
A Genealogy of Video

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A Genealogy of Video

Paul Ryan

Abstract—The author discusses the struggle that took place in New York City between 1968 and 1971 over whether video would be considered a tool of social change or a medium of art. The struggle is traced in terms of six dimensions: technological, theoretical, political, institutional, economic and cultural. The author's position is that video mutated from a countercultural gesture to an art genre. The question asked is how this genre will articulate its own genealogy.

I. INTRODUCTION

The term 'genealogy' indicates a particular sort of writing concerned with rediscovering struggles without shrinking from the rude memory of the conflict. It is an effort to establish knowledge, based on local memories, that is of tactical use to the reader. Whereas a history is generally written as if a struggle had been resolved, a genealogy assumes that the present resolution is subject to change.

The genealogies offered by Michel Foucault of phenomena such as modern prisons and medical clinics depend on extensive library research by a non-participant [1]. By contrast, this genealogy is constructed primarily out of the rude memory of the conflict itself by a participant in the struggle. Hence it is a genealogy, not *the* genealogy of video. Other participants would have other versions. To go beyond the sketch I provide here, a complete genealogy of video would have to take account of other versions and place early video within the context of the wider array of significant social shifts going on at the same time. What I believe saves this piece from being a merely subjective memoir is that it is constructed in terms of a fault line, a discontinuity in video history that is in danger of being ignored. My contention is that any serious account of video must take account of that fault line.

Video itself mutated from a countercultural gesture to an art genre. When video was principally a countercultural gesture, it held the promise of social change unmediated by the art world. Now, whatever promise of social change video holds is mediated by the art world. This is a significant difference. People unfamiliar with the mutation find it difficult to appreciate the unlimited sense

of possibility that early video held. The following anecdote might be illustrative. In the mid-1970s the author of *Independent Video*, Ken Marsh, ran a series of video festivals in Woodstock,

New York. During the course of one festival, in either 1974 or 1975, a plenary session of over 100 people was stopped cold by a resonant voice with an odd, insistent quality: "I want to know what's

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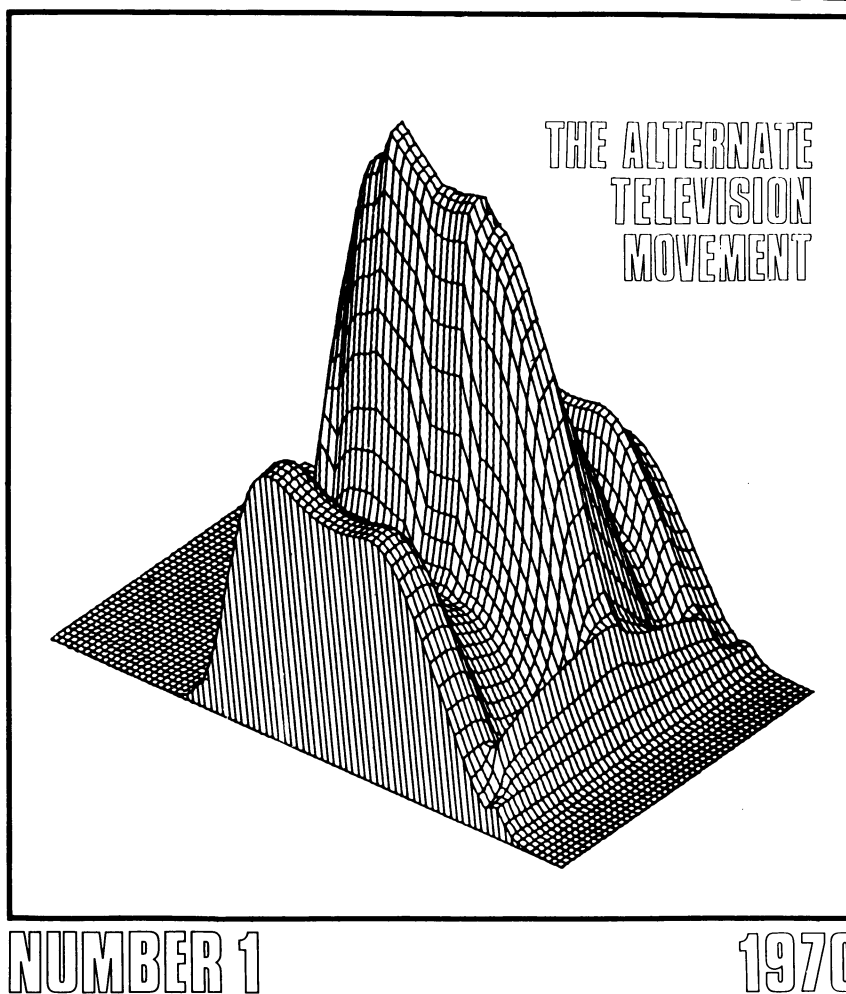


