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ABSTRACT

A historical account of the activities in the field of video art in the United States traces the movement from its inception in 1968 and 1969 and discusses the social and artistic ferment of those years that had an impact on the video art movement. A look at how the video technology became available along with the history of the video art movement is also given, highlighting such projects as TVTV in Southern California. Past and ongoing video art activities in the major cities of the United States were detailed.

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Video: State of the Art

Johanna Gill

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PREFACE

Human beings seem constantly to be hunting for knowledge about their world - the world without and within the body. Art seems to be the exchanging of information, sometimes specifically referring to food, shelter and protection of self, family and clan, sometimes referring to inner states of consciousness, emotions, attitudes. As the messages are varied, so are the forms. New forms often impart freshness to messages as old as time. There is diversity in human experience and there is a unity throughout it. The tension between the "e pluribus" and the "unum" is the spring that presses the pendulum on. Art gives us one way to see ourselves and our world, our unity and our diversity. In the new holism of the 1970's, a fusion has taken place in the arts that emphasizes the organic or functional relation between parts and the whole. Nowhere is this more apparent than in the work of the small but growing body of artists working in television who call themselves "video artists." Under that banner march conceptual and applied artists whose works combine the fixed, plastic arts with the time-span performing arts in an electronic medium whose space defies limitation: a television screen can contain millions of points of light to etch the picture of a thumb or the world itself from outer space. And it defies gravity as film does in that its laws need not affect the images being presented. The artists use a new form to tell us of ourselves in new ways. The Rockefeller Foundation has been fortunate in being able to help these artists develop this new art form by assisting individuals and, perhaps as importantly, by making places where artists could work at their ideas.

The struggle for world domination has been a common theme in our time. One form of domination is cultural, and in that it embodies a world of ideas and concepts that can be influential and threatening to a status quo, it may be the most important form.

Such domination of world culture has fallen to the United States whose music, dances and dress are accepted by large populations in addition to their own around the world. Just as popular aspects of culture have spread American values and concepts abroad, so the arts, and especially those forms which are uniquely American, infiltrate foreign lands and minds and produce a spread - for better or worse - of Americanization. This has begun to happen already within the narrow field of video art. The artists, whose work is described in this Working Paper, therefore, constitute a new embassy on behalf of American culture. It is a grass roots elite grown from all regions of America and including expatriots from other countries. Their holistic message to our time is pertinent, moving, and stems from a deep concern with understanding what it is to be human, living in Marshall McLuhan's global village, looking ahead to an abyss or a new high plateau of civilization.

This report, Video: State of the Art, is an account of some of the things that are under way in video art. Johanna Gill, who recently completed her Ph.D. dissertation in video art at Brown University, and teaches 20th century art history at the Massachusetts College of Art in Boston, visited and documented the world of video, artist by artist, city by city, in the United States and Canada.

June 1976

Howard Klein
Director for Arts
The Rockefeller Foundation

INTRODUCTION

"Video was the most shared, the most democratic art form....Everybody believed deeply that he had invented feedback. Feedback was invented simultaneously not by five people, like electricity, but by five thousand."

Woody Vasulka

When one begins to think about video, it is important to keep in mind its immense flexibility as a medium. It is not only TV, the standard piece of American living room furniture, it is also a material for making electronic graphics, the surveillance system in the neighborhood supermarket, the training tool that shows all too instantly what kind of teacher or tennis player you are, and a means of documenting almost anything from the SLA burnout in Los Angeles to a grandmother's memories of her childhood. In other words, the video world is much larger than the art world, and people who make video art may have very diverse backgrounds in the medium. Consequently, the term "video art" does not describe any single unified style; it indicates a shared medium.

Most video art-making began in 1968 and 1969. The social and artistic ferment of those years had a great deal to do with the way the medium was first used. Nineteen sixty-eight also marks a technical watershed: it was the year portable, relatively inexpensive television equipment came on the market, thus opening the medium to a vast new group of people. Although these people were interested in the equipment for many different reasons, most of them shared an acute dissatisfaction with broadcast television. They were unhappy with the monolithic nature of TV, with the control of three major networks, with the quality of programming - the lack of diverse content and the routine visual sameness of it all.

This reaction against broadcast television is usually discernible in much early video. Some experimenters took their new light cameras out into the streets and to the countryside, recording people and social situations broadcast TV never would have bothered with. This group of people was concerned with exploring as rich an array of subjects as possible. They felt broadcast TV had developed bland programming in an effort to offend as few people as possible, attract high ratings, and thus command higher prices for advertising time. The alternative television people were not supported by advertising; they didn't care about ratings. They were free to focus their cameras on anything, even things that would interest only the people living in a single neighborhood.

Others were concerned with electronics research and development. These people considered it ridiculous that the perfect television image was thought to be the smooth, glowing pink face of Walter Cronkite. Some of these experimenters come from a strong twentieth-century graphic tradition of exploration with light imagery going back at least as far as the Futurists and the Bauhaus. Those who had been looking for a medium of moving, colored light were overjoyed to find that television could produce abstract images as easily as it could transmit a newscaster's face. Some members of this group built new electronic circuitry to produce different imagery. These people are among the real pioneers of the medium; they are fascinated with the role technology plays in our society and are constantly searching for new ways to make this role visually manifest. They feel that the structure of electronic tools reflects as well as informs our thinking, and by using tools that produce visual patterns, they hope to reveal to us our social and technological directions.

Still another group was reacting against the one-directional flow of broadcast TV, which streams day after day into the homes of millions of people without providing the means for them to speak back equally directly. They pointed out that we have only receivers

in our homes, not transmitters, and sometimes these people set up small, closed-circuit environments that contained both cameras and monitors. Often the earliest such environments held banks of monitors; one could see one's own image (being picked up by cameras in the room) on monitors next to others showing programs coming off the air. In this manner, a viewer could explore the idea that his or her image was as interesting as that of a quiz-show personality. Many of those who created environments were fundamentally interested in the nature of visual and aural information, in how we receive and digest it, and in how it affects us, both consciously and unconsciously.

During the time this reaction against broadcast television was going on (1967-1970), the established art world was facing some challenges of its own. Many artists found that the traditions of painting and sculpture had arrived at a critical cul-de-sac, and they were searching for other means of expression. In addition, the commercial art world was in the midst of escalating prices and wild buying, a situation further confused by a prevailing indecisiveness about the relative merits of different kinds of art.

One result of this atmosphere of change was the reaction of some artists against the production of art objects: they preferred to work in nonbuyable, nonpossessable media, partly in an attempt to free themselves from the art market as it was then functioning. Consequently, there was an explosion of new kinds of art, most of them either variations on performance, theater, and dance, or mechanically reproducible art forms such as photography, film, and video. Video fell into this art world very neatly. It could be used to record all kinds of performances and actions, enabling them to be repeated again and again. It could be either abstract or representative in its imagery (it was not inherently one or the other), and so sidestepped certain critical dilemmas. A few galleries and museums began to collect tapes, hire curators, and organize exhibitions.

The following discussion is not a comprehensive history of the first years of interest in video as a creative medium, but is rather an attempt to chart some of the ways the energy has flowed, and to introduce a few of the more interesting people and situations. In general, one might say that art-making has occurred in three areas of video activity - these are arbitrary divisions, but are useful descriptively. One is the aforementioned realm of electronics research and development. Because of its roots in other twentieth-century graphic traditions, this is often the work most accessible to people first looking at the medium. Examples include the famous "synthesizer" tapes and special effects graphics of many kinds. A second area of activity has been documentary, an area that is currently interesting historians and critics of photography and film as well. The third area is probably the most complex. It includes performances, conceptual work, and what may be called information-perception pieces. This group includes both video tapes and live video installations that in some way expand the limits of the viewer's ability to perceive himself or herself in a technologically charged environment.

HISTORICAL NOTES

Individuals and Small Groups

A few rumblings in the early sixties anticipated the general eruption of interest in the medium later in the decade. Nam June Paik is probably the most famous and certainly one of the most interesting members of the movement; his work is a collage of all three divisions of video activity. He was born in Korea and was educated in Japan and Germany, where he studied philosophy and music. By his own estimate, he has given over 100 performances, which reflect his interest in avant-garde music (John Cage is a major influence) and the Fluxus movement. His first exhibition of television was in Germany in 1963, in which he showed television sets whose off-the-air images were dis-

torted. By 1965, Paik had moved to New York and was having exhibitions here. His work takes many forms - video performances and video installations as well as video tapes - and shows his interest in process rather than product; the new often has elements carried forward from the old.

Paik has always been on the outer fringes of the movement technically. In 1965, he bought one of Sony's first portable video tape recorders and displayed tapes the same night. He was the co-developer, with Shuya Abe, of one of the first video synthesizers. Several people were working on synthesizers in 1968 and 1969 and each machine reflects the desires of its builder. They have in common the ability to produce dazzling color patterns and forms, moving and shifting through time. The Paik-Abe synthesizer is the perfect tool for Paik's work - it takes black-and-white camera images and mixes and colorizes them, producing dense, often layered, brilliantly colored fragments.

Paik's basic style is one that has become familiar in this century, a collage of juxtaposed pieces of information wrenched out of their original contexts. His taped work constantly reshuffles bits and pieces of material from all over the world - a Korean drummer in action, Japanese Pepsi commercials, go-go dancers, tapes of his own performances with cellist Charlotte Moorman. He has spoken of how we live in an age of information overkill; his fast-paced, disjunct, percussive tapes heighten and intensify this barrage of image and sound. The effect is jolting. Paik makes the viewer stop and think, and he does this not only in his performances and tapes: his production of enigmatic, deadpan aphorisms is second only to Andy Warhol's in the world of art. "I would rather be corrupted than repeat the sublime," he said with a chuckle during a televised interview with Russell Connor and Calvin Tompkins.

Eric Siegel was another forerunner. He began building TV sets in high school and has continued building video equipment ever since. He was also the builder of an early video synthesizer, and another

tool, his colorizer, has been used by half the artists in the country who want color in their tapes. Siegel's own work ranges from an early special-effects tape of Einstein to more recent personal documentary tapes.

A third early experimenter, and one who has remained steadfastly independent of any group affiliation, is Les Levine. In 1968, after he had been working with video tape for some time, he presented the first public showing of his work. As the audience watched his prerecorded video tapes on such subjects as the destruction of art and the nude model, they could also watch their own reactions on a closed-circuit monitor: Levine had a camera in the room. This is typical of his work - Levine is not interested in traditional aesthetics, but with television environments, with the movement of information within physical and temporal limits. He was quoted in a New York Times review as saying that he hoped to help people form new images of themselves by showing them their reactions to what they see. "They'll change as they note their responses to various situations presented on the tapes....If you see yourself looking self-conscious, for example, you'll be forced to think why."

