

CONDITIONS OF USE FOR THIS PDF

The images contained within this pdf may be used for private study, scholarship, and research only. They may not be published in print, posted on the internet, nor exhibited. They may not be donated, sold, or otherwise transferred to another individual or repository without the written permission of The Museum of Modern Art Archives.

When publication is intended, publication-quality images must be obtained from SCALA Group, the Museum's agent for licensing and distribution of images to outside publishers and researchers.

If you wish to quote any of this material in a publication, an application for permission to publish must be submitted to the MoMA Archives. This stipulation also applies to dissertations and theses. All references to materials should cite the archival collection and folder, and acknowledge "The Museum of Modern Art Archives, New York."

Whether publishing an image or quoting text, you are responsible for obtaining any consents or permissions which may be necessary in connection with any use of the archival materials, including, without limitation, any necessary authorizations from the copyright holder thereof or from any individual depicted therein.

In requesting and accepting this reproduction, you are agreeing to indemnify and hold harmless The Museum of Modern Art, its agents and employees against all claims, demands, costs and expenses incurred by copyright infringement or any other legal or regulatory cause of action arising from the use of this material.

NOTICE: WARNING CONCERNING COPYRIGHT RESTRICTIONS

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

FOR STUDY PURPOSES ONLY. NOT FOR REPRODUCTION.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

The Museum of Modern Art

To Members of the Planning Committee

From Richard L. Palmer

Date September 14, 1972

Re OPEN CIRCUITS proposal

Attached you will find both a two-page summary of the OPEN CIRCUITS exhibition/conference proposal and a rather detailed presentation which has been drawn up by the Open Circuits group to use for fund-raising purposes should the project be accepted by the Museum as proposed. You will see, if you refer to the letter from Richard Oldenburg to Mr. Douglas Davis which is bound into the presentation, that the Museum's commitment to Open Circuits at this point is very limited and the space allocation originally contemplated was the small room off the auditorium lounge, not the Garden Wing as projected here. In sum, this presentation is indeed a proposal at this point, presenting the ideal format of the exhibition for consideration by the Museum.

Since the Open Circuits group will make a presentation at the Planning Committee Meeting on September 21, I hope you will be able to go through the detailed proposal in order to gain an idea of the scope of the project. Should time not permit you to do this, it would be helpful if you could read the two-page summary.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

OPEN CIRCUITS: A Brief Summary

I. Introduction.

The purpose of the OPEN CIRCUITS exhibition is to change attitudes toward television. The necessity of encouraging more meaningful, esthetically provocative use of this enormously influential aspect of contemporary culture is apparent. We propose 1) to examine the history of the development of television as an artistic medium in its own right; 2) to bring together for the first time the finest video works created from the beginning of television until 1974; and 3) to stimulate through the exhibition itself, and through its complementary catalogue, international conference, and broadcast programs, serious consideration of the future of television, as it effects the whole of our perceptual experience, and as it therefore determines the future of art.

II. The Exhibition.

The OPEN CIRCUITS exhibition itself will consist of an eight-hour videotape and a thirty-minute condensed version of the longer tape. In addition, eight one-hour programs will be created from the exhibition materials for broadcast over Public Television. The structure of the exhibition will be roughly chronological, covering the following topics:

1. Broadcast Television: The Public Vision.
2. Guerilla Television in the United States.
3. The Artist and Television USA: The Personal Vision, Outside the Structure.
4. The Artist and Television USA: The Personal Vision in Collaboration.
5. The Artist and Television USA: The Personal Vision Now.
6. International Television I: Public and Personal.
7. International Television II: Multiple Visions.
8. The Future of Television.

The material included will be drawn from works created through the collaboration of artists and producers at television stations, works created by artists independently, and works created by individuals and groups exploring the potential of television as message-documentation.

III. The Installation.

The OPEN CIRCUITS installation at The Museum of Modern Art will offer the visitor a multiplicity of perceptual experiences, introducing him to new ways of viewing television, through the use of different kinds of television screens and viewing spaces. The visitor on a tight time

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

schedule will be able to see a representative sampling of the entire exhibition in the thirty-minute digest version of the eight-hour tape, which will be displayed to orient viewers, as well as to enable them to select those portions of the exhibition which they wish to view more extensively. In the center of the installation, a hexagonal cylinder will provide the best possible viewing facilities for watching the entire exhibition from beginning to end, or optionally for watching various sections of the exhibition. Surrounding this central cylinder, a number of additional cubicles will explore the effect of certain new ways of seeing the television screen, including a double-channel experiment, an eidophone screen, a wall-size screen, a liquid-state tube, and a viewer-controlled switcher.

IV. The Catalogue.

The OPEN CIRCUITS catalogue will be an historic publication; it will always be turned to as the first collection of serious writings on the esthetics of television. The catalogue will contain ten essays on the international development of creative television, past, present and future. In addition, the catalogue will document the exhibition, devoting one fact sheet and one photograph to each work included in the exhibition. The catalogue will also include a chronology, a bibliography, and an index.

V. The Conference.

While the OPEN CIRCUITS exhibition is solidly based in existential fact, the past and present of creative television, the conference will be primarily speculative: it will examine the future of television - its effect on our experience of the world, and its relation to other art forms. The conference will have three components: 1. at the opening of the exhibition, six artists and theorists will be invited to deliver papers at the museum; four panels will also convene at this time; 2. six additional panels will meet during the month following to discuss a wide range of related topics, such as the impact of real-time feedback, instant replay, infolding techniques, etc., on creative thinking; and 3. at the end of three weeks, four cultural commentators from the United States, Japan, Europe, and Great Britain will participate in a real-time video conversation via satellite. It is hoped that the conference will not only focus attention on the exhibition and its fundamental intention to demonstrate the humanization and personalization of television, but will itself exemplify the change effected in a formal colloquy by the introduction of video techniques.

FOR STUDY PURPOSES ONLY. NOT FOR REPRODUCTION.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

The Museum of Modern Art

To Members of the Planning Committee

From Richard L. Palmer

Date September 14, 1972

Re OPEN CIRCUITS proposal

Attached you will find both a two-page summary of the OPEN CIRCUITS exhibition/conference proposal and a rather detailed presentation which has been drawn up by the Open Circuits group to use for fund-raising purposes should the project be accepted by the Museum as proposed. You will see, if you refer to the letter from Richard Oldenburg to Mr. Douglas Davis which is bound into the presentation, that the Museum's commitment to Open Circuits at this point is very limited and the space allocation originally contemplated was the small room off the auditorium lounge, not the Garden Wing as projected here. In sum, this presentation is indeed a proposal at this point, presenting the ideal format of the exhibition for consideration by the Museum.

Since the Open Circuits group will make a presentation at the Planning Committee Meeting on September 21, I hope you will be able to go through the detailed proposal in order to gain an idea of the scope of the project. Should time not permit you to do this, it would be helpful if you could read the two-page summary.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

OPEN CIRCUITS: A Brief Summary

I. Introduction.

The purpose of the OPEN CIRCUITS exhibition is to change attitudes toward television. The necessity of encouraging more meaningful, esthetically provocative use of this enormously influential aspect of contemporary culture is apparent. We propose 1) to examine the history of the development of television as an artistic medium in its own right; 2) to bring together for the first time the finest video works created from the beginning of television until 1974; and 3) to stimulate through the exhibition itself, and through its complementary catalogue, international conference, and broadcast programs, serious consideration of the future of television, as it effects the whole of our perceptual experience, and as it therefore determines the future of art.

II. The Exhibition.

The OPEN CIRCUITS exhibition itself will consist of an eight-hour videotape and a thirty-minute condensed version of the longer tape. In addition, eight one-hour programs will be created from the exhibition materials for broadcast over Public Television. The structure of the exhibition will be roughly chronological, covering the following topics:

1. Broadcast Television: The Public Vision.
2. Guerilla Television in the United States.
3. The Artist and Television USA: The Personal Vision, Outside the Structure.
4. The Artist and Television USA: The Personal Vision in Collaboration.
5. The Artist and Television USA: The Personal Vision Now.
6. International Television I: Public and Personal.
7. International Television II: Multiple Visions.
8. The Future of Television.

The material included will be drawn from works created through the collaboration of artists and producers at television stations, works created by artists independently, and works created by individuals and groups exploring the potential of television as message-documentation.

III. The Installation.

The OPEN CIRCUITS installation at The Museum of Modern Art will offer the visitor a multiplicity of perceptual experiences, introducing him to new ways of viewing television, through the use of different kinds of television screens and viewing spaces. The visitor on a tight time

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

schedule will be able to see a representative sampling of the entire exhibition in the thirty-minute digest version of the eight-hour tape, which will be displayed to orient viewers, as well as to enable them to select those portions of the exhibition which they wish to view more extensively. In the center of the installation, a hexagonal cylinder will provide the best possible viewing facilities for watching the entire exhibition from beginning to end, or optionally for watching various sections of the exhibition. Surrounding this central cylinder, a number of additional cubicles will explore the effect of certain new ways of seeing the television screen, including a double-channel experiment, an eidophone screen, a wall-size screen, a liquid-state tube, and a viewer-controlled switcher.

IV. The Catalogue.

The OPEN CIRCUITS catalogue will be an historic publication; it will always be turned to as the first collection of serious writings on the esthetics of television. The catalogue will contain ten essays on the international development of creative television, past, present and future. In addition, the catalogue will document the exhibition, devoting one fact sheet and one photograph to each work included in the exhibition. The catalogue will also include a chronology, a bibliography, and an index.

V. The Conference.

While the OPEN CIRCUITS exhibition is solidly based in existential fact, the past and present of creative television, the conference will be primarily speculative: it will examine the future of television - its effect on our experience of the world, and its relation to other art forms. The conference will have three components: 1. at the opening of the exhibition, six artists and theorists will be invited to deliver papers at the museum; four panels will also convene at this time; 2. six additional panels will meet during the month following to discuss a wide range of related topics, such as the impact of real-time feedback, instant replay, infolding techniques, etc., on creative thinking; and 3. at the end of three weeks, four cultural commentators from the United States, Japan, Europe, and Great Britain will participate in a real-time video conversation via satellite. It is hoped that the conference will not only focus attention on the exhibition and its fundamental intention to demonstrate the humanization and personalization of television, but will itself exemplify the change effected in a formal colloquy by the introduction of video techniques.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

OPEN CIRCUITS

An International Exhibition

devoted to the past,
present, and future of
Television

MOMA/1974

**FOR THE REMAINDER OF THIS 40 PAGE DOCUMENT, PLEASE SEE:
DEPARTMENT OF CIRCULATING EXHIBITION RECORDS, II.3.3.20.
THE MUSEUM OF MODERN ART, NEW YORK.**

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



Sam June Park, Video Synthesizer, in performance at the Bonino Gallery, New York City, 1972. (Photo: Intermedia Institute.)

VIDEO OBSCURA

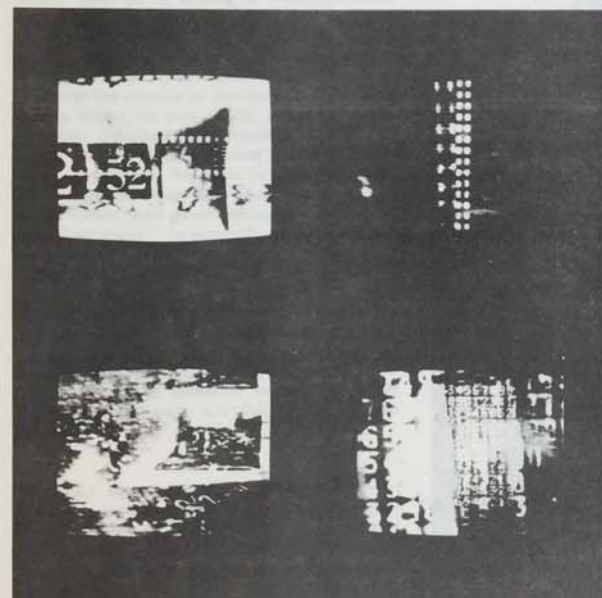
DOUGLAS DAVIS

The esthetic possibilities inherent in video have hardly been thought about at all. By "video" or "television" I mean much more than is normally understood by those terms. I mean the entire complex of hardware and software systems associated with visual broadcasting. I mean the sophisticated two-inch equipment available at the political top of the video structure to the portable half-inch videotape recorders and hand-held cameras used by artists and social radicals at the bottom. I mean "programs" made by one man, working alone, as well as by massive production teams — for "telecast" by video cassette, by cable television stations serving audiences in the thousands, or by closed circuit systems installed in a museum, a gallery, or a loft, as well as network trivia beamed to millions. I mean the moment and the quality of perception as well, when the electrons stream against the cathode-ray tube inside the set and hit the eyes of the viewers outside, settled in small groups of one, two, or three. This complex structure has been challenged and explored in many ways in the past few years but there has been little revision of critical and viewing attitudes. The gap that results is lamentable because the video structure is open now to change. For a

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

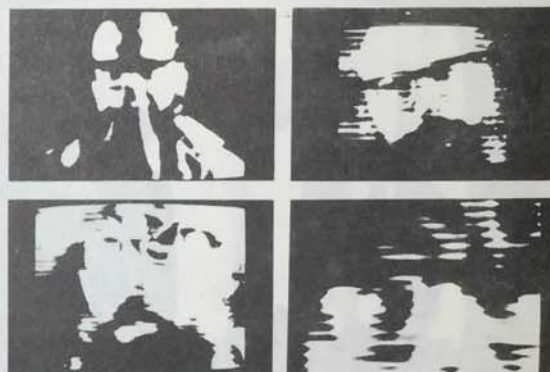


James Seawright, *Two Schoenberg Pieces*, 1970. Produced at WGBH-TV.
(Photos: James Seawright and Mimi Garrard.) Courtesy of the Boston Symphony Orchestra.



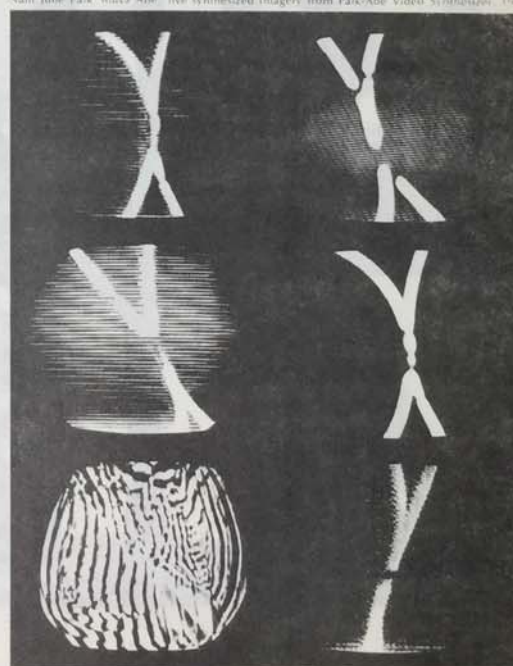
Douglas Davis, *Numbers: A Videotape Event*, 1970. (Photo: Peter Moore.)
Produced at WGBH-TV. Courtesy of the Boston Symphony Orchestra.

Keith Sonnier, *Hybrid V*, 1971.



Nam June Paik, *Selections from a videotape portrait of Allen Ginsberg produced on the Paik-Abe Video Synthesizer*, 1971. (Photo: Peter Moore.)
Nam June Paik/Shuya Abe: color courtesy Bonino Gallery.

Nam June Paik/Shuya Abe, *live synthesized imagery from Paik/Abe Video Synthesizer*, 1971.



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

scant minute in the history of the medium the situation is existential. The major problem is our inability to look at video without the prejudice of film.

I have in hand a recent review by Jonas Mekas of a videotape festival held at the Westbeth (New York City) Community Center and an essay by Jonathan Miller in the *New York Review of Books*. These two pieces define the gap in all its scope. Both demonstrate a remarkable insensitivity to the video screen. Mekas is easily the more serious and direct. He watches, reports what he sees, and pronounces it dull. He is bored by the poor sound-video quality of documentaries taped on the streets by media groups and is unimpressed by synthesized, abstract television. First, he is looking at videotape incorrectly, in the "public" setting forced upon him at Westbeth, where a ring of monitors was installed in a theaterlike setting for a large audience. The small screen rarely works in this way, whatever the number of monitors. Second, Mekas clearly misses the aura of film, a properly public occasion. Jonathan Miller operates several cuts below Mekas. He cannot bring himself to recognize — seriously — the video fact. More precisely, he cannot entertain the possibility that television differs from other, analogous media. "The television image," he writes, "is simply a disturbance on the surface of a piece of luminous glass which has no existence apart from the reality that it represents." This is an incredible statement. Think for just a minute about the luminosity of electronic color — the brightness is there because the light shines through it, from inside out, making possible hues beyond either painting or film. The television image is a highly complex disturbance, one that creates its own reality.

Vibrant, nervous color is a unique video asset. I am not surprised to hear that Cartier-Bresson said he had never seen color like that produced by the Nam June Paik-Shuya Abe Video Synthesizer, when it was displayed last summer in Aspen, Colorado. There are other assets, which I will come to later, but immediately I should say that the electronic field/canvas is transforming itself as I write. The jumpy diffuse picture that McLuhan called "cool" and involving, because it required intense participation to finish, is warming, becoming more sensuous. The receiving sets are far better than they were two years ago, particularly with regard to color. The size of the screen is due for significant expansion, too. It is likely that by 1980 flat, wall-sized screens will be common. Most important of all, the spread of cable telecasting systems insures the arrival of steady, clear-cut images. I hardly need add that the use in the home of videotape recorders and cassettes will further sensitize the eye to the video image.



Peter Campus, *Double Vision*, videotape performance at Finch College Museum of Art, New York City, 1971.

Vito Acconci, *Remote Control*, videotape performance at Finch College Museum of Art, 1971.