Fig. 1. Cover of *Radical Software*, No. 1: *The Alternative Television Movement* (1970). Articles in the first issue of *Radical Software* included Frank Gillette, "Is EVR a Good or Bad Thing?"; Gene Youngblood, Excerpts from *The Videosphere* and *Video Cassette Image Publishing*; a pirated transcription of an interview with R. Buckminster Fuller videotaped by Raindance Corp.; Nam June Paik, "Expanded Education for the Paperless Society"; and Paul Ryan, "Cable Television: The Raw and the Overcooked".

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going on with video. I just got \$5,000 from the New York State Council on the Arts to do video and I'm blind. I'm a blind man! What is going on?"

Literally translated from the Latin, 'video' means 'I see'. That the Arts Council would grant a blind man \$5,000 to produce video demonstrates that part of what was going on was a powerful belief system. Perhaps through this wondrous new technology, the blind would see. The story indicates the extent to which the Arts Council, and many others, had willfully suspended disbelief to allow a new fiction called 'video' to be generated.

Today, critical discourse is replacing suspended disbelief. The following account of the preconditions that made video possible by someone who played a role in generating the original fiction is intended as a contribution to that critical discourse.

II. TOWARD SOCIAL CHANGE OR ART?

The genealogy of video is a history of the struggle between the drive to use video as a tool of social change and the drive to use video as a medium of art. Specifically, this version deals with New York City video from 1968 to 1971. I settle on the term 'drive' because during that period there were no clearly defined factions of art versus social change. There were videomakers who thought of themselves as artists and saw their work as promulgating social change, and there were videomakers working for social change who considered their work artistic. Activity in the video field tended toward one or the other of these diverging poles. Choices could be made according to an agenda of social change, and choices could be made that individuated oneself as an artist.

As a participant/observer, I entered the fray with a bias toward using video as a tool of social change. This bias stemmed primarily from my opposition to the Vietnam War. I applied for and received a conscientious objector draft status based on the philosopher John Dewey's notion of God as the tension between the ideal and the actual. The ideal put forth by Marshall McLuhan of a more harmonious society based on electronic communications attracted me. In his introduction to *Understanding Media* [2] McLuhan asserted that he wrote the book as an act of faith in "the ultimate harmony of all being", a faith activated by the new electronic technology. Inspired by McLuhan, I gave up my ambition to be a 'writer' and determined to use electronic

technologies to work toward a society that could avoid Vietnams. I convinced the draft board to let me do my alternative to military service working directly with McLuhan while he was a visiting professor at Fordham University, 1967–1968, the year he wrote *War and Peace in the Global Village* [3]. During that year, I started exploring the new portable video. My experimentation led to a position as the New York Arts Council's first video consultant in 1969, to work with the alternative video group Raindance and to a series of essays on video entitled *Cybernetics of the Sacred* [4]. In this report, I will trace the genealogy of video's initial phase in terms of its technological, theoretical, political, institutional, economic and cultural dimensions.

Technological

In technological terms, the genealogy of video is best described by distinguishing between processing signals for the surface of the screen and using video as a system of communication [5]. The distinction between surface and system can be clarified by considering a man cutting down a tree with an axe. A systems understanding pays attention to how the differences in what the man sees make differences in how he swings the axe. The differences in how he swings the axe in turn make differences in the gashes on the tree. These differences in turn make differences in what the man sees, and so on, as the cycle repeats itself. A surface understanding frames that part of the tree where the axe repeatedly strikes and concerns itself with the 'composition' within that frame.

