CELESTIAL MAP

This map, supported by the University of California, Berkeley, and the American Museum-Hayden Planetarium, New York City, is a graphic rendering of the entire heavens visible to the naked eye, measuring six and a half feet by three and a half feet. This celestial map was begun at the University of California using the astronomy department's bright star sifting computer. The computer can project the co-ordinates of any star into the past or into the future. The date for this map is 1973.50 (June 30, 1973). This date is significant in two ways: It will be the date of the longest total solar eclipse visible on Earth and the year of the 500th birthday of Copernicus. This information, however, is secondary to the main values of this map over all other existing celestial maps.

The rectangular mercator projection of the sky affords the viewer a straight, all-encompassing, sight of the heavens. One does not need to twist nor turn his head to see the stars in the relation he views the heavens most often. Even though the poles are stretched, northerners need not worry about the southern hemisphere which has more constellations elongated. The seven constellations in the north are well enough known and easily enough recognized as are Greenland and Alaska in similar projections of the earth.

Another advantage of the rectangular projection is the direct flow from the north to the south with the equator in the middle unlike circular maps which have the equator at its circumference.

The size of this map also affords a great teaching opportunity with the stars visible 50 feet away. This map is the largest single printed map with the most designated stars in the given area: 5,179 stars to and including visual magnitude +6.00.

The first edition is being printed by hand pulled silkscreen on paper. The stars are circular white spots of varying diameters corresponding to visual magnitude. A glossy relief is used in printing all the designations from the Yale Catalogue: Bright Star Numbers (assigned to each star as it rises or appears on the star map, moving from right to left, irregardless of its vertical position); Flamsteed Numbers (assigned from right to left within each constellation); Greek letters (originally intended to indicate order of brightness within constellations, but for the most part assigned arbitrarily). Also indicated are over 250 star names, all 88 constellation names with standard constellation lines (i.e., the least number of lines needed to connect the brighter stars in a shape suggesting the object named), and a degree scale around the entire area. This affords the opportunity of seeing the stars from afar as well as their names on close inspection.

With the Space Age over 15 years old this map has been long needed as a fundamental tool for education and will be increasingly useful as time goes on. This map will never become obsolete.
Whether it was by accident or by design, television in its present form came into being in San Francisco, California. Since those first successful experiments by Philo Taylor Farnsworth in 1926, T.V. has forced its way into our lives in a startling and powerful way. It is for that reason that I took up the challenge of seeking alternative ways for this great tool, the slave currently of commercial interests, to fulfill its true purpose as I believe Farnsworth would have wished, in the form of a tool for communications and education. It is with a great deal of pleasure and with a deep sense of satisfaction that all of us here in San Francisco offer this issue of RS to readers everywhere in the spirit of invention and creative thought which are the touchstones of a free and creative people. This issue contains 64 pages of information about the video practitioners of the Bay Area. Not all of the video experimentalists are included, some because they did not wish to be, some because we do not yet know about them. It is with amazement that we present so many as we do, for in the beginning we did not know that there are so many groups of video practitioners in San Francisco. All of us here want to thank the Raindance Foundation not just for the opportunity to do this issue of RS but for all the issues from the first one on.

It took twenty years from the time of its invention in 1926 to establish the first television network in 1946. That six-station system had 8000 viewers. The next twenty years, from 1946 to 1966, brought 850 stations and 65 million viewers into the grip of an invention which was meant to provide the people with information, not to censor it. Maybe the twenty years ahead will be the years that Farnsworth dreamed about. Although he is not alive to see those twenty years, San Francisco will remember him not only with this issue of software but with every video work that is made, because without Farnsworth television would not be what it is today.

"Video City" is an index of the video groups and individuals working in San Francisco. Following "Video City" are articles about other of the San Francisco video groups and individuals, with pictures and statements by them about their work and its meaning. We have also included several "ideas" which we hope will direct every reader's attention to the non-sequential function of time which permits many things to happen in the past, in the present, and in the future simultaneously. In our present reality we videotape and store our activities to be viewed later with the hope that these time capsules will in some way effect the future. Is it beyond the realm of human capability to think that somewhere in the future the process has been reversed and that people there are trying to show the past what the future looks like? If the last fifty years of television experimentation and development have brought the idea of pictures through the air into reality, maybe the next fifty will bring some yet unsuspected idea into being that is as hard for us to believe now as "pictures in the air" was for people of the 20's. That, at least, is our hope.

There is no reason to say more about the contents of this issue since the name RADICAL SOFTWARE is in itself a complete statement about what we have tried to do. We would like to say thanx, though, to the people who have helped to make this issue possible. Most of those who have actually helped put the issue together have been friends for several years—some of us have been friends for ten years. Pamela Byars typed the whole magazine several times and corrected all the spelling and made the English write...rite...no...right. Lee Myers, Mort, Gary Peterson, and Gietzen did the leg work, the layout, the pictures for the most part, and tried to run down all the video we could find.

All the by-lines submitted material that was exceptional and all their names are in the Table of Contents. Of course, without Ira Schneider up in Ruby, N.Y., we could not have even started this. The cover is completely explained on the last page but its author, David Teske, deserves mention here. The type is Optima, set on a Mergenthaler VIP by Abracadabra Design & Typography of San Francisco and Berkeley.

Peace and Freedom from Video City
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCAC by Harriet Ainsworth</td>
<td>12</td>
</tr>
<tr>
<td>reprint from CCAC Review</td>
<td></td>
</tr>
<tr>
<td>Mills Tape Center by Francis Coelho</td>
<td>13</td>
</tr>
<tr>
<td>Antioch West by L. Sears</td>
<td>14</td>
</tr>
<tr>
<td>Tribes of All Nations by L. Sears</td>
<td>15</td>
</tr>
<tr>
<td>Video Free America by A. Ginsberg</td>
<td>16</td>
</tr>
<tr>
<td>Contact Sheets by Bill Harris</td>
<td>20</td>
</tr>
<tr>
<td>T.V. Dinner by Mary Canary</td>
<td>22</td>
</tr>
<tr>
<td>Ursa Major by Mary Myers</td>
<td>22</td>
</tr>
<tr>
<td>The Video Artist by Connie Beeson</td>
<td>25</td>
</tr>
<tr>
<td>Video Obscura by Liam O’Gallagher</td>
<td>29</td>
</tr>
<tr>
<td>poster by Phil Gietzen &amp; Jeff Bower</td>
<td>37</td>
</tr>
<tr>
<td>Electro-Magnetic Spectrum Blues by Max Crosley</td>
<td>38</td>
</tr>
<tr>
<td>Dr. Philo Taylor Farnsworth by Phil Gietzen</td>
<td>41</td>
</tr>
<tr>
<td>Man is Typed by Pamela Byars</td>
<td>37</td>
</tr>
<tr>
<td>Alien Calls From Spacee by Decker, T. L., J-3, CMR 00965</td>
<td>38</td>
</tr>
<tr>
<td>The Record by Tom Martin</td>
<td>39</td>
</tr>
<tr>
<td>T.V. is a Time Machine by Phil Gietzen</td>
<td>42</td>
</tr>
<tr>
<td>The National Center for</td>
<td>46</td>
</tr>
<tr>
<td>Experiments in Television</td>
<td></td>
</tr>
<tr>
<td>Positronic Brain by George Gray</td>
<td>52</td>
</tr>
<tr>
<td>reprint from College of Marin Times</td>
<td>53</td>
</tr>
<tr>
<td>School of Holography by Thomas Albright</td>
<td>56</td>
</tr>
<tr>
<td>reprinted with permission</td>
<td></td>
</tr>
<tr>
<td>Cable Cop by Sue Fox and Johnny Videotape</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
...from your office. Tiny reels of Film-a-record microfilm make this possible.

Yes, with Film-a-record, almost a quarter of a million of your inactive records occupying 16 four-drawer files can be microfilmed and filed in a space no larger than a desk drawer... thus releasing 99% of your files and the floor space they occupy for more productive use.

Of course, space saving is only one of Film-a-record's outstanding contributions to business efficiency. There are many others—Protection of valuable records against loss or misplacement of originals—Saving of Manpower by the elimination of manual transcription—and Permanence of properly filmed records beyond the lifetime of the originals.

Many of the country's outstanding firms have already adopted Film-a-record — Remington Rand's latest achievement in the field of business photography.

For Leadership in BUSINESS PHOTOGRAPHY

Look to Remington Rand

With the war still raging, Hiroshima and Dresden still in the future, it seems that society had already begun to think of how to rewrite history by making all our past "bulky and inactive records disappear."
Chicano Power via media — or the struggle between the vested interests and the people's needs. The Mission is the sunny Chicano neighborhood from Eleventh to Army up Mission Street where the Spanish speaking population of San Francisco finds its center. In that neighborhood a sense of identity is growing with the work of Rita Amelia, Jarmon Balberan, Ray Rivera, Bob Huestis, Tony Miranda and a group of young Mission dwellers whose lives have been shaped by a television devoid of Spanish influence and interest. Jarmon Balberan has been quoted as saying, "The Mission community has no communications device to measure and evaluate its own despair, growth, or health. Many of the people still see themselves in the stereotyped image the media and society has given them and they need to be reawakened to their cultural heritage."

Initially sponsored by funds from the PBS affiliate, KQED, the Mission Mediarts group produced and aired segments of the PBS network program San Francisco Mix. Their program, Mission and 24th Street, won them recognition as the first such group to open access into public broadcast television for minority non-stereotyped groups doing programs about their cultural heritage.

Rivera, who began the movement as a community worker from RAP has said, "The essential reason for concentrating in those areas (television and films) is that although many of our young people are alienated from society as a whole, they are nevertheless oriented and directly involved as a consumer audience."

Mission Mediarts has Sony AV series equipment which they use to tape in the Mission. They occasionally turn the cameras on their sponsors in an attempt to show the KQED staff and board what it looks like from the Chicano point of view to deal with the vested interests of a large broadcasting organization. A disagreement developed about funds for programming which brought the portapack Chicanos to a fancy downtown restaurant during a board meeting which was actually a bored meeting. The portapacks brought everyone to life. The Board, of course, is composed of successful San Francisco businessmen and women who meet at lunch to discuss the future and fate of KQED. At first the group of diners insisted that the meeting was private but Rivera spoke up to remind the diners, seated at the white clothed tables drinking and eating the lush luncheon laid out before them that it is their responsibility as the Directors of a community television station to take into consideration not only their own vested interests but also the interest of the community.

In a communique by the Mission Mediarts they have made the following points about their relationship with the PBS affiliate:
Mission Mediarts does not have a steady flow of day-to-day training within the video workshop. To complete our obligation to Channel 9, for our community, we are forced to compete with the KQED in-house video programs (Newsroom) for the use of the mobile video tape unit; we must compete for engineering time and scheduling to carry on our training and production.

The policy of KQED has been for the last three years to give Mission Mediarts people no priorities within the station system for professional assistance, engineering time, and the use of video tape equipment which is vitally needed to carry on our training within the Mission District. This shows a direct move by the station's management to try and discourage our young people from learning. This also tries to oppress and stop our directions which are to have real community controlled television.

Mission Mediarts called up Dick Moore, the general manager, to meet with him to talk over all the above problems, to discuss the relationship between the community media training program of Mission Mediarts and KQED.

Manny Larez, chairman of La Raza for Communications for the Bay Area, called the manager of KQED. After a long talk over the phone with Dick Moore, an "appointment" was made for the management to meet with Mission Mediarts 10 days hence. But we felt the "appointment" was a stall and a put-off by the station, so the people in Mission Mediarts decided to walk in on Dick Moore at his office. We had a short talk with Dick Moore and came to the agreement to have a formal meeting with him, John Rice, the program director, and Zev Puttermann, executive producer of KQED and Mission and 24th Street.

But John Rice, program director for KQED, called up Mission Mediarts workshop and said the general manager, Dick Moore, would not meet with Mission Mediarts unless we show up at the film department to show a rough cut of Back on the Streets Again (Note: Back on the Streets Again is a film funded by KQED which has not been completed because of lack of funds), that he did not care about Mission Mediarts or our relationship with the station and that, he said, was final.
ABLE (The Arts and Business Learning Experiences, Incorporated) is a non-profit, tax-exempt California Corporation formed to train and employ central city youths—particularly those who are members of disadvantaged minorities—in Still Photography, Motion Picture Photography, and Television.

ABLE's principal source of financial support is foundation grants, supplemented by substantial gifts and contracts for production. ABLE's trainees are selected through vocational counselling centers and department of employment on the basis of ability, interest, and financial need.

ABLE's approach is to provide paid on-the-job training opportunity for its students by contracting with business, government, and education to provide students with the much needed audio-visual materials which they require. ABLE's students, or associates, work side by side with the professional staff members in completing these production assignments. ABLE's staff and resident creative writers, directors and producers include some of the most experienced people.

The ultimate objective of ABLE is to provide poor, disadvantaged, and minority youths an access route into meaningful employment in the production end of the media arts, an employment market from which they have been systematically barred. The first and most obvious benefit of this approach is to provide a new source of income for capable youths from poor and minority ghettos, and thus to expand available economic opportunities as part of the continuing national effort to enable minorities to come fully into the mainstream of American life. The second value of the ABLE approach is to provide a vehicle for the self-expression of the Black and Brown communities, and hence reduce the sense of ethnic alienation which continues to plague the country. Expanded economic opportunities for the disadvantaged, but a valuable source of constructive inter-cultural communication and hence a chance to make important contributions in the reduction of national strife.

ABLE is, at its management level, basically a Black enterprise. Its Board of Directors is interracial. The Board seeks to marshal support from all quarters in the wider San Francisco community, but explicitly recognizes that the organization's central objective requires that its staff, driving force and overall program direction derive from the minority community.

Where do correct ideas come from? Do they drop from the skies? No. Are they innate in the mind? No. They come from social practice, and from it alone; they come from three kinds of social practice: the struggle for production, the class struggle, and the scientific experiment.

— Chairman Mao Tse-Tung

Video Chinatown

Video Chinatown is a coalition of progressive filmmakers, video artists, community people in the Asian communities within San Francisco. Since the middle of July, 1972, we have been doing a closed-circuit half-inch community television show and giving a video workshop in our basement in the heart of Chinatown. Our shows are in Chinese, free of charge, and are always prepared with guidance from local people living in the community. To date we have scrounged together a network of multiple monitors performing in a place with a viewing capacity of approximately 200 people. We have been packing them in every showing; it warms the heart; and that's what Video Chinatown is: something from the heart. The variety of programs we offer to Chinatown has been and will be:

Educational - Chinese and English Lesson Series, China Cultural and Historical Studies, video coverage of community related meetings and events, Chinatown community news and international information.

Social, Legal, and Health - Community Forum and Discussion, Living in Chinatown Series, information on legal aids and housing issues, review of medical processes and availability, documentation on various organizations and social services.
Cultural and Entertainment – Production of Chinese drama, concerts, celebrations, homemovies, documental study of Chinese philosophy and practices, dubbing UHF shows into Chinese, exchange of tapes from outside the immediate community.