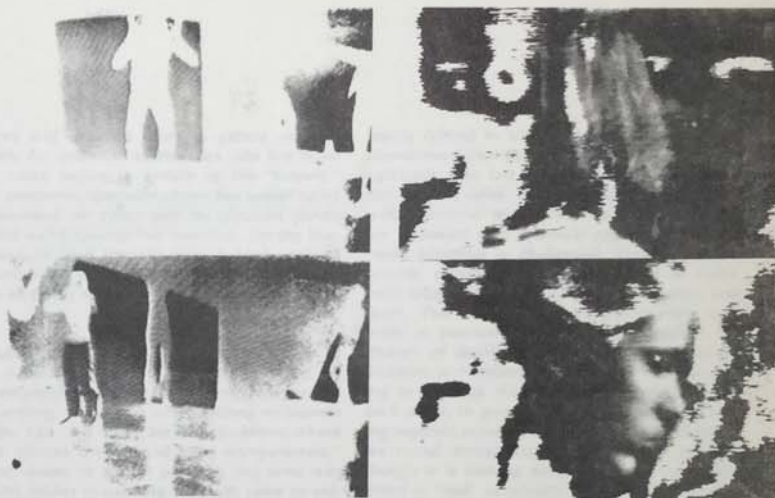
The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

They will sensitize the mind, too. The arena of choice is expanding far beyond what broadcast television presently affords. Both cable telecasting and video cassettes can be programmed for small and decidedly esoteric audiences. Personal, fragmented control will be asserted over content.

Two separate and alternating threads, the one historical, the other esthetic, will come together and unite toward the end of this essay. I must begin with an attempt at telescoping history. The earliest creators of what might be called the "personal" videotape, made on portable equipment, away from the impositions inherent in broadcast television (prior to 1970), appear to have been Nam June Paik, Andy Warhol, Les Levine, and Stan Vanderbeek. Paik purchased the first portable videotape recorder (or "VTR") sold to a consumer in New York City in 1965, taped the scenes outside the taxicab window on his way downtown, and played the result at the Cafe Au Go Go in Greenwich Village. He distributed dittoed copies of a manifesto: *As collage technique replaced oil paint, he wrote, the cathode-ray tube will replace the canvas.*

The premise of video as art lies in the one-to-one relationship between the image and the viewer. Television is not suited for theaters. Television takes place in what experimental producer Brice Howard has called the "videospace," which is essentially private. It is also casual. We will never expect the grand things from video that we expect from theater and film. They come by surprise and indirection. Video is closer to life than its competitors. Video is mind to mind, not mind to public. The audience is potentially huge, but intimate.

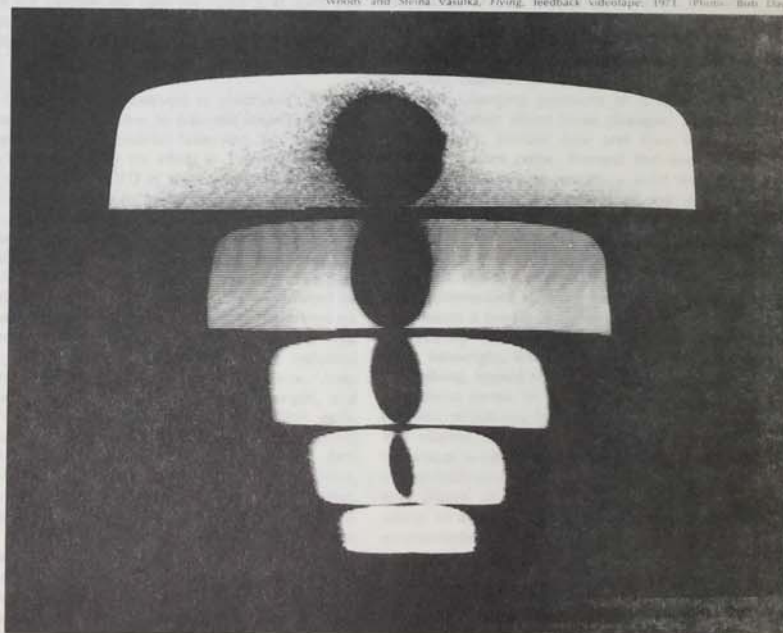
Half-inch videotape represents the first authentically electronic form that art can take. The appearance of the television set as an image in painting and as an element in sculpture (in constructions and multimedia environments) was a preliminary step, nothing more. Bruce Nauman worked the most intensively upon this step in the late 1960s. Possibly he preferred videotape to film because it was less complicated as a system; he could turn the camera on and let it run while he worked or performed, then play it back immediately and either keep or erase what he saw. The videotapes he has made since are similar in form and content to his films and performances. There is little utilization of the medium's technical characteristics. Videotape obviously provided Nauman with the means to record and develop ideas with comparative ease. He grimaces into the camera, stretches his mouth, walks, plays with props, paints his genitalia. Often he turns the camera on its side or upside down. Lately he has made videotapes of empty



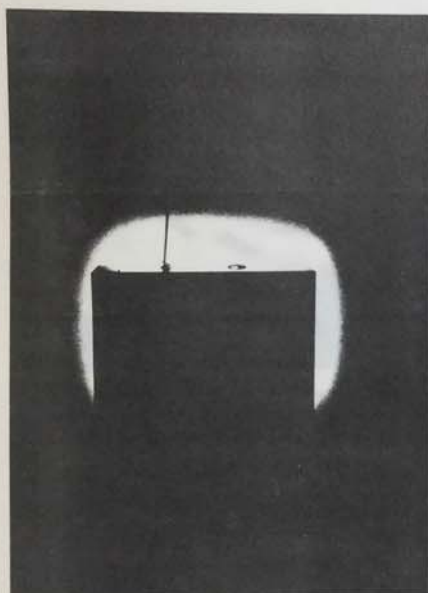
Keith Sonnier, *Dis-Play*, videotape, 1969.
(Photo: Richard Landry.)

Keith Sonnier, *Positive/Negative*, 16 mm film based on videotape, 1970.

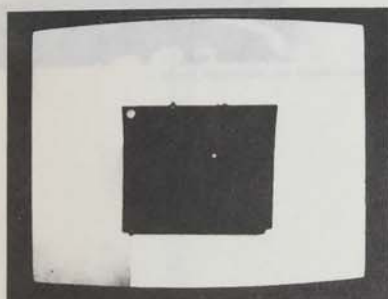
Woody and Steina Vasulka, *Flying feedback*, videotape, 1971. (Photo: Bobo Day.)



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



Douglas Davis, images from the *Present Tense I*, television set, 1971. (Photo: Robert McIlroy.)



Douglas Davis, images from the *Present Tense I*, documentary videotape, 1971. (Photo: Peter Moore.)

spaces and installed them in gallery environments. An extension of this idea into live monitor space occurs in certain of his "tunnels." The performer/spectator enters the tunnel space — bounded on either side by plywood panels — and walks towards two monitors. On the lower one he sees himself, from behind, walking toward what he sees. On the top monitor he sees an empty space.

Hans Richter, the Dada film maker, writes: "I see the film as a part of modern art. There are certain problems and sensations which are peculiar to painting, and others which belong exclusively to the film. But there are also problems where both spheres overlap and even interpenetrate." Video relates to film in precisely the same way as film relates to painting. Nauman came to video from painting and film, a studio situation. His tapes record private studio performances, in the manner of film documentary. The media groups observed by Mekas employ tape in the same way but over a broader slice of life and less successfully. Neither physical nor social scale fits the cathode-ray tube (or "CRT"), at least not yet. Video documentary is best focused in on a single image or idea.

The half-inch videotape is electronic in purpose as well as form: to transmit information on the CRT. So is broadcast television, which began to be a possibility for artists in 1968-69, roughly, in two places, KQED in San Francisco and WGBH in Boston. There for the first time, open access to the complete tool took place without restriction or imposition. Terry Riley made *Music With Balls* at KQED, and the Center for Experiment in Television produced *Heimskringla*, a video play written by Tom O'Horgan. WGBH was visited by a stream of artists. Some of them collaborated on *The Medium Is the Medium*, produced by Fred Barzyk and broadcast in 1969, which included brief contributions by Paik, Otto Piene, Aldo Tambellini, Allan Kaprow, James Seawright, and Thomas Tadlock. One year later, WGBH gathered another group of artists to produce *Video Variations*. They included Barzyk, Paik, Seawright, Vanderbeek, Tsai, Constantine Manos, Jackie Cassen, Russell Connor, and this writer. *Video Variations* was broadcast early in 1972. A great deal of the experimental work undertaken in television stations has not been seen, except in closed circuit situations. There have been scattered collaborations between artists and the station structure in Great Britain, West Germany, Sweden, and in New York, at WCBS-TV and WNET, and the two CATV systems.

Working contact with a television station changes the attitude of the artist as well as the station. Until then, the artist tends to use the videotape recorder as another studio tool to impose upon video ideas generated in other conditions,

mostly related to static esthetics. The broadcast environment changes the artist perceptually and politically. The last change, the political one, I will explore later. The physical change occurs with electronic mixing. Most television stations are endowed with technical capacities that are rarely exploited or challenged. These capacities provide command over a total field of color, color change, field density, layering, kinetics, and more. The entire *Video Variations* hour is a study in electronic density, which includes the illusion of depth. I discovered this almost by accident in *Numbers*, my own work. I was trying to layer as many images as possible over each other, to give the viewer the sense of seeing separate activities together as one field. What we found instead was depth. The eye feels as though it is looking deep within the tube; the effect is "real" or visually "true," unlike the flat experience of illusionism that occurs in film.

I have already mentioned the special qualities of video color. Keith Sonnier, who has used bright tints in his media environments, extends that sense with an electronic colorizer. This device permits the artist to "paint" on a previously recorded black-and-white videotape with artificial hues. In one such case, Sonnier set up two television cameras in his loft and focused upon a couple changing positions in a bed, talking with each other about those changes. The basic field is sepia, flecked now and then with tiny spots of radiant color. Toward the end — the tape is 50 minutes in length — solid washes of pink, purple, and green obscure the activities, which then return to visual clarity.

Density again. As noted, the video picture cannot accommodate environmental scale, but it can encompass a broad complexity of abstract forms and activity. The work executed by Paik, Vanderbeek, Seawright, Riley, Richard Felciano, Richard Lowenberg, Hamid Naficy, and others is saturated with these forms. In *Music With Balls* the aural overlays, which mix four tracks with a saxophone and electric organ, are more than matched by the visual wipes and dissolves, as huge spheres sweep back and forth across the screen, on several planes at once, distorting color as they swing. In all of this work, from Riley to Paik, the evanescence of the image is the central fact. No form is static.

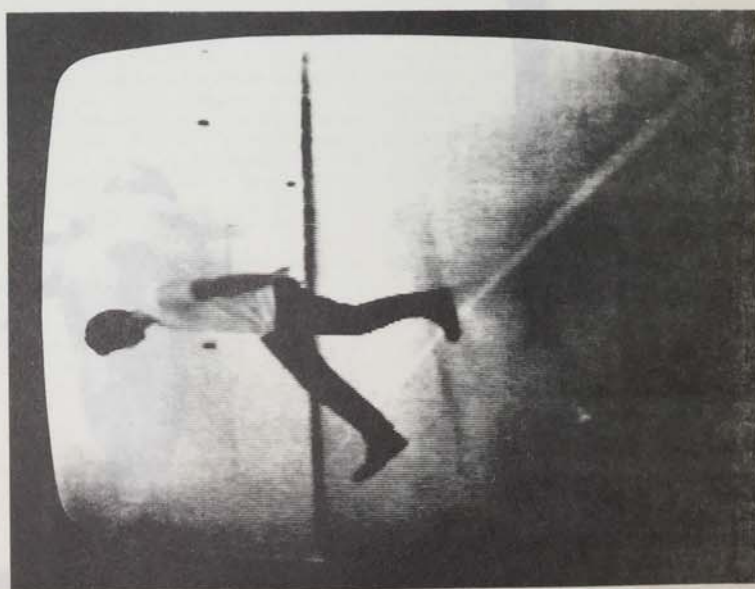
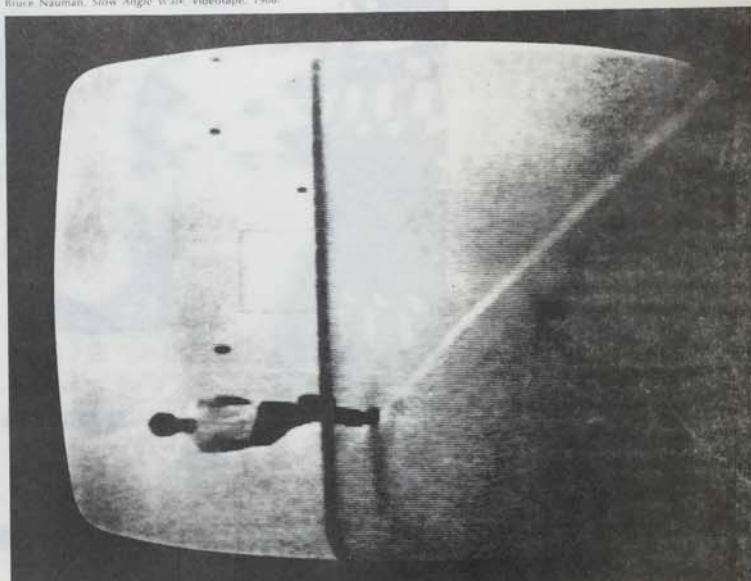
In *Two Schönberg Pieces*, James Seawright takes muted, controlled advantage of this evanescence. This piece, created for *Video Variations*, is built painstakingly on one principle: the order in which color signals are transmitted from the TV camera to the monitor. By spacing these signals out, Seawright turns each movement into a multiple of itself. The two dancers become a phalanx of

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

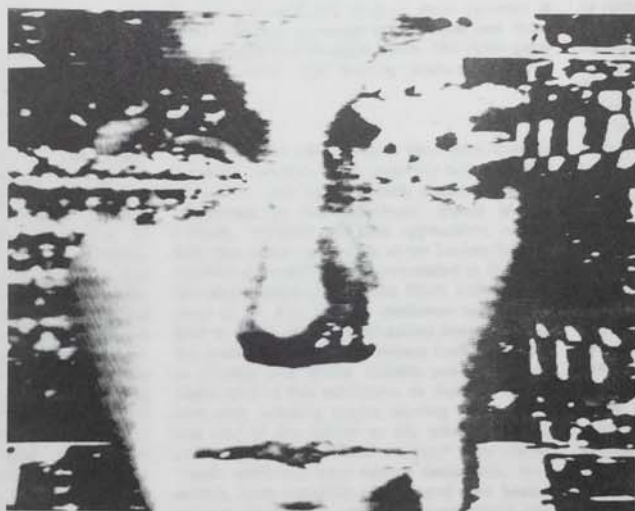


Dennis Oppenheim, *Air Pressure*, videotape, 1971.

Bruce Nauman, *Slow Angle Walk*, videotape, 1968.



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



Joanne Kyger, *Descartes*, videotape, 1971. (Photo: m d'Hamer.)



Gene Davis, *Video Pottio*, videotape, 1971

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

dancers. Their motions are waves of striated color.

Despite this sensuousness, social and political issues hover about the current usage of video. The possibility of personal production — through portable VTR equipment — first gained public attention through groups like the Video Freex, the Raindance Corporation, Global Village, and People's Video Theater. In varying degrees each believes that the dissemination of the production tool can change the social/political structure by providing alternate information. At the other end, the fine art end, politics hovers, too, like a discredited guest. If a painting can change consciousness slowly and grudgingly, videotape can effect perception on a widespread and instantaneous level. The privacy of Nauman's studio dissolves once it is taped. The most advanced thinking in contemporary art is public in potential. The Dadaists dreamed of bringing this about; Robert Motherwell says Dada was the first instance where the means of contemporary art were directed toward social change. The Constructivists were in fact more explicit. Dziga Vertov, the originator of the *Kino-Pravda* films, said of his medium: "My way leads towards the creation of a fresh perception of the world." In one of Paik's most successful tapes he expands the faces of politicians at press conferences, splitting the electronic image into black-white dots, while the voices are similarly distorted. I hope it is clear that I am not talking about politics in any literal way but about perception which governs our choices, in art and in life.

The last attribute of video — immediacy — is the most difficult to define. No other medium allows it to such an extent. Television can happen while you watch, in real time. The future can be unpredictable, like life itself and unlike the live theater (where the next moment is predetermined). Yet video is better than life. The small screen focuses and intensifies real time experience. The first step I wanted to take with video was to contact the viewer in such a moment, and share it with him. This was achieved last year in Washington, D.C., through the Corcoran Gallery and WTOP-TV, in *Electronic Hokkaido I*. We allowed an entire city to sing and chant to itself, through the means of sets scattered about the videosphere. Their chanting modulated the electronic images they saw, while the images were forming. Film lacks this potential; it is edited and then rendered public. Another aspect of this inherent immediacy is the mechanics of the video picture itself, easily apparent in streaming feedback forms. The video image is created by light passing through the screen, a screen that paints and repaints itself continually, at a rate of 3,000,000 dots per second. The kind of immediacy I am discussing has to do with a malleable future. The sense that the next minute is open to every option, yours or the artist's. This is not an easy quality to

handle. It demands the acceptance of real time. The painter and the sculptor must confront a mind watching in sequence, not now and then, as in a gallery or museum space. The videospace is both linear and moving onward toward a future.

Three recent exhibitions in New York indicate the ways in which art is presently trying to deal with video. One way, intensely physical, was encompassed by the videotapes shown at the Whitney Museum and the appearance of the Paik-Abe Video Synthesizer at the Bonino Gallery. Another approach was demonstrated in the performances videotaped at the Finch College Museum of Art. The Whitney exhibition was dominated by feedback and synthesized imagery, by all the means implicit in the system itself. The work of Woody and Steina Vasulka was at the esthetic core of this exhibition. In their tapes they sent wiry, writhing shapes moving rapidly from one end of the screen to the other. "We will present you sounds and images," they stated, "made artificially from various frequencies, from sounds, from inaudible pitches and their beats." Internal imagery, in brief. The synthesizers created by Eric Siegel and Stephen Beck turned this idea into machinehood. Siegel's images are clean and Constructivist in nature, Beck's diffuse and shifting.