Prior to the arrival of the Sony portable video system in 1968, 'video art' was primarily a matter of manipulating signals within the frame of the television screen. Magnets were applied to TV sets, internal circuitry was altered and black boxes were attached. Inspired by the music of John Cage, Nam June Paik used these tactics to achieve a certain playful iconoclasm. He broke down conventional expectations about TV images and introduced a sense of possibility for the screen. Eric Siegel, who was more knowledgeable about circuitry, colorized the gray tone scale and processed images, such as Albert Einstein's picture, synchronizing the processing to classical music.

Public television saw potential in this sort of image processing. In 1968, WGBH in Boston commissioned Alan Kaprow, Otto Piene, Aldo Tambellini, James Seawright, Nam June Paik and Thomas

Tadlock to produce 'broadcastable' video works for a show called *The Medium is the Medium*. With the exception of Alan Kaprow's *Hello*, which broadcasted randomly switched signals from a system of cameras and monitors set up around Boston, all these works relied heavily on processing the image on the surface of the screen. Only Aldo Tambellini's *Black*, about black life in America, dealt with explicit social content.

Processed imagery also dominated much of the "TV As A Creative Medium" show assembled by art gallery owner Howard Wise in the spring of 1969. Tadlock, Siegel and Tambellini were joined by Joe Wientraub and Earl Reiback in presenting processed image pieces. Paik's iconoclasm produced the *TV Bra*, an actual brassiere with monitors wired to the cello of performer Charlotte Moorman. Paik also showed *Participation TV*, which showed images of the viewer on separate monitors in different colors. While it can be said that Tambellini's *Black* and Paik's *TV Bra* effected social change by producing images that helped alter social mores about race and sex, the route of reference to social change was through symbol manipulation, not the systemics of communication.

Two works in the Wise show did concern themselves with the systemics of communication: *Wipe Cycle* and *Everyman's Moebius Strip*, which both grew out of experience with the Sony portable video system. *Wipe Cycle* by Frank Gillette and Ira Schneider involved a grid of nine monitors displaying broadcast images, prerecorded tapes and timed tape-delay images of the audience in front of the monitors. *Everyman's Moebius Strip*, the piece I did for the Wise show, provided a private feedback booth, where one could record oneself going through a series of simple exercises and see the playback in private before the tape was erased.

Wipe Cycle and *Everyman's Moebius Strip* were based on an appreciation of the new portable Sony as a communications system, complete with record, storage and playback capacity. It allowed the user to 'infol' information and set up feedback circuits, not merely manipulate the TV terminals of the broadcast system. A generation whose childhood had been dominated by broadcast television was now able to get its hands on a means of TV production. The machine was relatively inexpensive (\$1,500), lightweight, easy to use and reliable, and it produced a decent black-and-white image with acceptable audio. Tape was

reusable and inexpensive. The video portapak helped trigger a range of activity linking video with social change. These two 'communication' works in the Wise show were only an indication of a growing video movement.

George Stoney came from Challenge for Change in Canada [6] to start the Alternative Media Center with Red Burns at New York University, which used the portapak as a primary tool for social communication. Among other projects, the Media Center midwived an effective three-way communications system for senior citizens in Reading, Pennsylvania, using video and cable television.

Alain Fredrickson, a high-school biology teacher from Pennsylvania, went to Santa Cruz, California, to develop community cable TV and published a newsletter for high-school students under the alias of Johnny Videotape. Ken Marsh and Howie Gutstadt, both painters, initiated People's Video Theatre in New York City, trying to invent ways of using video to mediate social conflict. Coming from a theatre background, with particular reference to Pirandello, Artaud and Grotowski, David Cort began organizing what became known as the Videofreex. Ira Schneider, Michael Shamberg, Louis Jaffe, Marco Vassi and Frank Gillette founded Raindance, a production group which also published a magazine for the alternative community called *Radical Software* (see Figs 1-3). Started by Ira Schneider, Phyllis Gershuny and Beryl Korot, with Gershuny and Korot as the original editors, *Radical Software* quickly rose to a circulation of 5,000 and became the voice of the video movement. A sense of what the video belief system was like can be gleaned from reading Michael Shamberg's book *Guerrilla Television* [7] and more succinctly from the following editorial statement in *Radical Software*:

In issue one, volume one of *Radical Software* (Summer, 1970) we introduced the hypothesis that people must assert control over the information tools and processes that shape their lives in order to free themselves from the mass manipulation perpetrated by commercial media in this country and state controlled television abroad. By accessing low cost $\frac{1}{2}$ " portable videotape equipment to produce or create or partake in the information gathering process, we suggested that people would contribute greatly to restructuring their own information environments: YOU ARE THE INFORMATION. . . . In particular we focused on the increasing number of experiments conducted by people using this $\frac{1}{2}$ " video tool: experiments in producing locally originated programming for closed-circuit and cable tv and for public

access cablevision; construction of video information environments/structures/assemblages as related to information presentation and audience involvement; . . . explorations of the unique potentialities of feedback through video and audio infolding, and feedback as facilitator in encouraging play between people in pursuit of new life styles and/or as examination of the transformation of the director/actor relationship implicit in video. Long theoretical discussions were printed concerning such concepts as cybernetic guerilla warfare, triadic logic, biotopological resensitization, nutritive contexts, electronic democracy . . . [8].

Theoretical

By the time the portapak became available, Marshall McLuhan's work was being widely read. Other thinkers such as Teilhard de Chardin, Norman O. Brown, Buckminster Fuller and Herbert Marcuse were also being read, but McLuhan's work was particularly relevant to video.

The 'Oracle of the Electronic Age', as he was called by many, had published *Understanding Media* in 1964. His version of the complex process of media history—from the oral to the literate to the electric—was discussed in businesses, universities, the media, art circles and the counterculture. McLuhan's perceptions and language provided an instant framework of understanding both for those interested in processing imagery for the TV screen and for those interested in the social change possibilities of the portapak. McLuhan was quoting John Cage; Cage was quoting McLuhan. Eric Larabee, then head of the New York State Council on the Arts, was on a panel interviewing McLuhan on public television. Frank Gillette taught a course on McLuhan at the Fourteenth Street Free School in New York.

McLuhan himself offered no formal theory of art and no agenda for social change. When pushed about what could