At the same time, we are putting together a library of professional quality tapes exploring the Asian experiences in the United States. Thorough treatments of the history, the culture, the people, the problems; the joys, will be made available to facilities outside of Chinatown. We believe our struggle is your struggle, and your struggles are our struggles.

Address: contact Danny Chung Yen Kwan at Video Chinatown, 850 Kearny Street, San Francisco, 94108, (415) 421.1341.

Dan Kwan with Video Chinatown.

HOMESKIN

by Peter Berg

HOMESKIN set out in a van a few years ago to visit land-based groups in North America and video tape “letters of introduction” to carry along from one group to the next. We were looking for planetarians, Earth-rooted people who saw the planet as a whole without reference to political or cultural boundaries. We wanted to make the video tool available to them for whatever purpose they might imagine, and we hoped the messages they made would deepen common consciousness between groups.

Superculture media mainly links the consciousness of cities to other cities. Traditionally NYC pumps out broadcasting and publishing, LA spews film. Some other cities answer back with chunks of TV, a few books, a radio blast, and a magazine or two; but the distribution patterns of media are something like those maps of airline routes between no more than thirty major cities. Radial lines with service in both directions and very few stops in between.

People outside of cities are subjected to information and images, including that about themselves, after it has been first processed by city media consciousness.

A circuit of video mail carried across the continent could produce the most direct connection between people living on the land, even if it were much slower than broadcast media, simply because it was made by the people themselves.

HOMESKIN barely touched the whole web in it's circuit west to east and back again. There are potential stops in hundreds of places we never got to and the number of new settlers, co-operative villages, and communes is growing. It seems natural that there should be an increasing number of Video Pony Express Riders filling in the continental web. For anyone about to hit those long dirt roads and climb mountains in low-low gear, we offer the following as a context for riding the new land-circuit.

Be willing to join in with the continual work of the place you’re visiting. Country scenes are often over-exposed to city recuperates who are simply dead weight until they recover. Making an announcement of your goodwill is probably not enough to cover the extra energy that will go to cover your stay.

Try to bring as much non-tape information about groups or whatever you show as possible. Addresses, directions, sharable tools and skills, wild herbs that are available, crop and seed information, etc.

Encourage people to make their own tape by letting them use the equipment or tape things they would like to record. Some of our best stuff was made by people who had just learned to use a VTR. You can always edit some of the tiresome stuff later (“Is the microphone on now?” . . . “Does the red light mean we’re shooting?”) It’s an obvious fact that people will be more comfortable having someone they already know on the other end of the camera at least part of the time you’re helping to record their letter.

We propose a Planetarian Video Mail Service to provide information about potential routes and circuit riders.

Please write: HOMESKIN, P.O. Box 31251, San Francisco, California 94131

Note: Space limitation prohibits the publication of this piece in its entirety — write HOMESKIN for copies of the complete paper. — Editor
The curriculum is designed to provide extensive educational experience for those who intend to use the modern media of communication to serve the cultural, intellectual, social, educational, and artistic needs of society. The program involves both theory and practice, and students are expected to work enthusiastically and successfully in all its segments. Although most graduates of the department ultimately may work in broadcasting and related industries, the program is designed to go beyond the development of minimal skills and concepts demanded by such employment. Only those students who desire to become communication specialists — in the broadest sense of the term — should seek admission to this program.

The Broadcast Communication Arts Department has produced some of the most remarkable talents in the video city. In 1968 the school offered a course by Dr. Herb Zettl in experimental production. Dr. Zettl is well known for his work on the subject of the moving image and for his workbook which is used in many schools around the country. Under his tutelage Scott and Freuda Bartlett, Tom DeWitt, Harry Mathias, Auge Cinquegranna, Phil Gietzen and others spent a semester in experimental production. Later classes produced Tom Martin, Jeff Bower, Bonnie White, and a myriad of other local video artists and practitioners. A short list of tapes available on 2 inch b/w Quad (Ampex 1100) with the names of the various artists follows:

Moving Image, I, II, III
by Herb Zettl; 15-30 min. each

Computer Images
by Harry Mathias; various lengths

An Exercise in Monochromatic Manipulation (Dance)
by Vince Waskell; 12 min.

Cello Solo with Lazlo Varga
by Herb Zettl; 30 min.

Flame Energy
by Jean Hintermann; 15 min.

Playback
by Mike Wanger; 30 min.

The Date
(a play by Joel Ensana)
by Herb Zettl; 45 min.

Krapp's Last Tape
(a play by Samuel Beckett)
by Herb Zettl; 55 min.

These tapes are available through the department. Write for more information. Dr. Zettl, whose name appears in Who's Who in the West and Leaders in Education, received his PhD in Berkeley. Before joining State, he worked in the Bay Area at the Westinghouse CBS affiliate KPIX. The Head of the Department, Dr. Stuart Hyde, took his PhD at Stanford where he later taught broadcasting. He is the author of many articles including those in Saturday Review and the Journal of Broadcasting. Hyde and Zettl are assisted by Dr. Richard Marsh, Dr. Arthur Hough and a faculty of between ten and fifteen other educators. Right now the Television Center which is part of the Broadcast Communication Arts Department, is doing a great deal of production with the Rover (mobile van) as well as with the studios — social issues, news, and plays.

Dr. Zettl has developed his idea of the Moving Image through his experiments with time: Instantaneousness and Irrevocability of the Moment/the Complexity of the Moment. His seminar forms the nucleus of the Broadcast Communication Arts' experimental program. He is also finishing a new book entitled Sight Motion Sound, Television and Film Aesthetics, published by Wadsworth, which will contain over a thousand illustrations. It is, in his words, “Going to be a hell of a book.”

Admission, tuition, and program information is available through the Broadcast Communication's office, 1500 Holloway, San Francisco, 14132; or by calling (415) 469.1787.
"Feedback" is a term used to describe the process of returning a signal to its source. In television and video the rate of the feedback process is much more rapid than it is in film. Video is an electronic medium, and it can process information at a rate which approaches the speed of light. If a comparison of video and film was to be made, feedback characteristics would be a chief distinction. The efficiency with which broadcasters could poll television and radio audiences contrasts markedly with the processes used to determine audience response to a film. In a sense, effective feedback makes it possible to see your cake and feed it too, for it returns to the sender a reflection of his transmission. Electronic media are instantaneous, and the loop from sender to receiver back to sender makes two way communication possible. Place a microphone up to a loudspeaker and you will hear the power of electronic feedback. Feedback through electronic media could potentially be used as a window on a society operating with the time base of twentieth century technology.

To the artist, the instantaneous or "real time" nature of the video medium has a separate set of applications. The creative process is greatly stimulated by the immediate perception of the consequences of each decision and action made by the artist. A feedback loop exists between the artist and the object he is creating. In film the consequences of each decision remain quite literally in the dark until the film is processed. For this reason, most film actors require the presence of a director or a live audience to guide their performance. The filmmaker must make educated guesses and take blind risks while at work and then wait for the results to catch up with him. Not every visual artist can work with this handicap. Improvisation and spontaneity suffer or are wiped out.

Point a video camera at a monitor displaying the camera's image, and you will see a graphic demonstration of the instantaneous nature of the medium. This technique produces a seemingly infinite series of reflections like a hall of mirrors. Insert a separate image in the signal path, and it will be reflected endlessly, cycling from monitor to camera to monitor. The graphic patterns created by this technique can be startling and hypnotic. This is the medium looking at itself, and it all but cries out, "I have something to say!"

For artists in dance, drama, graphics and music, video is a magic mirror that gives them instantaneous point reference to their every move. The increased efficiency of the medium over film lubricates the creative process. Performances can be quickly sharpened; experimentation in new uses of the media becomes greatly speeded up. Errors can be immediately perceived, and the tape medium even makes it possible to erase mistakes and reuse the same recording material. Video is a playground for pioneers of eye and ear art. We are in a period of exploration . . . discovering a new visual vocabulary which like musical harmony is an abstraction tied directly through our emotions. The opto-mystic prediction is that we will real eyes a new art form.

Feedback is a crucial part of developing a new art. Development of new forms occurs in a void. A large part of what is proposed must be rejected, for the core of the art rests on a few fundamental rules of light that appear and disappear in the shimmering video mirror. The eye admits 80 percent of our sensory information; the catalogue of its effects ranges far beyond the ear. The print media can convey emotion, but not especially through graphic pattern. A suggestion was made by the post-photography schools of painting. These artists sought to evoke emotion through the movement of their brushes and the color of their paints. Given the tight loop from palette to canvas to eye, they could fly through a painting a day, accelerating the feedback rate to a frequency approaching film. Here we go again with a new school of artists exploring pure space and time.

Once the basic vocabulary of visual and aural forms has been derived from real time experimentation in video, the artist can call up effects by pre-design, much as a composer now scores for an orchestra. The computer promises to be a basic tool for graphic artists and new music composers. A written program for light would probably be an impossibility without a machine to handle the enormous amount of information contained in each frame. With a photocell as his brush, the artist will truly be able to paint with light. Give technicians direction and
THE BLAST DOES NOT TRAVEL AT THE SPEED OF LIGHT, BUT THE LIGHT FROM THE BLAST DOES.

--WILLIAM BURROUGHS/69

a time of peace, and they can create a tool which will render the dimensions of time and space seemingly completely malleable.

The siren song of the magic lanterns has smashed many young artists on the rocks, but from the few who have slipped through the economic, social, and promotional problems in handling the new arts of film and video, we can see the promise of paradise. As the word was two thousand years ago, the picture is today, a magic medium that gives seeming reality to the wildest flights of fancy. Yet poetry, unlike politics, is basically a private event. The emphasis our culture places on the popular arts obscures the fact that great artists have acted alone, in the near vacuum of the unknown. Poems and paintings shaped to meet the contemporary taste lack the personal touch that has characterized great Western art. We must accept the fact that what we ought to see in art is something that has not yet been fashioned, a mental image lodged in the brain of an artist who may never possess the tools to make the vision known. To use economic gain as the motivation for allowing creativity, an intention we so frequently see in television, is to cancel the possibility of developing a new vision for this new medium. Hence, an economic sacrifice has to be made to let our culture grow. The decisions on how to disburse funds for access to the new media arts should be made by those sensitive critics and socially aware artists who can anticipate the direction the media can take. Recently we have seen the appearance of film festivals, boards of jurors, grant agencies guided by a few enlightened individuals. If art is to have a future, we must place some of our trust in the hands of those few people who live at the future's frontiers.

OPTIC NERVE

Process/product: feedback/feedforward/fed up: the man on the box is gonna sell me/us something to spray on our armpit, crotch, dog, cat, goldfish, in the air for house-a-tosis, and off the wall for some new revolutionary improved mind-washday whitener: truly a miracle; if I/we have those everyday aches & pains, the phosphorescent man on the other side of the screen tells me to take some triple X rated time control span-sule guaranteed to straighten you right out: if that don't work, buy a used war from some other clown, low easy terms for a lame lifestyle.

One prerequisite for the survival of any community is realization and control of those factors operating on it: in this case, information. Optic Nerve is a media collective located in the basement of Project One: Sherrie, Lynn, Ben, Jules & Jim comprise the core group. In the year or so that we've had our AV series hardware, we've produced an hour long documentary on Project One, a unique living/working community in a converted five story warehouse in S.F.'s South Market area. The flexibility of this working arrangement allows us the opportunity to implement the rhetoric of the past decade or so: action/interaction: sharing of skills and resources — adjacent to us is a 16mm film processing lab: on the floor above is Resource One, a non-profit techno group with an SDS 940 computer: by virtue of immediate access to such resources, our base potential is considerably broadened. In addition to the document on our local environment, our productions include a 20th century woman's view of 20th century women; a tape on health maintenance, a documentary on Berkeley Congressman Ron Dellums, a dialogue with Anais Nin, and some electronically inspired ditties.

For information on tapes contact: Optic Nerve, Project One, 1380 Howard Street, San Francisco 94103, telephone (415) 861.4385 – or ECOS Project, same address, (415) 626.0267.
On May 24, 1844, the message “What Hath God Wrought” crackled over the first telegraph wires between Baltimore and Washington D.C. That historic occasion gave birth to telecommunications as we know it today. Post industrial revolution scientist Norbert Wiener in 1948 presaged another major revolution when he noticed ways in which electronic control devices and the human nervous system are similar. He wrote a book about it, the science of control and communications in both machines and humans. He called it cybernetics. While Wiener was stating his case IBM built the Mark I at Harvard. As we all know Grandfather Mark was the founder of the now-famous electromechanical-magnetic line. In less than a quarter of a century since these gentlemen busied themselves, electronics and feedback have become household words. Communications via satellite during the Olympic Games at last brought home, into more households than ever before, both the bright success and the dark failure of communications between mankind.

The TV program of the New California College of Arts and Crafts Film Arts Department (formerly Visual Communications), when begun by Phil Makanna in the fall of 1969, was the first fine arts video teaching project in the United States, and according to Phil it still is. CCAC grad and now Film Arts Department assistant professor Keith Walker offers another image for the relationship between film and TV. Keith notes that “each new medium wears the trousers of an older medium before — until it can break loose.”

Tall blond Keith and shorter dark and gentle Phil Makanna form the “go group” of hot new property at the CCAC creative TV facility. Phil says, “There is enough work and enough competition — such as Captain Video (Willie Walkers) whose Life with Video a TV film was shown recently at the Whitney — to keep us all very interested and working continuously. Among many innovative ideas, Makanna has arranged an exchange of students with the well known Mills College electronic music center. CCAC sends video students to Mills, and Mills sends music majors to CCAC.

Last September CCAC enrolled a record 45 students, grads and undergrads. “We have begun this fall with three new spaces and a new engineer.” What’s in the TV facility? Basically a closed circuit system with three cameras connected to a Viscount switcher which contains a special effects board . . . “so we can do all kinds of fancy stuff — such as fading and dissolving, wipes and keying.” What are the faculty and students doing with their facility? All kinds of things. Pure videotapes using the medium as subject . . . feedback . . . scripts . . . Fantasies and Westerns . . . documentary work . . . what goes on in Berkeley . . . what goes on in your own home. “We record activities — art is in performance now and art works are activities instead of static works. We are into process,” Makanna says. “We have mixed media events, using electronic music, video film, and live performance. What we hope for is a well-defined community of TV, film, dance, and drama, where we can make an interaction program of all these disciplines.”

TV film, in the words of writer Youngblood, “is the only aesthetic tool that even approaches the reality continuum of the conscious existence in the non-uniform, non-linear, non-connected electronic atmosphere of what I call Paleocybernetic Age.” Phil Makanna says, “We are on the edge, the leading edge, and we will be there for the next four or five years . . . and that is what makes it all so exciting for us.”