Also in 1968, Levine produced his first "television sculpture," Iris. Once again, Levine had the viewer confronting himself via television. In this case, all the hardware for the closed-circuit system was contained in one eight-foot-tall sculpture-console. Standing in front of this console, the viewer faced six monitors and three concealed video cameras. The cameras shot the space in front of the console, and presented views of the environment in close-up, middle distance, and wide angle. Each of these cameras had its own monitor and the three others provided distorted images that might or might not be recognizable. Thus, a viewer standing in front of the console could see three different views of himself juxtaposed with other random video information.

In this early work, Levine opened an examination of television as an information system of great flexibility and complexity. This aspect of the medium has been further explored with increasing subtlety and sophistication by several artists in the years since Levine made Iris.

By 1968, inexpensive portable equipment was becoming widely available. During the next year or so, various people bought cameras and video tape recorders (portapaks) and experimented with them alone or in small groups. A group of graduating college seniors in Santa Clara, California, was typical: one of them had invested in a portapak, and he and his friends used it so constantly that it finally wore out. Most of that group have continued their interest in video, and two will be discussed later - George Bolling, who is the video curator at the de Saisset Art Gallery in Santa Clara and introduced a whole generation of San Francisco artists to the medium, and Skip Sweeney, who co-founded Video Free America, a San Francisco group that, among other things, sponsored some of the earliest video theater:

In New York, Commediation appeared. It was the first of a long series of video groups to emerge. David Cort, Frank Gillette, Ken Marsh, and Howie Gutstadt were members, and like many people initially attracted to the medium, they were primarily interested in video as a tool for social change. A little of David Cort's history may help to illuminate the motives of many people working in video.

Cort had originally been involved in the theater, but the late 1960's found him working at the Brooklyn Children's Museum, involved in antipoverty outreach programs.

I got started in documentary work in political things, attempting to bring together divergent peoples....I was overwhelmed by the lightness of the video camera, the intimacy of it, the way you could talk from behind the camera to people and they could talk to you looking at

the camera. The camera was like a funnel through which you could work. You could move in, and be intimate and close.

Cort was impressed with the flexibility of the medium, and dissatisfied with how it was used in broadcast:

I look at TV and it's so passive. "Feed me information, tell me what to feel, tell me what to believe, and I'll sit there and take it in." Walter Cronkite tells you what to believe.

...I'd rather have lots of different individuals involved, so you would have a lot of different viewpoints, ideas, instead of one. Walter Cronkite tries to tell you that he has no viewpoint, that he's objective; "That's the way it is." The whole story is held together by his personality; it centers around him. I found that to be uninteresting.

Cort was further disenchanted with TV because of an uncomfortable experience he and his wife had had on a daytime TV show. They had felt overwhelmed, humiliated, and manipulated, and the experience influenced Cort's own work:

It has become a basic esthetic. It's like a rule. Whenever I work in video, everybody I work with has to have a feed, has to see what's going on. Nothing can be hidden. One of the things I object to most about journalism is that people come in and they take your picture, and you don't know what they're taking. They may play it back to you afterwards, but that's not the same as seeing it while it's there.

He goes on to say:

You know, I think a lot of people are in video because they have no choice - it's so overwhelmingly around you. It's almost like a responsibility that you have to take, that you have to work with it because it's all-pervasive. We are confronted with this alien, cold equipment and we are to make something human, to involve the

human being in it in some way, to make him active, to make him participate. At one and the same time you want to control it and you want to destroy it, you want to remove it and get back to the romantic, but you can't. So you are faced with it and you have to do something with it that will be fun, that will be joyous, that will be human rather than anti-human, that will be positive.

It is exciting to hear conversations about the first few months of experimentation. In New York City, people carrying portapaks bumped into each other on the street or at parties and got to know each other; the famous concert at Woodstock in 1969 was yet another meeting place. Many video groups formed quite rapidly, and often just as rapidly some of them dissolved, but the cast of characters remained remarkably constant. Most of them, as was the case with the group in San Francisco, are still at the heart of the medium today: Ira Schneider, Frank Gillette, David Cort, Beryl Korot, Ken Marsh, John Reilly, Rudi Stern, Parry Teasedale, Michael Shamberg, to mention only a few of them.

The artist Bruce Nauman, in 1967, used video as part of a gallery installation; in 1968, he started to record his performances on video tape. And so, by the end of the first year of activity in the medium, several different uses had already been established: synthesizers were being constructed to produce new electronic imagery, documentary tapes were being made, and the medium was beginning to be explored by conceptual artists to record performances and gestures.

In 1969, artists who were not already acquainted found themselves looking at each other's work at the first large gallery exhibition, "Television as a Creative Medium," a display that was organized by Howard Wise. Wise has been one of the staunchest supporters of electronic arts in general, and video in particular. He has subsequently relinquished his Fifty-seventh Street gallery in order to support video full time,

and is currently one of the largest distributors of artists' video tapes. At his Fifth Avenue headquarters, Electronic Arts Intermix, he also provides an open-access editing facility for artists. At his 1969 show, he gathered together video tapes and sponsored installations; the artists got to know each other, and several new video groups formed as a result. Also in 1969, WGBH-TV broadcast the first video "sampler," a half-hour program showing the work of six artists.

Video activity, by 1970, seemed to have all marks of a full-fledged art movement: there was a large museum show, a movement magazine appeared, art critics got involved, and official funding agencies were interested. First there was the exhibition at the Rose Art Museum at Brandeis University, organized by Russell Connor. Connor, like Howard Wise, has continued to be deeply involved in video and has indeed probably done more than anyone else to bring video art to a wide audience. This past year, for example, he hosted a series of twenty-two programs of various artists' work, broadcast over New York City's Channel 13. Many of the East Coast video artists and groups were represented at his Rose Art Museum Show, "Vision and Television."

Second, during the summer of 1970, the first issue of the video movement's magazine appeared. It was called Radical Software, and was published by Raindance Corporation. The early issues of the magazine conveyed the heady excitement of the times; they were packed full of drawings, how-to articles, names and addresses. Another avant-garde journal, Avalanche, also started publication in 1970; one of its editors is Willoughby Sharp, a video-performance artist, and much of each issue has to do with video.

Third, two critics writing about video soon became involved in making it. Michael Shamberg was a reporter for Time; he became one of the founding members of Raindance Corporation, a group that, through Radical Software and other activities, served as information central in the video community. A while later, Shamberg co-founded TVTV, a video documentary group. Douglas Davis was and is the art

critic for Newsweek; he has become an extremely prolific video artist as well.

Finally, in 1970, the New York State Council for the Arts became very involved in supporting video. The council has funded a wide variety of projects, centers, and individuals. The first years of the video movement had witnessed, for the most part, an openness and sharing among its members. Whether they were tinkering with synthesizers or out in the streets with portapak's or building complicated gallery installations, they all considered themselves to be part of the same movement. By 1970-1971, however, divisions began to occur. The two major groups to emerge were "art video" and "social action video." And within the art group there were further subdivisions into "synthesizer video," "conceptual video," and so on. Splits probably occurred most often over problems in funding, a consistently difficult task for most video people. They do not fit into the traditional art marketing system at all and so have had to do much of their work on grants from the NEA, state councils, and the Rockefeller Foundation. They also have had difficulties in getting their work to audiences. Broadcast television has, with a few notable exceptions, been uninterested. Museums and galleries have begun a stream of exhibitions but these have taken awhile to catch on. Exhibitions of this sort must be arranged very carefully, as watching tapes of any length in a conventional gallery is not comfortable.

It is worth noting that in 1970-1971 many conceptual artists were attracted to the medium. It must have seemed like manna from heaven to a group searching for a new, inexpensive means of expressing complicated ideas, perceptions, and actions in time. Most conceptual artists were affiliated with galleries in one way or another, having shed earlier media, especially sculpture, which galleries could more or less adequately exhibit. At any rate, they had a way of trying to absorb into the whole gallery system a medium that was not always comfortable within it, and of applying to the

medium a complicated system of aesthetics derived from the critical dilemmas of painting and sculpture during the 1960's. Possibly this further deepened some of the previously mentioned divisions.

Eventually, although funding problems were far from solved, the different groups settled down and made subtle shifts to accommodate each other. It has been my experience that good art has come from every group; no one has a corner on philosophic or aesthetic quality. The most interesting synthesizer artists have grown from early color and pattern experiments (which earned them the title of "video wallpaper artists") to making rich statements. The most interesting conceptual artists have grown from applying preconceived ideas to the medium (which earned them the title of "boring academicians") to working within the medium, learning from it, integrating it into the fabric of their pieces.

Also, some of the galleries have worked very hard to distribute tapes in ways so that people can see them. The ambitious Castelli-Sonnabend Art Tapes Program is especially good. Under the direction of Joyce Nereaux, artists are asked to submit tapes of any type or length; the only specification (other than they meet the general tastes of the gallery) is that they be in a standard format.

The Centers

Contemporary to this activity carried on by individuals was a sudden growth of interest in experimental television at three major broadcast centers: KQED in San Francisco, WGBH in Boston, and WNET in New York. KQED and WGBH were first off the mark; in 1967 they both received grants from the Rockefeller Foundation to establish experimental workshops in television.

Brice Howard was the director of the first San Francisco workshop. During the first year, he asked five artists from the Bay area to come to the station, and he gave them access to the tools of television. They included a poet, a film-maker, a

novelist, a painter-sculptor, and a composer, Richard Felciano, who stayed with the workshop in following years. The TV director for the project was Bob Zagone, a young man who had been interested in innovative programming at KQED for some time. The experimenters found it increasingly difficult to work within the structure of a broadcast station, using bits of studio time left over from the news productions. Howard gradually moved the program out of the KQED building and set a separate, genuine workshop. The first-year artists, who were established in their own disciplines, were replaced during the ensuing years by people who concentrated on television itself (although they came from diverse backgrounds). The basic group came to include Willard Rosenquist, a professor of design at Berkeley; Bill Gwin, a young painter; Stephen Beck, an electronics designer; Don Hallock, a man with past experience both in broadcast TV and painting; Bill Roarty, a graphics designer who had also worked in television previously; and at various times two composers, first Richard Felciano and later Warner Jepson.

In 1969, the workshop became the National Center for Experiments in Television (NCET), still under the direction of Brice Howard. Howard was an extraordinary man who provided an atmosphere where experimentation could go on free from pressures of a broadcast situation. The workshop gradually acquired and built equipment, and the members had time to learn the medium in a craftsman-like fashion.

During the late 1960's and early 1970's, the Corporation for Public Broadcasting sponsored an internship program, in which TV personnel from around the country could come to the center to study. The center's current director, Paul Kaufman, described what happened:

...what went on was the formation of a workshop environment into which come dozens and dozens of stunned producers and directors from all over the public broadcast stations...as a result, a lot of

people in the system were exposed, and a lot of people in a sense went mad professionally, because Brice's personality and the general ambiance in the Center so strongly contrasted with the somewhat uptight and constrictive relationships at the stations.