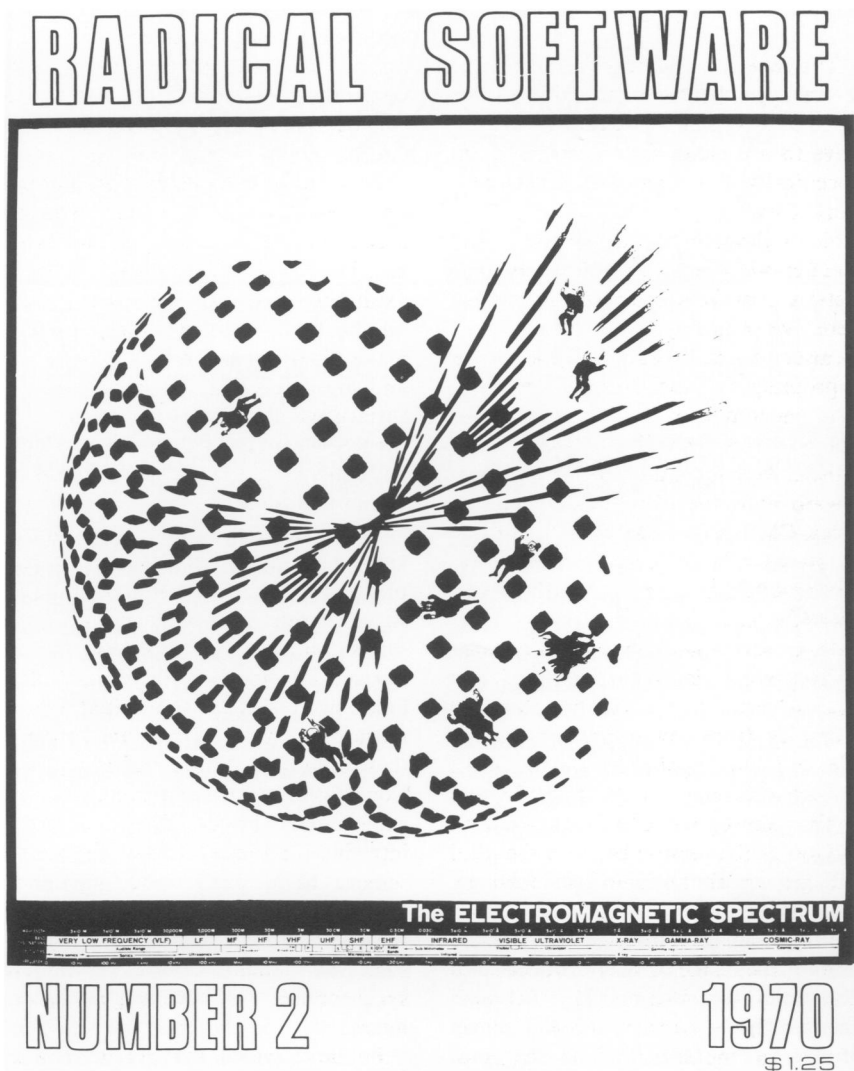
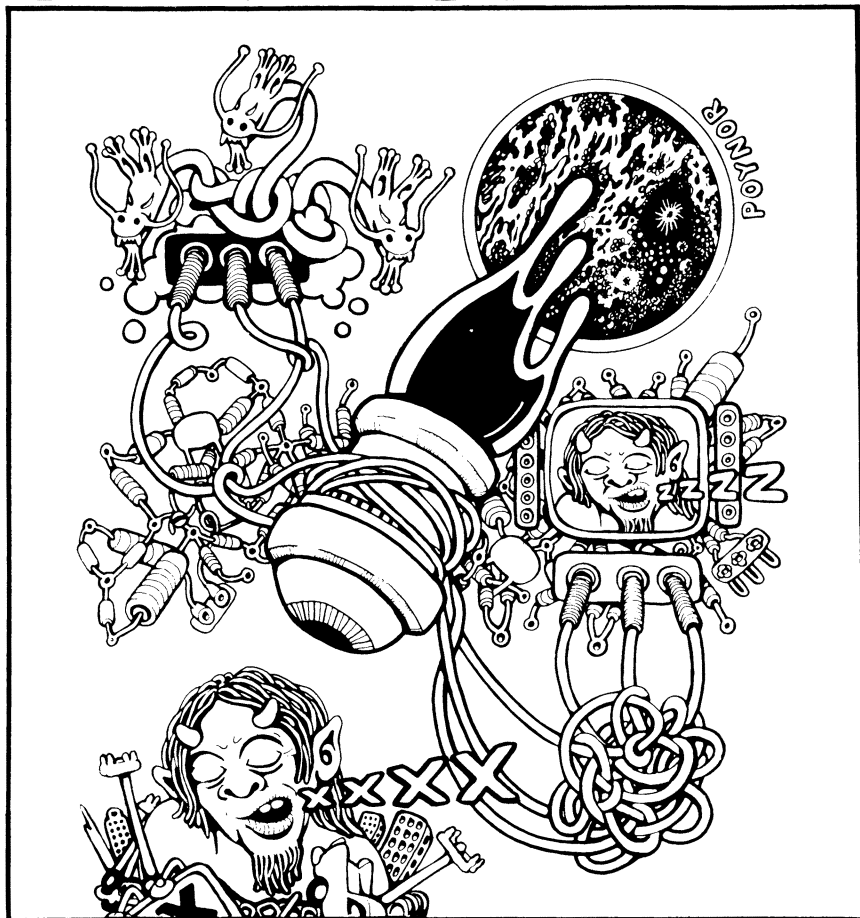


Fig. 2. Cover of *Radical Software*, No. 2: *The Electromagnetic Spectrum* (1970) including Takis, Excerpts from *Technology Against Technology = Anti-Tech*; Elliot S. Glass, "Video in El Barrio and the Classroom"; Ken Marsh, "Alternatives for Alternate Media—People's Video Theatre Handbook"; Ira Einhorn, "Noh Place".

RADICAL SOFTWARE



NUMBER 3

SPRING 1971

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Fig. 3. Cover of *Radical Software*, No. 3 (Spring 1971), including Gregory Bateson, "Restructuring the Ecology of a Great City"; Videofreex, "Media Bus"; Ira Schneider, "Tentative Design for a Flexible Video Environment"; Paul Ryan, "Cybernetic Guerilla Warfare".

be done in the electronic era, he would say only that it was too early to tell. He invested his energy in probing for new and useful perceptions of the situation created by electronic media. In concentrating on perception, McLuhan was appropriating a strategy from the art world, a strategy only apparently radical: exploit new media for the novelty of the perceptions they yield; take no responsibility for acting on those perceptions.