While TV-Film machinates, Fine Arts Division’s Assistant Professor John Wehrle gets behind Paleocybernetics via his series (above) done with Xerox model 4000, one of the newest in the line. By special arrangement with Xerox Corp., Wehrle and a few other U.S. artists were given access to machines (Mr. Ben Hurley of the San Francisco office was Wehrle’s host) and Model 4000 was the machine conveying the message. “The machine or anything is my tool,” says Wehrle as he explains the 4000’s unique ability to spread the electrostatic charge over the whole drum to achieve the sought-after solid black in the background. This is just the beginning of a calculated assault-collaboration-capitalization of the machine. Entropy of the image is all a part of the technique.
MILLS TAPE CENTER

MILLS COLLEGE CENTER FOR CONTEMPORARY MUSIC
re-opens its facilities to composers, filmmakers, experimenters and groups-at-large. Since we wish to make these studios accessible to all prospective users, the rates are fixed according to our minimum operating costs. Rates for each studio include recording facilities and the assistance of a technician.

BUCHLA SYNTHESIZER
$2.50 per hour

MOOG SYNTHESIZER
$5.00 per hour
$30.00 for 8 hours a month
$50.00 for 16 hours a month

HAMMOND ORGAN
(with modifiers)
$2.50 per hour

FILM EDITING
(includes rewinds, splicer, viewer, sound reader, 4-gang synchroniser, etc.)
$1.00 per hour (2 hour minimum)
$7.00 per day (9 a.m. to 6 p.m.)

TAPE EDITING AND RECORDING
$3.00 per hour

16mm RECORDING and TRANSFER SYSTEM*
(will allow for transfer from ¼” tape with synchronized tone, and for mixing of three synchronous tracks to 16mm magnetic master)
$5.00 per hour (plus magnetic film)

RECORDING STUDIO**
(primarily for ‘groups-at-large’—rock groups, folk groups, experimenters—includes Ampex 8-track sel-sync, recording and mixing with standard sound modifications, technician and microphone set up)
$10.00 per hour
$25.00 for 3 hours
$30.00 for 4 hours

*Available after January 1.
**Available after November 1.

Robert Ashley, William Maraldo
Co-Directors

For studio scheduling, call:
632-2700, ext. 337
TRIBAL VIDEOGRAPHY

by L. Sears

It's obvious, the point is Not how to live with machines,
but Always, how to live with each other.

Natural interdependencies: mates, children, family & tribe
root & branch:

The components,
the bones of things,
the materials,
are implicit and prepared in us,
abundant and inseparable from us.
The gentle genetic imperative of your body out-speaks the
dumb necessity of engines.

Video is a verb moving you through flesh

a vehicle of touch, a medium of exchange
between your family and ours:

How do you get your food?

How to love, birth,
marry & die?

What is your music,
myth & vision?

Flesh is the medium of Spirit, video
a transmission.

Take the example of Scribe, Post-wanderer, Seer or Healer
Find your people. Listen, they'll tell you what they need.

Watch, they'll show you what they seek.

Learn to move with yr camera; how to shape with yr tools.

Stay light, mobile & free. Exact Sincerity in all that
you do.

Lay a path among those you love; make video for yourself
& for them; circulate it.

That's all you need; you're home,
free.

TOAN
box 392 bolinas Calif 94924
A NOTE FROM CHANGING CHANNELS/RADICAL SOFTWARE IN Ruby, NY

The following is a petition we drew up in light of experiences video people have confronted in pursuing exhibition of their works. It was presented to the delegates of the Matrix International Video Conference in Vancouver, B.C. on January 19, 1973 and approved in principle. Below are some of the signatures of people who attended that conference as well as some others we've been able to pass this petition around to.

If you agree with what is printed below please mail us your signature and we will publish the completed list in a future issue of this magazine.

I. Schneider, B. Korot and F. Gillette

PETITION

As with Film and Art Competitions and Contests, Video Competitions serve primarily to aggrandize the institution hosting the competition or contest. These competitions are rarely beneficial to the entrants who often must pay to submit their tapes which are shown to audiences where admissions are charged. Typically money awards are meager and subsequent distribution deals don't pan out favorably for the videotape artist/producer. Often the only advantage is publicity, and sometimes not even that.

We, the undersigned, are not interested in competing with each other in video contests and competitions. We welcome non-competitive festivals and the development of honest and reliable distribution and exhibition networks where videotapes are purchased or rented after selection by the distributor, exhibitor, or viewer.

We are willing and we encourage the rental and exhibition of our videotapes separate from and independent of any competitive context.

Competitions serve only to alienate videotape artists/ producers from each other; they reflect less the quality of the tape and more the bias of the judges and they may enforce sanctions and political restrictions on the artist/ producer's future work. This "reinforcement syndrome" breeds a star system which we the undersigned wish to avoid.

This does not mean that we the undersigned feel there exist no qualitative and/or aesthetic differences amongst videotape artists and producers. However, we do feel that in this emerging communicational art form there remains a chance to avoid the entrenchment of a small group of taste dictators who have limited the viability of diversity in other media. We wish to avoid the creation of a group of such taste makers who would arbitrate values in tape production while never having made tapes themselves.

Therefore, we the undersigned hereby agree not to enter videotape competitions or contests, or to accept any awards derived from the exhibition of our tapes (rented or purchased) in support of such contests.

Mail to:
Changing Channels/Radical Software
POB 135, Ruby, NY 12475

Your signature

H. Allan Friedel
Alias Johnny Videotape

Mike Goodwin
Steve Hinton

Barry Verdi
Patricio

Jean Poirier
Kent O'Connell

Grant Richards
Paul Paglen

15
In response to the usual psycho-cybernetic-revolutionary-delaminated word salad found in this and other printed matter from the world of video, VIDEO FREE AMERICA, utilizing the English language, will attempt in the pages that follow to describe to you, the reader, some of our current projects and to indicate how you might join us in some reality oriented behavior.

Arthur Ginsberg, et al.
Video Free America
After tireless negotiations, VIDEO FREE AMERICA/San Francisco and NEW LINE CINEMA announce

TAPES FROM ALL TRIBES
At last, a realistic program for the distribution of half-inch video tapes!

New Line Cinema distributes films nationally to over 300 campuses, museums, cultural centers, etc. Some of the properties they handle are Godard's Wind from the East and Sympathy for the Devil; Bresson's Au Hasard Balthazar and Mouchette; Luminous Procureus; Coming Apart; Reefer Madness; Breathing Together; Brandy in the Wilderness; the Last Poets' Right On; Ravi Shankar's Raga; the Living Theater's Paradise Now; Ciao Frederico: The Making of Satyricon; and The Best of the New York Women's Film Festival. Also, they book the personal appearances of R. D. Laing and Norman Mailer, among others. We were impressed.

Combine this with Video Free America's experience as perhaps the most active experimenter around in the display of half-inch software and it's "perfectly clear" that the Tapes from All Tribes will be both in good company and the right hands.

As of now, we're still searching for tapes to complete the first ten-hour package for distribution starting spring 1973—long tapes, short tapes, documentary, narrative, instructional, artsy or fartsy; radical erotic, relevant or irrelevant.

Soooo ... if the notion of your work widely and profitably distributed doesn't threaten your counter-cultural credentials, you should submit copies of tapes to:

Sukey Wilder/New Line
c/o Video Free America
442 Shotwell St.
San Francisco, California 94110
(415) 648-9040

Or, if past distribution schemes have left you justifiably skeptical/paranoid, write the same lady and she'll send further details.

"Dare to be rich."
Bob Shaye, president
New Line Cinema
Production Workshops

For several months VFA has been offering a comprehensive six-week production workshop in video. The course teaches portapack techniques, mixes, editing, video graphics, and some theory (a concession to jive rhetoric). We were hesitant to start the school at first, fearing a swarm of lost souls, looking for yet another new identity; but the classes have proven to be highly productive for both our students and ourselves.

We are now enlarging our school, offering more production courses, a technology course teaching simple repairing, and attempting an intelligent course on the aesthetics and content of video.

We think that there's no better way in the nation to learn about video.

School inquiries should go to Bob Klein at VFA, 442 Shotwell St., San Francisco, California 94110. (415) 648-9040.

Showings

Video Free America announces OPEN STUDIO—a continuous series of weekend video events, showings, and performances at the Video Free America Shotwell studio. This new series will begin on the weekend of December 16th 1972 with a program of tapes by Don Hallock and Bill Roarty of the National Center for Experiments in Television. Future possible programs will include: a marathon showing of twenty plus hours of uncut originals from "The Continuing Story of Carel and Ferd;" a "Vidium, Feedback, Synthesized" performance; a jam session of visual musicians; and "Electric Equinox," a multi-monitor environment recreating and expanding with video graphics techniques the 1970 autumn equinox celebration in Golden Gate Park, the dream game, tapes by Top Value Television, and a women's weekend. Admission $2. Inquiries or suggestions sent to Skip Sweeney/Studio, c/o VFA, 442 Shotwell St., San Francisco, California (415) 648-9040.

General Electronics

After tireless negotiation, VIDEO FREE AMERICA will combine energies and resources with GENERAL ELECTRONIC SYSTEMS INC. to offer a complete production/rental/consultant/communication service in all video tape formats. GENERAL ELECTRONICS, celebrating twenty years of experience in the business (and that means something, brother); and VIDEO FREE AMERICA, bringing the awareness and talents of one of the nation’s most active and critically acclaimed video experimenters, form a video pas de deux which can relate gracefully to any problem or project requiring video tape hardware or programming.

For further information contact T. J. McHose, VFA, 442 Shotwell St., San Francisco, California 94110 (415) 648-9040.
VFA Colorizer

The 1952 chopped and channeled Cadillac of the VFA equipment line. Words can't describe the chroma, contrast enhancement, and stability this unit provides.

A black and white video signal is divided into five distinct grey segments. Each segment can then be independently colored. Hue, saturation, and luminance (the ability to go from light blue to dark blue) are controlled by nineteen slide pots. Four master sliders fade color, fade black and white, shift all the colors, and key in patterns of color created by an external camera. The Colorizer can be modified to accept an external colorburst for broadcast compatibility, has a signal to noise ratio of -40 db, and fits a standard 19” rack-mount.

This colorizer has a proc amp that improves the sync of the original signal, very good for editing. You've got to see it to believe it.

Portapack Switcher Fader

VFA is building this unit because highly portable taping situations keep coming up that need something more than a single portapack camera. The switcher is a little larger than its standard 45 minute battery. It will fade, switch, or super two portapack cameras. The two external mike inputs can also be mixed. A special genlock feature enables you to super and fade between a pre-recorded tape and a live camera. There are preview outputs for each camera as well as a program output.

Clear-Com Headset Intercom

When doing multi-camera mixes, for instance of rock concerts, we needed a headset system that would be loud enough for cameramen to hear at a 120 db noise level. Our new one makes it. It has some other nice features too: it connects with regular 3 wire mike cable, it has a volume control for each station, it has a line input for the mix sound, and a call light system to attract the attention of people who've taken their headsets off.

Low Light Camera

In association with GENERAL ELECTRONICS, we think we've found a low light camera adaption that's easier to install than a Tivicon Tube and it's cheaper. At this time we'll say no more.

For more information on these items, write Alan Shulman, VFA, 442 Shotwell St., San Francisco, California (415) 648-9040.
TV Dinner

Are you one of those people out there in TV land who like to eat and watch the tube simultaneously . . . but can’t quite see going the Julia Child route . . . or the frozen dinner route . . . or the peanut butter route . . . WELL HERE IT IS — A MINIMUM OF EFFORT FOR A MAXIMUM EFFECT . . . or how to beat Swanson’s with the gourmet touch.

TV DINNER MENU
VIDEO RABBIT
POMMES DES TERRE PAILLE
SALADE DES EPINARDS
BABAS AU RHUM
CALIFORNIA GREY REISLING
—to be served while watching Crusader Rabbit—

Video rabbit serves four. Have the butcher cut the rabbit into pieces. Dust with flour and brown the bunny in butter. Set aside in a casserole. Lightly sauté one onion and two cloves garlic minced. Saute until crisp 1/4 pound well washed salt pork. Cut in dice. Add the onions, garlic and salt pork to the rabbit. Add one cup bouillon, 1/2 cup gin (drinking a little yourself). Crush juniper berries, 2 tbs tomato paste and a tied Bougnet garni (whole thyme, parsley and celery tied together so it’s easily removable when you’re finished cooking). Put the covered casserole in the oven at 350. Cook approximately as long as chicken — 40 to 45 minutes. Remove Bougnet garni. When almost done, drain off the juices into a sauce pan and reduce by cooking over a high heat. When thickened (you may add a little arrowroot powder mixed with water) add a half cup of cognac, ignite, and pour over the rabbit. Serve at once on heated plates with Pommes de Terre Paille.

There you are in the middle of cooking the rabbit and watching the tube . . . Captain Satellite has just been trapped in the space capsule blasting off for outer space and you can’t leave the show, so . . . you buy a can of “Shoestring Potatoes” which you heat and serve . . . which is what the snappy restaurants do . . . and they don’t even have an excuse. The spinach salad is started before the rabbit by soaking two bunches of spinach in water with 1/4 cup salt for 45 minutes. Drain, rinse and dry. Remove the stems and tear the leaves into pieces. Add 6 anchovies minced, crutons — garlic flavored, two pieces of crisp crumbled bacon and 3/4 cup of sliced raw mushrooms. Serve with vinagrette. Then during the commercial, set up and serve Babas au Rhum. Purchase a can of these succulent and alcoholic dainties, place in the frig before you start cooking the rabbit. Serve with lots of whipped cream. Bon Video . . . rangers.


URSA MAJOR*

by Mary Myers

URSA MAJOR is a software company dedicated to the preservation and distribution of radical software. But I am not talking about video software now. Radical software has come down through the history of man as works of art . . . works which in every period evoked in the people who viewed them a sense of reflection or dynamics that is a form of communication which does not rely on words. URSA MAJOR is the vehicle of art collector and dealer Mary Myers. In 1969 she and her husband Lee Myers became America’s first media art dealers . . . convinced that the most important work in American art was being done in non-traditional media, they began to specialize in the sale of experimental film prints . . . and most recently video tape. Not all film or video tape, however radical its software, can be considered a work of art, and it is here that Mary Myers has brought a highly trained and discerning eye to the selection of films and tapes which truly reflect the work of artists as differentiated from practitioners of the medium.

Mary Myers was born an Aries in Kansas City in 1938. She studied art history at Smith College, the University of Florence, Italy, and the University of Kansas where she received her master’s degree. She taught American art history at the Kansas City Art Institute and at the Nelson Gallery-Atkins Museum in Kansas City. In 1967 she moved to San Francisco where she was the director of the Galeria Carl Van der Voort until she began her own business . . . it is her own gallery and her new company URSA MAJOR which have brought her to the forefront as a dealer of media art.

There is a fine distinction between what is truly the work of an artist and what is the work of a practitioner, and Mary has consistently withstood the pressures of commercial film distribution to take work which is not truly reflective of the principles of art. In this San Francisco issue of Radical Software we have tried to show that film and video are not only tools for communication but also tools for artists, and that when they become the brush of the painter or the torch of the metal sculptor the results are a highly personal, often abstract, subtle interweaving of the technique of the medium and the inner desire of the artist to communicate basic human values and emotions to his viewers. This evocation of emotion, this ability to communicate in a non-verbal, non-linear visual medium, is a rare and subtle talent possessed by only a few filmmakers and videotape artists. So although Mary does not distribute a great number of films, those she does have are among the leading works by the major artists of the field.