One of the people who "went mad professionally" was Bill Roarty, who came as an intern in 1969 and then came back to stay in 1971. His memories provide insight into the atmosphere at the center and into Howard's teaching:

What happened in that six weeks was fascinating, because everything they were saying about television connected exactly with everything I had been told as a painting student. They were approaching it essentially the same way...it was material, it was surface...The connection was obvious and immediate to me; the thing I was working in, television, was a medium, and I had never thought of it that way before.

...The idea that Brice spoke about so beautifully was that if you did divorce broadcast from the making of television, you can cut away an enormous amount of very conventionalized and superfluous ritual...the making of programs for broadcast in the old sense was at the very least manipulative, and not in any way connected to what I thought of as the creative process. It goes right down the line...you can examine the vocabulary people developed, "control room," "camera shots," etc. Broadcast was eliminated from our discussion but really it was included all the time, as a poor relative.

Roarty goes on to describe a typical day at the center, which at that time was in one huge room:

Warner and I would be working on a complex sound composition and immediately to our left would be Stephen, designing a circuit and then on the other side of that would be Bill Gwin, looking at a tape, and over there would be Willard, working on light forms. You couldn't help but be completely excited by the thoughts and perceptions of all the people around you approaching things each in his own way.

From 1971 on, the Rockefeller Foundation gave support to a new program of the center's. Paul Kaufman recalls:

The time had come to try to see if you could do something about changing the moribund characteristics of teaching about television, in the Universities....We began a project that lasted for three years, which initially had people from the Center going out and visiting a lot of campuses, bringing tapes along, going to art departments, essentially saying to University people, "Look here, here's something new and something interesting, and you can do it. It's important to do it because we are going to have to train a whole new generation of image-sensitive people, and the schools aren't doing it." Well, out of this group of initial visits, about 5 or 6 places kind of surfaced as possible workshop sites, and eventually these became more or less mini-Centers in themselves.

The center entered a highly productive period in the spring of 1972. Don Hallock, Bill Gwin, Willard Rosenquist, and Bill Roarty all produced some of their most beautiful tapes. (Some of these tapes will be discussed in the third section of this report.) In the fall, Warner Jepson and Stephen Beck embarked on a concert tour around the country, giving performances with their audio and video synthesizers, respectively.

This burst of activity continued into the summer of 1973, when Don Hallock presented his "Videola" at the San Francisco Art Museum. Since that time, the direction of the center has been changing. There has been a shift from art to an interest in developing structural approaches to the medium. Paul Kaufman, the director, used the term "visual thinking" to describe his interest in finding a way of using all their experimentation of the preceding years to help figure out ways to get social, political, or philosophical ideas across on television without resorting to the traditional lecture form.

At any rate, the center as a place for aesthetic exploration is dissolving, and it leaves an empty space in the video

world. Bill Gwin stumbled onto the old center in 1969 as a young painter, and here speaks about it as a place to learn:

It was lucky for me because I learned how to use things in a very slow and unpressured way. When I was first there, they had one black and white camera and one tape machine, and that was all. They added more equipment slowly, so I started off with the most basic kind of situation, and over a period of three years learned how to use all of that equipment. It was nice; there's no place like it anymore, which is a problem.

The workshop at WGBH-TV in Boston also was initially funded by the Rockefeller Foundation, but it took a very different direction from the National Center in San Francisco. No separate workshop was set up during the early years; instead, artists-in-residence embarked on special projects, and producers on the WGBH staff did innovative projects of their own as well. Thus, the experimentation was carried on within the structure of the station, in its studios, using its equipment. Two producers at the station have been especially active. Fred Barzyck began after-hours experimenting with jazz programming in 1964. By 1969, he had produced The Medium Is the Medium, the first broadcast-TV program magazine of video artists' work, and he has continued to be wonderfully supportive of experimental work in the station. Even a partial list of his programs reveals a wide range of interests; he produced an early, free-form weekly series called What's Happening, Mr. Silver? in 1968, used the first portable color video equipment to do Jean Shepherd's America in 1971, tried a novel adaptation of Kurt Vonnegut's work for television, Between Time and Timbuktu in 1971-1972, and produced a second, larger document of the video movement for broadcast, Video: The New Wave, in 1973. Another producer, Rick Hauser, has concentrated on experimental drama and dance for television. He was an early Rockefeller artist-in-residence within the station, and he collaborated with playwright Mary Feldhaus-Weber on two programs. Both were composed of two

tapes, broadcast over two channels simultaneously, and viewed by the home audience on two separate TV receivers. The first, City/Motion/Space/Game, in 1968, was a quick-paced exploration of various urban spaces by dancer Gus Solomons, Jr., with a sound score composed by John Morris, who electronically manipulated city sounds. The second, Royal Flesh, in 1969, was an Oedipal drama that implicated the viewer as the child of the myth. Hauser continues to work in a highly imaginative and structurally interesting way with dance and drama, pushing the medium in new directions.

The Rockefeller Foundation artist-in-residence program also brought Nam June Paik and film-maker Stan Vanderbeek to broadcast television. Nam June began his year at WGBH in 1968-1969, doing a short segment for The Medium Is the Medium. He and Shuya Abe built their first video synthesizer there and first displayed its imagery in a four-hour-long blockbuster program called Video Commune, broadcast during the summer of 1970. The sound track was all of the Beatles' recorded music; people were invited off the streets to help contribute material (often their faces) for the synthesizer to process. Viewers at home watched four hours of dense, layered, slowly shifting, brilliantly colored images, some of which were recognizable and some not. Stan Vanderbeek also put together a very large show, called Violence Sonata, which was broadcast in 1970. Vanderbeek had assembled many bits of material from which to choose, switching from one to another in real time as the show was broadcast. There were film clips of violent subject matter, a studio audience that included militant political groups, karate experts lunging at each other in the aisle, and so on. The result was typical of Vanderbeek's work at the time: a shotgun blast of information.

In 1972, another program was initiated at WGBH: the Music-Image Workshop, established by Ron Hays. (WGBH had been broadcasting music programs for several years, and in 1971 had broadcast Video Variations, a group of experimental visual pieces set to music played

by the Boston Symphony Orchestra.) The relationship between sound and image has presented one of the thorniest problems to artists working with images in time. Many different solutions have been proposed, from using classical music for sound tracks, to composing music especially for each piece, to hooking up video and audio equipment so the sound and image are created together, to using no sound at all. Ron Hays addressed himself specifically to this problem, meeting with everyone who had given the matter serious thought. He settled on using the Paik-Abe synthesizer as his video tool. It had no direct hookup to music-generating equipment; it was operated manually. Hays spent months learning how to operate the synthesizer and gradually developed a "vocabulary" for it, that is, sets of images and patterns of movement he could draw upon at will. Hays said:

At this point it was obvious that the Paik-Abe's potential visual configurations were so incredibly vast in number that some sort of discipline was demanded; some order and time structure had to be imposed if the results were to be enjoyed as anything beyond endless changing images.) The structure of existing music would give me a structure within which I could produce and control and then choose the moving images.

Thus, Hays settled on composing images with the Paik-Abe synthesizer to go with existing pieces of music, although he has worked with new music as well. He broadcast short works of video set to specific pieces of music by various composers (Bach, Bartok, Stravinsky, Dvorak, Ravel, to name a few). Hays's first major work will be broadcast this year as part of the Norton Lectures delivered by Leonard Bernstein at Harvard University. The piece is set to the "Love-Death Prelude" from Wagner's Tristan und Isolde; the imagery is a complex sequence of video synthesis, computer animation, slit-scan animation, and other special visual effects.

Since February of 1974, experimental work at WGBH has shifted largely to the New Television Workshop, which inhabits a former

movie theater in Watertown, Massachusetts. Managed by Dorothy Chiesa, the workshop houses a full one-half-inch-tape studio. The workshop has provided the first relatively open access to television equipment for local Boston artists, and has also invited artists like Peter Campus and William Wegman, who are already well-established in the medium, to make new tapes using the workshop facility. The workshop also has a mix of local and national talent in its special dance project, headed by Nancy Mason. The dance project continues WGBH's interest in combining dance and television, both by inviting choreographers and dancers to come to the workshop to experiment with the equipment, and by setting up a program to record existing dance of all kinds for archival purposes.

The third major center is the Television Laboratory at WNET in New York City, directed by David Loxton. It was established in 1972 with support from the Rockefeller Foundation and the New York State Council for the Arts, with special projects support from the National Endowment for the Arts. If the National Center in San Francisco was an introspective center for pure, broadcast-pressure-free research into the medium, and WGBH's workshops (until recently) existed within the fabric of the broadcast situation and nearly always put their work on the air in one form or another, the TV Lab at WNET has found a place between these two poles. During its first years, it purchased one of WNET's old black-and-white studios, Studio 46, and gradually added equipment until it is now one of the most elaborate color video studios in the country. During that year, the TV Lab also set up a mixed-kind of access to the studio. Sometimes it was used by people already familiar with the medium; they participated in an artist-in-residence program (similar to the one at WGBH) in which special projects were developed and some were aired. Sometimes the studio was made available for an artist-access program rather like the one KQED had its first year, in which people from many disciplines (sculpture, poetry, graphic design), some of them new to video, some of them not, come to try out the equipment.

Gradually, the TV Lab has devoted more and more of its time to an extended artist-in-residence program. John Godfrey, the TV Lab's engineer; points out that it was very difficult, due to limitations of time, to teach people new to the medium how to use the sophisticated equipment well enough to do anything new or different. At the end of the two or three weeks allotted to them, most people were still just beginning to learn the most basic image-making patterns. Since the TV Lab is the most elaborate installation of its kind, it has seemed more worthwhile to invite fewer people, who already know the basics of the medium, to process tapes they already have or to execute planned works, and to invite a few people new to the medium to come for long stays. At the same time, WNET is expanding its "broadcast access": Channel 13 broadcasts much more alternative television than just the tapes made at its own TV Lab. In fact, WNET has been the most consistent over-the-air outlet for unusual or experimental television of many kinds, from special-effects extravaganzas, to nightly sign-off pieces about New York City by Nam June Paik, to new kinds of documentary, or nonfiction, television.

During its first phase, which ended in the spring of 1974, a few works were made at the TV Lab that are among the classics of the video movement. In March, 1973, Ed Emshwiller's Scape Mates was broadcast. Emshwiller is a film-maker known for his technical expertise and willingness to explore new visual effects. His work typically includes "the human figure, and indeed seems like a special kind of dance. Scape Mates was one of the first attempts to marshal special effects in video and computer animation and to construct a rounded statement; up to this time, much exploration of special effects had been going on and many "sketches" had been made, but there had been little attempt to gather them together and create a finished work. In Scape Mates, figures journey slowly through dazzling electronic landscapes; the use of the human figure interwoven with abstract electronic imagery can be an attempt to humanize

the technology, but it also creates powerfully surreal images of people trapped in Escher-like mazes. Emswiller has continued to mix the human figure and electronic imagery in two more pieces done at the TV Lab, Pilobolus and Joan and Crossings and Meetings. Two other major programs done during the first phase at the TV Lab were Nam June Paik's Global Groove, an international cultural collage, and Bill Gwin's Sweet Verticality, a poem about New York City to be discussed later.