For those interested in social change, the popularist McLuhan proclaimed—in the tradition of Harold Innis—that the technologies of communication, not economics, were the real keys to social change. Marx had, in McLuhan's provocative phrase, "missed the communications bus" [9]. By gaining access to new communications systems, the disenfranchised minorities—such as teenagers, the elderly and various ethnic

minorities—could gain social power. McLuhan also proclaimed with poet Ezra Pound that artists were "the antennae of the race". They could anticipate the blows to the human psyche wrought by the new technologies and provide mappings of how to integrate these blows. He declared, to the consternation of many, "Art is anything you can get away with".

Political

Prior to his reelection campaign in 1970, the incumbent governor of the State of New York, Nelson Rockefeller, increased the State Council on the Arts budget from 2 to 20 million dollars. Rockefeller had chartered the New York State Arts Council, the first such council in the United States.

For those interested in the medium of video as art, i.e. career artists, this move was in keeping with a tradition they were

familiar with from Nelson Rockefeller's famous patronage of the visual arts, so abundantly evident in the Museum of Modern Art. The New York State Arts Council could provide support for experimental work in a new art medium that had not yet developed a market for its products.

For those interested in social change, this seemed the action of an extremely wealthy man developing a state apparatus to carry out a function analogous to traditional patronage of the arts. Moreover, it was a way for Rockefeller to win reelection support from his traditional, wealthy supporters by giving state money to major cultural institutions, such as Lincoln Center, which were patronized by the wealthier classes.

As the person who originally mediated the Rockefeller Arts Council money into precedent-setting video grants, my glee at getting the money allocated was balanced by a nagging doubt that perhaps modern art was merely a process whereby the pain of the poor becomes the perceptions of the rich. The rich need these perceptions to maintain their power because they are out of touch with the shifting sentiments of the majority of people. Artists, in touch with the alienating experience of industrialization suffered by most people, translate that experience into an idiom or code (modern art) useful to the few who profit from that alienation. I was asking myself if refusing to make art would result in a more just society. Moreover, since art legitimizes wealth, it contributes to a status quo that can effectively ignore the pain of the poor. To contribute to this process is, in some sense, a betrayal. The September 1971 killings at Attica State Prison did nothing to allay these doubts.

At the same time, it was an opportunity to secure money for social change projects. Art, after all, was "anything you could get away with". When a budget jumps from 2 to 20 million dollars in one year there is a lot of 'funny money', i.e. money with no real specification as to its use.

Institutional

In one year, 1969, the New York State Arts Council went from a family style organization to an agency dispensing 20 million dollars. During that year, the Council allocated over half a million dollars for video. The handful of then-extant video groups—Videofreex, Raindance, People's Video Theatre and Global Village—competed for the money. A series of complicated machinations ensued, which included a battle over a ¼-million-dollar plan for a "Center for

Decentralized Television” to be administered through the Jewish Museum under Carl Katz. The notion was to distribute portable production capacity to 20 diverse groups in New York State, including upstate farmers and urban ghetto dwellers. The center would then facilitate the exchange of tapes and public showings. In the end, each of the four groups got \$35,000. The balance went to museums and public television stations.

While the Arts Council is the only state agency chartered to make discretionary judgments, in the case of the original funding of video groups it did not exercise its discretion but gave equal money to all groups. This was partly because video was new, partly because of the growing pains of the Council and partly because the money was available. In effect, the Council followed the sort of hands-off policy toward art funding that had been instituted in England after World War II with Keynesian economics. As Peter Fuller reports:

The Arts Council, established in 1945, was one of the first components of the welfare state. Its architect, and first chairperson, was Keynes himself. Married to a ballerina, a Bloomsbury habitué, he had spoken of the prostitution of the arts for financial gain as “one of worse crimes of present-day capitalism.” In the welfare state, all that was going to change. In 1945 Keynes wrote: “The purpose of the Arts Council ... is to create an environment, to breed a spirit, to cultivate an opinion, to offer a stimulus to such purpose that the artist and the public can each sustain and live on each other in that union which has occasionally existed in part at the great ages of a communal civilized life.” He claimed: “The artist walks where his spirit leads him. He cannot be told his direction; he does not know it himself.” But he expected new work to “spring up more abundantly in unexpected quarters and in unforeseen shapes when there is a universal opportunity for contact with traditional and contemporary arts in their noblest form” [10].