The Paik-Abe Synthesizer is very different. It uses the outside world extensively. Images are fed from a battery of cameras into a complicated console, within which distortion and colorizing of all kinds is possible. At the Bonino Gallery the content was the audience, mugging and frowning to see itself distorted on television. The Paik-Abe image is expressionist in every sense of the word, stretching and extending the human face and whatever emotional content it happens to be indulging.

The Finch tapes, which included works by Vito Acconci, Peter Campus, Dan Graham, Les Levine, Michael Netter, Dennis Oppenheim, Steven Reich, and myself, exploited the medium only in the subtlest sense. There are two tapes I want particularly to mention, by Campus and Acconci. In the first the artist videotapes himself from above. Campus placed the portable camera on the balcony of a gymnasium and dropped a rope down from it to the floor below. By holding onto the rope and spiraling around with it, he kept the focus upon himself. The effect — as he circles around the floor — is sharply vertical; at times it is almost dizzying. Vito Acconci's performance, *Remote Control*, differed greatly in mode but played with the medium just as casually. It is recorded on two tapes and requires two monitors. Each tape follows the conversa-

tion of one performer, seated in a box, trying to communicate with the other performer, similarly seated, across the room. The male performer attempts to persuade the female to tie herself up with a rope. Now and again he glances at the monitor to spy what she is doing. There is no more recognition of the medium than this. Yet neither work — nor any of the Finch performances — would exist without the casually conceptual structure that videotape provides.

Whether the content is feedback electrons or repetitive movement in the studio, the early video art tries to defy time. Rather than linear progression it moves in a circular fashion, with no beginning and no end. This presupposes a mind-to-public rather than mind-to-mind communication, a bored and formal audience rather than an intense and informal one. Painters and sculptors do not normally think in terms of moving time. Their images are both static and instantaneous. "Time has to do with seeing," Robert Morris told William Agee in a 1970 interview, "with behavior. . . . That gets into perception. You can talk about that: the necessity of time for perception. . . . Some things might remain static, but they might have their static, momentary, physical existence while you are there. When you came back, they might be different. Sometimes things fall down, for example. Objects in the world are in constant flux and changing and acknowledging that provides another way of dealing with things." In two of Morris' recent films there is a confrontation with time. *Gas Station* is a real time film. It depicts on two separate screens, from far and near, the activity of the station. *Neo-Classic*, made last year during his Tate Gallery exhibition, records objects in motion, objects made especially for display at the gallery: a rolling cylinder, a ball, a tightrope wire in vibration — all of them caught in the flux of time.

This represents a keenly different awareness and exploitation of time. It is neither fixed nor circular. It is progressive. It destroys static notions of art and life. No medium demands this progressive sense of time more than video, which is why — among other things — video is political in the deepest personal sense. The more fully we exploit the medium as art, the more completely we change perception. This will now become clearer if I summarize the inherent qualities of video: nervous, luminous color; the density and complexity of the picture field; the immediate, mind-to-mind contact between creator and perceiver. At its esthetic core video is art dematerialized. Its organic physical qualities are confined to the loop tape, the cartridge cassette, or live broadcast through the air. Therefore the result is political and esthetic at once: swift, intense communication, not possession. ■

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

VIDEO BIBLIOGRAPHY

- Aaron, Chloe. "The Alternate-Media Guerrillas." New York, October 19, 1970.
- Barzyk, Fred. "TV as Art as TV." Print, Vol. 26 No. 1, January-February 1972.
- Battcock, Gregory. "A Mobile Culture." Art and Artists, Vol. 6 No. 11, February 1972.
- "The Greening of Televideo and the Aesthetics of Boeing," Domus, 509, April 1972.
- Davis, Douglas. "Media/Art/Media." Arts Magazine, September, 1971.
- "Rauschenberg's Recent Graphics." Art in America, July-August, 1969.
- "Television's Avant-Garde." Newsweek, February 9, 1970.
- "Television Is." Radical Software, No. 2, 1970.
- "Veni, Vidi, Video." Newsweek, April 13, 1970.
- "Video Obscure?" Artforum, April, 1972. Design Quarterly, 1966-67. "Design and the Computer."
- Durniak, John. "The Vanderbeek Dimension." US Camera World Annual, 1970.
- Howard, Brice. Videospace. San Francisco National Center for Experiments in Television, 1972.
- Kragen, Robert. "Art and TV." Radical Software, Summer 1970.
- Margolies, John. "TV - the Next Medium." Art in America, September-October, 1969.
- Mekas, Jonas. "Movie Journal." The Village Voice, December 2, 1971.
- Movshon, George. "The Video Revolution." Saturday Review, August 8, 1970.
- O'Connor, John J. "What Hath the Underground Wrought?" New York Times, June 1, 1972.
- Parisi, Anthony J., "The New Art." Pulsebeat, Summer 1969.
- Nam June Paik: Electronic Art. New York: Galeria Bonino, 1965.
- Paik, Nam June. "Expanded Education for the Paperless Society." Radical Software, Summer, 1970.
- "Stimulation of human Eyes by Four-Channel Stereo Video-taping." E.A.T./L.A. Survey, Fall, 1970.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

VIDEO BIBLIOGRAPHY CONTINUED

PAGE 2

- Price, Jonathan. "Video Pioneers." Harper's, Vol. 244 No. 1465, June 1972.
- Rose, Barbara. "Switch-on Art." New York Magazine. Vol. 4 No. 51, December 20-27, 1971.
- Schjeldahl, Peter. "Well, It's a Heck of a Long Way from 'Marcus Welby'". New York Times, April 11, 1971.
- Software. Essays by Jack Burnham. Theodore Nelson. Introduction by Karl Katz. New York: Jewish Museum, 1970.
- Tambellini, Aldo. "Simultaneous Video Statements." Radical Software, Summer, 1970.
- Vision and Television. Foreword by Russell Connor. Waltham, Mass.: Rose Art Museum, Brandeis University, 1970.
- Vostell, Wolf. Happening und Leber. Berlin, Germany, 1970.
- Yalkut, Jud. "Frank Gillette and Ira Schneider, Parts I and II of an Interview." Radical Software, Summer, 1970.
- "Electronic Zen: The Underground TV Generation." West Side News (New York), August 10, 1967.
- Youngblood, Gene. Expanded Cinema. New York: Dutton, 1970.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

VIDEO EXHIBITIONS

1967

Nicholas Wilder Gallery, Los Angeles, Bruce Nauman

1969

Leo Castelli Gallery, New York City, Bruce Nauman, May 1969

Howard Wise Gallery, New York City, "Television as a Creative Medium",
May 17 - June 14, 1969.

1970

Rose Art Museum (Roses Institute of Fine Arts) Brandeis University, Waltham,
Massachusetts, "Vision and Television", January 21 - February 22, 1970.

Leo Castelli Gallery, New York City, Keith Sonnier, March 1970.

1971

State University of New York at Buffalo, Spring Gardens Festival,
"Byeconosphere", Spring, 1971.

Finch College Art Museum, New York City, "Videotape Show", October, 1971.

The Whitney Museum of American Art, New York City, New American Filmmakers'
Series, "Special Videotape Show", December 9 - 16, 1971.

Leo Castelli Gallery, New York City, Bruce Nauman, 1971

Reese Palley Gallery, San Francisco, Paul Kos, Howard Fried, Terry Fox, 1971-72.

Mercer Arts Center, New York City, "The Kitchen", continuing to present.

1972

Leo Castelli Gallery, New York City, Keith Sonnier, February 1972.

Paula Cooper Gallery, New York City, Videotapes, May 11-12, 1972.

Mercer Arts Center, New York City, "The Kitchen", since 1971, (especially
June, 1972, Video Festival).

Reese Palley Gallery, New York City, Paul Kos, June 1972.

Walker Art Center, Minneapolis, Minnesota, Videotape Festival, August, 1972.

Sonnabend Gallery, New York City, William Wegman, October 28, 1972.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

VIDEO EXHIBITIONS CONT.

PAGE 2

The Television Environment

Baltimore Museum of Art

Florida State University Art Gallery

Pasadena Art Museum,

University Art Museum, Berkeley

Vancouver Art Gallery, B.C.

The television environment is a complex and often confusing one. It is a medium that has become an integral part of our lives, and it is one that we must understand if we are to use it effectively.

One of the most important aspects of the television environment is the way in which it is used. It is not enough to simply broadcast a message; it is necessary to understand the audience and to tailor the message to their needs and interests.

Another important aspect of the television environment is the way in which it is controlled. There are many different groups and individuals who have an interest in the television environment, and it is necessary to understand their interests and to work with them to achieve common goals.

Finally, it is important to understand the role of the television environment in our society. It is a powerful tool that can be used for good or for ill, and it is necessary to understand its potential and to use it wisely.

These are some of the key issues that must be addressed in order to create a television environment that is effective and responsible.

One of the most important aspects of the television environment is the way in which it is used. It is not enough to simply broadcast a message; it is necessary to understand the audience and to tailor the message to their needs and interests.

Another important aspect of the television environment is the way in which it is controlled. There are many different groups and individuals who have an interest in the television environment, and it is necessary to understand their interests and to work with them to achieve common goals.

Finally, it is important to understand the role of the television environment in our society. It is a powerful tool that can be used for good or for ill, and it is necessary to understand its potential and to use it wisely.

These are some of the key issues that must be addressed in order to create a television environment that is effective and responsible.

One of the most important aspects of the television environment is the way in which it is used. It is not enough to simply broadcast a message; it is necessary to understand the audience and to tailor the message to their needs and interests.

Another important aspect of the television environment is the way in which it is controlled. There are many different groups and individuals who have an interest in the television environment, and it is necessary to understand their interests and to work with them to achieve common goals.

Finally, it is important to understand the role of the television environment in our society. It is a powerful tool that can be used for good or for ill, and it is necessary to understand its potential and to use it wisely.

These are some of the key issues that must be addressed in order to create a television environment that is effective and responsible.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

TV AS ART AS TV

Can the medium that gave us "Beverly Hillbillies" provide the basis of a creative art form? The answer is "yes" . . . as a growing number of video-artists testifies.

It is estimated that the average American spends 1200 hours a year in front of a television set.

Which is a little more than three hours a day.

Or an eighth of a lifetime.

And what does he see?

For the most part, ubiquitous Westerns, soap operas, ancient movies, variety shows that vary little, situation comedies, and commercials—ah, yes, commercials. All about as bland and banal as the typical American kitchen. Which is often where you find yourself.

Then suddenly, every once in a while, out of the blue, something like this comes along:

"Swirls, ripples, slides of color . . . melting human features . . . sparks flying across the screen in lovely, agitated patterns . . . scrolls of light, swirling, fiery paths, brilliantly colored tear-drops elongated and falling . . . little shoals of colored fish-drops, floating, swimming across the screen . . . garlands of dotted lights . . . a piano blazing, disintegrating, crumpling in flame. . ."

That's experimental television. Which is alive and well and doing a land-office business in public television stations across the U.S. Which should be good news to everyone who watches television, and of particular importance to all those engaged in visual communications. The passage I quoted is a description by Edith Efron, editor of TV Guide, of a segment of an experimental television program called "Video Variations," produced by WGBH in Boston in conjunction with the Boston Symphony Orchestra. The program came about when the Orchestra received a grant from the National Endowment for the Arts (headquartered in Washington, D.C.) to test more interesting ways of visualizing symphonic music on television. Since WGBH has been televising live concerts of the Boston Symphony Orchestra for years, it was naturally interested in the opportunity. At the request of the Orchestra, the station supplied a producer, director, equipment and eight artists from outside WGBH for the project. Each artist was given great latitude in his choice of music from the Orchestra's recorded repertoire, and total freedom in the composition of his short, visual accompaniment. The results were, to say the least, unique.

—Stan VanDerBeek, a filmmaker who generally works in controlled patterns of strong, geometric shapes, interpreted Ravel's "Daphnis and Chloe" with a stunning barrage of

flowing video effects which appeared almost accidental.

—Tsai Wen-Ying, a cybernetic sculptor who had never worked in television before, constructed a delicate sculpture of thin metal rods which vibrated in response to the music.

—The first and second movements of Schönberg's "Five Pieces for Orchestra" were accompanied by a dreamlike video ballet composed by James Seawright, and his dancer wife, Mimi Garrard.

—Constantine Manos, official photographer to the Boston Symphony Orchestra, selected a series of still photographs to interpret the third and fourth movements of the same Schönberg work.

—Doug Davis, art critic for Newsweek, chose to visually interpret a Bach symphony as a "happening." His event showed a group of people writing and interacting with numbers juxtaposed with streams of other numerals moving through space.

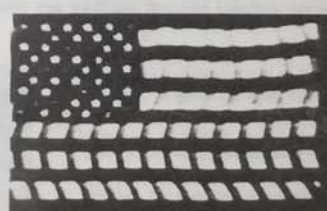
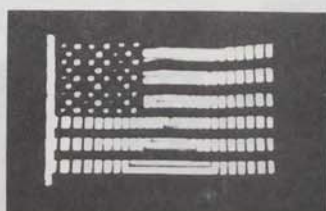
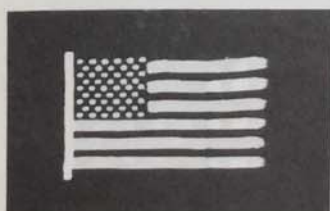
—Jackie Cassen, another filmmaker, combined photographic stills and clips of peace marches and "Wake Up, America" rallies in a collage accompaniment to Beethoven's "Eroica."

—Nam June Paik, a musician-scientist-artist-engineer widely known for his development of the video synthesizer (an optical color generator capable of taking the inputs of multiple black-and-white cameras and transforming them into an infinite number of color designs and patterns) utilized the synthesizer to interpret the music and mythic stature of Beethoven through a series of abstract and real images. The final image is of a grand piano on fire. (This is what Edith Efron was describing in the passage cited above.)

—Russell Conner, member of the New York State Council on the Arts, and formerly assistant curator of the Rose Art Museum of Brandeis University, also used the Paik video synthesizer. He interpreted a section from Wagner's "Die Götterdämmerung" with a random, abstract visual composition of a nude model.

Eight artists. Eight personal statements. Eight strikingly effective presentations. "Video Variations" quite graphically demonstrates that when art and technology, and in this case videotape primarily, are brought together with taste and imagination, stunning solutions to visual problems can be achieved. It also serves to reveal the emergence of the video-artist as a vital new force in visual communications.

The video-artist, to put it simply, is a writer, composer, photographer, choreographer, filmmaker, painter, sculptor, architect or graphic designer who has brought his, or her, particular talents to television in an effort to utilize the



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

Whether a graphic designer, photographer, painter, filmmaker, or choreographer, his goal is to revitalize the TV medium.

medium in new ways, and to find new modes of expression for his own art. His genesis rests with the establishment in 1967 and 1972 of three artist-in-residence programs in public television stations in San Francisco, New York and Boston.

One such facility at San Francisco's KQED, founded in 1967, and under the direction of Brice Howard and Paul Kaufman, brought artists and technologists together to work unfettered for a full year before being replaced by another "team." Funded by the Rockefeller Foundation and the National Endowment for the Arts,* the ongoing program was conducted in an atmosphere of pure experimentation geared to advancing the "state of the art," or of establishing a state where none existed, with emphasis on scoring technological breakthroughs.

While no conscious effort was made to produce a "product," an outstanding result of the KQED experiment was the development of a new visual concept called "Videospace," which produced a series of startling visual effects and kaleidoscopic images using existing broadcast equipment. Described by this magazine as "more a new way of looking at TV than a technological innovation," Videospace obviated conventional thinking in the theatrical sense, and "infused the television screen with new meaning."

In Boston, WGBH has received a \$300,000 three-year grant from the Rockefeller Foundation to bring artists from various fields under its aegis to apply what is learned to the creation of programs that could be shown and tested on the air. The result has been a series of startlingly innovative programs which reinforces the potential of television as an art form, and demonstrates the creative possibilities inherent in the new tools being spawned.

"What's Happening, Mr. Silver?" was one of the first programs developed by WGBH utilizing the experimental criteria established. The overall objective was simply to present segments of experience from a wide spectrum of everyday life, and to do so in a manner which respected the viewers' ability and willingness to judge and find significance in aspects of ordinary existence which they may not have recognized before. Sparked by the creative impulses of David Silver, a young Englishman teaching at Tufts University, the 30 programs in the series never ran along traditional lines. On the contrary, they established a totally new format—the video collage.

The single most important element was the basic technique of juxtaposition, in which a group of separate pieces were

placed together in such a way as to comment on each other, acting as catalysts for presenting familiar material in a provocative manner. This juxtaposition invariably resulted in a sense of surprise and the unexpected. One particularly unusual offering, "Madness and Intuition," utilizing John Cage's theories of chance, featured the outputs of 48 different video and sound sources in an absolutely random process. Artists, actors, technicians, crewmen, directors and engineers were all asked to step out of their normal functions and assume whatever role struck them as pertinent at a given time. Whenever anyone got bored, he simply switched to something else, without rhyme or reason. The point was to expand the role of accidental possibilities in the act of creating for television.

The Educational Broadcasting Corporation, representing both public television station WNET in New York and NET, the national production center, announced in January of this year the formation of its own Experimental Television Center supported by \$218,000 in grants from both the Rockefeller Foundation and the New York State Council on the Arts.

Under the direction of David Loxton, the Center's main objective is to attract to television the huge resource of human talent available in New York. Writers, poets, artists, humanists, dramatists, sociologists, critics and choreographers reflecting the spectrum of New York cultural life will be invited to join with ETC's own staff of producers, directors and engineers. Capitalizing on experimental projects from both San Francisco and Boston, the New York Center will develop its own style and approach in bringing thinkers to television and letting them find expression for their ideas through the video medium.