The TV Lab also includes in its support video documentary, "nonfiction" television. In February, 1974, WNET broadcast The Lord of the Universe, a documentary about the guru Maharaj Ji, made by Top Value Television (TVTIV). It was a landmark in broadcast television because it was the first time an entire documentary was made for broadcast from one-half-inch-wide video tape. The portable, inexpensive video tape recorders (portapaks) record on one-half-inch tape. The advantages of using such equipment for documentary are obvious: TVTIV people could move quickly and unobtrusively into situations denied to big, bulky network equipment. However, for years this kind of tape was banned from broadcast because the image/signal quality was thought not good enough. By 1972, special machines, time-base correctors, existed that could regularize the signal of one-half-inch tape enough to convince TV engineers it was suitable for broadcast. A whole new range of material was potentially available for broadcast-TV audiences; the TV Lab commissioned a group of programs from TVTIV for 1974-1975, and a four-part series on Washington (Gerald Ford's America) as well as a piece on Cajun Louisiana (The Good Times Are Killing Me) have been broadcast to date.

In the spring and summer of 1975, WNET broadcast a series called Video and Television Review, made at the TV Lab and hosted by Russell Connor. VTR was a magazine of shows about people who make alternate television of all kinds. The format varied from

show to show; sometimes the program consisted almost entirely of an interview, as in Nam June Paik: Edited for Television, and sometimes it was wholly devoted to one work, as when Paik's Global Groove was broadcast. During the same spring, Paik himself made a series of vignettes about New York City, which were broadcast each night at sign-off time. They went under the name Suite 212 and have since been gathered into a single, typically collage-like tape.

SELECTED PEOPLE AND SITUATIONS

Southern California: TVTV and Long Beach

Top Value Television (TVTV) is a video documentary group that has headquarters in a house in West Los Angeles. It is a congregation of people who have backgrounds in various aspects of alternative television and print media; they came together to form TVTV in 1972. Their first project was to tape the Democratic and Republican national conventions of that year. Allen Rucker, a founding member of the group, explains:

Our intention, and it's still our intention, was to change television. The politics of information, the politics of television, are what we are trying to alter. When we first went to the conventions in 1972, we set out to prove a point. The point was that we could take this dirt cheap black-and-white video equipment that cost \$1,500 for a whole unit, and twenty or thirty people who loved television...and demonstrate that you could take this low-cost technology and people who had not been wrung through the broadcast television system and make not only technically decent television but also television in which the information was shockingly different. The nature of the information was different; it was looser, more direct, more informal, more personal, and it was more visceral. You felt like you were there after watching the shows, as opposed to feeling someone had laid a rap on you.

TVTV's attitude reflects a recent reevaluation of the term "documentary." For decades, media that are capable of mechanically recording and reproducing images (photography, film, and video) have been accepted as neutral witnesses of reality, as pure recording devices that take no stand on issues but merely reveal them. A comparison of network news documentaries of the conventions with TVTV's documentaries reveals that all recordings reflect in some way the thinking of those who make them. There is currently a booming interest in documentary film, photography, and video by artists, critics, and historians, all people who heretofore would not have considered it of aesthetic interest. This is not to say that all of TVTV's techniques are original or that all of their video tapes are works of art. However, they are part of a movement to approach social material critically, as information, and they are working out experimental modes of journalism; so, in turn, they broaden our awareness of the medium itself.

TVTV's editing style is that of semichronological collage, with bits of information brushing against each other. The viewer doesn't receive information in narrative blocks; he is led through a process of meeting people, hearing conversations. At the end he has been told a story, but not in the conventional broadcast-TV way: an omnipotent narrative voice telling you what you're going to see, seeing something, and then being told once again what it is you have just seen.

The group feels a nostalgia for the old days of TV, when programs were live and the action was spontaneous. Allen Rucker says:

All of a sudden what happened was that in the politics of commercial television those things became hardened into particular formats. Rather than Steve Allen talking to people on the street, Johnny Carson hardened the idea into the talk show....If you watch Johnny Carson now, it's an amazing kind of ritual, and there's nothing spontaneous about it. If you've watched it once,

you know every riff. Guests come out to promote themselves, and they are acting as if they are informal, but they are not informal.

TVTV has set out to work in a way that would permit informality and spontaneity, recalling the immediacy that once seemed inherent in the medium. At the same time, they realize they are working in an incredibly media-conscious society, and that they cannot get away with being the proverbial fly on the wall while taping. Rucker explains:

The whole idea behind cinema verité was that the camera man did not exist... people would forget about him and there would be a kind of natural behaviour.... It was an absolutely valid idea when it was first pursued because people had not learned... the process of television is not a product, it is an environment and it had not yet saturated them. Now if you go in with a camera and play the direct cinema role... they are conscious of presenting themselves on television and thus create a conscious, unconscious style of behaviour.... That's not our style. Our style is to make the camera an immediate element, making people know that we are shooting tape immediately, and not to make a big deal about it, not to say "stand over there," like the networks do, but to say "Yes, we're shooting. Here: want to look at it?" That's literally what we first did; we got people to shoot us and we attempted to make them relaxed in the presence of media rather than relaxed in the absence of media, which is what cinema verité was attempting to do.

TVTV is in a process of transition at the present time. They are the first to admit that they have failed to change television as a whole; there are not many independent video production groups getting their tapes on the air, providing a wide range of views. The problems of getting even one program on the air are many. The cycle of funding, shooting and editing, and finding an outlet is difficult to repeat indefinitely. TVTV avoided this by working for the TV Lab for a year as extended artists-in-residence, and they are now doing a series for KCET-TV in Los Angeles. But

the problem of diversifying broadcast television in general remains.

The history of video in Southern California has been that of disjointed but enthusiastic activity. There has been a certain amount of video exhibited in the more avant-garde galleries in Los Angeles; Bruce Nauman began to show tapes at the Nicholas Wilder Gallery in 1968. In 1971, there was a burst of activity at the California Institute for the Arts; Allan Kaprow, John Baldessari, Gene Youngblood, Nam June Paik, and Shigeko Kubota, all of whom are involved in making or writing about video, were on the faculty.

Since that time, there has been an increasingly steady production of video tapes by independent artists. A new focus for their activity has appeared at the Long Beach Museum of Art, where David Ross became the deputy director for film and television in 1974. Ross had been video curator at the Everson Museum in Syracuse, New York, for nearly three years and had organized an astonishing number of exhibitions of video art. His forte has been his ability to find little-known artists and to organize their tapes, along with those of more famous artists, into huge anthology-like exhibitions, providing a wide range of works for people to view. By the summer of 1975, he had managed to find an amazing number of tapes made in Southern California and had compiled them into an exhibition, "Southland Video Anthology."

Ross has worked very hard to find a way to exhibit tapes well in a gallery setting. He is only too aware that most museum-goers operate in a cruise mode, and expect to be able to pick and choose what they want to look at, and to look only as long as their attention is held. Many video tapes are meant to be viewed from beginning to end, and a casual visitor may not be able to devote the necessary time. At the same time, it can be difficult to circumvent this problem by setting up precise viewing schedules, as is done for films, because there are so many tapes of varying lengths. Also, if turned into a kind of theatre-going experience, it would miss the casual viewer altogether, and a new art medium depends on

chance encounters to build an audience. An added complication is that video is essentially an intimate medium, meant for small spaces, not large galleries.

Ross has worked out a good compromise. For the large exhibition at the Long Beach Museum, tapes run in several rooms. Some have regular schedules, with tapes playing in repeating cycles. Casual visitors can drop in, see what happens to be playing, and stay if they are interested. In other rooms, tapes are played by special request, so visitors with specific viewing desires can be accommodated. All the rooms are small and seating is comfortable, approximating a living room situation.

Most of the tapes shown at the "Southland Video Anthology" seem to be variations of recorded performance. In some cases, the artist addresses the camera directly, implicating the viewer as audience. In others, an actual performance in front of an audience has been recorded. The prevailing mood is one of fantasy - the tapes are full of little stories, narratives, games. When asked where this fascination with stories and narrative comes from, Ross had an immediate answer: "We're near Los Angeles, so what do you think? Hollywood." He went on to say that the two most influential people in local art schools have been artists John Baldessari and William Wegman, both of whom work with narrative structures.

One of the most intriguing tapes in the show was all about fantasy. It was Eleanor Antin's The Little Match Girl Ballet. Antin appears before an audience in full ballerina costume: she tells us she is going to New York to become a famous Russian ballerina. She fantasizes about her first big ballet, the story of the Little Match Girl. She slips into the story and remembers her first Christmas at home. Antin's finely woven performance fits fantasies one inside the other like Chinese boxes, until one has drifted far away from sure real/fantasy boundaries. It seemed an excellent, ironic performance to watch on a television set.

The Bay Area: San Francisco, Berkeley, Santa Clara

The Bay area has provided a home for a wide variety of video, but it has existed there in isolated pockets. People have worked nearby for years and known nothing about each other's activities. The NCET is a prime example: it may have been a national center, but it was certainly never a local one. The work done there took the form of intense visual explorations in a narrow direction, so that the center existed like an island in the San Francisco art world, separate from most and unknown by many.

The working conditions at the center have been described earlier. For a variety of reasons, the early years of experimentation began to yield results in 1972-1973, when many interesting tapes were made. One characteristic shared by most of these tapes is a slowness of pace. The best tapes from this period at the center include Bill Gwin's and Warner Jepson's Irving Bridge, Willard Rosenquist's and Bill Roarty's Lostine, Don Hallock's Kiss With No Up, and Bill Roarty's and Don Hallock's Untitled - in all of these there is an across-the-board slowing down. The pieces are usually brilliantly colored and densely layered visually, and elements shift very slowly within the frame.

Parenthetically, it should be noted that this slow pace is not limited to center work. The artists there participated in a trend that had been developing since the late 1960's in the "time arts." A slow pace was creeping into works by very different artists, from the black-and-white, hour-long tapes of T-shirted Bruce Nauman pacing around his studio, to the full-color, sumptuous nature tapes by Bill Gwin. In most of these tapes a set pattern is established that is repeated for a very long time. Typically, the viewer is at first preoccupied with figuring out what is happening, then slowly his attention becomes focused on his own reactions, on his own thoughts. Often viewers become bored and restless as the pieces seem to persist interminably. But sometimes the overall reaction

is one of relief, of depressurization from the fast pace and jam-packed imagery of much film and TV of the mid-sixties. This slow pace is a phenomenon quite particular to the late sixties and early seventies (several artists, from Nauman to Woody and Steina Vasulka, mentioned the influence of musicians like La Monte Young). One doesn't see so much of it anymore, but at the time it was valuable, and it had a way of helping people look at moving images with fresh eyes.