Mutatis mutandis, this is the manner in which the New York State Council on the Arts first funded video. The half million dollars allocated set a precedent and became a prime source of stable funding for video through the seventies and into the eighties. As a state arts council, the institution developed an alliance network that included television stations, museums, universities, small experimental video groups and individual artists working in video. Other funding institutions also supported video. The Rockefeller Foundation, with Nam June Paik as a consultant, supported video art.

The Markle Foundation supported the Alternative Media Center in using video as a tool of social change. Only the New York State Council on the Arts has had the courage to ride both horses.

For advocates of social change, the opportunism of going to the Arts Council in the first place meant that eventually the resulting compromises with the art world would spell defeat. The context of a state bureaucracy defined in terms of art would ultimately defuse and erode efforts at social change. Yet the imposed dialogue with art forced a much deeper consideration both of the role of art in social change and of the whole relationship between art and politics. For artists, the Council was a godsend in terms of a career-support system, but a mixed blessing in terms of being forced to compete with social change advocates for funds available through the paperwork and panels of a state bureaucracy.

Because the grant money was available, the spontaneous origins of the video movement maintained some of the character of a ‘gift economy’. Equipment, information, skills and tapes were freely shared, often between social change advocates and artists. There was an ‘information free’ ethic not unlike the early computer hacker culture [11]. The marketplace was held at bay. Yet given the absence of a clear pattern of discretionary art judgments, the video/New York State Council nexus appeared at times to be a welfare system for eccentrics caught up in various video solipsisms.

Of course, a gift economy could not be long sustained through state bureaucracy. Over the years, the trust and faith necessary for a gift economy yielded to the mechanisms of mediation and regulation. Such benign regulation has taken place over the years as the movement failed to regulate itself. Like many similar movements, it fell prey to the internal dynamics that tend to split up non-hierarchical small groups. As the original groups tended to break up, so the funds tended to go more toward individual artists, media equipment centers and large institutions. While the context was such that there was discussion in *Radical Software* of an information economy [12], that is, a non-money economy based on knowledge as value, no viable realization of that notion matured.

Cultural

In large part, the original video movement can be seen as a transformation of the waning counterculture of the

sixties. Given the pervasive influence of broadcast television on the mass culture of America, it is logical that video would be appropriated as a tool of resistance, protest and change by the counterculture. The alternate video group Raindance was conceived of as a countercultural think tank—an alternate to the Rand Corporation. People’s Video Theatre had a popularist stance associated with the counterculture. Many of the Videofreex were former teachers who involved themselves in the counterculture. Two of the principals, David Cort and Parry Teasdale, met at the Woodstock Music Festival. At Woodstock they were introduced to Don West, then assistant to the president of Columbia Broadcast System (CBS). With the assistance of Don West, Cort and Teasdale, along with Curtis Ratcliff, organized the Videofreex to produce a portapak-style pilot tape for broadcast on CBS. The program was to render the Woodstock experience and the values of the counterculture. The pilot was played through Eric Siegel’s color synthesizer for a group of CBS executives including Michael Dann and Fred Silverman. At the end of the showing, Michael Dann thanked the Videofreex for their efforts and said it would be a long time before such programming found its way onto the air. The next day CBS dismantled the project and fired Don West [13]. The subtext for this meeting is articulated by social scientist George Gerbner: “If you can write a nation’s stories, you needn’t worry about who makes its laws. Today television tells most of the stories to most of the people most of the time” [14]. Such storytelling configures a symbolic environment that controls modern society the way religion used to control society. Violence-laden drama, for example, “shows who gets away with what, when, why, how and against whom” [15].