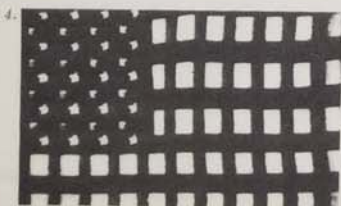
It is obvious to me that each of these artist-in-residence programs fulfills an important function in the growth of the video-art movement:

San Francisco—the thoughtful theoreticians, defining the "grammar" and ground rules of the medium.

Boston—exploring the possible synthesis of television communications with dance, music, art and drama.

New York—utilizing TV to implement or extend psychological, sociological or philosophical ideas.

"The landmark show that first attracted attention to TV's avant garde," according to Newsweek, was "The Medium Is the Medium," broadcast by the Public Broadcast Laboratory nationally in 1969. Executive producer David Oppenheim, who convinced national educational TV executives of the need to experiment with the medium, brought together six artists and WGBH.



1-5. Title sequence from "The Medium Is the Medium," a landmark show (1969) that first attracted attention to TV's avant garde. Produced by WGBH in Boston, one of the three public television stations that have been funded to explore the potential of the medium, the show was broadcast nationally by the Public Broadcast Laboratory. Designer of title sequence was Fred Barzyk.

*The workshop is now known as the National Center for Experiments in Television, with funds from the Corporation for Public Broadcasting.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

6-8. From "The Medium Is the Medium." James Seawright, one of the participating artists, painted an electronic picture by tape-delaying the three color tubes of the TV camera.

9. From "The Medium Is the Medium." Aldo Tambellini showed 40 black children in the WGBH studio interacting with 100 colored slides and seven 16mm films projected into space. The resulting interplay, taped live on three TV cameras and concentrated on one videotape, created a "dense barrage of energy."

10. From "The Medium Is the Medium." Nam June Paik used three hippies, a nude dancer, and junk TV sets to create an electronic opera on the Moog Synthesizer.



10.

—Artist Allan Kaprow used closed-circuit inputs to four locations in the city of Boston.

—Intermedia artist Otto Piene, in the same program, used only two images to achieve an original statement. One source was a grid of colored dots that dissolved into abstract patterns across the screen. Superimposed on this was a videotape of a young girl climbing to the top of a 40-foot-high polyethylene sculpture filled with helium. The result was a work of surprising elegance.

—Aldo Tambellini, an artist exclusively concerned with "black" as both a concept and social experience, showed some 30 black children in the WGBH studio interacting with 1000 colored slides and no less than seven 16mm films projected into space. The interplay was taped live on three television cameras, and the resultant concentration of images on one videotape created a dense barrage of energy.

—Thomas Tadlock employed his own electronic machine—"Archetron"—to scramble broadcast television symbols in a never-ending kaleidoscopic pattern.

—Nam June Paik used three hippies, a nude dancer and junk TV sets to create an electronic opera on the Moog Synthesizer.

—Jim Seawright painted an electronic picture by tape-delaying the three color tubes of the TV camera.

The artistic manipulation of space, form and color by electronic means is not the only concern of those working on the leading edge of television art. Sound—what you hear as well as what you see—has been the subject of intense scrutiny and extensive experimentation. Innovation in both the graphic and audio sense was underscored in "City/Motion/Space/Game," which televised different, but related, images simultaneously on two television channels (WGBH-TV and WGBX-TV), while two audio-tracks were broadcast in stereo on WGBH-FM radio. To my knowledge, it was the first multi-channel over-the-air broadcast of its kind. Essentially, "City/Motion/Space/Game" was a dance spectacular featuring Gus Solomons, Jr., choreographer and architectural graduate from M.I.T. From moment to moment and often simultaneously, Solomons was seen dancing at various locations around the city, or in the limbo setting of the television studio. Concurrently, two sound tracks carried the various sounds of the city, punctuated by remarks by Solomons about his art and life.

Public reaction to the program was mixed. Some viewers thought it too "gimmicky." But John Allen in the Christian Science Monitor wrote, "For half an hour there was something on the airwaves with as much style and daring—with as much esthetic and intellectual power to provide pleasure and provoke thought—as one associates with experimental filmmaking and contemporary popular music."

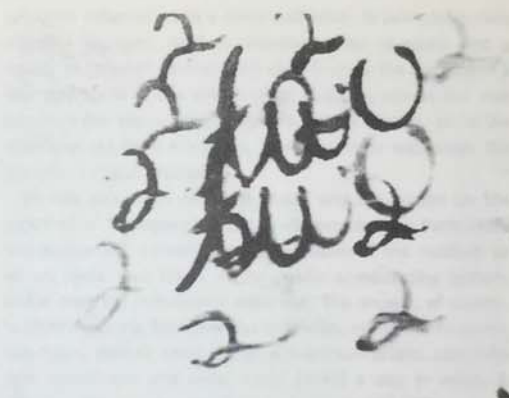
One of the most fascinating programs to come out of the WGBH artist-in-residence projects was "Zone," created by an experimental theater group made up of Harris Barron, his wife Ros Barron, and Alan Finneran.

The group sought a way of communicating non-literal, highly

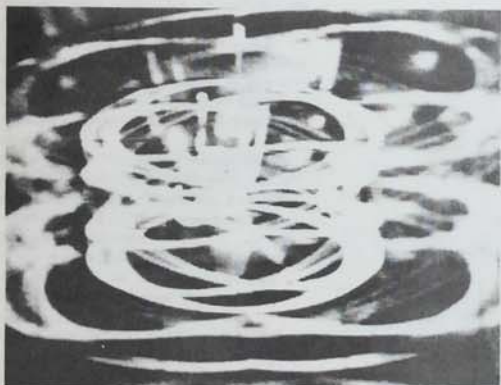
The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



11.



12.



13.



14.



15.



16.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

11. From "Video Variations," produced by WGBH in Boston in conjunction with the Boston Symphony Orchestra, 1971. Stan VanDerBeek, one of the participating artists, interpreted Ravel's "Daphnis and Chloe" with a barrage of flowing, "accidental" video effects.
12. From "Video Variations," Doug Davis interpreted a Bach symphony by showing a group of people writing and interacting with numbers juxtaposed with streams of other numerals moving through space.
13. Same as Fig. 11.
14. From "Video Variations," James Seawright created a video ballet, danced by his wife Mimi, to the music of Schönberg's "Five Pieces for Orchestra."
15. From "Video Variations," Nam June Paik used the video synthesizer (an optical color generator capable of taking the inputs of multiple black-and-white cameras and transforming them into an infinite number of color designs and patterns) to interpret the music and mythic stature of Beethoven through a series of real and abstract images.
16. From "Video Variations," Jackie Cassen combined photographic stills and clips of peace marches and "Wake Up, America" rallies in a collage accompaniment to Beethoven's "Eroica."
17. "City/Motion/Space/Game," 1968, featured Gus Solomons, Jr., dancing at various locations around Boston. The images, different but related, were carried simultaneously over WGBH and WGBX. At the same time two sound tracks carried the various sounds of the city, punctuated by remarks by Solomons about his life and art.



17.

symbolic information to a mass audience. In one particularly effective segment, light polarization, color reversals and a variety of "keying" devices were used to show the merging of a man and his television set. Through changing effects the man becomes the image he is watching on the screen, while the television set takes his place. The production was under the direction of David Atwood.

At this point it is pertinent to ask why the burden (or the blessing) of TV experimentation—developing new techniques and equipment, extending the proposition of the medium as an art form—has fallen to the public broadcasting system, rather than the commercial networks? The answer, of course, is obvious: Costs. Experimental television, even on a rudimentary basis, doesn't come cheap. A television studio, complete with technicians and crew, costs \$4000 a day or more. A video synthesizer can run from \$15,000 to \$30,000.

Help, however, is on the way for broadcast and cable systems. The development of a highly portable video-recorder—the Phillips PCP-90 color camera and an Ampex VR-3000 video-recorder—promises to bring the number of production personnel within manageable bounds. Instead of the 15 engineers usually used on remotes, the number of technicians has shrunk to three. WGBH has already used the system for the production of a complete series, "Jean Shepard's America," with gratifying results. Not only did the PCP-90 permit on-location taping with considerably less strain, it also provided for the expression of a highly personal statement.

However, only the most sophisticated broadcast TV stations can presently afford this equipment. It will be the introduction of portable, three-quarter-inch and one-inch video equipment that will ultimately change the industry. If broadcast quality can be obtained thereby, the cost of TV production will be cut in half. My prediction is that this is going to happen within the next two years.

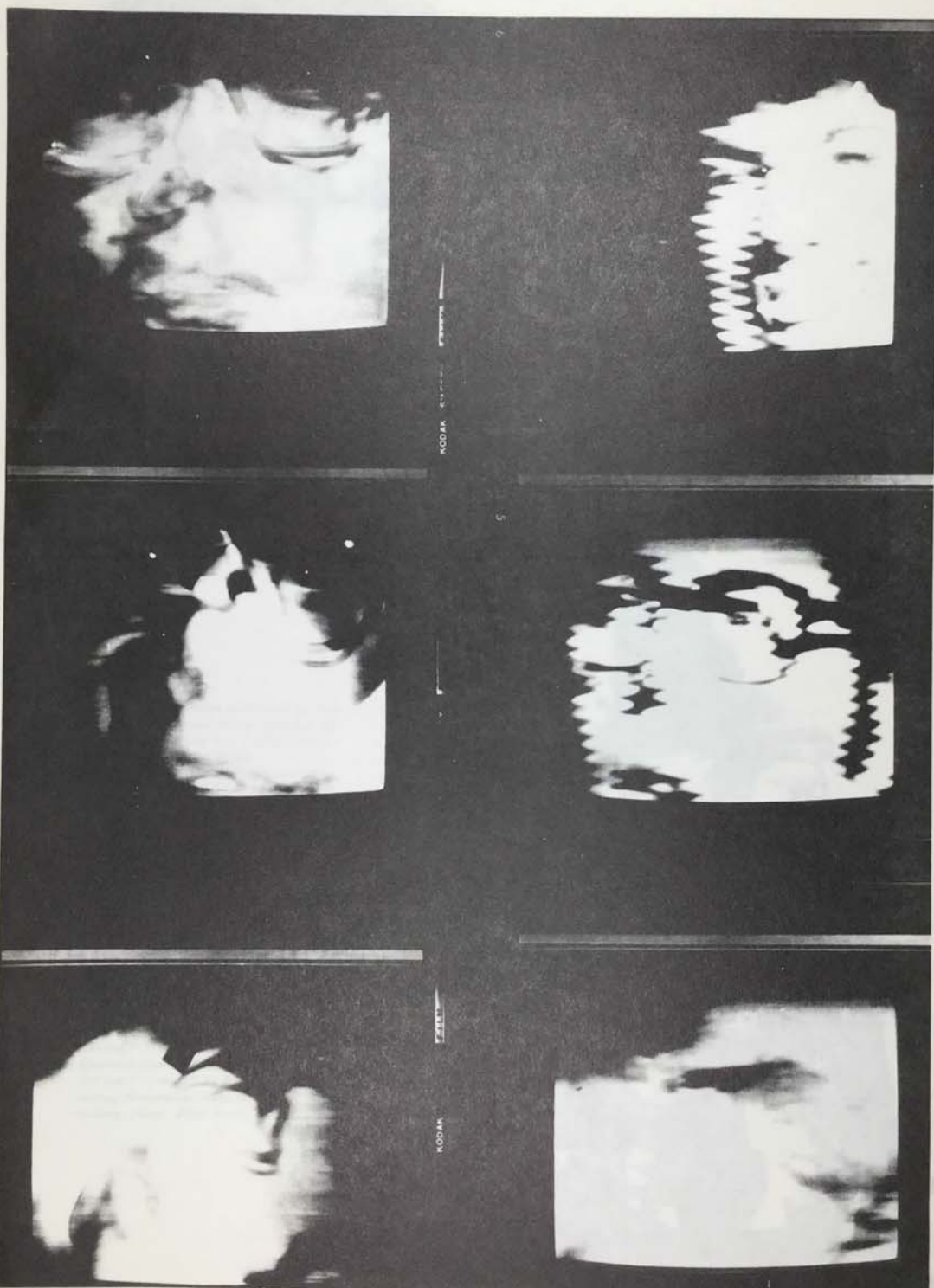
As things stand today, commercial networks on the whole refuse to foot multi-digit bills without assurance of a sizable share of a viewing audience. No experimental television program, of course, can offer such assurance. Indeed, they are not intended to do so (although "What's Happening, Mr. Silver?" was an eminently successful series in terms of numbers of viewers). Thus, for the time being, private and governmental funding constitute the life-source of experimental television, and dedicated radicals serve as its practitioners.

This isn't to say that experimental television and the technology it is spawning is without profit potential, either from an individual or a corporate standpoint. Even a cursory glance at the list of applications of video-art sends one's imagination soaring. More and more experimental television works are becoming the subjects of museum and gallery exhibitions. In early 1970, the Rose Art Museum at Brandeis University, for example, conducted the first campus exhibition devoted to video-art exclusively. The Whitney Museum in New York is currently conducting a similar venture, at which viewers not only see the latest creations by video-artists, but

Text continues on page 29

FOR STUDY PURPOSES ONLY. NOT FOR REPRODUCTION.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



19.

18. Demonstration of video synthesizer by Nam June Paik and Shuya Abe at exhibition of electronic art held at New York's Bonino Gallery. Photo: Peter Moore.

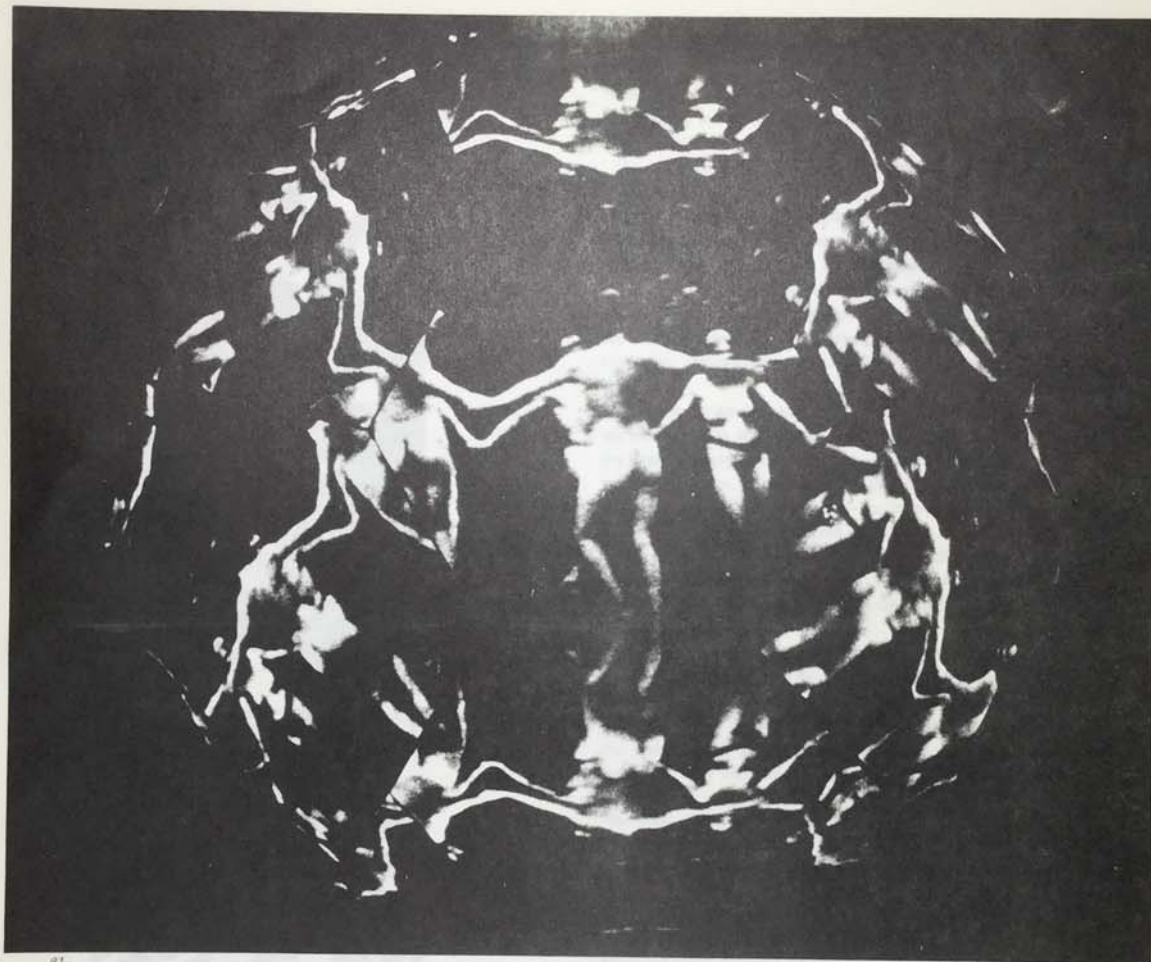
19. Videotape still from "Heimskringla!", a play produced by KQED in San Francisco. (KQED is another of the three public television stations funded to do experimental work in the medium—the third being WNET in New York.) Producer Brice Howard, director Tom O'Horgan, and all the other artists and technicians involved in "Heimskringla!", used a technique called "Videospace," wherein a mosaic of color and kaleidoscopic images is achieved by tampering with electronic circuitry via synchronization, amplitude, modulation and amplification. Using existing TV equipment, the show's creators were able to make on-the-spot visual changes, such as halos, outlines and graphic mirages. Photo: Robert Barclay.

20. Charlotte Moorman performs "Concerto for TV and Videotape," by Nam June Paik, during electronic art show at Bonino Gallery. Photo: Peter Moore.