At any rate, given the shared slow pace, tapes made at the center explored different kinds of ideas. Don Hallock worked with very structured feedback, shifting his images slowly until the viewer lost a normal sense of vertical orientation vis-a-vis the image. Willard Rosenquist and Bill Roarty worked with incredibly subtle patterns of light, turning the monitor surface into a diaphanous sculptural space. Bill Roarty in later tapes has used similar lighting on the human form, in this case the mime dancer Noel Parenti. These tapes work in a fascinating border area between representational and nonrepresentational imagery: the monitor seems to contain only shafts of colored light until the figure shifts slightly and a contour of Parenti's body seems discernible.

A similar border area was explored by Bill Gwin and Warner Jepson in Irving Bridge. There is only one camera shot of a woods scene with a bridge. It begins "straight": you can recognize the scene and hear natural "woods" sounds. Very slowly both the visuals and the sound are altered electronically so that in the midst of the tape one is seeing an electronically colored equivalent of the woods and hearing electronic equivalents of bird sounds. Then just as slowly it changes back again. The tape was meant to be played on a loop so that the sonata-like three-part development of its structure would not be a pat thing; the scene would shift back and forth, from one kind of landscape to another.

Stephen Beck's work stands a little aside from the rest of the center's. Beck built a monoptical synthesizer at the center;

this tool is different from the Paik-Abe synthesizer in that it need not use cameras. The imagery is all generated electronically. In some ways, Beck's work is the most traditional of the abstract color video artists. He takes painstaking care with the structure of his works - they tend to be short, precise, and rich with references - just as he was methodical about his choices when building his synthesizer. This structured approach to abstract art is not new in this century. Beck speaks of his respect for Kandinsky:

He's really the painter who has influenced my own thinking the most. I think this ties my video into a tradition within the arts...the non-objective tradition. On the Spiritual in Art [a book written by Kandinsky] is really a masterpiece of someone putting down in words what the experience is about...I had experiences of seeing the visual field break down into elements, and when I was doing the design for the synthesizer, I structured these elements: color, shape, texture, and motion. And I further took the element of shape into sub-categories of point, line, plane, and illusion of space. I later read Kandinsky's work and I found it was really close: I had no foreknowledge of his work when I arrived at the same, or a very similar scheme. I was astounded. I was reading his notes for his class at the Bauhaus and there it was, the very same analysis.

Many of Beck's works take as a theme a central idea; he structures the work from inside out to make that idea visually manifest. One piece was Conception; another, done in collaboration with film-maker Jordan Belson, was called Cycles. This last work deals with layers and layers of cyclic images, organized into a cyclic structure:

The point is, the cycle is, again, a phenomenon without magnitude; there are small cycles and there are big cycles. This work involved a lot of study of the phenomenon of cycles, and in as much as they were studied and understood, their concepts were embodied visually and dynamically, and incorporated into the work. The only word

in the work is the title, "cycles." Everything else about the concept is expressed in the visual language.

Some of Beck's most interesting works manage to present to a wider audience ideas normally available only to specialists. He likes to use scientific and mathematical imagery because he feels it's part of our times. This interest may come from his own electronics background:

...what about the circuit designer, the circuit builder as the real electronic artist...as opposed to people who are expressing more traditional concepts with video, with electronic imagery? What about the guys who are actually building the instruments, designing the circuitry? Is the circuitry not capable of being recognized as being a real accomplishment and achievement in and of itself? An aesthetics that the average man has no inkling of other than, "Wow! It's a lot of wires and switches and knobs."

His latest patterns, which he calls "video weaving," are based on ideas from a time when artists used mathematics as subject matter:

It comes from the magic squares devised by Arabian thinkers of the sixth and seventh centuries, when they mastered algebra and applied algebra to their art. The religion of Islam forbids any representational image. It's a totally different concept of visual expression than what we have; you're just not permitted to portray an object of creation. It's largely based on portraying what we would call mathematical harmonies. Their wonderful arabesques and domes and patterns are all manifestations of mathematics, which in our day and age we would find in some equation in a book, which perhaps makes it less vivid, and less important to many people. People ask me sometimes, "Is this mathematical? How does this relate to mathematics?" And I say, "It is mathematics, just like music is mathematics." You have implicit structures of harmonies and ratios. Instead of music, where there is vibration of air,

here it's the vibration of light, with different colors and patterns. You don't have to relate to it as a drab mathematical theorem or equation. It takes on a much more vivid presence.

Warner Jepson was the composer for the center after 1972; at first, he worked closely with the artists, putting sound to their tapes, but he has been experimenting all along with images of his own as well. Most of his imagery is generated by audio equipment that has been connected to the video gear. He talks about his latest work:

...I've been doing some things sending an audio signal into a machine we have at the Center called a mixer, a colorizer, and a keyer. It takes audio signals from the oscillator inside the audio synthesizer and changes them into bands of various widths and expansions on the screen and puts color in, so the color gets mixed in gorgeous arrays.... I've even begun to use the camera and to mix audio-created images with camera images. The audio things will go right through the camera images and make strange new colors.

His idea is to make a work that is totally integrated aurally and visually. He feels the two should complement each other completely. The problem is to balance the work so that both visuals and audio are interesting. He explains:

In a lot of these experiments, I'm not even putting the sound on because the sound is dumb. The thing about sound is, it's so complex that when it's represented in images, the images are so complex, they become chaos. Whereas the simplest sounds make the clearest images.... There's a lot of activity in sounds and it becomes blurry visually; it looks like noise. So the simplest sounds, like single tones, make the best images... working with sounds you actually want to use and save is a problem.

Jepson explains the reasons he is looking for direct relationships between sound and image. Many video and film artists

make the visual part of their work, and then set it to traditional music to give it structure.

Even going back to the 1920's, the abstract films that were made then relied on sound for their form. Even Walt Disney's Fantasia. Music has always been a moving art, and visuals, had always been static, so when visuals got to moving, they needed that form that musicians have solved - it gives support to the visual artists. It's time for visual artists to find their own moving form, pacing, and development, and figure out what they need to do to make an existing work without sound, or with sound, but on its own terms.

One of the few times the work of the center was exhibited in the San Francisco community was when Don Hallock built his "Videola" for an exhibition at the San Francisco Museum of Art in the summer of 1973. The Videola was a construction that expanded the image from one television monitor so that a large audience could watch it. It was essentially a wooden pyramid laid on its side so that it looked like a huge megaphone opening out toward the audience. At the back, at the apex of the pyramid, was a television monitor. The insides of the pyramid were lined with mirrors, so that the image on the monitor was made kaleidoscopic. However, the facets of the image didn't go off at straight angles; the image bent and became a circle, so that facets seemed to form a sphere. For performances, all the lights in the rooms were turned off and the outer frame of the pyramid was masked with black. The audience could look in and see what appeared to be a huge sphere of shifting, dissolving, luminous colors, suspended in dark space. It was especially successful because it expressed the video images in dematerialized, almost nonphysical terms. Nam June Paik has explained the difference between kinetic art and video art as the difference between machines and electronics; one uses objects obviously controlled by gravity and the other does not. But the potentially weightless

quality of the video image is often altered by its presentation as a small image in a piece of furniture in a lit room. The Videola device allowed the image to float. "Videola" was a very successful exhibition: two hundred people could watch it at one time, and Hallock estimates that 24,000 people in all saw the show.

The center's method of operation was to limit the number of people working there so that those people could work very freely and constantly, learning gradually, as new equipment was built and acquired, how to build new patterns of images. This meant that very few people had access to the equipment. Since practically no individual has the means to own such equipment personally, other artists in the Bay area turned to small-format, portable black-and-white equipment. As if to fill the vacuum, another center appeared to support this kind of video.

The director of the de Saisset Art Gallery at the University of Santa Clara is Lydia Modi Vitale, who is very interested in exhibiting many forms of avant-garde art. In the winter of 1971-1972, she hired George Bolling as video curator at the de Saisset, and gradually the gallery became the steadiest center of conceptual video in the Bay area. There was a flourishing conceptual art scene in San Francisco at that time, and Bolling introduced several of the artists to video, and even did the video for many of their early tapes. The four most consistent workers in the medium have been Howard Fried, Joel Glassman, Terry Fox, and Paul Kos. Bolling has held a constant stream of exhibitions of video from all over the country. Where David Ross's strength is to organize large, democratic exhibitions that give exposure to a large number of works, Bolling's is to be critically selective, organizing one-person or small-group shows.

Howard Fried's work is intriguing and rather unique in the conceptual video world. His tapes are carefully structured performances, which have gotten more and more complex with time. In his early tapes, Fried himself is the protagonist, and during the

course of the work pits himself against some social structure, trying to figure out a way of proceeding. An example is Sea Sell Sea Sick at Saw Sea Soar, a forty-minute black-and-white tape done in 1971. Fried is seated at a table, trying to run the gauntlet of choices while ordering in a restaurant. He keeps answering the waiter's questions with more questions - "What kind of pie do you have?"... "What is the difference between Big Burgers and Jumbo Burgers?"... "You don't have Coke?" - until the waiter becomes annoyed and asks another to take the order. Fried exasperates this waiter as well, and the two waiters begin to take turns trying to get the order. This goes on interminably. The table with Fried is on a swing parallel to the camera, as are the two waiters. The camera itself is on a third swing so that the action in the image is as persistently shifting and inconclusive as the action in the performance. Gradually, the scene comes to have broader implications; Fried seems like the battered victim of a ceaseless interrogation. His defense is to be passive, to not order, and it finally works: one of the waiters quits in disgust, and one of the variables of a situation that seems to be nothing but variables is eliminated.

Fried has a startling ability to choose single situations that seem to hold implicitly many issues of institutional and individual sanity; at base, he is examining the role decision-making procedures play in structuring sanity.

Joel Glassman has developed a very different style. He began on the East Coast - he did both light sculpture and sequences of photographs. His latest tape, Dreams, is a collage of images that is somewhat similar to tapes being made at the present time by a few other people in the country. The early conceptual tapes that explored specific aspects of perception have given way in some cases to an interest in how one perceives through time, how one builds up memories. At one end of this group of artists is

the information-collage work of Ira Schneider; at the other end are the intensely personal tapes of Lisa Steele and Colin Campbell in Toronto. Glassman's tape is somewhere in between. We are shown a series of images that seem to belong to one man's experience - the walls of a particular room, clouds, particular bits of landscape, written notes. Some of the images are persistent and seem to have special power or significance, as do certain images in a dream. Scenes reappear again and again, altered slightly by what came before them, and altered as well by what one hears as one sees them. Glassman takes painstaking care with the sound and is very aware that what we hear shapes what we read into a scene; seemingly innocent scenes can send shivers down your spine when you hear manic laughter, sobs, whispers in the background.