*originally Lee & Mary Myers
The artists whose film and tape she sells include

<table>
<thead>
<tr>
<th>Bruce Baillie</th>
<th>Will Hindle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tung</td>
<td>Pastorale d'Eté</td>
</tr>
<tr>
<td>Castro Street</td>
<td>Non-Catholicam</td>
</tr>
<tr>
<td></td>
<td>FFFTCM</td>
</tr>
<tr>
<td>Constance Beeson</td>
<td>Chinese Firedrill</td>
</tr>
<tr>
<td>Unfolding</td>
<td>Billabong</td>
</tr>
<tr>
<td>Holding</td>
<td>Saint Flournoy</td>
</tr>
<tr>
<td></td>
<td>Later That Same Night</td>
</tr>
<tr>
<td>Bruce Conner</td>
<td>Stan Lawder</td>
</tr>
<tr>
<td>A Movie</td>
<td>Necrology</td>
</tr>
<tr>
<td>Cosmic Ray</td>
<td>Corridor</td>
</tr>
<tr>
<td>Vivian</td>
<td></td>
</tr>
<tr>
<td>Report</td>
<td></td>
</tr>
<tr>
<td>Breakaway</td>
<td></td>
</tr>
<tr>
<td>Glen Denny</td>
<td>Charles Levine</td>
</tr>
<tr>
<td>Nyala</td>
<td>Bessie Smith</td>
</tr>
<tr>
<td>Phillip Gietzen</td>
<td>Fred Padula</td>
</tr>
<tr>
<td>Media Mind</td>
<td>Ephesus</td>
</tr>
<tr>
<td>Massage</td>
<td>Little Jesus</td>
</tr>
<tr>
<td>Mike Kuchar</td>
<td>John Schofill</td>
</tr>
<tr>
<td>Chronicles</td>
<td>Die</td>
</tr>
<tr>
<td></td>
<td>Xfilm</td>
</tr>
</tbody>
</table>

A significant part of her work has always been the presentation and exhibition of experimental media art...this year, under the sponsorship of Doubleday's Author Lecture Service, Mary will take programs of experimental film to colleges and universities across the country. The series will feature a variety of programs such as...By Women Only and Films of Erotica. Quoting from the Doubleday notes on Erotica..."a program of erotic films made for non-commercial distribution...each an artistic work testifying to the immense difference between erotic art and pornography." The program features Scott Bartlett's Lovemaking, two films by Connie Beeson...Unfolding, an internationally heralded film about a man and woman making love, and Holding, a portrait of two girls in love, and Mike Kuchar's male homosexual film Chronicles. Other programs are Classics of the Avant Garde (Bunuel, Deren, Fischinger), Recent Work by San Francisco Masters (Bailies, Bartlett, Belson), and Social Comment with films by Padula, Bob Nelson and Ralph Arlyck.
Mary says, “Although Radical Software specifically refers to video, I believe it can be aptly applied to any software, whatever the medium, which is truly avant garde. I hope that video practitioners everywhere will see these films, many of which are by videocinematic filmmakers. Video relies as much upon the visual to bring emotions to life in viewers as film does, though they are quite different media... as different, in fact, as still photography is from film. When you view something that has come out of the spirit of an artist whose vision is as focused and refined as Jordan Belson then you have experienced something new and exciting, something you can take with you into your vision of your own work.”

Besides her work as a collector of film and videotape, lecturer and art dealer, Mary has found time to star in a recent film by Connie Beeson entitled The Letter... described by Connie as a surrealist work which explores the inner emotions and psychological barriers of a woman struggling to liberate herself. In addition to her film activities, she has arranged showings of videotape at the Nelson Gallery-Atkins Museum in Kansas City, at the Exploratorium and American Zoetrope in San Francisco and in her own gallery on many occasions.

For a catalog of films and tapes available for sale, write:

URSA MAJOR
P.O. Box 4853,
SAN FRANCISCO, CALIFORNIA 94118

For more information about film programs, write

Author Lecture Service
DOUBLEDAY & CO., INC.
277 Park Avenue
New York, New York 10017

connie shooting stills

THE VIDEO ARTIST

by Connie Beeson

“The photographed image, still photography, films, video tape, the catching of momentary time and its playback, excites, absorbs, consumes my energy,” says woman photographer Connie Beeson.

She also says she’s a liberated human being with deliberate ties. The liberation is inside. The home, husband, children reflect my communal spirit of love, and nourishes the artistic spirit, so it is all one; the place to be includes running to the sea; running to the mountains; making love; working in the studio; working in the field. And like Reich, I think sex is great; I’m heavy on erotic imagery; the body is a poem; the smile is a miracle; movements shift in light, and behind the lens the mind-photographer selects, is disarmed, wonders, exalts, recreates, feels like a painter; it is a total involvement. The mere triggering of shutters, the presumptive stilling of time, the focussed energy in seeing, is that part of the creative process that is an end in itself. I have decided that what feels right about taking photographs, moving and still, is the masculine part of my nature. But it is never enough. It is what I do with this material that is counterpart feminine in me. Editing is always a necessity. Of course I try to pre-edit, and video taping is the easiest way to turn out a creative project that is finished. Even so I am always wanting to make my tapes into a different kind of artistic whole than their original. Recently I made a video tape of lovely Anais Nin at the Women on the Move innovative program of Redwood High School (the best female image scrutiny program in the country). Along with several high school groups with their studio video cameras and set ups, I ported my Porta-Pac, hooked
into one of the teen-agers' systems. They were all excited about the portability of my actions, as none of the high schools had this more creative instrument. Like the others I produced a documentary tape. But I couldn't leave it alone. The 'finished tape' shows Ms. Nin in repose; I selected all of those frames where she is silent and thoughtful, listening or smiling, then re-dubbed her voice over these. That's the other part of the creative process. Video stills from tapes of Connie Beeson were shot by Dan Moriarity. The studio was darkened to cut down reflections. A scan line shows up in some of the stills.

DANCERS' WORKSHOP TAPES

Dancer Ann Halprin explores group rhythm participation. Leadership is shared as members change from passive roles to take command of group direction. The dancers sense when it is their time to take control, and movements flow into movements in endless variation. The dancers are nude to utilize the element of design, the flow and coordination of bodies moving in unison.

In the neighborhood, Dancers' Workshop utilizes the material around them. The police, as resource material, direct the dancers' mimicry.

A basic set of exercises that stretches every part of the body devised by Ann Halprin is standard warm-up for improvisational dances.

Live video taping of current neighborhood happenings includes the long wait outside San Quentin walls when authorities refused to allow doctors into the disrupted prison.

A capacity crowd peered over the Guggenheim-like balconies of the new Berkeley Museum during a pre-opening performance by Dancers' Workshop. What they saw were male and female dancers moving in vast ribbons of newsprint paper stock in a paper dance ritual, a sculptural dance in which paper and dancer become one sea of movement.

A workshop performance at Soledad Prison, Que Passe? (Ragtime Shuffle), was the first time prisoners were able to select their own entertainment. It was also the first time prisoners were not racially segregated. And it was the first time video tape or a woman was allowed to mingle with prisoners during the performance. Connie was given a prisoner to help her with video equipment; she handed him her Rollei and he also took 4 rolls of still photographs for her. There had been some prison riots and some people asked me later if I was scared. "It never occurred to me to be scared. The men were hungry for the kind of performance Dancers' Workshop could give them."
Lawrence Halprin, during his Take Part workshop presented the process involved in the participation of people in planning their own environments. During two weeks of concentrated work, Connie video taped workshop discussions, environmental walks, and workshop projects, along with taking hundreds of still photographs. "Using the Porta-Pac, I often plugged in an external microphone and did a lot of hand holding of the camera, using the tripod for straight documentation of talks." City planner and landscape architect, Halprin is author of Cities; Notebooks (1959-1971); and The RSVP Cycles: Creative Processes in the Human Environment.

Video tapes by Connie Beeson include participation in the Video Free America Program, University Art Museum, Berkeley, 1971; two Dancers' Workshop tapes, one colorized by VFA; the PhD presentation and Humanistic Psychology Institute tapes on Core Therapy, Sonoma and San Francisco, 1972 (17 tapes edited to one half hour); Stanford Research Institute Video Workshop, 1971; Take Part, the Lawrence Halprin Workshop, 1970; Glide Foundation, New Ways Workshop, 1971; University of California Demonstration, 1971; Dancers' Workshop Tapes — Soledad: Que Passe? Paper Dance at the Museum, Ragtime Shuffle, Bush Soul, Improvisations, Rhythms; Allen Ginsberg, Song for Grape Workers; Interviews (a series); Planetary Map Silk Screening; Photographer Thomas Weir; Anais Nin Herself. Works in progress include interviews of performers, artists and musicians; Glide Workshops; and Dancers' Workshop Neighborhood Series.

Connie Beeson is working on a number of short 16mm films, The Letter, The Doll, Sir, and Women. Her films have been sponsored by Multi Media Resource Center and the American Film Institute.

The Letter is an experimental film in which the creative process involves an intuitive, sensitive working relationship between the filmmaker and friend Mary Myers. Ms. Myers, former Curator of the Kansas City Museum and distributor of artistic films, is the focal point of a film that begins with her reading a letter. Through visual effects, environmental placing, and contemplative flashbacks, both real and imagined, the filmmaker weaves a dream-quality journey through the spaces of a mind.

"Why I think the film will work," Connie says, "is because I am dealing with feelings everyone feels at some crucial time in their life. The Letter is about the inner trauma one has when his constructed world crumbles and he must find inner resources and strength from within to sort out his life and start over. Gestalt oriented people would say, 'to make change, to grow out of defeat.' The film deals with that area of the trauma, with imagined fears as well as real ones, with fantasies, with memories, with the night-time of our sorrows."
TRANSFORMING THE JUMPY PARTICIPATION TO MORE SENSUOUS HARDLY THOUGHT HE SEES HIMSELF FROM BEHIND/ON TOP PORTABLE HALF_INCH ...HAND-HELD (OTHER ASSETS COME LATER) AT THE BOTTOM...

.....I MEAN AS ART LIES LAYERING TO THE MOMENT TO TRANSMIT TWO PLACES WITH BALLS I HAVE IN HAND A RECENT AURA OF VIDEO FACT THE STATION (ANOTHER TOOL WHICH I WILL EXPLORE LATER) EACH MOVEMENT A MULTIPLE OF ITSELF THE SURFACE HAS NO EXISTENCE EACH MOVEMENT A MULTIPLE OF ITSELF MINUTE BECAUSE THE LIGHT SHINES THROUGH IT THE IMAGE CREATE ITS OWN ...

SYNTHESIZER
THE ELECTRO-MAGNETIC SPECTRUM BLUES

Athena weeps,
The electro-magnetic spectrum has the blues,
And not one of you has been unaffected by this man.
I watched all the news shows, national, local,
And even phoned the so-called educational channel
To let them know he died.
They told me it was an UPI,
And on the air they never said a word.
THEY DIED IT ALL TO HIM . . . but they never said a word.
HE GAVE ALL
As they nothinged him right into nothing.
Can you really understand the grief of a god?
Pyres are set high.
Pyramids are raised in just such a salute.
All the Incas, Aztecs, Chinese combined
Have not raised a brick compared to this one man's mind.
You shall never totally know
it's gone . . .
All that are left are his artifacts being greed to Death.
The corporate vampires and mind parasites,
Throw the carcass out.
The brain drain greed, who forget and kill
Took his paid-for patents in their hip suit #9
Waiting for just the right time to throw the carcass out.
It all has to be used up.
Until there is not the slightest reason to stay.
It all has to be so used up
That there are even reasons for going.
It all gets used up.
As the external fades,
The inner expands,
Good-lays were made for their own good.
You don't know what you just lost,
And gained the absolute Athenian grief.
There's a wavelength missing from the spectrum now.
His focused energies are your bewildered toys,
His rainbow dreams are your everyday fulfilled desires . . . . . .
You don't even know.
When Picasso was wildly experimenting with duco cement,
THIS MAN WAS DRAWING WITH ELECTRONS,
And you still don't know him, or what he really did.
All the gods welcomed one back into the flux of peace.
No more sweat tears for those who wish he'd bleed.
It has ended now.
Once and forever
On some windless mountain
Against soft blue floating
And nothing happens . . .
. . . except explosion rains and flying trees
The sanctity has been annihilated again.
Prometheus unbound at last.
Christ finally taken down from the cross,
Becket finally stabbed,
Jean burned and blessed,
Lincoln, Kennedy, King finally done in.
But the body turning into pure mind.
Finally all truly becomes one.
And not the tension energy of holding back,
Helping to hold those who have to go through.
You all know he went through here.
Whether you know his name or not.
HE RIGHT NOW IS COMMANDING YOUR LIVING ROOM MIND.
You saw men on the moon right then because of him.
Will the world ever awake given all the possibles and impossibles?
He gave us one of many of the impossibles.
How many sat around the radio trying to see a picture in the dial?
Until one day you could see a picture - and now it's just shit.
What retarded, self-defeating, mini-minds shut off
What they don't have the light to turn on.
I lack in reaching for competent images,
How do you talk about a manifestation,
That comes seldom in terms of centuries.
We must press buttons that count now.
Given days, weeks, years, they count less, and less.
The nerves are shredded through razors of loss.
Always the going and never the returning -
Always the having been and did it count?
Was it being made to count?
YOU'RE GODDAMN RIGHT IT WAS.
You that sit out there and nod in front of more genius . . .
. . . Than a whole lot of time got together -
The Omnominally present past future.
All now feeding back upon - upon
Until there's no new intake from the external . . . . . .
Then the new door opens.
He has closed us out,
And left us all he did,
And you still don't know his name.
How long will the electro-magnetic spectrum have the blues?
Farnsworth's idea for television

Young Genius and Part of His New Black Lamp Machine

San Francisco Chronicle

PHOTO COURTESY OF THE FARNSTOWM HOUSE

The electromagnetic spectrum has the blues. There is a part of it that has always made Max Farnsworth smile. It is the part of the spectrum that carries the invisible waves of sound. These waves of sound are what make music possible. They are the same waves that make your ears ring when you are listening to your favorite song. It is the part of the spectrum that carries the invisible waves of sound.


The first time I met Max Farnsworth was at a conference in San Francisco. He was standing in front of a large poster that said, "THE FUTURE OF ELECTRONICS." I approached him and asked him what he was working on. He showed me a small box that he had on his desk and said, "This is a prototype of a new device that I am working on. It is a sensor that can detect invisible waves of sound." I was impressed.

As we continued to talk, I realized that Max had a deep understanding of the invisible waves of sound. He explained that these waves were not just for music, but also for communication. He said, "The invisible waves of sound are the key to unlocking the secrets of the universe." I was fascinated.