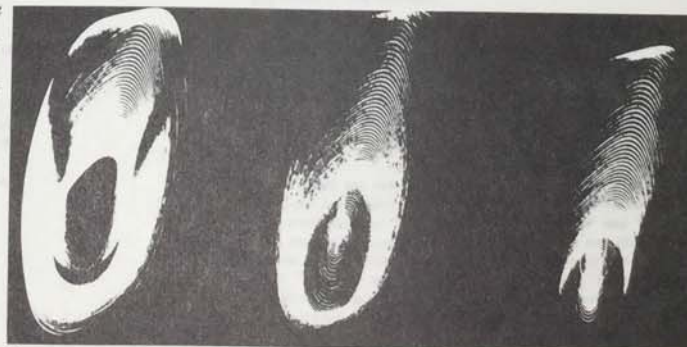
20.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



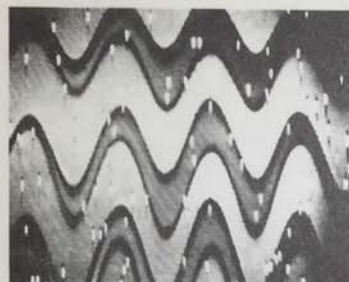
21.

21. "Innertube, a one person Video Environment by John Reilly and Rudi Stern"; from "Vision & Television," an exhibition at Rose Art Museum, Brandeis University, 1970. "A kinetic video environment for one person at a time," says the exhibit catalog about the work. "The theater for one is a cathode ray tube. One sees subliminal images of oneself intercut with specially created pre-taped material. The participant relates to himself in juxtaposition with the social, the erotic, the purely kinetic. One becomes part of a video time capsule. The instant merges with the preconceived and the two become kaleidoscopic." Photo: Jay Good.



22.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



23.



24.



25.

22. "Black Spiral," by Aldo Tambellini in collaboration with Tracy Kinsel and Hank Reinhold of Bell Labs; from "Vision & Television" exhibition. A set was recircuited so that all regular broadcast imagery was transformed into a constantly moving spiral drawn into the center of the tube.

23-25. "Synthesized Video Images," by Stephen Beck, KQED, San Francisco. Photos: Margaret D'amer.

compose their own video-art with the manipulation of a few dials. Plans are also underway at the Museum of Modern Art in New York to expand upon this type of "exhibition."

As the attention of the art community is focused on synesthetic videotapes (the merging of two images or techniques on videotape), it is quite conceivable that an abstract video-art composition may one day command as large a sum on the gallery auction block as a Jackson Pollock or a Jasper Johns. The Leo Castelli Galleries in New York has already sold several private videotapes to collectors. When one considers the reproduction rights advantages of an "original" or master tape, the prospects for monetary gain become immensely appealing.

Commercial advertisers and their agencies are beginning to toy with the idea of using the explosive effects of video-art as the basis for commercials. My own experience with this type of end-use, however, prompts me to state that extensive application must await the day when the multi-layered decision-making process along Madison Avenue is reduced. Few are willing to extend the corporate neck at this time, even though most advertising people agree that the need for a multi-media approach to the solution of visual problems is becoming more and more apparent.

In the final analysis, experimental television can and should be used as an instrument for enriching the television output of the entire country—making art an organic part of everyday life. In addition to serving as the basis for special programs, the special effects engendered by the manipulation of electronic circuitry are being used to emphasize or "hold" a story line together in conventional dramas, such as Kurt Vonnegut's "Between Time and Tribulation: A Space Fantasy," a show recently produced at WGBH-TV.

As the dimensions of television screens increase to the size of living room walls, soon-to-be-developed instruments will be used to project electrons as "wallpaper" of kaleidoscopic colors and design. Mass-produced video synthesizers in the hands of home viewers will permit one to alter colors, patterns and images to suite the décor of the room, the time of day, or the mood of the moment.

Cost and the inaccessibility of equipment still rank as the major obstacles to be overcome by experimental television teams. TV, in fact, may not exist as a truly creative art form until it becomes as cheap to produce a show as it is to Xerox a piece of paper. That day may be upon us sooner than you think.

Fred Barzyk has been a producer/director at WGBH in Boston since 1958, and has established his reputation in the television avant garde with productions of "The Medium Is the Medium" and "Video Variations with the Boston Symphony Orchestra." He won three Ohio State awards and a citation from National Educational Television for his show, "Madness and Intuition," in the series, "What's Happening, Mr. Silver?" Barzyk's latest work is a Kurt Vonnegut, Jr., special for public television which incorporates "video-art" in a drama structure. He has experimented with two-channel multi-media broadcasts and stereo drama, and was instrumental in the allocation of funds for the creation of a video synthesizer.

FOR STUDY PURPOSES ONLY. NOT FOR REPRODUCTION.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

OPEN CIRCUITS

An International Exhibition

devoted to the past,
present, and future of
Television

MOMA/1974

**FOR THE REMAINDER OF THIS 40 PAGE DOCUMENT, PLEASE SEE:
DEPARTMENT OF CIRCULATING EXHIBITION RECORDS, II.3.3.20.
THE MUSEUM OF MODERN ART, NEW YORK.**

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



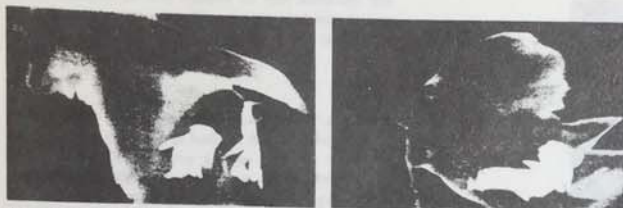
Nam June Paik, Video Synthesizer, in performance at the Bonino Gallery, New York City, 1972. (Photo: Howard Institute)

VIDEO OBSCURA

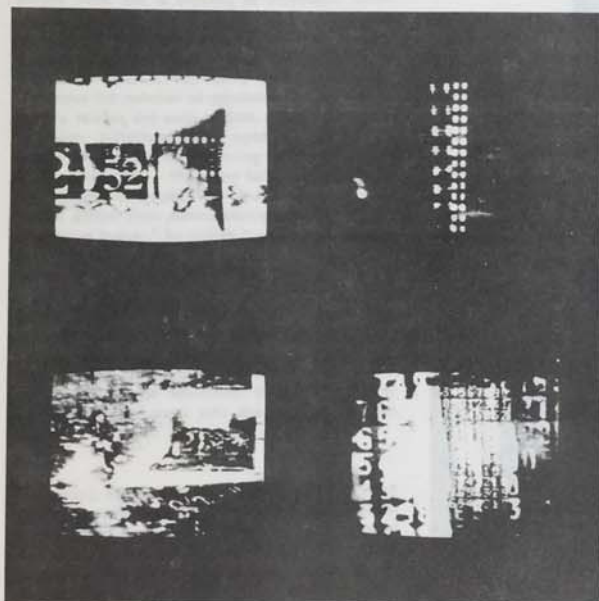
DOUGLAS DAVIS

The esthetic possibilities inherent in video have hardly been thought about at all. By "video" or "television" I mean much more than is normally understood by those terms. I mean the entire complex of hardware and software systems associated with visual broadcasting. I mean the sophisticated two-inch equipment available at the political top of the video structure to the portable half-inch videotape recorders and hand-held cameras used by artists and social radicals at the bottom. I mean "programs" made by one man, working alone, as well as by massive production teams — for "telecast" by video cassette, by cable television stations serving audiences in the thousands, or by closed circuit systems installed in a museum, a gallery, or a loft, as well as network trivia beamed to millions. I mean the moment and the quality of perception as well, when the electrons stream against the cathode-ray tube inside the set and hit the eyes of the viewers outside, settled in small groups of one, two, or three. This complex structure has been challenged and explored in many ways in the past few years but there has been little revision of critical and viewing attitudes. The gap that results is lamentable because the video structure is open now to change. For a

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

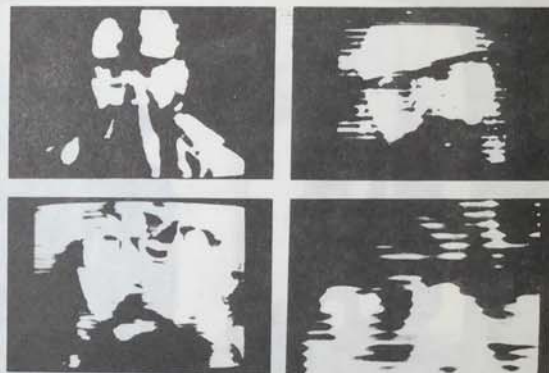


James Seawright, *Two Schoenberg Pieces*, 1970. Produced at WGBH-TV.
(Photos: James Seawright and Mimi Garrard.) Courtesy of the Boston Symphony Orchestra.



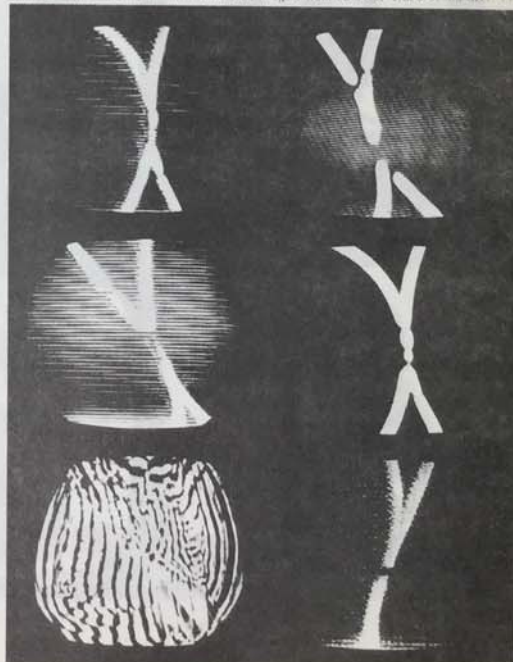
Douglas Davis, *Numbers: A Videotape Event*, 1970. (Photo: Peter Moore.)
Produced at WGBH-TV. Courtesy of the Boston Symphony Orchestra.

Keith Sommer, *Archival V*, 1971.



Nam June Paik, *Sections from a videotape portrait of Allen Ginsberg produced on the Paik-Abe Video Synthesizer*, 1971. (Photo: Peter Moore.)
Nam June Paik/Shuya Abe color courtesy Bonino Gallery.

Nam June Paik/Shuya Abe, *live synthesized imagery from Paik-Abe Video Synthesizer*, 1971.



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

scant minute in the history of the medium the situation is existential. The major problem is our inability to look at video without the prejudice of film.

I have in hand a recent review by Jonas Mekas of a videotape festival held at the Westbeth (New York City) Community Center and an essay by Jonathan Miller in the *New York Review of Books*. These two pieces define the gap in all its scope. Both demonstrate a remarkable insensitivity to the video screen. Mekas is easily the more serious and direct. He watches, reports what he sees, and pronounces it dull. He is bored by the poor sound-video quality of documentaries taped on the streets by media groups and is unimpressed by synthesized, abstract television. First, he is looking at videotape incorrectly, in the "public" setting forced upon him at Westbeth, where a ring of monitors was installed in a theaterlike setting for a large audience. The small screen rarely works in this way, whatever the number of monitors. Second, Mekas clearly misses the aura of film, a properly public occasion. Jonathan Miller operates several cuts below Mekas. He cannot bring himself to recognize — seriously — the video fact. More precisely, he cannot entertain the possibility that television differs from other, analogous media. "The television image," he writes, "is simply a disturbance on the surface of a piece of luminous glass which has no existence apart from the reality that it represents." This is an incredible statement. Think for just a minute about the luminosity of electronic color — the brightness is there because the light shines through it, from inside out, making possible hues beyond either painting or film. The television image is a highly complex disturbance, one that creates its own reality.

Vibrant, nervous color is a unique video asset. I am not surprised to hear that Cartier-Bresson said he had never seen color like that produced by the Nam June Paik-Shuya Abe Video Synthesizer, when it was displayed last summer in Aspen, Colorado. There are other assets, which I will come to later, but immediately I should say that the electronic field/canvas is transforming itself as I write. The jumpy diffuse picture that McLuhan called "cool" and involving, because it required intense participation to finish, is warming, becoming more sensuous. The receiving sets are far better than they were two years ago, particularly with regard to color. The size of the screen is due for significant expansion, too. It is likely that by 1980 flat, wall-sized screens will be common. Most important of all, the spread of cable telecasting systems insures the arrival of steady, clear-cut images. I hardly need add that the use in the home of videotape recorders and cassettes will further sensitize the eye to the video image.



Peter Campus, *Double Vision*, videotape performance at Finch College Museum of Art, New York City, 1971.

Vito Acconci, *Remote Control*, videotape performance at Finch College Museum of Art, 1971.



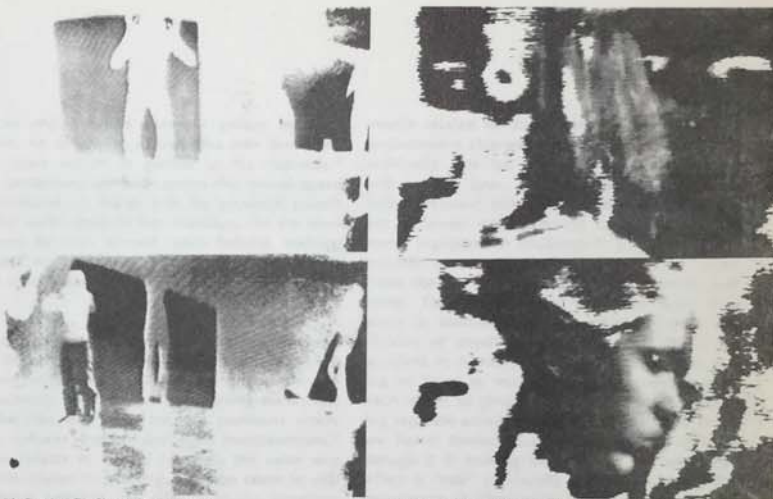
The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

They will sensitize the mind, too. The arena of choice is expanding far beyond what broadcast television presently affords. Both cable telecasting and video cassettes can be programmed for small and decidedly esoteric audiences. Personal, fragmented control will be asserted over content.

Two separate and alternating threads, the one historical, the other esthetic, will come together and unite toward the end of this essay. I must begin with an attempt at telescoping history. The earliest creators of what might be called the "personal" videotape, made on portable equipment, away from the impositions inherent in broadcast television (prior to 1970), appear to have been Nam June Paik, Andy Warhol, Les Levine, and Stan Vanderbeek. Paik purchased the first portable videotape recorder (or "VTR") sold to a consumer in New York City in 1965, taped the scenes outside the taxicab window on his way downtown, and played the result at the Cafe Au Go Go in Greenwich Village. He distributed dittoed copies of a manifesto: *As collage technique replaced oil paint, he wrote, the cathode-ray tube will replace the canvas.*

The premise of video as art lies in the one-to-one relationship between the image and the viewer. Television is not suited for theaters. Television takes place in what experimental producer Brice Howard has called the "videospace," which is essentially private. It is also casual. We will never expect the grand things from video that we expect from theater and film. They come by surprise and indirection. Video is closer to life than its competitors. Video is mind to mind, not mind to public. The audience is potentially huge, but intimate.

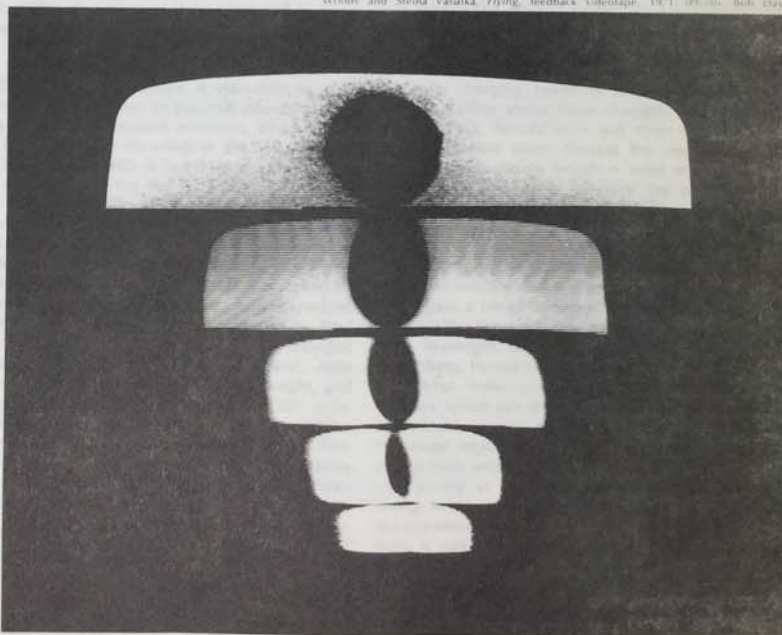
Half-inch videotape represents the first authentically electronic form that art can take. The appearance of the television set as an image in painting and as an element in sculpture (in constructions and multimedia environments) was a preliminary step, nothing more. Bruce Nauman worked the most intensively upon this step in the late 1960s. Possibly he preferred videotape to film because it was less complicated as a system; he could turn the camera on and let it run while he worked or performed, then play it back immediately and either keep or erase what he saw. The videotapes he has made since are similar in form and content to his films and performances. There is little utilization of the medium's technical characteristics. Videotape obviously provided Nauman with the means to record and develop ideas with comparative ease. He grimaces into the camera, stretches his mouth, walks, plays with props, paints his genitalia. Often he turns the camera on its side or upside down. Lately he has made videotapes of empty



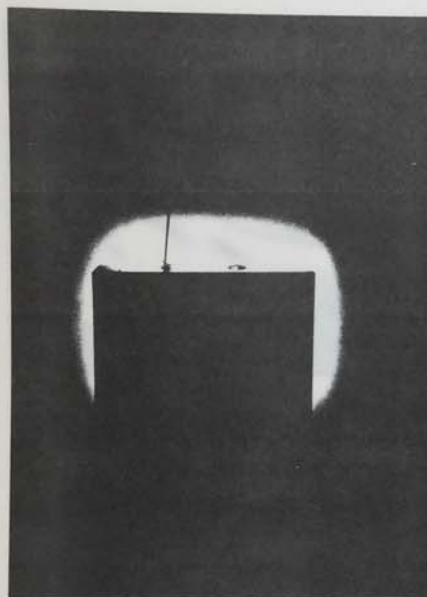
Keith Sonnier, *Dis-Play*, videotape, 1969.
(Photo: Richard Landry.)