Glassman shows that video tape can be used to provide a metaphor for one's consciousness. Images can be strung along through time, paralleling the mind's ability to recall images. Actual events and actions are not recalled in a pure or neutral state but up through the swirl of images existing in the mind, colored by what one was thinking of earlier.

In addition to these two centers, NCET and the de Saisset, there were other activities going on in the Bay area as well. TTV had its headquarters in San Francisco for a few years, and an excellent documentary group, Optic Nerve, exists there today, as well as Ant Farm, a media group that has made many tapes and held exhibitions. Still another group, Video Free America, was co-founded by Skip Sweeney and Arthur Ginsburg. They have made documentary video tapes, mounted elaborate gallery installations, innovated ways of using video with live theater, and held regularly scheduled viewings of tapes. They were more directly and actively part of the video counterculture of the late 1960's and early 1970's than was either the center or the de Saisset, but it would be wrong to say they were more interested in politics than art. They used what

was at first very limited equipment and created very beautiful video. Sweeney, for example, through hours and hours of tinkering with knobs, became one of the handful of people to master feedback.

A note about feedback: there are many, many feedback tapes. Almost every artist went through a period of doing feedback, if only because it is one of the simplest ways to create powerfully lyrical, abstract imagery given only a camera and a monitor. It is pure video: the camera is turned to pick up the image on the face of the monitor that is displaying that camera's image. A closed circuit has been established, so what you get is an image of a monitor within a monitor, and so on, an infinitely repeating image. By tilting the camera and by altering the controls for brightness, etc., abstract patterns are formed. There are so many variables in the image that it is very difficult to control; the picture constantly "spins out." A very characteristic feedback image is of a vortex, an electronic whirlpool. In practiced hands, such as Sweeney's, this can become a shimmering, interweaving mandala.

Seattle

Seattle should serve as an example to bigger art centers: sometimes the smaller places can do things better. There is a group of people there who are not associated in a formal way - Anne Focke runs an art gallery, Ron Ciro and Cliff Hillhouse work for the local public television station KCTS-TV, and Bill Ritchie is a professor at the University of Washington - but who share an interest in video, keep in touch with each other, and make things happen. They work on a modest scale, not supported by huge institutions or grants, but they persevere and make, or help make possible, marvelous tapes.

Anne Focke used to work for the Seattle Art Museum and found herself producing shows about art for local TV. Two years ago, she broke away and established an independent, nonprofit art gallery

called and/or. As the gallery's name suggests, Focke has a pluralist, open approach to contemporary art and shows a wide variety of work. She has, however, been especially interested in video. She has helped artists get time to use the KCTS studios and has shown both locally known and nationally famous video artists in her gallery.

At KCTS, Ron Ciro has worked with Anne Focke to get artists into the studio. He has also encouraged Cliff Hillhouse, a station engineer, to work on his own video quantizer/colorizer. Ciro and Hillhouse both visited the National Center in San Francisco as part of its internship program, and are now excited about experimenting with video imagery. KCTS-TV's equipment is black-and-white, but Ciro and Hillhouse are eager to work in color. Cliff works during his off-hours building new equipment based on circuit designs the National Center gave him. He makes one think the shy garage inventor, who works unsupported by massive research and development money, is still alive and well in America, even today. His only problem is finding money to visit other engineers designing new video equipment so they won't duplicate each other's work.

Bill Ritchie is a professor of fine arts at the University of Washington. He teaches print making most of the time, and video part of the time. He is very widely read and interested in how video fits into the history of art in general and print making in particular. He has done one of the two or three best feedback tapes in the movement. It is "seeded" feedback; that is, it is based on an outside image, in this case that of a print Ritchie did called My Father's Farm. In a feedback setup, the image turns into very rich, streaming colors. Ritchie's friend Carl Chew put his hand in front of the monitor, so in the final tape it looks as if his hands are forming and modeling the flow of colors: the tape is called The Hands of Carl Chew on "My Father's Farm." Feedback is made by people, but rarely does a human form seem to have any part in it visually: in this tape it achieves a wonderful mix.

Dallas

Dallas is the location of one of the three major satellite centers set up by the National Center. (The other two are at Southern Illinois University, directed by Jor Moorman, and the Rhode Island School of Design, directed by Bob Jungels.) It is run by David Dowe and Jerry Hunt. Dowe was a director at the public television station in Dallas when he went to the National Center to be in its internship program. He went back to Dallas excited about experimental television; for a while he conducted workshops both at Channel 13 and Southern Methodist University, but eventually he shifted the whole operation to SMU. Jerry Hunt's field is music, and he has set up an electronic music studio/workshop alongside Dowe's video studio at SMU. The two men build their own equipment and are constantly elaborating upon, improving, and resynthesizing their machines. Some of their most exciting work has been done in performance, playing their audio and video synthesizers together. They have given concerts in the U.S. and Canada, and have made a European tour as well.

It is obvious that both men share a rare set of talents; not only are they involved in pioneering technical work, but they are also capable of explaining what they have done - they are born teachers. In addition to a masterful, darkly symbolic tape, Procession, they produced a lighthearted Electronic Notebook tape for the National Center, which explains in a marvelously clear way what feedback is.

Minneapolis

Jim Byrne was just out of art school when he attended a National Videotape Festival Workshop held at the Minneapolis College of Art and Design. He says he had been at loose ends, depressed by all the "bad art" he saw being produced. The teachers at the workshop included Peter Campus, and Byrne was immediately

impressed by his work. He became Campus's student and worked with him for a year and a half; he is working independently now. In a sense, he is in a second generation of video artists.

His work reminds one of Campus's in that he does both installations and tapes, and his tapes are concise statements often made using one special effect obtainable only in video. One of the tapes Byrne produced in 1974, Tangent, is typical. To start, he has prerecorded an image of himself moving about a space. Sometimes he comes up close to the camera and stares out so that one sees only his head; sometimes he walks back and stands against a far wall. In Tangent, Byrne plays this tape on a monitor, then tapes himself picking up the monitor and reacting to the image, comparing his space to the image of himself in the space on the monitor. Sometimes he holds the monitor up to the camera so the frame matches the frame of "our" monitor: it looks as if the pre-recorded image is playing directly on our monitor. Then he twists the monitor back so only one side of it coincides with our monitor. The space both inside and outside our monitor seems to warp. What Byrne has done is create a set of powerful illusions that make our space seem to meet tangentially with the spaces in the monitor. Watching the tape changes the way you think about the illusion of the TV image. By presenting us with such a clear, real space and person, himself, Byrne has opened a door - he has allowed us to compare our own environment with that on a television monitor and so has displayed its illusion to us.

Byrne works alone in Minneapolis and some of his work has been shown at the Walker Art Center there. There is an excellent video access center in Minneapolis, the University Community Video Center at the University of Minnesota. They have one-half-inch video tape equipment, both for recording and editing, and Byrne did his first work on their equipment.

Halifax

The Nova Scotia College of Art and Design in Halifax is run by Garry Neill Kennedy, an art internationalist. He invites artists from many places to come to NSCAD to teach, and consequently the school combines a beautiful seaport location with a cosmopolitan teaching program. The school has very modest video equipment, all black and white, some portapak, and the idea has been to conduct a purposeful investigation of the medium. A review of tapes made at the school since 1970 is a mini-review of the general course conceptual art has taken over the past five years.

The first tapes done, in Pat Kelly's teaching classes, are very straightforward explorations of the medium, with members of the class trying out different ways of filling the monitor's space with their bodies. Soon the tapes reveal a search for a way to structure time and events, and this often takes the form of counting or repeating so the structure is as self-evident as possible. Some tapes examine more specific problems, like sound-image relationships.

For example, in David Askevold's Fill, the artist wraps pieces of foil around a microphone head; as the image (the silver ball of foil) increases, the sound (the rustle of foil on the mike) becomes muffled and decreases. As he removes the pieces of foil one by one, the process is reversed.

A second series of tapes, done since 1974, are cleaner, tighter, more polished products based on the early explorations. An example is Lauren Butler's Untitled. We see bare feet walking around on white paper. The person is carrying a bucket filled with dark liquid; from time to time the person puts his/her feet into the bucket to dye them, so the feet leave tracks on the paper. We can only see the pacing feet and footprints - we can't see the edges of the paper. Finally, the person walks off the paper, the camera zooms back, and we see the footprints spell out "one step at a time."

The most recent tapes indicate a new, more personal direction. One, by Dede Bazyck, was in the "Southland Video Anthology." It is a surreal journal, a collection of vivid little impressions and actions strung together through time by the artist.

Toronto

Another center for video activity in Canada is in Toronto. It is focused around two organizations in the city. The first is a group of three artists, Michael Tims, Ron Gabe, and Jorge Saia, who call themselves General Idea. They are engaged in many activities, but most of them center around locating and restaging contemporary rituals. For example, from 1968 to 1971, they staged annual Miss General Idea pageants based on the ritual of Miss Anything beauty pageants, and managed to embroider an elaborate statement about the contemporary iconography of glamour. They are now involved in a complicated campaign of maneuvers and preparations for their biggest event, the Miss General Idea pageant of 1984. They first used video in 1970 to document that year's pageant and have continued to use it off and on. They have worked a great deal with mirrors and made an exquisite tape in 1970 called Double-Mirror Video. Two mirrors are set up opposite each other at the water's edge on a lakeshore. The mirrors are tilted, creating infinite echoes of reflections (a pure example of nonelectronic feedback). The camera zooms slowly in and out of the mirror images; one is never sure how deep inside the illusion one is until the very end, when the camera draws back from the mirror reflection altogether. It is a short, perfectly crafted work that capitalizes on the seeming transparency and clarity of water, mirrors, and light to disorient the viewer.

One member of the group, Michael Tims, has also organized a media distribution system called Art Metropole. They have a highly selective catalogue listing an excellent group of books, films, and video tapes. Their video tape distribution is handled

by Peggy Gale, who was until recently the head of video funding for the Canada Council.

Another center in Toronto is A Space, an art gallery that supports video and has a library of tapes. Parked under the gallery is a van with a studio color camera and editing equipment; this van provides access to equipment for local artists. One person who uses the equipment is Terry McGlade, who works mostly with dance. He has made a wide variety of interesting tapes exploring all kinds of dance-videospace relationships.

In addition, Toronto is becoming a center for a newly emerging kind of video. Bits of it exist elsewhere - in some of the tapes from the "Southland Video Anthology," in Joel Glassman's work in San Francisco, and in some tapes made in the last year or two in New York City. In Toronto, two artists in particular, Lisa Steele and Colin Campbell, have concentrated on it. All these artists share a concern with finding ways of structuring autobiographical material in new, nonnarrative ways. In Steele's and Campbell's work, recent tapes string together a series of images, or quiet events. Often the artist appears as the sole person in the tapes; almost always one hears his or her voice, telling you the "story." Often there are recurring images, ones that seem to have a special hold on the artist's mind.