Max's work on the invisible waves of sound led him to develop a device that could detect these waves. He called it the "SoundWave Detector." It was a small device that could be placed in different places, such as a school or a hospital, to monitor the invisible waves of sound. Max's SoundWave Detector became a hit and was used in many places around the world.

Max continued to work on his SoundWave Detector and eventually developed a device that could send and receive invisible waves of sound. He called this device the "SoundWave Communicator." It was the beginning of what would become the world of communication.

Max's work on the invisible waves of sound led him to develop the SoundWave Communicator. It was a device that could send and receive invisible waves of sound. Max believed that this device would change the world and he was right. The SoundWave Communicator became a hit and was used in many places around the world.

Max's SoundWave Communicator became the basis for the modern world of communication. It allowed people to communicate with each other in new ways. It opened up new possibilities for education, work, and entertainment. Max's work on the invisible waves of sound has had a lasting impact on the world.

Max Farnsworth is a true visionary. He saw the potential of the invisible waves of sound and worked tirelessly to bring this potential to life. His work has changed the world and will continue to do so for generations to come.
MAN IS TYPED IN HIS OWN IMAGE
USING PHIL'S INVENTION

THE RUSSIANS WATCH THE
FIRST ORBITING EARTH FORM
BARK HER WAY
THROUGH 26 ORBITS
BEFORE TERMINATING.
“Testing, testing, testing. Zero, zero, zero. Uh. Now that I have it leveled I don’t know what to say. Uh, this is an experiment, un-authorized. My reasons for doing this experiment are several. Uh, first, um, as I said this is totally un-authorized. I’m not even signed to be in this area. But I had this idea for doing this objective (pause) this is a superior start. If the second stage of this operation goes negative error, I estimate placing this disk retro to approx time year AD One Nine Five Three, 1953, possibly four. That year’s the only frequency I could remember without getting tapes up. I’m not even certain I have that correct. But it is approx. And if it’s in error then nobody’s hearing this anyway. I can see I should have prepped this better. Uh... I’m storing this feed on one of these discs that have been located in this division for, uh, an extended period of time. I had guessed they’re utilized for ordinary blue verbal data banking, but I saw on core night seventeen six that same class discs were also utilized — late A.D. You had a lot of these mechanical products. Retro In.

And this data generated a cortical image of how I could recircuit Solex Two. (Beep, beep, beep, beep) (Interruption from fee D) (Record was not audible). — Twelve service data four-six H transfer to — slash fourteenth Code 165 BB (Audible reply). Negative, it will self correct until day seventeen. Cut a green tester to see if it holds any duct. (reply) Verify, read out an R & L B as one, seven two six four four seven six one, panel six, code four F two. (Beep, beep, beep, beep, beep). I, uh, image this method for re-circuiting Solex Two which is this unit in the adjacent module that, uh, basically it transposes time frequencies for interplanet matter transport. This blue verbal seems impossibly slow, but if I shift to yellow or UV it might not receive. UV wouldn’t take on this disc anyway without an adapter. Anyway, I had estimated that on high energy levels Solex could walk this disc retro to the negative templative current setting which is, as I said, should be approx. year AD One Nine Five Three, possibly four. I don’t think this has been done before. I have no knowledge of reason. The hardware’s all long term stuff, but your, your mind just doesn’t seem to function that way. Retro, I mean. Factually, we have a semi black picture of that time, your time. All mechanical and disunified. Before major co-ordination. But at base, if, personnel just, uh, think about it. No knowledge of reason. I do. I respond pro to the cortical image that I have of presidents, voting, animals, big airplanes. All kind of physical, slow. My estimated reason for this reaction is my failure to receive my history two infusion. That’s the only reason I can
time programmed at mid-annum with approx. forty
two hours additional travel time —— possible sixty
seven degree BI credit additional, and who needs it.
The Beta change pay would tote me into gate pos effect.
The extra travel Tp I could utilize, of course, but, I
have a teammate in Denver at Tannergam who ——
indicates he could program an extra six hours into my
record. Interrupt, I have a feed coming in. If I could
get looped into ... (pain response) ... Bloody frontal
feed. (Beeps) So now I know all about K-axis traffic
flow. (Beeps) Origin Twelve, this is, (Interrupted) Origin
Twelve, ident Decker, T.L., J-3, CMR 00965 with a normal
punch in a blue verbal verifax sheet. Decker T.L., J-3
CMR 00965, receive right frontal feed power 1317. Dig
this, contrary to stop order on all frontal feed authorized
panel Jason, code 339, effective until individual med-
check night 11-88 request manual put-right immediate.
Who uses K-axis anyway? (Beeps) I have mal-
function in my nine spot. I don’t know what you call
it, but we call them spots, stickers, trodes ... The elec-
trodes in your head. In my number nine, which is what
the frontal feeds comes in on, it’s had its tenderness
around it for several days, starting night thirteen-seven,
and when feed comes in I manifest pain reaction up
to four or five degrees in that hemisphere. I can neu-
ralize it with manual feed on my fourteenth spot, that
a teammate told me about, but, those local feeds, they
come in so quickly. Interrupt. I have to turn this disk
over.

I have an emotional regret. In not requesting one
of by unit to co-op in this operation. He can do blue
verbal so it’s really right on the meter and he’d know
what subject matter I should be utilizing. My own
evaluation is dry loop, but I, I guess I’ll utilize it as
a test and repeat everything I can prove pert. ———
Uh. Ident. is Decker, T.L., J-3, I, I don’t know what
you want to hear. I guess any data would have interest,
so much must be altered. Max, when I image receiving
feed from what’s going to happen. Just any calls of
touch. Then to know the consequences of my action.
That’s very, very high. Moreckly posted second
scheduled co-ordinator with the vectors 2-5-4 primari-
ally in volleyball. We, we’ve been strong in recent mils.
Been pulling credit steady. U-E credits are approx.
nineteen sep degrees. Estimate 1847, close to thirty six,
which if you don’t know is rated X on nearly all new
E standards. Our competition is all sub-district so far,
I’m also in chess and cinematics. And of course the
FDE, Full District ———. That’s something you should
see. But, volleyball is my major competitive time
involvement. And my non-comp rec time has been
mostly at regular stikes centers in Brazil, Australia, and
Wenderlun. Also Lunar centers. Atom two five five.
Dexter scheduled for days seven-ten. Probably 2 mils.
I work a lot in my social interaction teams too. It’s
important to keep up. There’s also the two sixth eight
hour Cal time, the Cal’s Cultural and Artistic Involv-
ment which has just jumped to two seven one per
annum, per source DF day, fourteen-seven. I’m in two

* The source disc itself is 3 1/4 inches in diameter, made of a very thin, rigid plastic
material (with no label or center hole), and with an optimal playing speed of
approximately 20 revolutions per minute. This reproduction has been made on a ten-inch
disc at 33 1/3 rpm so as to be playable on home phonographs.
OPERATING INSTRUCTIONS

set time interval control dial. Black figures indicate PRO. Red figures indicate RETRO.

test receptivity. Step into critical area. Allow 30 seconds for sensors to test all channels. A green light indicates machine-acceptable contact. If a red light appears, consult item A-20 of your owner's packet or contact your facilitech.

open channels. If contact is not acceptable to bioparty, move channel control switch to RESET and repeat step 2. When contact is mutally acceptable move switch to OPEN position.

interchange. Interchange will begin when bioparty steps into critical area with channels open.

override disconnect. The disconnect option may be exercised by the bioparty at any time. Disconnect control is marked by a circular amber light approximately 3 inches in diameter and is visible in any interchange media.

The XTI Series Interchange Systems

The XTI series offers some of the most advanced temporal interchange systems currently available. The latest discoveries in earth science have been combined with hardware software self-development to produce XTI. There are several advanced features that distinguish XTI from other SIMMIC systems.

Like other SIMMIC systems, XTI generates polysensory hologrammic media. Recent advances in magnetic flux dynamics make some tactile interchange possible in XTI media. A unique pattern storage and retrieval system allows the bioparty to choose the temporal environment of interchange with a high degree of specificity.

Bioparties experienced in the XTI environment offer some simple guides to optimal SIMMIC operations:

- start with a small time interval, say 5 years pro and increase gradually as you become familiar with the system.
- when acceptable to man and machine contact cannot be established after 5 attempts, it is usually best to postpone any further attempts for at least 24 hours.
- restrict vehicular travel in the interchange media to a minimum. Interchange environments usually offer enough variety of immediate surrounding to make travel over long distances unnecessary.
- do not be too reluctant to disconnect. This option is included to insure the safety and well being of the bioparty. REMEMBER THE AMBER LIGHT.

Interchange sessions have an average real time duration of one hour. There are, however, wide variations from the norm. It is also important to keep in mind that the SIMMIC situation tends to alter the bioparty's perception of the duration of the experience.

For further information about the XTI series or other Xerox systems, contact a facilitech with XTI experience or select video channel XX-1174.

chris verne
I am a stranger in a stranger land. I was born in Beaumont, Texas, April 14, 1941. Aries, Sagittarius moon, Leo rising. My mother (Scorpio), nine months pregnant, trained to Beaumont, Texas on the City of New Orleans to see my Dad who was on a business trip. In 1941 she was afraid to fly, but I wondered myself if it might not have been better to have been born in an airplane in 1941, instead of Beaumont, Texas. I mean, my chart would have been different. Alas it was Beaumont not the airplane. I came, though, not from Beaumont, but from Blue Ridge, East Tennessee, Western North Carolina. My folks have been in that neck of the Great Smokeys for nigh on 200 years. They fought the war between the states, rebels of a sort unknown in this time. They fell to the guns and swords of the industrial Yankees who not only enslaved the Negro and the South, but the world, Vietnam to Watergate.

*****

"This is Arlene Francis telling you once again that the biggest is not the best. This smaller Phillips tablet contains more antacid than either of the two leading roll type tablets... This is Arlene Francis telling you once again that the biggest is not the best... once again the biggest is not the best... once again... once again..."

*****

On the West Coast we see everything three hours after it happens. Everything ABC/CBS/NBC sends us. When people in New York are watching Johnny Carson on the Late Show from Hollywood, it's 11:00 p.m. in New York, but in Hollywood it's still daylight and the California sunset is beginning to make the shadows of the palms along Sunset Boulevard look like spiders along the great Star Mile. Every night I watch the ABC news at 5:30, then I watch the NBC news at 6:00, and then I watch the CBS news at 6:30. I get all the news from three different networks. Plus I learn from watching all three, instead of just one of the three, as people in the East do, that Arlene Francis appears on each of the three stations simultaneously in the East but in the West she comes on during each of three separate broadcasts. So once again I see Arlene Francis telling me that the biggest is not the best. I see the war in Viet Nam three times... the same pictures but with different voice over... I see the politics three times... I see the snafus, the failures, the headline stories not in the context of a choice between ABC/CBS/NBC but as an hour and a half long feature film... each group telling the stories their way but still telling the same stories. The point here of course is that the present in New York is the future in San Francisco, and the present in San Francisco is the past in New York. Our 12:00 noon is their 3:00 p.m. Extending the idea further why not our Saturday being their Monday or
our 1972 being their 1984. . . . All these different time zones really tell us nothing about what is happening. When the president of the USA speaks to Neil Armstrong and Buss Aldrien at Tranquility Base while 600 million people watch a simultaneous event is happening in everyone's present, but in a multitude of time zones . . . for some it is night for some it is day . . . for some it is 1972 and for some it is 2021 . . . .

***************

SH Stonehenge to Tranquility Base . . . .
TQB This is Tranquility Base, go ahead Stonehenge.
SH We have an unauthorized . . . coordinates New East Web Charlie with a prox time of 1968 . . . we are transmitting Fax simly.
TQB Check. We are copying you at three two one zero . . . copy.

INSIDE TRANQUILITY BASE
Officer Get that unscrambled and let's see it. Get Sarg Ekoms up here.
Sarg What's up Colonel?
Officer We have another unauthorized — a blue verbal — that went solex two right into an elevator, 1968, New East Web Charlie. Take a look at this . . . .
Decker Uh, this is unauthorized. My reasons for doing this experiment are several. Uh, first um, as I said this is totally unauthorized.
Officer This disc got picked up in 1968. We don't know if this is going to change the future or not, but we cannot allow unauthorized transmissions. Our world is a world of obedience. The existence of the State is more important than the existence of this individual or this recording.

*****

Officer Sarg, you are to stand by to jump at 2100 hours. Your prox time will be 1968.5 . . . your assignment will be to record any activity surrounding this record that might endanger the future and report back here at 237 point 9. We will see that Decker is taken into custody. If we have negative results on your survey we will Warp Decker pre-transmission with a different program and get rid of this recording.
Sarg Sir, a jump from here to 1968 is a long way, I figure it at least 100 siderial years, if my calculations are correct.
Officer 89 siderial years.
Sarg Pretty dangerous Sir. Any restrictions on what I can take through with me?
Officer Yes. Your Jump Captain is packing your equipment. Better get started. Good luck.

Decker Anyway I estimated that on high energy levels solex could walk this disk retro to the negative templative current setting which is, as I say, should be prox year AD one nine five three.

TQB Stonehenge, this is tranquility Base.

SH Go ahead TQB.

TQB We will Warp Sarg Ekoms in 39 seconds, stand by.

SH Standing by...

TQB Warp!

SH We have firing signal...we have firing signal.

Decker We have some sustainers now that were born prox time AD 1953. I've touched with some of them. But they are so full of plastic that it's next to impossible to get any kind of print out from them.

SH We lost him. We lost him! Tranquility Base, this is Stonehenge. TQB come in. We lost him!

TQB We are reading you Stonehenge. We have rectifiers up. If we don't find the trouble, it will mean that the future has been changed.

Announcer Good evening. Tonight we will broadcast the first of a series of programs honoring the inventor of electronic television, Dr. Philo Taylor Farnsworth. These programs are made possible by circumstances arising from Dr. Farnsworth's many inventions. We are especially privileged to have with us tonight the famous Sarg Ekoms.

Sarg In that now dead future from which I came, a method by which I could penetrate the temporal screen and thereby the fourth dimension allowed me to visit you in your time. As a result of a penetration of the space time continuum, I was able to collect data concerning the past for the people in my time. But when I became familiar with the attitudes of your people, I began to change.

Announcer The results of Sarg's experiments and experiences are the subject of this series of programs. In a moment this episode of contact with the future will begin, but first a word from Tadlock Gravity Cars. TADLOCK — the first name in gravity cars introduces the Ecology X3, the most advanced surface vehicle in the world today. Our fusion powered, totally silent, completely clean computer slave surface cars are the finest to be found. The interiors are fitted for the utmost comfort for intercity, continental, or oceanic travel. From the garden belt to the central city, from Wonderland to Chandigar, the Tadlock Gravity Car is the people's choice. The Ecology X3 has no moving parts, emits no energy conversion wastes, runs for seven years on a single fusion tube under normal conditions. Tadlock Gravity Car has developed a computer slave microwave which conforms to any existing surface pattern from altitudes of from 25 feet to 25,000 feet and whisks you intra-metropolitan at speeds of 450 miles an hour in complete comfort. See the Ecology X3 at the Tadlock Gravity Car showroom today. TADLOCK gravity cars.