Keith Sonnier, *Positive/Negative*, 16 mm film based on videotape, 1970.

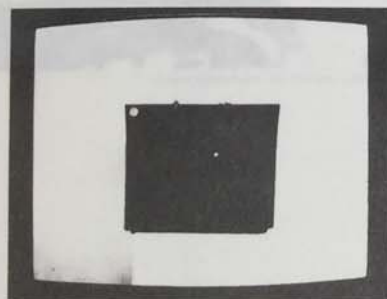
Woods and Stena Vasulka, *Flying*, feedback videotape, 1971, 16 mm, 900 days.



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



Douglas Davis, images from the *Present Tense I* documentary set, 1971. (Photo: Robert McElroy)



Douglas Davis, images from the *Present Tense I* documentary videotape, 1971. (Photo: Peter Moore)

spaces and installed them in gallery environments. An extension of this idea into live monitor space occurs in certain of his "tunnels." The performer/spectator enters the tunnel space — bounded on either side by plywood panels — and walks towards two monitors. On the lower one he sees himself, from behind, walking toward what he sees. On the top monitor he sees an empty space.

Hans Richter, the Dada film maker, writes: "I see the film as a part of modern art. There are certain problems and sensations which are peculiar to painting, and others which belong exclusively to the film. But there are also problems where both spheres overlap and even interpenetrate." Video relates to film in precisely the same way as film relates to painting. Nauman came to video from painting and film, a studio situation. His tapes record private studio performances, in the manner of film documentary. The media groups observed by Mekas employ tape in the same way but over a broader slice of life and less successfully. Neither physical nor social scale fits the cathode-ray tube (or "CRT"), at least not yet. Video documentary is best focused in on a single image or idea.

The half-inch videotape is electronic in purpose as well as form: to transmit information on the CRT. So is broadcast television, which began to be a possibility for artists in 1968-69, roughly, in two places, KQED in San Francisco and WGBH in Boston. There for the first time, open access to the complete tool took place without restriction or imposition. Terry Riley made *Music With Balls* at KQED, and the Center for Experiment in Television produced *Heimskringla*, a video play written by Tom O'Horgan. WGBH was visited by a stream of artists. Some of them collaborated on *The Medium Is the Medium*, produced by Fred Barzyk and broadcast in 1969, which included brief contributions by Paik, Otto Piene, Aldo Tambellini, Allan Kaprow, James Seawright, and Thomas Tadlock. One year later, WGBH gathered another group of artists to produce *Video Variations*. They included Barzyk, Paik, Seawright, Vanderbeek, Tsai, Constantine Manos, Jackie Cassen, Russell Connor, and this writer. *Video Variations* was broadcast early in 1972. A great deal of the experimental work undertaken in television stations has not been seen, except in closed circuit situations. There have been scattered collaborations between artists and the station structure in Great Britain, West Germany, Sweden, and in New York, at WCBS-TV and WNET, and the two CATV systems.

Working contact with a television station changes the attitude of the artist as well as the station. Until then, the artist tends to use the videotape recorder as another studio tool to impose upon video ideas generated in other conditions,

mostly related to static esthetics. The broadcast environment changes the artist perceptually and politically. The last change, the political one, I will explore later. The physical change occurs with electronic mixing. Most television stations are endowed with technical capacities that are rarely exploited or challenged. These capacities provide command over a total field of color, color change, field density, layering, kinetics, and more. The entire *Video Variations* hour is a study in electronic density, which includes the illusion of depth. I discovered this almost by accident in *Numbers*, my own work. I was trying to layer as many images as possible over each other, to give the viewer the sense of seeing separate activities together as one field. What we found instead was depth. The eye feels as though it is looking deep within the tube; the effect is "real" or visually "true," unlike the flat experience of illusionism that occurs in film.

I have already mentioned the special qualities of video color. Keith Sonnier, who has used bright tints in his media environments, extends that sense with an electronic colorizer. This device permits the artist to "paint" on a previously recorded black-and-white videotape with artificial hues. In one such case, Sonnier set up two television cameras in his loft and focused upon a couple changing positions in a bed, talking with each other about those changes. The basic field is sepia, flecked now and then with tiny spots of radiant color. Toward the end — the tape is 50 minutes in length — solid washes of pink, purple, and green obscure the activities, which then return to visual clarity.

Density again. As noted, the video picture cannot accommodate environmental scale, but it can encompass a broad complexity of abstract forms and activity. The work executed by Paik, Vanderbeek, Seawright, Riley, Richard Felciano, Richard Lowenberg, Hamid Naficy, and others is saturated with these forms. In *Music With Balls* the aural overlays, which mix four tracks with a saxophone and electric organ, are more than matched by the visual wipes and dissolves, as huge spheres sweep back and forth across the screen, on several planes at once, distorting color as they swing. In all of this work, from Riley to Paik, the evanescence of the image is the central fact. No form is static.

In *Two Schönberg Pieces*, James Seawright takes muted, controlled advantage of this evanescence. This piece, created for *Video Variations*, is built painstakingly on one principle: the order in which color signals are transmitted from the TV camera to the monitor. By spacing these signals out, Seawright turns each movement into a multiple of itself. The two dancers become a phalanx of

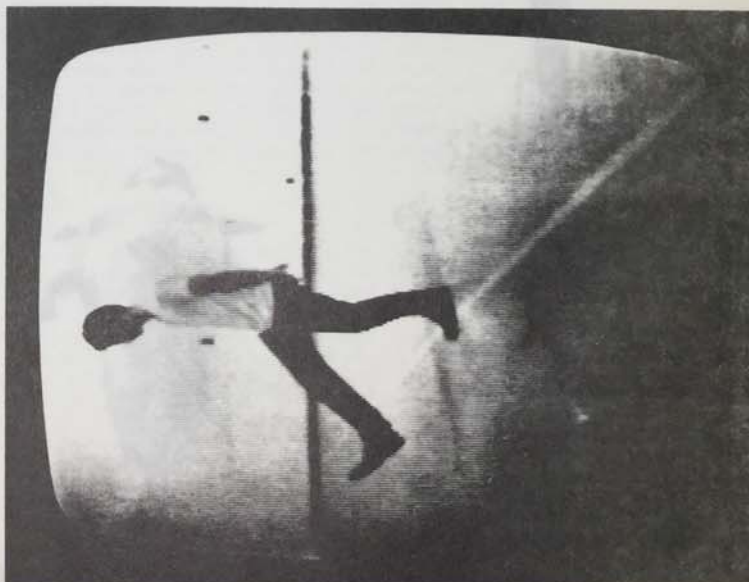
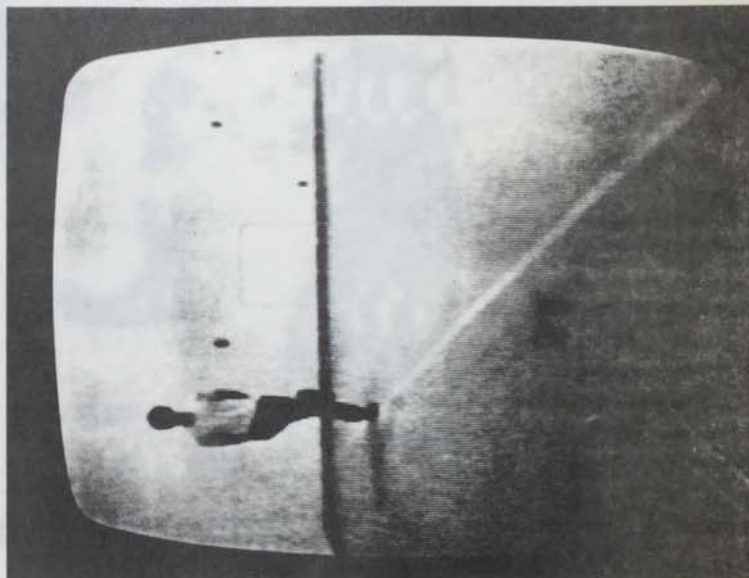
FOR STUDY PURPOSES ONLY. NOT FOR REPRODUCTION.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



Dennis Oppenheim, *Air Pressure*, videotape, 1971.

Bruce Nauman, *Slow Angle Wall*, videotape, 1968.



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



Joanne Kyger, *Descartes*, videotape, 1971. (Photo: m d'Hamer.)



Gene Davis, *Video Puzzle*, videotape, 1971.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

dancers. Their motions are waves of striated color.

Despite this sensuousness, social and political issues hover about the current usage of video. The possibility of personal production — through portable VTR equipment — first gained public attention through groups like the Video Free, the Raindance Corporation, Global Village, and People's Video Theater. In varying degrees each believes that the dissemination of the production tool can change the social/political structure by providing alternate information. At the other end, the fine art end, politics hovers, too, like a discredited guest. If a painting can change consciousness slowly and grudgingly, videotape can effect perception on a widespread and instantaneous level. The privacy of Nauman's studio dissolves once it is taped. The most advanced thinking in contemporary art is public in potential. The Dadaists dreamed of bringing this about; Robert Motherwell says Dada was the first instance where the means of contemporary art were directed toward social change. The Constructivists were in fact more explicit. Dziga Vertov, the originator of the *Kino-Pravda* films, said of his medium: "My way leads towards the creation of a fresh perception of the world." In one of Paik's most successful tapes he expands the faces of politicians at press conferences, splitting the electronic image into black-white dots, while the voices are similarly distorted. I hope it is clear that I am not talking about politics in any literal way but about perception which governs our choices, in art and in life.

The last attribute of video — immediacy — is the most difficult to define. No other medium allows it to such an extent. Television can happen while you watch, in real time. The future can be unpredictable, like life itself and unlike the live theater (where the next moment is predetermined). Yet video is better than life. The small screen focuses and intensifies real time experience. The first step I wanted to take with video was to contact the viewer in such a moment, and share it with him. This was achieved last year in Washington, D.C., through the Corcoran Gallery and WTOP-TV, in *Electronic Hokkaido I*. We allowed an entire city to sing and chant to itself, through the means of sets scattered about the videosphere. Their chanting modulated the electronic images they saw, while the images were forming. Film lacks this potential; it is edited and then rendered public. Another aspect of this inherent immediacy is the mechanics of the video picture itself, easily apparent in streaming feedback forms. The video image is created by light passing through the screen, a screen that paints and repaints itself continually, at a rate of 3,000,000 dots per second. The kind of immediacy I am discussing has to do with a malleable future. The sense that the next minute is open to every option, yours or the artist's. This is not an easy quality to

handle. It demands the acceptance of real time. The painter and the sculptor must confront a mind watching in sequence, not now and then, as in a gallery or museum space. The videospace is both linear and moving onward toward a future.

Three recent exhibitions in New York indicate the ways in which art is presently trying to deal with video. One way, intensely physical, was encompassed by the videotapes shown at the Whitney Museum and the appearance of the Paik-Abe Video Synthesizer at the Bonino Gallery. Another approach was demonstrated in the performances videotaped at the Finch College Museum of Art. The Whitney exhibition was dominated by feedback and synthesized imagery, by all the means implicit in the system itself. The work of Woody and Steina Vasulka was at the esthetic core of this exhibition. In their tapes they sent wiry, writhing shapes moving rapidly from one end of the screen to the other. "We will present you sounds and images," they stated, "made artificially from various frequencies, from sounds, from inaudible pitches and their beats." Internal imagery, in brief. The synthesizers created by Eric Siegel and Stephen Beck turned this idea into machinehood. Siegel's images are clean and Constructivist in nature, Beck's diffuse and shifting.

The Paik-Abe Synthesizer is very different. It uses the outside world extensively. Images are fed from a battery of cameras into a complicated console, within which distortion and colorizing of all kinds is possible. At the Bonino Gallery the content was the audience, mugging and frowning to see itself distorted on television. The Paik-Abe image is expressionist in every sense of the word, stretching and extending the human face and whatever emotional content it happens to be indulging.

The Finch tapes, which included works by Vito Acconci, Peter Campus, Dan Graham, Les Levine, Michael Netter, Dennis Oppenheim, Steven Reich, and myself, exploited the medium only in the subtlest sense. There are two tapes I want particularly to mention, by Campus and Acconci. In the first the artist videotapes himself from above. Campus placed the portable camera on the balcony of a gymnasium and dropped a rope down from it to the floor below. By holding onto the rope and spiraling around with it, he kept the focus upon himself. The effect — as he circles around the floor — is sharply vertical; at times it is almost dizzying. Vito Acconci's performance, *Remote Control*, differed greatly in mode but played with the medium just as casually. It is recorded on two tapes and requires two monitors. Each tape follows the conversa-

tion of one performer, seated in a box, trying to communicate with the other performer, similarly seated, across the room. The male performer attempts to persuade the female to tie herself up with a rope. Now and again he glances at the monitor to spy what she is doing. There is no more recognition of the medium than this. Yet neither work — nor any of the Finch performances — would exist without the casually conceptual structure that videotape provides.

Whether the content is feedback electrons or repetitive movement in the studio, the early video art tries to defy time. Rather than linear progression it moves in a circular fashion, with no beginning and no end. This presupposes a mind-to-public rather than mind-to-mind communication, a bored and formal audience rather than an intense and informal one. Painters and sculptors do not normally think in terms of moving time. Their images are both static and instantaneous. "Time has to do with seeing," Robert Morris told William Agee in a 1970 interview, "with behavior. . . . That gets into perception. You can talk about that: the necessity of time for perception. . . . Some things might remain static, but they might have their static, momentary, physical existence while you are there. When you came back, they might be different. Sometimes things fall down, for example. Objects in the world are in constant flux and changing and acknowledging that provides another way of dealing with things." In two of Morris' recent films there is a confrontation with time. *Gas Station* is a real time film. It depicts on two separate screens, from far and near, the activity of the station. *Neo-Classic*, made last year during his Tate Gallery exhibition, records objects in motion, objects made especially for display at the gallery: a rolling cylinder, a ball, a tightrope wire in vibration — all of them caught in the flux of time.

This represents a keenly different awareness and exploitation of time. It is neither fixed nor circular. It is progressive. It destroys static notions of art and life. No medium demands this progressive sense of time more than video, which is why — among other things — video is political in the deepest personal sense. The more fully we exploit the medium as art, the more completely we change perception. This will now become clearer if I summarize the inherent qualities of video: nervous, luminous color; the density and complexity of the picture field; the immediate, mind-to-mind contact between creator and perceiver. At its esthetic core video is art dematerialized. Its organic physical qualities are confined to the loop tape, the cartridge cassette, or live broadcast through the air. Therefore the result is political and esthetic at once: swift, intense communication, not possession. ■

The Museum of Modern Art Archives, NY	Collection:	Series/Folder:
	KM	II.A.8

VIDEO BIBLIOGRAPHY

- Aaron, Chloe. "The Alternate-Media Guerrillas." New York, October 19, 1970.
- Barzyk, Fred. "TV as Art as TV," Print, Vol. 26 No. 1, January-February 1972.
- Battcock, Gregory. "A Mobile Culture." Art and Artists, Vol. 6 No. 11, February 1972.
- "The Greening of Televideo and the Aesthetics of Boeing," Domus, 509, April 1972.
- Davis, Douglas. "Media/Art/Media." Arts Magazine, September, 1971.
- "Rauschenberg's Recent Graphics." Art in America, July-August, 1969.
 - "Television's Avant-Garde," Newsweek, February 9, 1970.
 - "Television Is." Radical Software, No. 2, 1970.
 - "Veni, Vidi, Video." Newsweek, April 13, 1970.
 - "Video Obscura?" Artforum, April, 1972. Design Quarterly, 1966-67. "Design and the Computer."
- Durniak, John. "The Vanderbeek Dimension." US Camera World Annual, 1970.
- Howard, Eric. Videospace. San Francisco National Center for Experiments in Television, 1972.
- Kragen, Robert. "Art and TV." Radical Software, Summer 1970.
- Margolies, John. "TV - the Next Medium." Art in America, September-October, 1969.
- Mekas, Jonas. "Movie Journal." The Village Voice, December 2, 1971.
- Movshon, George. "The Video Revolution." Saturday Review, August 8, 1970.
- O'Connor, John J. "What Hath the Underground Wrought?" New York Times, June 4, 1972.
- Parisi, Anthony J., "The New Art." Pulsebeat, Summer 1969.
- Nam June Paik: Electronic Art. New York: Galeria Bonino, 1965.
- Paik, Nam June. "Expanded Education for the Paperless Society." Radical Software, Summer, 1970.
- "Stimulation of Human Eyes by Four-Channel Stereo Video-taping." E.A.T./L.A. Survey, Fall, 1970.

The Museum of Modern Art Archives, NY	Collection:	Series/Folder:
	KM	II.A.8

VIDEO BIBLIOGRAPHY CONTINUED

PAGE 2

Price, Jonathan. "Video Pioneers." Harper's, Vol. 244 No. 1465, June 1972.

Rose, Barbara. "Switch-on Art." New York Magazine, Vol. 4 No. 51, December 20-27, 1971.

Schjeldahl, Peter. "Well, It's a Heck of a Long Way from 'Marcus Welby'". New York Times, April 11, 1971.

Software. Essays by Jack Burnham. Theodore Nelson. Introduction by Karl Katz. New York: Jewish Museum, 1970.

Tambellini, Aldo. "Simultaneous Video Statements." Radical Software, Summer, 1970.

Vision and Television. Foreword by Russell Connor. Waltham, Mass.: Rose Art Museum, Brandeis University, 1970.

Vostell, Wolf. Happening und Leber. Berlin, Germany, 1970.

Yalkut, Jud. "Frank Gillette and Ira Schneider, Parts I and II of an Interview." Radical Software, Summer, 1970.