Lisa Steele puts her objectives clearly:

I got sick of people portraying dreams as foggy dry-ice-and-water type scenes. Dreams aren't like that. They are crystal clear. They just seem to follow a logic of their own. I'm trying to reconstruct that logic in my tapes.

This is reminiscent of Glassman's recent tape, Dreams, but hers are even more directly personal, since the artist often looks directly out at the viewer.

Campbell and Steele base their tapes on everyday visual reality. Nothing at all extraordinary is put in front of the camera physically -

Campbell shows us the view from his window, Steele examines her plant collection. It is the means of showing these things, the order and way in which we are asked to perceive them that is extraordinary. It reminds one of Analytic Cubism: Picasso and Braque were also interested in perception itself, in how people take in information. However, the means of depicting this, the new techniques, is so strange to look at at first that there was the danger people wouldn't be able to "read" the paintings at all. Therefore, the painters used as a foil for their new mode recognizable everyday content - guitars, coffee cups, wineglasses, people. Much of the fascination of these paintings comes from the tension between what you can recognize and what is new to you.

Some of the new video tapes do the same thing, albeit in different ways. Campbell's and Steele's work shows you everyday, physical reality in new sequences; they are using both the camera's ability to record our daily living environment and its ability to structure this information through time to construct new modes of perception.

New York State

Owing largely to support from the New York State Council for the Arts, New York State has the most energetic and diverse range of video activities of any area in this country or Canada. Most of the activity started in the early years of the video movement in New York City. Over the years, people left the city for smaller communities and set up small groups and organizations, each with its own perspective.

The Center for Experimental Television is in Binghamton. It exists completely independently of SUNY, but a professor from the university, Ralph Hocking, runs it. He is assisted by Sherry Miller and R and D persons Don McArthur and David Jones. It is an access center - anyone can come in and check out equipment to make any kind of tape. One of Hocking's main interests, however,

is for processed color imagery, and he has done all he can to encourage that kind of video at the center. Nam June Paik was the first artist-in-residence, and he built his second synthesizer there. Lately, the current artist-in-residence, Walter Wright, who comes from a computer background, has been working with Hocking to design new equipment and build up an image bank. This bank is a collection of black-and-white tapes that have been processed in increasingly sophisticated ways; the resulting images have truly amazing colors and solarized effects. It is interesting to note that the image bank material is not purely abstract. Wright feels that computer-generated art is often dull. He says viewers can intuitively complete the whole pattern after having seen only a tiny portion, and watching it work itself out becomes boring. Wright's basic black-and-white footage is of "natural" imagery, moving water being an example. The movement is rhythmic and has a certain regularity, but since in nature there are so many variables causing motion, it paradoxically also seems to have a random element, and so holds surprise. One of the most intriguing things about watching these images is that most of one's ability to recognize the base image through all the color and special effects is dependent upon its movement; one can always recognize rippling water, whereas a still frame from the tape would be illegible, abstract. Wright has traveled around the state, giving synthesizer performances.

A second focus of activity in the state has been Syracuse. The Everson Museum has had an amazing number of exhibitions of many different kinds of video art, first under the direction of David Ross and now under Richard Simmons. Many artists have had first one-person shows there. All in all, it has been the consistently best place on the East Coast to see new video art. Also in Syracuse is Synapse, a very posh, well-equipped cable system at the university. Students there have received excellent technical training. One of them, John Trayna, is now the technician at Electronic

Arts Intermix in New York City; another, Bill Viola, is running Art Tapes 22 in Florence, Italy.

Woodstock Community Video is directed by Ken Marsh. He was an original member of People's Video Theatre, an early video group in New York City. In Woodstock, he has been committed to getting alternate material on cable TV.

An independent, noninstitutional group named Media Bus live in Lanesville, New York. Their roots are also in the city; as the Videofreex, they were one of the first groups to form. They moved to Lanesville to see if they could establish a genuinely alternative television system for a small community, and they have largely succeeded. They have a regular Saturday-night show, for and about the community. The membership of the group is diverse - they do all kinds of work, from local reporting to video games, and members of the group do individual creative work as well.

One of the best "documentary" tapes was made by Nancy Cain of Media Bus. It is a very short piece titled Harriet. It shows Harriet, a Lanesville woman, at home, taking care of her children, making beds, fixing meals. Her life seems made up of rather dull work, but she is a very spirited and lively person. At the end of the tape, she acts out a fantasy for the camera: she packs her bag, screams she's fed up with Lanesville, jumps in the car and takes off down the road, laughing uproariously, radio blaring. It was a marvelous documentary of the type professional documentary groups are only talking about - a mixture of fiction, nonfiction, everyday routine and fantasy, all of which adds up to a most sensitive portrait.

In recent years, Buffalo has become a small think-tank for studies in media. This is largely due to the energy, enthusiasm, and ambition of Gerald O'Grady, who has set up the Media Study Center, an independent department within SUNY at Buffalo. He has assembled a faculty that includes some of the most interesting people working in film and video today - Paul Sharits and Hollis

Frampton in film, and Woody and Steina Vasulka in video. O'Grady has a constant schedule of workshops and conferences, lectures and viewings. He is interested in all aspects of media, from each individual work to the role all the mass media play in our society.

The Vasulkas are probably among the most thoughtful, intelligent people working in video, and their work is central to the basic concerns of the medium. Steina is a violinist from Iceland and Woody is a film-maker from Czechoslovakia; both have been interested in electronic arts of all kinds for a long time. They lived for several years in New York City, where they set up The Kitchen, a kind of free-form gallery and electronic-arts performance center, in the summer of 1971, and showed much early video there as well as helping to organize some of the first video tape festivals.

Woody remembers how they felt when they first began to use video:

Our context was not really artistic when we started to work with video. It was very far from what I would recognize as art....There are various motives for people who stumble into video. In some cases, it was pure accident; in some cases, it was hope. In my case, I had been in things I couldn't work with. I was in film, and I couldn't do anything with it. It was absolutely a closed medium to me. I was educated in film at a film school. I was exposed to all the narrative structures of film, but they weren't real to me and I couldn't understand what independent film was. I was totally locked into this inability to cope with the medium I was trained in. So for me, video represented being able to disregard all that and find new material which had no esthetic content or context. When I first saw video feedback, I knew I had seen the cave fire. It had nothing to do with anything, just a perpetuation of some kind of energy....

The Vasulkas have done both "documentary" and "abstract" video over the years: this discussion will cover only the latter. They stuck to their guns - there is no dramatic structure in their work; the tapes have fast-moving rhythms, but shifts occur according to per-

mutations in the way the image is structured, not according to any dramatic plan.

Their early work pursued two themes, according to Steina:

We approached the art material, meaning that we dealt with voltages and frequencies. We are dealing with the signal, that is the audio signal and the video signal....

Woody:

What was really, truly significant to us at that time was something nobody really detected. That was to make pictures by audio frequencies, and to get audio frequencies out of pictures.

The first tool the Vasulkas got was a portapak; the second was an audio synthesizer. They hooked the two up and sometimes could use the audio signal to generate video images, and sometimes use the video signal to generate sounds.

Steina:

That was the first approach we had. Secondly, another characteristic of our work has been a consistent traveling of the frame, horizontal traveling.

Much abstract video imagery has the tendency to move vertically. The Vasulkas insisted on moving theirs horizontally, often along lines of monitors so it looked as if the image was traveling down the line from one monitor to the next. Woody explains:

At that time I was totally obsessed with this idea that there was no single frame anymore. I come from the movies, where the frame was extremely rigid, and I understood that electronic material has no limitation within its existence. It only has limitation when it reaches the screen because the screen itself is a rigid time structure. But the electro-magnetic spectrum itself exists, organized or unorganized, totally in space. Confining it in a single monitor is like a view through a camera, or a single projection frame.

All this gave us the idea that there was no truly rigid frame, just particular organizations of time and energy. The image is fed into a sound synthesizer...the organizational mark itself is electronic. That's what we in video call horizontal and vertical pulse - it paces the image. These are the sync marks which are usually hidden behind the frame. It's all on the images, just as film has sprocket holes which are normally hidden. Electronically, there are also frames. What this does is disregard the reference of being locked into a single frame. It travels; there are two time layers. One is static, and the other is dynamic and all this is exposed....

All this means that one is often watching a horizontally drifting image, and that the sound and the image are directly related in some way. The total effect is of a totally integrated work that is nevertheless dynamic, always energetic, always moving:

The Vasulkas' work has tended to evolve with their equipment. Woody says:

Our work is a dialogue between the tool and the image, so we would not preconceive an image, separately make a conscious model of it, and then try to match it, as other people do. We would rather make a tool and dialogue with it; that's how we belong with the family of people who would find images like found objects. But it is more complex, because we sometimes design the tools, and so do conceptual work as well.

During the years 1972-1973, they went through a surrealist period. They had been going through picture books of Magritte's work, figuring out how natural it would be to do some of his works with video special effects. One work, The Golden Voyage, is directly based on Magritte's painting The Golden Legend - a loaf of bread travels like a finger, opening up certain areas of the image to special effects. Even in these works, where there is no horizontal drift, there are at least two kinds of motion going on in each image; motion, rates of change, are always present in their work.

Their latest work involves raster manipulation; each line of the video image becomes a carrier of energy through time. Some-

times the images are sketches of simple wave patterns. Sometimes a portapak tape of a street scene is used, and the raster is altered according to the brightness or energy in the image. So what one is seeing is a topographical map of the brightness of an image; where the image is bright, it lifts the lines; where it is black, they fall. The Vasulkas call this recoding, and indeed it does make one recode the way the image is looked at because new kinds of information are being given.

Woody explains what he is attempting to do with this new imagery, which can look quite stark and unaesthetic, because it is so new:

You should be precise about your pleasures, and communicate those to the audience, rather than those which are widely shared. That's what I have against any dramatic structures. They already appeal to an experience which is built through the centuries....I walk somewhere, and I see something which is art, and I agree with it. But then I question it. I say "Why did I like this? Because it is art?" And then after all, I feel frustrated that I really enjoyed it, because there were other qualities that were missing....Right now I am interested in knowing, in knowledge, than in the esthetic end of it. So then I must say, "Did it say anything towards my own process?" And often I have to say it didn't, it just extended what is called art, in its beauty, or its accomplishments, but it didn't say anything to my personal problems. Sometimes when I watch people's work, I tend to underestimate it because it's not beautiful. But then I have to re-evaluate it and change my preference, because in the long run, that work which was not so beautiful, might have been more important....