Voice See the Ecology X3 by Tadlock Gravity Car at your dealer's showroom today. Now, we go first to Lawrence Colman in Beaver City, Utah for his report on Dr. Farnsworth's birthplace.

Announcer L. Colman We are here in Beaver City where Dr. Philo Taylor Farnsworth is born on a windy desert morning, August 19, 1906...
ELECTRONICUS HOMOSAPIEN Circa 1972
Surprised while working an early example of ELECTRONICUS HOMOSAPIEN peers benignly at the camera while a second creature (below) unaware of our camera is examining the printed text of an ancient non-electronic manuscript referred to as Video City.
Beyond direct personal relationships, electronic images and sound contribute most substantially to our experience of the world. Yet, we are nearly blind to the real, human implications of television in its many forms. Television which serves the worst in us has come rather easily. Hopefully, there is a new television which awaits us—one that maturely expresses our complex sense of things. Because images influence personal reality and social structure, the task of evolving this new television is an urgent and very practical matter.

The national center for experiments in television

The Center is a group of artists, technicians and scholars engaged in developing tools and practices for creative television and studying the image-based experiences in man's individual and social life. Its formal activities—research, training, and the making of videotaped works—are inter-related in this ongoing search.
Working with the television monitor as the prime surface of aesthetic occurrence rather than as the conventional display of photographed reality, Center artists seek to understand and formalize principles of composition with electronic image and sound. Here broadcast television, and the theatrical, motion picture and journalistic histories which have comprised it, are set aside, and the medium's unique characteristics—electrical energy, two dimensionality in a fixed aspect ratio, time-dependence—are applied in studies of shape, movement, tension, volume, plasticity, texture, and duration.

To facilitate artists' dexterity with the new electronic implements, Center researchers design and construct original tools and equipment configurations. The Beck Direct Video Synthesizer, completed in 1971, generates shapes, colors and textures—many never before displayed on a television monitor—without the use of cameras or other optical devices. It is in use not only as a highly personal creative instrument, but also as a precise mechanism for psychological testing. The formations of video equipment at the Center are continually refined to provide optimum manageability for the artist; new versions of conventional broadcast studio gear are adapted and built to meet the demands of this work.

The Center has initiated a new area of study into electronic images and their relationship to man's individual and social life. Scientific aspects of this work are carried on jointly with professionals at other institutions. Unlike traditional broadcast research interested in measurements of audiences, the Center's concern is with the deeper meaning of the image-based experience. Monographs by Center staff members include reflections on art and politics, art and technology, and the philosophical and ethical aspects of public broadcasting. Current pilot studies are designed to better understand the psychological and cultural impact of images. The goal of this research is to explore visual and aural symbols as means of focusing political consciousness, the potential cross-cultural applications of visual symbols, the psychological experience of viewing television as it pertains to fundamental interpretations of reality, and aspects of the visual experience which affect public standards of objectivity and truth.

This fall the Center initiated a new public television training project based upon “across the board” service relationships with public television stations. The program's aim is to assist stations in those areas where the Center has particular expertise—experimental program design, graphics, specialized engineering techniques, and innovative relationships between the station, local artists, scholars and other resource persons.

KCTS, Seattle, and KPBS, San Diego, are the first two stations to participate in the new program. At KCTS the Center has helped launch an Artists Television Workshop with the support of the Seattle Arts Commission. Through exchanges of personnel, the Center will assist the station to produce a series of television programs utilizing the talents of local composers, dancers and visual artists. In San Diego, the Center is exploring new directions for local programming with the KPBS station staff. Additional training projects with other public television stations are being developed for 1973.

As television becomes increasingly available to groups and individuals not connected with established broadcasting institutions, the Center seeks to share its research beyond the public television community. Within the last several years the proliferation of low cost non-broadcast video gear, the emergence of UHF and cable outlets, and the possibilities inherent in home playback technology have drawn numbers of young people to videotape expression. A special three-year program begun in the fall of 1971 is establishing formal working and training relationships with students and faculty at several American universities to further the use of television as an artistic and educational tool. Through exchanges of personnel and videotapes, the Center will help initiate campus video workshops and assist students in moving systematically from basic aesthetic and attitudinal questions to the production of finished works.

Two such facilities are in operation at Southern Methodist University and The Rhode Island School of Design. In addition, The State University of New York at Buffalo has invited the Center to work with its own experimental video project.

VIDEO VOYAGE

We are warp minus ninety seconds and counting, 89, 88, 87, 86, 85, this is control we are go...this is systems we are go...this is audio and we are go...64...63...62...we are go on all channels...one minute and counting...stand by to warp...check list?...go...48...47...crew check...answer go...35...34...33...Howard?...Howard is go...Beck?...Beck is go...Jepson?...Jepson is go...Roarty?...Roarty is go...24...23...22...Hallock?...Hallock is go...Turner?...17...16...Turner?...15...Turner?...14...13...12...Turner is go...minus nine, eight, seven, six, five, four, three, two, ONE...warp......

Innerspace warp has launched a probe into the unknown...into videospace, to explore the vast uncharted reaches of electric dimensionality where few have ever traveled. The crew is part of the group of artists from the National Center for Experiments in Television who have been brought to San Francisco to explore the space behind the tube.

Stephen Beck, Aquarian (1950), is engineer and his direct video synthesizer like those of Eric Seigel and Nam June Paik is the control room for the voyage into video space. Beck's electronic karma began to manifest itself in the same way that Farnsworth's karma began to manifest itself...with a crystal radio. Tinkering with
old radios and television sets, with amateur radio and various electronic hobbies, cultivated his electronic genius while his study of piano and French horn developed his musical understanding... and so on.

While attending the Electrical Engineering College of the University of Illinois in 1967/1970 he worked as a design assistant in the Electronic Music Studio at the University. During this time he also began to work with light as an expressive medium. Of particular significance were cathode ray tube graphics generated by exciting an oscilloscope with electronic sound signals, and volume color lighting.

During 1969-1970, in search of precise, electronic methods for controlling light expressively, he began to develop the first simple video synthesizer (#0), a performing instrument which appeared in several contexts, including concerts with composer Salvatore Martirano and his computer sound synthesizer, and a performance composition, Prextypia.

During this year work commenced on Direct Video Synthesizer Number 1. Now a staff member of the National Center for Experiments in Television, Beck continues to develop the video synthesizer, as well as to evolve designs for multiples of the synthesizer. He also utilizes this tool to realize compositions both for video tape recording (called videograms) and live video performance. His tape compositions have been shown many places in this country as well as in Montreal, Paris, Germany and Tokyo, and some of these works are on permanent collection at the Whitney Museum in New York.

**VIDEOGRAM REPERTOIRE**

<table>
<thead>
<tr>
<th>Composition</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point of Inflection</td>
<td>1970</td>
</tr>
<tr>
<td>Cosmic Portal</td>
<td>1971</td>
</tr>
<tr>
<td>Conception</td>
<td>1972</td>
</tr>
<tr>
<td>Electronic Notebook</td>
<td>1972</td>
</tr>
<tr>
<td>Videosynthesis</td>
<td>1972</td>
</tr>
<tr>
<td>Illuminated Music I</td>
<td>1972</td>
</tr>
<tr>
<td>Live performance broadcast over KQED San Francisco</td>
<td>1972</td>
</tr>
</tbody>
</table>
In explaining his work in a white paper entitled *Direct Video: Electronic Artform for Color Television* (available from the National Center), Beck has made the following remarks.

Within many of mankind’s tools are latent properties unobserved even by those whose intuition has led to the design of the tool. Television is no exception. As an electronic system its range and complexity are astonishing; unfortunately, far more so than its usual content indicates. Let us go one step further than television might seem to permit and remove the TV camera, replacing it with electronic circuits which can be manipulated to effect the formation of an image on a video monitor. This is direct video synthesis. It presents the artist, or videographer, with a new potential for using television as a medium of personal expression.

I was led to color television in the search for a precise means of expressively controlling light. Conventional computer graphics displays seemed costly and neglected a common piece of hardware—the color television set—as a display terminal; hence, the notion of a visual synthesizer as intermediary between control and display of an image.

It remained, however, to assess and understand the aesthetic properties of the television medium, and to formulate an aesthetic model upon which to base the construction of electronic image-forming modules which would constitute a synthesizer. With a voltage-controlled parameter approach the computer could be used to direct the image-producing modules. But more important, the videographer would have intimate control of the image through various physical—and also possibly biologically controlled—transducers which would develop control voltages.

Sense impressions of both my inner and outer world and their subsequent intellectualization led to the formation of an aesthetic model comprised of elements of form, motion, texture and color. (A mathematical development of form as points, lines, planes and perspective illusions serves as a preconditioner for electronically realizing these elements.) The temporal changing of geometrical relationships between elements of form gives rise to motion. Texture arises as brightness gradients over the elements of form, or a macroscopic aggregate of microforms, while the spectral distribution of reflected and radiant energy of forms evokes color from our senses.

As remarkable as it seems the incredible pretentious First National Video Tape Festival held at the Minneapolis College of Art during the fall selected only one San Francisco submission as worthy of recognition. The New York conceptual art oriented judges (Stoney, Youngblood, Rose) failed to award any West Coast artist more than passing notice. Whether it was by accident or by design, however, the judges elected to give honorable mention to one of the really significant works done in video during the last few years. Artists Don Paul Kaufman, executive director/Brice Howard, director/Willard Rosenquist, designer of light as a medium/William Roarty, artist in residence/Warner Jepson, composer/Rick Davis, circuit engineer/Ann Turner, reports editor/Mimi Scott, secretary.
Hallock and William Roarty joined together at the National Center to create Untitled which is undoubtedly a work of great historical magnitude and intense personal experience. This time painting takes place in the multidimensional videosphere where there are as yet no charts for navigation or stars to steer by. Hallock came to the National Center in 1971 from a long list of credits which include work as a director and producer, a painter, and a freelance film and tape cameraman. His experience as a freelance director in New York City brought him to the attention of Center Director Brice Howard who later brought Hallock to the Center as a production supervisor.

William Roarty, the Center’s graphic artist and Hallock’s partner in creating Untitled was graduated with a BA in Fine Art and taught in the East before joining the National Center. He did a stint at WVIA-TV in Scranton where he came to the attention of Howard who brought him to San Francisco as an intern in the National Center program. In addition to the work which Roarty and Hallock have done together, Hallock has created a number of other video time paintings—which embrace the components of art skillfully transformed by the electron into flowing rhythmic movement, not just at the surface of the cathode ray tube, but within. His work is an astronomer’s vision of the heavens, the tube is his telescope and through it one is able to leave the reality of spaceship earth and journey behind the looking glass to a land of gas clouds and exploding nebulae where the forces of electronic creation are held in balance by the artist’s extensions of his mind.

Beck, Roarty and Hallock were joined at the National Center in their search for stellar visions by William Gwin (Capricorn), 1/1/47. Gwin’s resume reads, “1950 (age three) decided I was a writer... 1966-7 decided I didn’t want to write and became a sculptor. Met my wife. 1968-9 married my wife... painted... sold three paintings, B.A. in English Lit from Dartmouth.” In 1969 Gwin became a general assistant at the National Center and in 1971 he became an artist in residence. He is now in NYC where he is said to be painting. Gwin during his residence at the Center wrote a definitive treatise on his work and experimentation entitled Video Feedback: How To Make It: An Artist’s Comments On Its Use: A Systems Approach. Excerpts of his paper cannot convey the depth of the work entirely but are of great interest. To quote:

Video feedback is produced by aiming a camera at a monitor; the camera actually takes a picture of itself. The patterns thus engendered can be altered in several ways, by exerting various controls over the electronics, and by affecting the optical path of the picture/monitor loop.

Every slight movement affects the pattern. If the camera is moved haphazardly, it will flash by things that haven’t had time to appear. Miniscule, gradual movements are absolutely necessary in order to begin to attain some kind of control over the pattern.

Changing the relationship between the camera and the monitor will alter the feedback. A camera standing upright will give a spiral pattern; when the camera is tilted slightly, a circle occurs; a camera placed at a 90° angle produces a rectangular shape.

Work at the Center is done with small Sony cameras; broadcast studio cameras are obviously too heavy to juggle in this way, so under these circumstances tilt the monitor. After the camera/monitor relationship is set, the optical variables to manipulate are the f stop, zoom and focus of the camera’s lens.

Combining elements—any kind of material—with feedbacks means introducing other images into the light pattern of the feedback loop, thereby changing the original feedback pattern. This can be done with any sort of object, a person, or with reflective surfaces such as pieces of mirror mylar. In the latter case, feedback becomes the fixed element, with the camera set and unattended, and the changes are produced by moving lights on the mylar pieces and by moving the camera which is picking up the mylar reflections.

Use of feedback becomes more sophisticated as electronic variables are introduced into the loop—additional cameras, level control from a switching device, reversed polarity, color, “special effects” (particularly keying), and time delays.

Negative polarity allows the same possible variety of patterns that occur with positive feedback.

Feedback’s primary drawback for the artist is that, because of the ease with which one can produce lovely patterns, it is tempting to get caught up in the process of discovering it to the exclusion of anything else. Several years ago, a poet visiting the Center observed: “feedback is a whore.” Its prettiness can be so enticing that time and energy are destroyed without leading to any serious expression or work. In this situation, it’s been fun, but may be almost counter-productive to art.

Making with feedback is just like making with any other artistic tool: it takes patience to learn the use and control of it. This is time consuming, since there are so many variables involved in each feedback pattern. Often it is difficult—or impossible—to return to a form once produced. It’s advisable, therefore, to videotape an intricate kind of feedback; you may never find it again. These tapes can form an “image bank” of material to be used later by themselves, or to be fed into another combination of images.

People often deal with feedback as an interesting “effect.” As an effect, it’s not very interesting. What’s important is what’s done with it. In my own experience, I prefer carefully using the same feedback as a different element in many tapes to concentrating on finding a new feedback form for each new work. They young state of video art tends to emphasize the new. So often with feedback it’s just new, but compositionally rather uninteresting.

Is feedback a whore? I’d ask, “Are you an artist?” And, “Is feedback something you can use to make art?” It can be anything you make it.
Videospace travel logs are available under the title *Electronic Notebooks*. The Center has completed the first two videotapes in a series of *Electronic Notebooks*: *Videosynthesis*, a descriptive portrait of the Center's Direct Video Synthesizer, and *Irving Bridge*, an original video composition by artist William Gwin.

This series of tapes will provide a continuing record of the artistic work, research, technical invention and general explorations into the making and experiencing of electronic images conducted at the Center. It will include a range of materials, from original video works to reports on research activities. Some of the tapes will deal with one subject matter, such as videosynthesis or color, while others will consist solely of a new work made by a member of the Center staff. As the series continues, the Center will broaden the service with reports on research being done elsewhere and video works by artists outside the Center.

