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. Emshwiller 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 (TVT). 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: TVTV 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 TVTV 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.

TVIV'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 TVIV'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 TVIV'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.

TVIV's editing style is that of semi-chronological 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.

TVIV 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 behavior. . . . 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 behavior. . . . 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



Gene Youngblood in the Vasulka's loft, ca. 1975, Buffalo, New York. Photo: Woody Vasulka

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 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 Tshirted 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-à-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 -



ME 065 step through next 17 frames

built a non optical 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  $\dots$  the non-objective tradition. On the Spiritual in Art la 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 filmmaker Jordan



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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



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

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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 expansion 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 avantgarde 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 smallgroup shows.

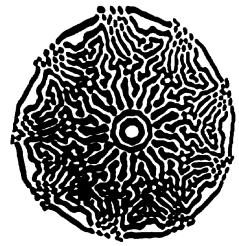
Howard Fried's work is intriguing and rather unique in the conceptual video world. His tapes are carefully structured performances, which have gotten more and more complex with time. In his early tapes, Fried himself is the protagonist, and during the course of the work pits himself against some social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



Feedback by Skip Sweeney

In addition to these two centers, NCET and the de Saisset, there were other activities going on in the Bay area as well. TVTV 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: -





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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 Jon 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 re-synthesizing their machines. Some of their most exciting work