"Electronic Zen: The Underground TV Generation." West Side News (New York), August 10, 1967.

Youngblood, Gene. Expanded Cinema. New York: Dutton, 1970.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

VIDEO EXHIBITIONS

1967

Nicholas Wilder Gallery, Los Angeles, Bruce Nauman

1969

Leo Castelli Gallery, New York City, Bruce Nauman, May 1969

Howard Wise Gallery, New York City, "Television as a Creative Medium", May 17 - June 11, 1969.

1970

Rose Art Museum (Roses Institute of Fine Arts) Brandeis University, Waltham, Massachusetts, "Vision and Television", January 21 - February 22, 1970.

Leo Castelli Gallery, New York City, Keith Sonnier, March 1970.

1971

State University of New York at Buffalo, Spring Gardens Festival, "Eyeconosphere", Spring, 1971.

Finch College Art Museum, New York City, "Videotape Show", October, 1971.

The Whitney Museum of American Art, New York City, New American Filmmakers' Series, "Special Videotape Show", December 9 - 16, 1971.

Leo Castelli Gallery, New York City, Bruce Nauman, 1971

Reese Palley Gallery, San Francisco, Paul Kos, Howard Fried, Terry Fox, 1971-72.

Mercer Arts Center, New York City, "The Kitchen", continuing to present.

1972

Leo Castelli Gallery, New York City, Keith Sonnier, February 1972.

Paula Cooper Gallery, New York City, Videotapes, May 11-12, 1972.

Mercer Arts Center, New York City, "The Kitchen", since 1971, (especially June, 1972, Video Festival).

Reese Palley Gallery, New York City, Paul Kos, June 1972.

Walker Art Center, Minneapolis, Minnesota, Videotape Festival, August, 1972.

Sonnabend Gallery, New York City, William Wegman, October 28, 1972.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

TV AS ART AS TV

Can the medium that gave us "Beverly Hillbillies" provide the basis of a creative art form? The answer is "yes" . . . as a growing number of video-artists testifies.

It is estimated that the average American spends 1200 hours a year in front of a television set.

Which is a little more than three hours a day.

Or an eighth of a lifetime.

And what does he see?

For the most part, ubiquitous Westerns, soap operas, ancient movies, variety shows that vary little, situation comedies, and commercials—ah, yes, commercials. All about as bland and banal as the typical American kitchen. Which is often where you find yourself.

Then suddenly, every once in a while, out of the blue, something like this comes along:

"Swirls, ripples, slides of color . . . melting human features . . . sparks flying across the screen in lovely, agitated patterns . . . scrolls of light, swirling, fiery paths, brilliantly colored tear-drops elongated and falling . . . little shoals of colored fish-drops, floating, swimming across the screen . . . garlands of dotted lights . . . a piano blazing, disintegrating, crumpling in flame. . ."

That's experimental television. Which is alive and well and doing a land-office business in public television stations across the U.S. Which should be good news to everyone who watches television, and of particular importance to all those engaged in visual communications. The passage I quoted is a description by Edith Efron, editor of TV Guide, of a segment of an experimental television program called "Video Variations," produced by WGBH in Boston in conjunction with the Boston Symphony Orchestra. The program came about when the Orchestra received a grant from the National Endowment for the Arts (headquartered in Washington, D.C.) to test more interesting ways of visualizing symphonic music on television. Since WGBH has been televising live concerts of the Boston Symphony Orchestra for years, it was naturally interested in the opportunity. At the request of the Orchestra, the station supplied a producer, director, equipment and eight artists from outside WGBH for the project. Each artist was given great latitude in his choice of music from the Orchestra's recorded repertoire, and total freedom in the composition of his short, visual accompaniment. The results were, to say the least, unique.

—Stan VanDerBeek, a filmmaker who generally works in controlled patterns of strong, geometric shapes, interpreted Ravel's "Daphnis and Chloe" with a stunning barrage of

flowing video effects which appeared almost accidental.

—Tsai Wen-Ying, a cybernetic sculptor who had never worked in television before, constructed a delicate sculpture of thin metal rods which vibrated in response to the music.

—The first and second movements of Schönberg's "Five Pieces for Orchestra" were accompanied by a dreamlike video ballet composed by James Seawright, and his dancer wife, Mimi Garrard.

—Constantine Manos, official photographer to the Boston Symphony Orchestra, selected a series of still photographs to interpret the third and fourth movements of the same Schönberg work.

—Doug Davis, art critic for Newsweek, chose to visually interpret a Bach symphony as a "happening." His event showed a group of people writing and interacting with numbers juxtaposed with streams of other numerals moving through space.

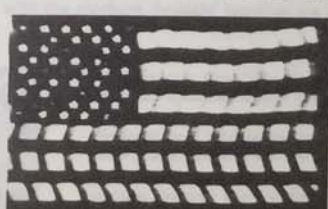
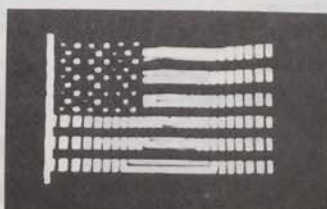
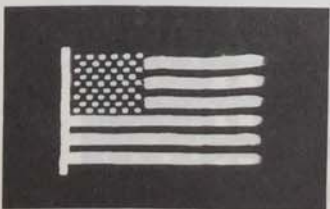
—Jackie Cassen, another filmmaker, combined photographic stills and clips of peace marches and "Wake Up, America" rallies in a collage accompaniment to Beethoven's "Eroica."

—Nam June Paik, a musician-scientist-artist-engineer widely known for his development of the video synthesizer (an optical color generator capable of taking the inputs of multiple black-and-white cameras and transforming them into an infinite number of color designs and patterns) utilized the synthesizer to interpret the music and mythic stature of Beethoven through a series of abstract and real images. The final image is of a grand piano on fire. (This is what Edith Efron was describing in the passage cited above.)

—Russell Conner, member of the New York State Council on the Arts, and formerly assistant curator of the Rose Art Museum of Brandeis University, also used the Paik video synthesizer. He interpreted a section from Wagner's "Die Götterdämmerung" with a random, abstract visual composition of a nude model.

Eight artists. Eight personal statements. Eight strikingly effective presentations. "Video Variations" quite graphically demonstrates that when art and technology, and in this case videotape primarily, are brought together with taste and imagination, stunning solutions to visual problems can be achieved. It also serves to reveal the emergence of the video-artist as a vital new force in visual communications.

The video-artist, to put it simply, is a writer, composer, photographer, choreographer, filmmaker, painter, sculptor, architect or graphic designer who has brought his, or her, particular talents to television in an effort to utilize the



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

Whether a graphic designer, photographer, painter, filmmaker, or choreographer, his goal is to revitalize the TV medium.

medium in new ways, and to find new modes of expression for his own art. His genesis rests with the establishment in 1967 and 1972 of three artist-in-residence programs in public television stations in San Francisco, New York and Boston.

One such facility at San Francisco's KQED, founded in 1967, and under the direction of Brice Howard and Paul Kaufman, brought artists and technologists together to work unfettered for a full year before being replaced by another "team." Funded by the Rockefeller Foundation and the National Endowment for the Arts,* the ongoing program was conducted in an atmosphere of pure experimentation geared to advancing the "state of the art," or of establishing a state where none existed, with emphasis on scoring technological breakthroughs.

While no conscious effort was made to produce a "product," an outstanding result of the KQED experiment was the development of a new visual concept called "Videospace," which produced a series of startling visual effects and kaleidoscopic images using existing broadcast equipment. Described by this magazine as "more a new way of looking at TV than a technological innovation," Videospace obviated conventional thinking in the theatrical sense, and "infused the television screen with new meaning."

In Boston, WGBH has received a \$300,000 three-year grant from the Rockefeller Foundation to bring artists from various fields under its aegis to apply what is learned to the creation of programs that could be shown and tested on the air. The result has been a series of startlingly innovative programs which reinforces the potential of television as an art form, and demonstrates the creative possibilities inherent in the new tools being spawned.

"What's Happening, Mr. Silver?" was one of the first programs developed by WGBH utilizing the experimental criteria established. The overall objective was simply to present segments of experience from a wide spectrum of everyday life, and to do so in a manner which respected the viewers' ability and willingness to judge and find significance in aspects of ordinary existence which they may not have recognized before. Sparked by the creative impulses of David Silver, a young Englishman teaching at Tufts University, the 30 programs in the series never ran along traditional lines. On the contrary, they established a totally new format—the video collage.

The single most important element was the basic technique of juxtaposition, in which a group of separate pieces were

placed together in such a way as to comment on each other, acting as catalysts for presenting familiar material in a provocative manner. This juxtaposition invariably resulted in a sense of surprise and the unexpected. One particularly unusual offering, "Madness and Intuition," utilizing John Cage's theories of chance, featured the outputs of 48 different video and sound sources in an absolutely random process. Artists, actors, technicians, crewmen, directors and engineers were all asked to step out of their normal functions and assume whatever role struck them as pertinent at a given time. Whenever anyone got bored, he simply switched to something else, without rhyme or reason. The point was to expand the role of accidental possibilities in the act of creating for television.

The Educational Broadcasting Corporation, representing both public television station WNET in New York and NET, the national production center, announced in January of this year the formation of its own Experimental Television Center supported by \$218,000 in grants from both the Rockefeller Foundation and the New York State Council on the Arts.

Under the direction of David Loxton, the Center's main objective is to attract to television the huge resource of human talent available in New York. Writers, poets, artists, humanists, dramatists, sociologists, critics and choreographers reflecting the spectrum of New York cultural life will be invited to join with ETC's own staff of producers, directors and engineers. Capitalizing on experimental projects from both San Francisco and Boston, the New York Center will develop its own style and approach in bringing thinkers to television and letting them find expression for their ideas through the video medium.

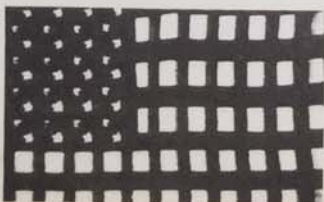
It is obvious to me that each of these artist-in-residence programs fulfills an important function in the growth of the video-art movement:

San Francisco—the thoughtful theoreticians, defining the "grammar" and ground rules of the medium.

Boston—exploring the possible synthesis of television communications with dance, music, art and drama.

New York—utilizing TV to implement or extend psychological, sociological or philosophical ideas.

"The landmark show that first attracted attention to TV's avant garde," according to Newsweek, was "The Medium Is the Medium," broadcast by the Public Broadcast Laboratory nationally in 1969. Executive producer David Oppenheim, who convinced national educational TV executives of the need to experiment with the medium, brought together six artists and WGBH.



1-5, Title sequence from "The Medium Is the Medium," a landmark show (1969) that first attracted attention to TV's avant garde. Produced by WGBH in Boston, one of the three public television stations that have been funded to explore the potential of the medium, the show was broadcast nationally by the Public Broadcast Laboratory. Designer of title sequence was Fred Barzyk.

*The workshop is now known as the National Center for Experiments in Television, with funds from the Corporation for Public Broadcasting.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

Whether a graphic designer, photographer, painter, filmmaker, or choreographer, his goal is to revitalize the TV medium.

medium in new ways, and to find new modes of expression for his own art. His genesis rests with the establishment in 1967 and 1972 of three artist-in-residence programs in public television stations in San Francisco, New York and Boston.

One such facility at San Francisco's KQED, founded in 1967, and under the direction of Brice Howard and Paul Kaufman, brought artists and technologists together to work unfettered for a full year before being replaced by another "team." Funded by the Rockefeller Foundation and the National Endowment for the Arts,* the ongoing program was conducted in an atmosphere of pure experimentation geared to advancing the "state of the art," or of establishing a state where none existed, with emphasis on scoring technological breakthroughs.

While no conscious effort was made to produce a "product," an outstanding result of the KQED experiment was the development of a new visual concept called "Videospace," which produced a series of startling visual effects and kaleidoscopic images using existing broadcast equipment. Described by this magazine as "more a new way of looking at TV than a technological innovation," Videospace obviated conventional thinking in the theatrical sense, and "infused the television screen with new meaning."

In Boston, WGBH has received a \$300,000 three-year grant from the Rockefeller Foundation to bring artists from various fields under its aegis to apply what is learned to the creation of programs that could be shown and tested on the air. The result has been a series of startlingly innovative programs which reinforces the potential of television as an art form, and demonstrates the creative possibilities inherent in the new tools being spawned.

"What's Happening, Mr. Silver?" was one of the first programs developed by WGBH utilizing the experimental criteria established. The overall objective was simply to present segments of experience from a wide spectrum of everyday life, and to do so in a manner which respected the viewers' ability and willingness to judge and find significance in aspects of ordinary existence which they may not have recognized before. Sparked by the creative impulses of David Silver, a young Englishman teaching at Tufts University, the 30 programs in the series never ran along traditional lines. On the contrary, they established a totally new format—the video collage.

The single most important element was the basic technique of juxtaposition, in which a group of separate pieces were

placed together in such a way as to comment on each other, acting as catalysts for presenting familiar material in a provocative manner. This juxtaposition invariably resulted in a sense of surprise and the unexpected. One particularly unusual offering, "Madness and Intuition," utilizing John Cage's theories of chance, featured the outputs of 48 different video and sound sources in an absolutely random process. Artists, actors, technicians, crewmen, directors and engineers were all asked to step out of their normal functions and assume whatever role struck them as pertinent at a given time. Whenever anyone got bored, he simply switched to something else, without rhyme or reason. The point was to expand the role of accidental possibilities in the act of creating for television.

The Educational Broadcasting Corporation, representing both public television station WNET in New York and NET, the national production center, announced in January of this year the formation of its own Experimental Television Center supported by \$218,000 in grants from both the Rockefeller Foundation and the New York State Council on the Arts.

Under the direction of David Loxton, the Center's main objective is to attract to television the huge resource of human talent available in New York. Writers, poets, artists, humanists, dramatists, sociologists, critics and choreographers reflecting the spectrum of New York cultural life will be invited to join with ETC's own staff of producers, directors and engineers. Capitalizing on experimental projects from both San Francisco and Boston, the New York Center will develop its own style and approach in bringing thinkers to television and letting them find expression for their ideas through the video medium.

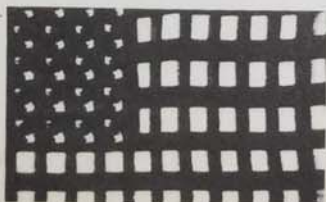
It is obvious to me that each of these artist-in-residence programs fulfills an important function in the growth of the video-art movement:

San Francisco—the thoughtful theoreticians, defining the "grammar" and ground rules of the medium.

Boston—exploring the possible synthesis of television communications with dance, music, art and drama.

New York—utilizing TV to implement or extend psychological, sociological or philosophical ideas.

"The landmark show that first attracted attention to TV's avant garde," according to Newsweek, was "The Medium Is the Medium," broadcast by the Public Broadcast Laboratory nationally in 1969. Executive producer David Oppenheim, who convinced national educational TV executives of the need to experiment with the medium, brought together six artists and WGBH.



1-5, Title sequence from "The Medium Is the Medium," a landmark show (1969) that first attracted attention to TV's avant garde. Produced by WGBH in Boston, one of the three public television stations that have been funded to explore the potential of the medium, the show was broadcast nationally by the Public Broadcast Laboratory. Designer of title sequence was Fred Barzyk.

*The workshop is now known as the National Center for Experiments in Television, with funds from the Corporation for Public Broadcasting.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



6. [Illegible text]



7.



8.



9.

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

—[Illegible text]

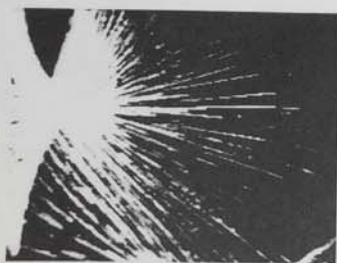
The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



6-8. From "The Medium Is the Medium." James Seawright, one of the participating artists, painted an electronic picture by tape-delaying the three color tubes of the TV camera.

9. From "The Medium Is the Medium." Aldo Tambellini showed 40 black children in the WGBH studio interacting with 100 colored slides and seven 16mm films projected into space. The resulting interplay, taped live on three TV cameras and concentrated on one videotape, created a "dense barrage of energy."

10. From "The Medium Is the Medium." Nam June Paik used three hippies, a nude dancer, and junk TV sets to create an electronic opera on the Moog Synthesizer.



10.

—Artist Allan Kaprow used closed-circuit inputs to four locations in the city of Boston.

—Intermedia artist Otto Piene, in the same program, used only two images to achieve an original statement. One source was a grid of colored dots that dissolved into abstract patterns across the screen. Superimposed on this was a videotape of a young girl climbing to the top of a 40-foot-high polyethylene sculpture filled with helium. The result was a work of surprising elegance.

—Aldo Tambellini, an artist exclusively concerned with "black" as both a concept and social experience, showed some 30 black children in the WGBH studio interacting with 1000 colored slides and no less than seven 16mm films projected into space. The interplay was taped live on three television cameras, and the resultant concentration of images on one videotape created a dense barrage of energy.

—Thomas Tadlock employed his own electronic machine—"Archetron"—to scramble broadcast television symbols in a never-ending kaleidoscopic pattern.

—Nam June Paik used three hippies, a nude dancer and junk TV sets to create an electronic opera on the Moog Synthesizer.

—Jim Seawright painted an electronic picture by tape-delaying the three color tubes of the TV camera.

The artistic manipulation of space, form and color by electronic means is not the only concern of those working on the leading edge of television art. Sound—what you hear as well as what you see—has been the subject of intense scrutiny and extensive experimentation. Innovation in both the graphic and audio sense was underscored in "City/Motion/Space/Game," which televised different, but related, images simultaneously on two television channels (WGBH-TV and WGBX-TV), while two audio-tracks were broadcast in stereo on WGBH-FM radio. To my knowledge, it was the first multi-channel over-the-air broadcast of its kind. Essentially, "City/Motion/Space/Game" was a dance spectacular featuring Gus Solomons, Jr., choreographer and architectural graduate from M.I.T. From moment to moment and often simultaneously, Solomons was seen dancing at various locations around the city, or in the limbo setting of the television studio. Concurrently, two sound tracks carried the various sounds of the city, punctuated by remarks by Solomons about his art and life.