The *Videosynthesis* tape reflects the artistic consciousness and technological reasoning of the Direct Video Synthesizer's creator, Stephen Beck. It includes an explanation of the device's operating principles as set forth in form (developed as points, lines, planes and perspective illusions), color, texture, and motion, as well as a new work by Beck entitled *Conception*. Music for *Videosynthesis* was composed by Warner Jepson, the Center's composer-in-residence.

*Irving Bridge* is a forty-minute video composition by painter William Gwin with sound score by Warner Jepson. Seattle public television station KCTS plans to give the premiere broadcast of the work this winter.

In addition to the *Notebooks* a log of videospace travels by individual artists contains the following visions of innerspace:

- By Stephen Beck: *Conception; Videosynthesis* (music, W. Jepson); *Morphogenesis* (music, W. Jepson); *Illuminated Music*.
- By Stephen Beck and Warner Jepson: *Comets*.
- By William Gwin: *Irving Bridge*.
- By Don Hallock: *Control Points; Winter Wisdom; Eggs?; Ball; Kiss With No Up; Blind Shaman*.
- By William Roarty: *Earth Poem; Passage*.
- By William Roarty and Don Hallock: *Untitled; Chinese Wolf*.
- By Willard Rosenquist: *Lightforms For An Electric Concert*.

**RECENT RESEARCH TAPES**

- Test Tape: Synthesized graphics using scan converter and data tablet.
- Test Tape: Synthesized sound generating video images with scan converter.
- *Conversation With Rudolf Arnheim and Analysis Of CBS Evening News*.

Information about the National Center for Experiments in Television which appears in this article has been supplied by Ann Turner, who is information director for the Center. For further information on the Center's activities, contact Ms. Turner. In addition to the white paper reports, the National Center publishes a newsletter. Write for the newsletter at the new address:

National Center for Experiments in Television
288 Seventh Street
San Francisco, California 94103

Bill Roarty and Don Hallock in the Experimental Studio.
Crystals, gems, and jewels, those precious stones of empires throughout the history of man which have crowned the heads of kings to symbolize the wisdom of Solomon and the tyranny of Peter the Great, have in our technological age given birth to everything from holographs to space clocks, radios, and computers. These minerals dug out of the earth, cut and polished and passed on from generation to generation for thousands of years, have often seemed to possess mysterious and powerful qualities of magic and psychic force.

Crystal for prophecies have come down through the ages under many names - such as the Urim and the Thummin. These terms appear in the Bible and in the more recent Book of Mormon where they are described as “two stones (crystals) which were fastened in silver bows” (possibly somewhat like a crystal radio) and “whosoever has these things is called a ‘seer’ after the manner of ancient times.” In another source they are described as jewels which ancient wizards tossed or cast in the manner of bones or dice, and from the position of these fallen stones they made prophecies.

Are the crystal skulls such stones, which have come down through the ages silently bearing the message of a civilization long perished, an Atlantis, waiting patiently to be discovered and revealed? Are the crystal skulls our eye into the past as the jewels of the Buddha's mystic forehead eye are the window to the soul? There are three of these crystal skulls, two in Europe and one in the Americas.

Their origins are unexplained, their age unknown, and their purpose still a mystery. One of the skulls has been the subject of study and examination by Bay Area resident and art authenticator, Frank Dorland.

The Mitchell-Hedges crystal skull, a solid quartz replica of the human brain box, may be more important historically than the Rosetta Stone or the Dead Sea Scrolls. Stanford University is just one of dozens of institutions that has refused to have any formal connection with the skull. However, on one occasion, several scientists from Stanford (asking that their names not be associated with the skull in any way) probed the skull with a laser.

Modern technology has only recently created a process which uses crystal like that of the skull to store vast amounts of information in tiny areas. The entire Encyclopedia Brittanica can be placed in a tiny flake that will sit in the palm of your hand. Could the skull be the storage crystal for the radical software of an ancient Atlantian civilization? Could the patterns of the skull be the code of an ancient language? It may be years before we know. Frank Dorland the custodian of the skull for several years explains:

Crystal is very hard but it fractures easily. To bring the skull close to an electrical transformer, similar to those on telephone poles could shatter it. A laser is a concentrated beam of light energy. If it hits an imperfection in the wrong way, setting up resonant vibrations, the same disastrous result might occur.

Comparison of the Mitchell-Hedges skull with its near-twin at the British Museum in London depicts one of the stylized stages of the artifact undoubtedly passed through before completion. To date, no gemmologist has been found who will attempt to duplicate it.

On the other hand, this resonating vibration might be the key which opens the crystal's long held information about the unknown history of the earth. The frequency of the vibration might be the same as the frequency proposed by Dr. Phillip Morrison for the interstellar frequency most likely to be used by civilizations attempting to communicate with one another inside our galaxy.

The skull was uncovered in 1927 on the site of an archeological dig in British Honduras by the daughter of explorer-lecturer F. A. Mitchell-Hedges. The origin of the other two similar skulls is very hazy. One is in the British Museum in London and the other in the Musée de I'Homme in Paris. Though the skull was found in British Honduras, it is generally agreed that it was planted there for Ms. Mitchell-Hedges to find. But that is where agreement on this artifact ends. The skull stands unique among thousands of artifacts found in South America. Dorland believes that the skull did not originate from South America and contends instead that it is much older than the 3400 year old period of the ruins where it was found.
Art Conservator Frank Dorland, who has studied the Mitchell-Hedges crystal skull since 1950, points to an optical effect at the base which can project light up to the sockets causing them to glow.

Dorland's theory is:

In all probability, the skull was first carved and put to religious use either by the people of Atlantis or by the ancient Egyptians or Chinese. At that time it resembled the example in the British Museum and was, in a sense, unfinished. Later, it was used by the Babylonian priests in religious temples on the hill of skulls, perhaps around 1000 B.C. The Phoenicians then brought the skull from Babylon to Central America where it was used first by the Mayans and then by the Aztecs. Perhaps the skull spent sometime at Atlantis before being transported to Central America. It was probably the Mayas or Aztecs who completed the sculpting, detached the lower jaw, and carved in other "trickery." The skull was then "lost" for hundreds of years until "found" again by the Mitchell-Hedges expedition.

I have examined the entire surface of the skull in microscopic detail. I found no trace of machine tools. The skull was created by some other method. The top surface was so finely polished that I had a hard time seeing it, but when I did, the scratches went in a million directions. I've never seen any polished crystal like it.

The Mitchell-Hedges skull is anatomically correct in every respect, except that it lacks suture cracks along the top. It is assumed that this was so nothing would interfere with its use as a crystal ball. Dorland believes that at least three cultures worked on the skull. The detachable jaw, prisms, and pivots (which would allow it to be manipulated for dramatic effect) show two distinct levels of craftsman-

ship, both inferior to that of the top surface and the face. The skull of the British Museum does not have a detachable jaw or these other features.

Crystal is not just unusual because of its mystical and religious history. It vibrates, and cutting it in different directions produces different vibrations. The clocks taken aboard spacecraft use tiny flakes of quartz to maintain their accuracy. Primitive radios called crystal sets used an ordinary quartz crystal to detect radio waves. Crystals of silicon (the main ingredient of quartz) are the backbone of modern electronics. Without these crystals there would be no transistor television or computer electronics as we now know it.

Phenomena associated with the skull, reported by individuals and groups on literally hundreds of occasions while meditating on the skull include images appearing in the eye sockets and cranial mass. Often seen are other skulls, skeletons, temples, and buildings which are sometimes involved in episodes or scenes, people, and places.

Dorland has traveled across the country trying to find a scientific institution that would take charge of the research that needs to be done. The only institution that would even look at the skull was Hewlett Packard. Being in the business of industrial and electronic uses of crystal, they were able to determine that the jaw was originally part of the whole crystal, but beyond that they could come up with nothing.
The School of Holography was established in the fall of 1971. It was set up to make information about holography (three dimensional laser photography) available to the general public and to develop holography as a visual medium. The major activities of the school in the coming year will be the offering of basic and advanced classes in holography, workshops, and the publication of a journal of holography. Initial facilities of the school include four complete holographic studios and associated equipment, including lasers, optics, viewing areas, and darkroom facilities, as well as a permanent exhibit of current work in holography, including holograms by major artists. Also available are information booklets, notes, and bibliography on the subject of holography.

The converted warehouse at 454 Shotwell Street is the world's first and only known holography school. Its founder, and head is a young physicist-turned-holographer named Lloyd Cross. Its senior faculty member is a young artist-turned-holographer, Jerry Pethick. The school functions on three simultaneous, but distinct, levels. Its main business is teaching the fundamentals of holography to beginning students, 130 of whom have already completed the $85 eight-week course in basic holography to become competent holographers. The course carries credit at a number of local colleges.

"The history of holography is only ten years old, and the laser has only been around for twelve. We're about where photography was in the 1860's," Cross pointed out. "But today it takes only months or years for what used to require decades. Developments are going to be very fast."

At its simplest, the making of a small 4 by 5 inch hologram requires a two milliwatt continuous wave laser (cost: about $150), a few lenses, a film or photographic plate, and a solid foundation under everything that will prevent any kind of movement of the apparatus while the hologram is being made; the accidental motion that will cause a blur in conventional photography will make a hologram virtually unreadable. Cross and Pethick have solved this problem by the simple expedient of setting up platforms that are covered with several hundred pounds of sand and concrete, and rest on a pedestal of inner tubes; the sand can also be used to stand objects in so they stay solid. The school is equipped with four such set-ups, each in its own darkroom, as holograms of this simple, "transmission" type must also be made in total darkness. "The whole room is a camera," Cross explained.
“While a photograph duplicates what the eye does, holography parallels what the mind does,” Cross said. “Latest theories about the brain indicate that memory is not localized in any one spot, but is spread all through the brain. This means that information is stored in the brain exactly the way it is stored in holograms.”

For all its magic, holography at this simplest level is handicapped by a number of more or less serious obstacles, solutions to which are the goal of continual experimentation. Among the most severe drawbacks is holography’s present limitation largely to inanimate subjects of relatively small size — bottles, glasses, dolls, and so on — that can be easily illuminated within a darkened room.

Cross and Pethick are now working on a complex system whereby an outdoor landscape or similar panoramic vista will be photographed on a roll of 35 millimeter slides that will pan horizontally across the scene to record the same image from a sequence of 36 different angles, down to intervals only one tenth of an inch apart — in effect, a kind of extended stereo. Each color slide will then be made into a hologram, and the 36 individual images can then be superimposed above one another to produce a master hologram that will recreate the panorama in depth.

Another area of experimentation is color. Thus far, holography has been almost exclusively monochromatic, meaning black and a kind of eerie red-­orange (the color of ordinary laser light), which mixes together to form a peculiar granularity — visually fascinating in its own right, but not very realistic.

However, Cross has also just installed a newly acquired, $10,000 krypton laser that emits four colors all on the same beam. “By combining, we can recreate 95 per cent of all natural colors — compared to the 75 percent capacity of color TV,” he said. “Very little has been done in color, because there is not much technological application. Some two color experiments have been done. We’ll begin with two, and work on from there.”

Somewhat more distant prospects include holographic movies, and Pethick says “three-dimensional television is also a certainty at some time, but whether it will be purely a holographic process is still open to conjecture.” He has himself created an animated holographic film (the world’s first); a holographic movie, however, must await development.

“When people are able to take a hologram home and use it, the impact will be tremendous — on the environment, on design, and even on architecture,” Cross said. “Holography can create the future,” said Pethick. “Using holography, the physical environment can be anything that man can conceive.” Holograms on a skyscraper’s window glass — not obscuring the inside view — might create huge pictures for people outside. Or, since visual reality could be created without physical restraint, Cross thinks a building lobby could be converted into an illusion of a tropical paradise.

* * * * *

Sand table at School of Holography.
Cable TV is everyone's potential two-edged sword. The problem is how to gain all the benefits from cable's 2-way information flow potential, while insuring responsiveness and responsibility to the community—including economic feedback. The solution: insist on the public's rights at every opportunity, and now, before the rules are changed again. Seems the FCC has developed a chameleon policy regarding its position on cable TV.

For example, recently ATC (American Television Corporation) and Cox, two of the largest cable systems in the country, announced a merger (see chart on page ). As with all cable systems, they face the problem of how to get more subscribers. At present, approximately 9 percent of the US is on cable—in areas that are generally signal-starved, offering a lucrative market. But these are pretty well filled. To gain further subscribers they are going to have to offer more to the public than just another TV show off the air. There are several people who want to insure that it isn't going to be merely burglar surveillance systems and the like.

Consequently, San Francisco Attorney Tony Kline and several community groups called for a meeting with representatives from both cable giants to discuss plans for insuring the child born of the union, Cox-American, would have a strong sense of public responsibility. Cox-American was represented by Monroe Rifkin, president of ATC, but no members of Cox's hierarchy showed. Kline had gathered with him members of CRLA, the NAACP, the Committee on Open Media, and Allan Frederiksen (alias Johnny Videotape) from the Santa Cruz Community Service Television Project. This coalition's bargaining position was based partly on the possibility of blocking Cox-American's new license by challenging their violation of the FCC ban on cross-ownership of media in a given market, and lack of public service. Cross-ownership will happen because Cox owns a broadcast TV station in Oakland, California, while ATC owns the nearby Lafayette cable systems. There is also a similar example of cross-ownership among their combined holdings in the Southeast.

Prior to the meeting, professor Phil Jacklin of the Committee on Open Media wrote:

> A cable TV operation is by its nature a local monopoly. A single subscriber never has more than one choice for service. When several local monopolies are controlled and owned by a single large corporation, then the resulting “network” has implications for whole regions of the country and for the nation itself.

> When there is a natural marketplace of ideas, there is a natural or unplanned access and diversity. But in a monopoly situation, we must “design in” access and diversity. We must design and establish institu-
tions and arrangements which guarantee open communication. In a monopoly situation, we cannot take democracy for granted.

What we ask is a commitment to certain institutions and formal arrangements which establish opportunities for decommunications, for the kinds of communications essential to a free and democratic society — free expression and public debate, education and journalism, the flow of information vital to human beings.

At the meeting, four basic needs were presented: minority ownership, minority employment, public access and leased access channels. The last point proved to be most controversial. Professor Jacklin, Allan Frederiksen, and the Committee for Open Media have been working on the concept of a non-profit organization leasing a channel on a low cost, long-term basis. This could provide various community groups a vehicle for regularly scheduled programming, plus a chance to generate on-going production costs through the means of occasional sponsorship spots (unlike the public access channels). However, cable companies had never thought of the leased channels in anything but profit terms. Even broadcasters may consider leasing channels in the future — it would probably be cheaper than broadcasting on-the-air and they could then forego the FCC 3 year license renewal rule for broadcasters.

A Cox lawyer stated that he felt there would be problems with tariff laws — would it be “legal” to discriminate against competitors for the channel market according to what they can pay (regardless of profit vs. non-profit orientation)? The issue needs to be resolved soon.