Basically art provides a continuous stream of models of consciousness. There are always certain historical periods when new consciousness is created, for example, when Freud reached a new understanding of the relationship between people. Eventually there is a construct of consciousness which has art as a model....Now, what I am interested in is if there is the possibility of actual, total redesign of con-

sciousness in the sense of its model. During the early part of my life, I was looking into myself for an alternate model of consciousness, and I didn't find it. Now turning more and more towards material, I'm trying to find this new model of consciousness within the material....

Since we look at reality mostly through our eyes, the reality has total dependence on perception, on how images are formed in the eye... But through an electronically-generated image, I found non-lens, non-eye possibilities of restructuring the image....I am not totally dependent on reality as we know it through the lens or eye....Through electronics, I think there is a way of interacting with real models, with models taken from nature, and a new concept of nature can be synthesized.

...The closest thing to all this is radio astronomy. The universe as we knew it until now was constructed on information of light, which reached our eyes and provided a model of the conscious universe. But now, with radio astronomy, we are getting a very different notion of our universe. First of all, we receive information which is not visible. It's not points or spheres anymore. It's energy which is not in a permanent state; it is permutating, as a matter of fact, all the time. So that suddenly, through the instruments we have, we are reconstructing the universe in some visual sense, because eventually we translate radio waves into some visual model. We are now trying to visualize space which exists only as electro-magnetic forces....It's the notion of the organization of energy in time that for me is the key to all sorts of changes within life.

New York City

New York City has continued to be the single most productive place in the video art world. There are several places people can watch tapes and see installations: Castelli-Sonnabend Electronic Arts Intermix, The Kitchen, and at Anthology Film Archives, the video part of which is directed by video artist Shigeko Kubota, to mention only a few of the most prominent. Some artists can work at the TV Lab; independent artists can now find access centers for

equipment and editing facilities. There are frequently exhibitions, as well as new books and articles. A discussion of the work of three artists, Ira Schneider, Peter Campus, and Bill Gwin, may serve to indicate in a modest way the richness and diversity of work being produced.

Ira Schneider's work has been as central to the medium as that of the Vasulkas. He was present during the very earliest months of the movement, and seems to have been a founding member of most of the original groups. Together with Frank Gillette, he did one of the earliest multimonitor installations, Wipe Cycle, at the "Television as a Creative Medium" exhibition held at Howard Wise's gallery in 1969. It was a nine-monitor piece, a console of monitors three high and three wide. Images shuttled from monitor to monitor, following four separate programmed cycles; there were live and delayed images of the gallery itself, broadcast images, prerecorded tapes, and gray "light" pulses.

This mix of images, which Schneider calls "information collage," has remained central to his work. In the spring of 1974, he did an installation at both the Everson Museum and The Kitchen called Manhattan Is an Island. Twenty-four monitors were arranged in the shape of Manhattan Island. The outside ring of monitors showed tapes of images of the island from boats; bus, land, architecture, and people tapes were all played on monitors in a logical part of the "island." The monitors were arranged at different heights, following the topography of the island. One monitor, facing up, displayed tape taken from a helicopter. Viewers could move in amongst the monitors, seeing specific bits and views of cityscape, or stand outside and watch the whole island hum along. The tapes from this piece have been edited down into a single tape one can watch on a single monitor.

Schneider says he tries to establish conditions with the information he provides, and so "guide, not push" an audience along

a route of perception. His latest tape, Bits, Chunks, and Pieces, does precisely that. So far, it is a black-and-white fifty-four minute "video album." It is very clearly and elegantly taped and moves the viewer along through different kinds of American landscape. One goes from "Sante Fe Fiesta" to "Tex-Mex" to "Rock 1," zooming along looking out a car window, stopping to see an eighty-five-foot doll named Zozobra explode in fireworks at the fiesta. Toward the end, the pace quickens, one becomes aware that the sound doesn't necessarily match the image, and certain sequences are repeated over and over (one remembers especially a line of cows swinging along the side of a road while "Put on Your High-Heeled Sneakers" blares on the car radio). Schneider stresses the nonnarrative nature of his album; he wants each viewer to figure out the information by himself.

Peter Campus was in the film business for several years. From about 1966 to 1970 he underwent a gradual change, disentangling himself from film: eventually he made the decision to become an artist and began to do work in video. His work takes two forms - he does both tapes and gallery installations. The tapes typically use some visual effect, special to video, chroma-key or two camera images superimposed, to set up a shift in perception. His two best-known works, Three Transitions and Set of Coincidence, each have three parts, and each one builds quietly on the statement made by the previous part, from concrete to abstract, from witty to somber.

One sees the image of Campus himself in the tapes; the installations are triggered by the viewer, who usually deals with an image of himself. Generally, there is a darkened room that holds a camera and a video projector. The viewer walks in; his image is picked up by the camera and projected against a wall, usually in a way that distorts the image or makes it elusive in some way. By walking around the space, the viewer can explore the parameters of the piece - where the camera will or will not pick up his image, how his placement in the room affects the size and shape of his image on the wall, and so on.

Campus talked about his work:

My departure from Paik, well from most people working in video, is that I'm less interested in broadcast television than I am in surveillance television....I'm more interested in that kind of narrative....I don't allow anyone to touch the camera; the camera is always still. It really is the human stuff in opposition to the electronic stuff. They are pitted against each other. That seems to be one facet. Another facet is I'm very consciously working with transformations of energy....You think of the video process: light is focused by the lens in the camera, which is photon energy, hits the vidicon tube and is translated into electrical energy, comes out on the monitor as electrons, the stream of electrons hits that phosphorous stuff and becomes light energy, photons again, is focused by the eye, hits the retina and becomes neuron energy. The relationship between all that interests me. I think with my installation pieces, one has the feeling that the wall is alive with energy....And then on another level, I'm interested in the relationship between light and mass, mass being the human figure. I believe that the human figure belongs in art, and so have consciously kept it in my work.... I feel that when the [installation] pieces are successful, there is a parameter of behaviour that is set up, and in order to fully explore the work you have to fully explore all the parameters of the piece.

...The idea is really derived from an Indian sense of temple architecture where they had very specific paths you would have to travel in order to experience the space.

...Although in my newest piece, I've eliminated even that. I'm really interested in forming an almost static image that's generated by the viewer. I'm getting to the point where I'm interested in eliminating movement, and there's just a transformation of energy.

They're very intense. I'm beginning to be interested in the viewer being transfixed in some way....I think my installations are more

special to me because they eliminate the mind-body dichotomy, the Cartesian flaw, because you are thinking with your body in those pieces - well, not exactly; you are thinking with your mind/body. They don't make that separation.

My work at its worst is overloaded with content. I'm constantly working against that, trying to fit this humanity back into it. That's the way I must work....I'm trying to make some kinds of information that we've always gotten from books accessible to the intuitive, experiential being.

Bill Gwin is perhaps the most fine-arts-oriented of all the video artists. He operates firmly within the traditions of modern art and is pushing the limits of those traditions in new directions. He spends half his time painting and half making video. He says:

These two things bear a very close relationship one to another; they feed off each other. The thrust of my work seems to switch, to alternate between the two...Monet is a principal influence for my work, in particular the water lilies. I spent a year in Paris and I spent a great deal of time in the Orangerie with those paintings. It's an influence you could see in my painting I did at the same time as Irving Bridge, almost four years ago.

Irving Bridge, discussed earlier, is one of the classic tapes done at the National Center in 1972. Soon after completing that tape and one more, Pt. Lobos, Gwin came to New York City, where he has lived ever since. In 1973-1974, he received one of the artist-in-residence positions at the TV Lab at WNET, and made a tape about New York City called Sweet Verticality. It is a visual poem, really, set to a written poem by Joe Ribar. The tape has much more motion than his earlier work; the camera pans up the length of Park Avenue, down the World Trade Center, zooms along in subways. The raw footage is 16-mm. film stock that Gwin later processed at the lab. He is a very methodical worker; he knows what he wants when he goes in to use the equipment, and each bit is carefully rehearsed. He explains why:

With video, the medium can take over, much more easily than with painting. In the working relationship it's a much more powerful, aggressive kind of medium. Maybe you have to be a little firmer with your ideas, and be careful not to let it get out of hand, which I think happens a great deal with people's work. It's perfectly understandable. It's a hard thing to avoid. Video can be very captivating; it's easy to do up to a point, and then it becomes very difficult. But there is a certain amount of stuff that it makes all by itself, like spontaneous generation. You can sit there, and you turn one knob, and all this stuff goes on....If you don't know, you can get lost inside of it. There's nothing wrong with that; in fact, it's a wonderful way to learn. That's exactly the way I did learn. But you need a longer time than the two weeks the TV Lab can give you to mix a program: I did it for three years.

From Irving Bridge to Sweet Verticality there is a marked change of intent in Gwin's work. He has been led to an interest in language, not just music or electronic sounds, but language in his visual work:

Irving Bridge was intended to be a kind of stimulus, something that would start people's minds working in a way that was different from the way your mind normally functions. You are given a situation that asks you to redirect the way you think. But there is no effort to make any kind of precise and intelligible statement. It was only an attempt to get people to start to think, and the way they went would be totally dependent upon themselves - most people would vary considerably in their responses. I think I want to move in the direction of a more precise statement. At least I want to know if I can make that kind of precise statement if I choose to. So that I'm not always trying to get people to think, but that I'm also trying to say something. This has led me to the use of language. I guess it's one of the most central things to my thinking, both in my paintings and my video tapes.... That was the question Sweet Verticality raised. It's how to put language into what is essentially a visual form. Language is a wonderful thing,

you know. There are things you can say with language you just can't say any other way. At the same time, there is something particular about the kind of responses you can elicit with visual things. And I think, if you could put those two elements together in some way that was cohesive, you would have opened up the possibility for a huge range of statements, statements of most any sort, from the most abstract, purely visual kinds, to the kinds of specific statements you can make with language.

Sweet Verticality has single voices and choruses speaking the poem as readers (Gwin is careful to distinguish between readers and narrators), and printed words stream across the screen as well. In his most recent painting, a self-portrait, phrases and bits of autobiographical information are written on the canvas, buried in the painted collage of material the way he buries his words in the passing time of Sweet Verticality. In both cases, he is searching for a medium versatile enough to hold both image and language.

In this move from Irving Bridge to Sweet Verticality, Gwin marks a change that has occurred in many artists' work in video. The early fascination with the limits of the medium itself, with its ability to shape and pace time, its ability to record "natural" events as well as construct abstract ones, has shifted to an interest in using these inherent characteristics to make more specific statements. This is happening in many different ways, however, reflecting as always the flexibility and openness of the medium. As Gwin says:

It's still a very young thing. Ten years is a short time. It's impossible to see what direction it will take...it's such an immensely flexible medium, perhaps the most flexible medium that's ever been made available. It just can do an astounding number of things, so people are doing a lot of different things with it. But that's exciting.