Public reaction to the program was mixed. Some viewers thought it too "gimmicky." But John Allen in the Christian Science Monitor wrote, "For half an hour there was something on the airwaves with as much style and daring—with as much esthetic and intellectual power to provide pleasure and provoke thought—as one associates with experimental filmmaking and contemporary popular music."

One of the most fascinating programs to come out of the WGBH artist-in-residence projects was "Zone," created by an experimental theater group made up of Harris Barron, his wife Ros Barron, and Alan Finneran.

The group sought a way of communicating non-literal, highly

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8

11. From "Video Variations," produced by WGBH in Boston in conjunction with the Boston Symphony Orchestra, 1971. Stan VanDerBeek, one of the participating artists, interpreted Ravel's "Daphnis and Chloe" with a barrage of flowing, "accidental" video effects.
12. From "Video Variations," Doug Davis interpreted a Bach symphony by showing a group of people writing and interacting with numbers juxtaposed with streams of other numerals moving through space.
13. Same as Fig. 11.
14. From "Video Variations," James Seawright created a video ballet, danced by his wife Mimi, to the music of Schönberg's "Five Pieces for Orchestra."
15. From "Video Variations," Nam June Paik used the video synthesizer (an optical color generator capable of taking the inputs of multiple black-and-white cameras and transforming them into an infinite number of color designs and patterns) to interpret the music and mythic stature of Beethoven through a series of real and abstract images.
16. From "Video Variations," Jackie Cassen combined photographic stills and clips of peace marches and "Wake Up, America" rallies in a collage accompaniment to Beethoven's "Eroica."
17. "City/Motion/Space/Game," 1968, featured Gus Solomons, Jr., dancing at various locations around Boston. The images, different but related, were carried simultaneously over WGBH and WGBX. At the same time two sound tracks carried the various sounds of the city, punctuated by remarks by Solomons about his life and art.



17.

symbolic information to a mass audience. In one particularly effective segment, light polarization, color reversals and a variety of "keying" devices were used to show the merging of a man and his television set. Through changing effects the man becomes the image he is watching on the screen, while the television set takes his place. The production was under the direction of David Atwood.

At this point it is pertinent to ask why the burden (or the blessing) of TV experimentation—developing new techniques and equipment, extending the proposition of the medium as an art form—has fallen to the public broadcasting system, rather than the commercial networks? The answer, of course, is obvious: Costs. Experimental television, even on a rudimentary basis, doesn't come cheap. A television studio, complete with technicians and crew, costs \$4000 a day or more. A video synthesizer can run from \$15,000 to \$30,000.

Help, however, is on the way for broadcast and cable systems. The development of a highly portable video-recorder—the Phillips PCP-90 color camera and an Ampex VR-3000 video-recorder—promises to bring the number of production personnel within manageable bounds. Instead of the 15 engineers usually used on remotes, the number of technicians has shrunk to three. WGBH has already used the system for the production of a complete series, "Jean Shepard's America," with gratifying results. Not only did the PCP-90 permit on-location taping with considerably less strain, it also provided for the expression of a highly personal statement.

However, only the most sophisticated broadcast TV stations can presently afford this equipment. It will be the introduction of portable, three-quarter-inch and one-inch video equipment that will ultimately change the industry. If broadcast quality can be obtained thereby, the cost of TV production will be cut in half. My prediction is that this is going to happen within the next two years.

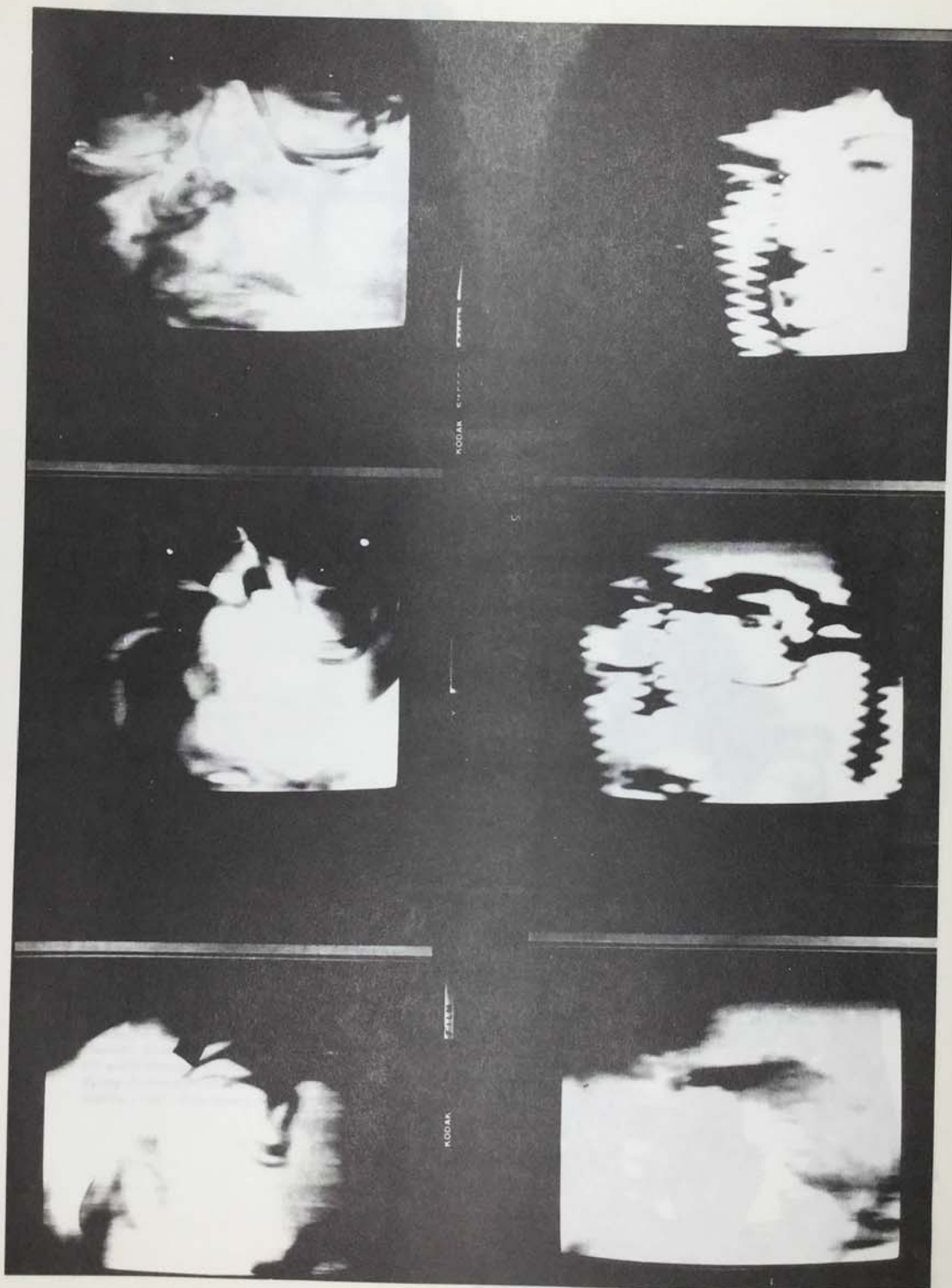
As things stand today, commercial networks on the whole refuse to foot multi-digit bills without assurance of a sizable share of a viewing audience. No experimental television program, of course, can offer such assurance. Indeed, they are not intended to do so (although "What's Happening, Mr. Silver?" was an eminently successful series in terms of numbers of viewers). Thus, for the time being, private and governmental funding constitute the life-source of experimental television, and dedicated radicals serve as its practitioners.

This isn't to say that experimental television and the technology it is spawning is without profit potential, either from an individual or a corporate standpoint. Even a cursory glance at the list of applications of video-art sends one's imagination soaring. More and more experimental television works are becoming the subjects of museum and gallery exhibitions. In early 1970, the Rose Art Museum at Brandeis University, for example, conducted the first campus exhibition devoted to video-art exclusively. The Whitney Museum in New York is currently conducting a similar venture, at which viewers not only see the latest creations by video-artists, but

Text continues on page 29

FOR STUDY PURPOSES ONLY. NOT FOR REPRODUCTION.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



19.

18. Demonstration of video synthesizer by Nam June Paik and Shuya Abe at exhibition of electronic art held at New York's Bonino Gallery. Photo: Peter Moore.

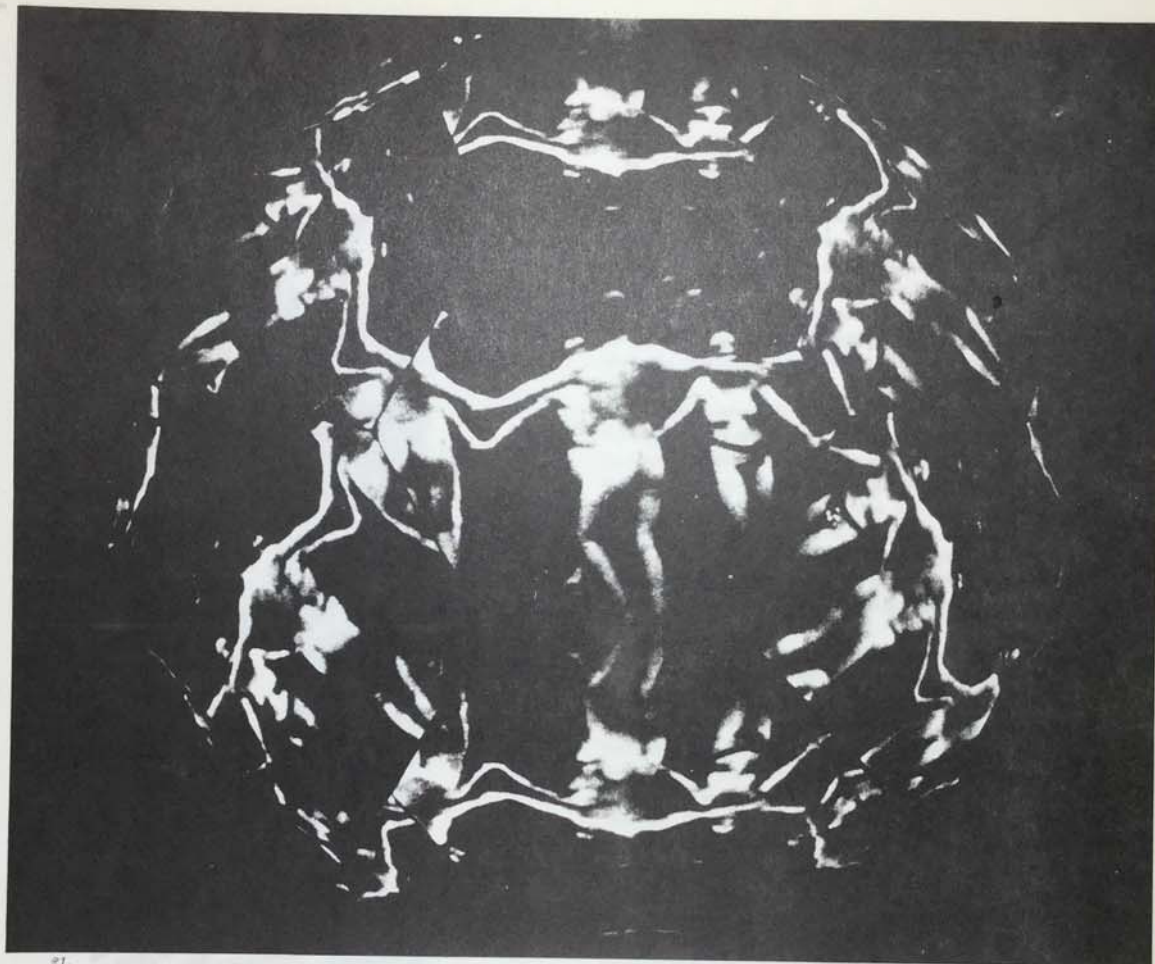
19. Videotape still from "Heimskringla!", a play produced by KQED in San Francisco. (KQED is another of the three public television stations funded to do experimental work in the medium—the third being WNET in New York.) Producer Brice Howard, director Tom O'Horgan, and all the other artists and technicians involved in "Heimskringla!" used a technique called "Videospace," wherein a mosaic of color and kaleidoscopic images is achieved by tampering with electronic circuitry via synchronization, amplitude, modulation and amplification. Using existing TV equipment, the show's creators were able to make on-the-spot visual changes, such as halos, outlines and graphic mirages. Photo: Robert Barclay.

20. Charlotte Moorman performs "Concerto for TV and Videotape," by Nam June Paik, during electronic art show at Bonino Gallery. Photo: Peter Moore.



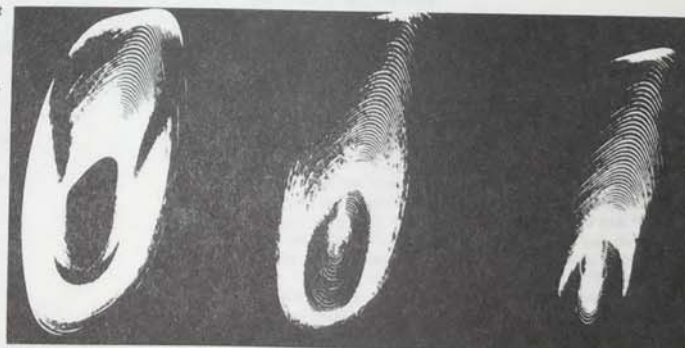
20.

The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



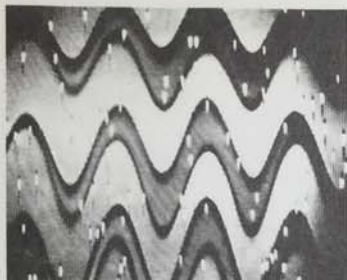
21.

21. "Innertube, a one person Video Environment by John Reilly and Rudi Stern"; from "Vision & Television," an exhibition at Rose Art Museum, Brandeis University, 1970. "A kinetic video environment for one person at a time," says the exhibit catalog about the work. "The theater for one is a cathode ray tube. One sees subliminal images of oneself intercut with specially created pre-taped material. The participant relates to himself in juxtaposition with the social, the erotic, the purely kinetic. One becomes part of a video time capsule. The instant merges with the preconceived and the two become kaleidoscopic." Photo: Jay Good.



22.

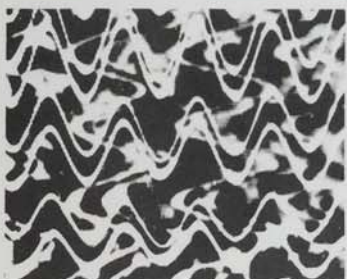
The Museum of Modern Art Archives, NY	Collection:	Series.Folder:
	KM	II.A.8



23.



24.



25.

22. "Black Spiral," by Aldo Tambellini in collaboration with Tracy Kinsel and Hank Reinbold of Bell Labs; from "Vision & Television" exhibition. A set was recircuited so that all regular broadcast imagery was transformed into a constantly moving spiral drawn into the center of the tube.

23-25. "Synthesized Video Images," by Stephen Beck, KQED, San Francisco. Photos: Margaret D'amer.

compose their own video-art with the manipulation of a few dials. Plans are also underway at the Museum of Modern Art in New York to expand upon this type of "exhibition."

As the attention of the art community is focused on synesthetic videotapes (the merging of two images or techniques on videotape), it is quite conceivable that an abstract video-art composition may one day command as large a sum on the gallery auction block as a Jackson Pollock or a Jasper Johns. The Leo Castelli Galleries in New York has already sold several private videotapes to collectors. When one considers the reproduction rights advantages of an "original" or master tape, the prospects for monetary gain become immensely appealing.

Commercial advertisers and their agencies are beginning to toy with the idea of using the explosive effects of video-art as the basis for commercials. My own experience with this type of end-use, however, prompts me to state that extensive application must await the day when the multi-layered decision-making process along Madison Avenue is reduced. Few are willing to extend the corporate neck at this time, even though most advertising people agree that the need for a multi-media approach to the solution of visual problems is becoming more and more apparent.

In the final analysis, experimental television can and should be used as an instrument for enriching the television output of the entire country—making art an organic part of everyday life. In addition to serving as the basis for special programs, the special effects engendered by the manipulation of electronic circuitry are being used to emphasize or "hold" a story line together in conventional dramas, such as Kurt Vonnegut's "Between Time and Tribulation: A Space Fantasy," a show recently produced at WGBH-TV.

As the dimensions of television screens increase to the size of living room walls, soon-to-be-developed instruments will be used to project electrons as "wallpaper" of kaleidoscopic colors and design. Mass-produced video synthesizers in the hands of home viewers will permit one to alter colors, patterns and images to suite the décor of the room, the time of day, or the mood of the moment.

Cost and the inaccessibility of equipment still rank as the major obstacles to be overcome by experimental television teams. TV, in fact, may not exist as a truly creative art form until it becomes as cheap to produce a show as it is to Xerox a piece of paper. That day may be upon us sooner than you think.

Fred Barzyk has been a producer/director at WGBH in Boston since 1958, and has established his reputation in the television avant garde with productions of "The Medium Is the Medium" and "Video Variations with the Boston Symphony Orchestra." He won three Ohio State awards and a citation from National Educational Television for his show, "Madness and Intuition," in the series, "What's Happening, Mr. Silver!" Barzyk's latest work is a Kurt Vonnegut, Jr. special for public television which incorporates "video-art" in a drama structure. He has experimented with two-channel multi-media broadcasts and stereo drama, and was instrumental in the allocation of funds for the creation of a video synthesizer.