Along with his associates at the University of Pennsylvania, from 1967 to 1982 Gerbner analyzed over 1,600 prime-time programs and interviewed large samples of both frequent and infrequent television viewers in the U.S. They documented very skewed perceptions of reality on the part of frequent viewers in relation to sex roles, jobs, races, minorities and crime. For example, 55 percent of the characters shown on prime-time television are involved in violence once a week. In real life, the comparable figure is less than 1 percent. Frequent viewers grossly overestimated the chance of violence in their own lives and had an exaggerated distrust of strangers. Gerbner argues that such distortion functions to maintain the

status quo of the industrial state in America:

... television is the central cultural arm of American society. It is an agency of the established order and serves primarily to extend and maintain rather than alter, threaten or weaken conventional conceptions, beliefs and behaviors. Its chief cultural function is to spread and stabilize social patterns, to cultivate not change but resistance to change. Television is a medium of the socialization of most people into standardized roles and behaviors. Its function is, in a word, enculturation [16].

Gerbner's work on enculturation allows us to see this entire genealogy of video, with both its aesthetic and social change aspects, against the background of the religion of broadcast television. The values and beliefs associated with video have not supplanted the values and beliefs associated with broadcast television. Video did not make the blind see.

III. CONCLUSION

In 1987, there is little willingness to suspend disbelief. The fiction of video is coming under increased scrutiny and a reconsideration is in order. One wonders how the art world with its tradition of the new will deal with video as it grows old. What of real value can be distilled from what has happened under the cover of video? Who will do the distilling? The New York State Council on the Arts? The museums? The American Film Institute?

Broadcast television? The academic world? Private patrons? The Library of Congress? What criteria will be applied? The field of video is particularly vulnerable to cannibalization because the state of suspended disbelief has lasted overlong and no critical discourse has been cultivated that would justify to the world at large the selection of certain video works as having lasting value.

At the core of the difficulty is the fact that there has been no resolution of the problematics underlying the industrial culture promulgated by broadcast television. Video originally addressed those problematics. For the most part, a sense of this context has eroded from the video field. Moreover, the conditions that gave rise to the genealogy of video have shifted. Technological improvements in video equipment have shifted the emphasis from process values to production values. Personal computers have displaced video as the electronic medium of possibility in people's imaginations. McLuhan's discourse is outdated, and no comparable discourse has replaced it. Ronald Reagan is dismantling the welfare state, and the marketplace increasingly determines video production. In New York State, the Arts Council funding has not kept pace with either inflation or the number of videomakers. The counter-culture has long since lost power. Video itself has mutated from a countercultural gesture to an art genre. How this genre articulates its genealogy remains to be seen.

REFERENCES AND NOTES

1. Michel Foucault, *Power/Knowledge*, Colin Gordon, ed. (New York: Pantheon, 1980) pp. 78ff.
2. Marshall McLuhan, *Understanding Media* (New York: McGraw-Hill, 1964) p. 21.
3. Marshall McLuhan, *War and Peace in the Global Village* (New York: Bantam, 1968).
4. Paul Ryan, *Cybernetics of the Sacred* (New York: Doubleday Anchor, 1974).
5. David Gigliotti, "Video Art of the Sixties", in "Abstract Painting: 1960-69", exh. cat., P.S. 1 (Project Studies One), The Institute for Art and Urban Resources, Inc., Brooklyn, NY (January 16-March 13, 1983), unpaginated.
6. An organization funded by the Canadian government to prod service bureaucracies.
7. Michael Shamberg, *Guerrilla Television* (New York: Holt, 1971).
8. Beryl Korot and Ira Schneider, eds., *Radical Software* 2, No. 1 (September 1972), editorial page.
9. This quote and the two that follow are taken from memory of lectures McLuhan gave at Fordham University, 1967-1968.
10. Peter Fuller, "The Crisis of Professionalism in Art", *International* 6, No. 2, 31 (July 1981).
11. Steven Levy, *Hackers* (Garden City, NY: Doubleday, 1984).
12. Ryan [4] pp. 59-64.
13. Gigliotti [5].
14. George Gerbner quoted by Harry F. Waters in "Life According to TV", *Newsweek* 100, No. 23, 136 (6 December 1982).
15. G. Gerbner, "Living with Television: The Violence Profile", *Journal of Communication* 26, No. 2, 370 (Spring 1976).
16. Gerbner [15] p. 366.