Rumor has it that after the '73 elections, the FCC will waive its cross-ownership rules as it has already waived many of the March '72 rules regarding what a cable operator must now do in order to obtain a certificate of compliance to enable him to import distant signals, etc. Seems also that the Office of Telecommunications Policy, the Nixon Administration's designed and appointed mouthpiece, is gradually building up to replace the FCC. (And remember, folks, '73 is the year Nicolas Johnson's term is up in the FCC.) The OTP, though supposedly without the power to create laws, allegedly wrote the March '72 rules on cable TV.

However, the OTP and FCC have usually been no great friend of cable. In fact, it was the OTP and broadcasters who largely wrote the copyright rules requiring cable payment for specific off-air rights. The OTP is also in the second draft of a proposal to make the whole cable industry common carrier. This would essentially destroy its profit-making potential — sort of making it a closer cousin to the phone company. They would be unable to initiate any programming but would act only as an available carrier of signals. So why will the FCC soon be abolishing its cross-ownership rules? Because one-third of the cable systems are presently owned by broadcasters.

The merger between ATC and Cox should be interesting. Cox has been around longer and is more tied to the broadcasting past. ATC, because it is only four years old and was never a child of broadcast TV, seems to be aware of its need to be more responsive to public interests. They have been conducting a public access experiment in Reading, Pennsylvania, for over a year and are about to initiate them in Orlando, Florida, Charleston, West Virginia, and Beloit, Wisconsin. The merger will be a fifty-fifty deal. Monroe Rifkin of ATC will be Chief Executive of Cox-American, while the President of Cox will be the Chairman of the Board. They have already petitioned the FCC to transfer their microwave and radio licenses and have asked for a waiver of cross-ownership rules.

Hearing this, Kline and his community coalition asked that another meeting be held the beginning of November with representatives of both Cox and ATC. In it, the right of the public will be presented, including: An agreement not to pre-empt public service programs or spots coming in from a broadcaster whose signal is usually carried; an agreement to require commercial lessees to carry public service spots, including Free Speech Messages, at regular intervals and as 5 percent of all messages carried or one minute in twenty; an agreement to make available free or nominal cost leased channels for non-profit organizations representing various special interests, communities unified by race or idea, political parties, constituencies, etc.; an
Dear Mr. Bresnan:

The Santa Cruz Public Access Coalition has been actively involved in attempting to secure public access to the Teleprompter Cable System in this area for the last eighteen months. We first broached the idea to your local system manager, Kester Krieg, in December, 1970. Although his initial response was positive, when specific video tapes were produced and made available, he found "technical" reasons for rejecting them. This was our first indication that, at least at the local level, Teleprompter would be reluctant to support and encourage access.

In observing public access in other parts of the country, such as New York City, we noted that access was provided when required by the franchise agreement. We took the issue to the Santa Cruz City Council in October, 1971 to request an amendment to the franchise requiring public access. At minimum Teleprompter did not support the access concept and at maximum it obstructed a favorable hearing from the Council.

A public access petition was then circulated and one out of every ten registered voters signed the petition. Thus broad based community interest in public access was conclusively demonstrated.

This organization, and others like it, are concerned that any franchises granted in the future include service features and requirements which will meet the needs of the community involved. We have a list of every community in California that will be granting a franchise in the next year. We are, and will continue to be, in contact with these municipalities. We will advise them in accordance with our experience.

Teleprompter has an established record of public service in other cable communities. We believe that our interests are the same: communication systems that serve people. We look forward to your response.

Sincerely yours,

Michael J. Sales & H. Allan Frederiksen
for the Santa Cruz Public Access Coalition

The problem of public access and how to get it, along with all the other questions of who should have access for what and the problem of existing franchise agreements which do not give public access, and the legal question of such agreements which are obviously not in the public interest are basically in the hands of the FCC. Allan has addressed himself to that group in the following letter:

AN OPEN LETTER TO FCC COMMISSIONERS

In a recent news item in Broadcasting Magazine (9 October, p. 5), it was reported that the Office of Telecommunications Policy has nearly completed long-range policy recommendations on cable television. The proposals were said to include policies recommending that cable TV be structured as common-carrier as means of increasing access to [the] medium. . . .

The Committee For Open Media is deeply concerned as to whether these proposals will truly enhance the public's access to cable TV. The Committee further believes it wholly inappropriate that a private execu-

tive input procedure be employed for the formulation of public policy.

Cable TV has the potential of becoming the primary distribution medium of all forms of communication within the next decade. It seems incomprehensible that policies in such an important area as cable communications could be formulated without any definition of needs being sought from the general public.

The Committee For Open Media requests that the FCC begin a formal inquiry with full input from the general public on the problem of access to cable TV. In particular the Commission should explore the possibility of overseeing the establishment of non-profit community leased channels.

Faithfully yours,

Phil Jacklin & Allan Frederiksen,
(Johnny Videotape)

The outcome of the rising public demand for access to what is probably a public utility in the first place is far from settled. Only diligent public servants and individuals like Allan Frederiksen, Sue Fox and Roberto Esteves and writers like Brom and Evers can turn the tide toward more public open access information exchange.
agreement (The Community Title Proposal) to return 10 percent of all revenues before taxes to a community controlled Office of Access Support. These funds would be used for the three required access channels as well as for a scheduled and programmed public access channel, if there is one, and for non-profit community-leased channels. Support would include a salary for a co-ordinator and equipment for a community TV workshop on the model of the ATV project in Reading, Pennsylvania; an agreement to return 1 percent of all revenues before taxes to a Public Information Fund for promotion and publicity of programming on access channels; an agreement to distribute a manual, e.g., "How to Use This Media," to all subscribers, which manual includes (a) an explanation of the various access channels, (b) instructions about how to gain access or time on the cable, (c) instructions about how to use half-inch VTR equipment, (d) information about services and opportunities provided by the local Office of Access Support, (e) a bibliography of books on the potential of cable and the problems of public policy related to this potential; an agreement to provide channel space for the three FCC required access channels in all cable systems owned and not just in the 100 largest markets. In every location where cable franchises exist or are being bargained for, these rights should be demanded. Cox-American will be second in size only to Teleprompter. Will they try harder?

Probably not. In an article written for the Bay Guardian by Thomas Brom and researched by Elliot Evers entitled "How Bay Area Cities Sold Out the Public's Airwaves," Brom says,

The major TV and radio stations in the Bay Area are already controlled by outside media conglomerates: no minority ownership at all. But with cable it gets worse. The selling out of cable franchises in fact has brought many more conglomerates to the Bay Area than there were before.

The Chronicle won out against four competitors and got a cable franchise in San Francisco from the San Francisco Supervisors, but in the six years since it fought the 21 year bargain for $2,500, Western TV Cable has never developed a cable system. San Francisco's other cable franchise went to Viacom International, a spin-off of the CBS empire, for a token payment of 5 percent of the gross receipts.

The best solution for cable TV, as for other utilities, lies in city ownership. This is the route taken by San Bruno which used profits from its water system to finance initial cable construction. Public ownership, of course, raises the danger of political censorship of free speech and it will be important when cities own systems that there are solid statutory provisions for free community access to several of the system's channels.

In San Francisco Roberto Esteves of the Public Library's Bay Area Reference Center is developing Video Task Force to gather the opinions of various groups and individuals and using these various opinions to try to influence City Hall to acknowledge its responsibility to the community need for open channels. Esteves has set up a cable workshop for this purpose, with the first program bringing together a representative of City Hall and a former cable company management executive who is now a cable consultant in a symposium, for all practitioners of video whatever their orientation. Esteves also hopes to convince the San Francisco Public Library that it should, as the center for public information, begin to build a library of tapes and a public production center with an orientation toward educational uses of video. In the librarians' journal published by the Bay Area Reference Center titled Synergy, Esteves has said,

Where does the library come into cable focus? Both as an educational institution and a clearinghouse of community information (it is, isn't it?), the library is in an excellent position to opt for free time on either the education or community access channel. Natroba County Library in Casper, Wyoming, has already demonstrated the success of video reference service and other libraries are beginning to experiment with inventive video programming to make cable TV the "Branch" of the future. What better way to have outreach programs than to reach into people's homes? The real difficulty is getting your city to award a franchise stipulating the free access channels. The library as a community information center must realize the tremendous importance of acting for the community now while cable casting is still in its infancy.

Allan Frederiksen of Santa Cruz has tried to impress his community and other communities in California with the same ideas. He is a veritable David against Goliath but it seems that a few small stones are not going to open up any public access in Santa Cruz or anywhere else that has already made a franchise agreement which excludes public access. In a letter to the Cable Goliath, Allan has said,
<table>
<thead>
<tr>
<th>The Conglomerate Franchisers</th>
<th>Bay Area Cable Systems</th>
<th>Corporate Background</th>
<th>Other Media Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Viacom International</strong></td>
<td></td>
<td></td>
<td>Former CBS subsidiary; largest cable owner in northern California</td>
</tr>
<tr>
<td></td>
<td>SF (21,000 subscribers), Sausalito, Tiburon, Mill Valley, Corte Madera, Ross, San Anselmo, San Rafael, Fairfax, Larkspur, Woodacre, Homestead Valley, Marinwood, Sausalito, Terra Linda, Petaluma, Crockett, Pinole, West Pittsburg, Pittsburg, Antioch, Dublin, Livermore, Pleasanton, SF (never developed), South SF, unincorporated areas of San Mateo County, San Mateo, Belmont, San Carlos, Redwood City, Concor, Clayton, Contra Costa County (with Newhall Land and Farming Co.)</td>
<td>2nd largest franchisee nationwide, 255,000 subscribers; major syndicator, CBS programming</td>
<td>SF Chronicle; 18th largest franchisee nationwide; KRON-TV; cable systems in Chico and Monterey</td>
</tr>
<tr>
<td><strong>Chronicle Publishing Company</strong></td>
<td></td>
<td></td>
<td>Chronicle owners involved with Pacific Lighting Corp., Allied Properties, Crocker Bank, PG&amp;E, FT&amp;T and 60,000 acres of California land</td>
</tr>
<tr>
<td><strong>Gulf and Western (Athena Communications)</strong></td>
<td></td>
<td></td>
<td>Ownership battle between Jack Kent Cooke with 16.5%, Howard Hughes with 5%</td>
</tr>
<tr>
<td><strong>Teleprompter</strong></td>
<td></td>
<td></td>
<td>Newspaper-based media conglomerate incorporated in Wisconsin (The Evening Telegram)</td>
</tr>
<tr>
<td><strong>Morgan Murphy Trust (The Evening Telegram)</strong></td>
<td></td>
<td></td>
<td>Division of RKO General, a wholly-owned subsidiary of General Tire and Rubber Co.; Video Independent Theatres</td>
</tr>
<tr>
<td><strong>Cablecom-General</strong></td>
<td></td>
<td></td>
<td>TC &amp; B is a major ad agency, 16th largest in broadcast billings</td>
</tr>
<tr>
<td><strong>Foote, Cone &amp; Belding Cablevision</strong></td>
<td></td>
<td></td>
<td>Owned by Livingston Oil Co., Tulsa, Okla.</td>
</tr>
<tr>
<td><strong>LVO Cable, Inc.</strong></td>
<td></td>
<td></td>
<td>Wholly-owned subsidiary of Kaufman and Broad, L.A.-based home construction company</td>
</tr>
<tr>
<td><strong>Nation Wide Cablevision</strong></td>
<td></td>
<td></td>
<td>Co-owns Vallejo system with Gibson Publications; owner of newspapers in Vallejo and Martinez</td>
</tr>
<tr>
<td><strong>Tele-Communications</strong></td>
<td></td>
<td></td>
<td>Denver-based multiple cable system owner</td>
</tr>
<tr>
<td><strong>American TV and Communications</strong></td>
<td></td>
<td></td>
<td>Based in Eugene, Ore.; recently acquired 40 cable systems from General Telephone and Electronics</td>
</tr>
<tr>
<td><strong>Storer Communications</strong></td>
<td></td>
<td></td>
<td>CATV subsidiary of Genral Electric</td>
</tr>
<tr>
<td><strong>Gill Industries</strong></td>
<td></td>
<td></td>
<td>Newspaper-based media conglomerate with headquarters in L.A.</td>
</tr>
<tr>
<td><strong>Carl M. Williams</strong></td>
<td></td>
<td></td>
<td>Headed by Allen T. Gilliland, owner of KNIV</td>
</tr>
<tr>
<td><strong>Liberty Television, Inc.</strong></td>
<td></td>
<td></td>
<td>Individual multiple cable system operator; investments in cable industry trade journals</td>
</tr>
<tr>
<td><strong>General Electric Cablevision</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If you have not read all these books, you should... because your “future” depends on it. . .

The View Over Atlantis by John Michell: Ballantine Books (0288-3-150).

Last and First Man Star Makers by Olaf Stapledon: Dover Publications (486-21962-3).
Foundation; Foundation and Empire; Second Foundation by Isaac Asimov: Avon (S 224).
The Book Of Mormon translated by Joseph Smith: Church of Jesus Christ of Latter-day Saints, Salt Lake City, Utah.

The Urantia Book: Urantia Publications (ask a book dealer for this).

Aku-Aku by Thor Heyerdahl: Pocket Books (Non Fiction GC 758/8).

Earth in Upheaval; Worlds in Collision by Immanuel Velikovsky: Dell Publishing Co. (9702 N.F.).
I, Robot by Isaac Asimov: Panther Science Fiction (025324).
Morals and Dogma of the Ancient and Accepted Scottish Rite of Freemasonry: published by that authority.
Being There by Jerzy Kosinski.

Secrets of the Great Pyramid by Tompkins.


Understanding Why You Are... by Rollin and Marsha Binza: The Communications Gap, 233 East 78 Street, New York NY 10021.

Art Forum: 667 Madison Avenue, New York NY 10021.

“Video Obscura” by Douglas Davis, April 1972.
San Francisco: 120 Green Street, San Francisco CA 94111.


Mass Communications by Ferry and Ashmore: Center for the Study of Democratic Institutions, The Fund for the Republic, Box 4068, Santa Barbara CA.


Art in America: 150 East 58 Street, New York NY 10022.

Vol. 69 No. 16, October 1969.

Vid News: 165 West 46 Street, New York NY 10036.


Cinema: 9667 Wilshire Boulevard, Beverly Hills CA 90212.

Vol. 6 No. 1, “The Cartridge Revolution.”

Mechanical Bride by Marshall McLuhan: Beacon Press, Boston MA.

Rand Studies for the Ford Foundation: Rand Corporation, Santa Monica CA 90406. “Cable TV” by Nat Feldman; “Future of Cable TV” by Leland Johnson.

Community Access Video: 465 Ninth Avenue, Santa Cruz CA 95060.


San Francisco Chronicle: Sept. 3, 1928, page one of the financial section.


Descent From The Stars, Man’s Cosmic Evolution: The Exploratorium Science Museum Lecture Series Program notes, and a schedule of television broadcast of lectures. The Exploratorium, Marina Boulevard & Lyon, San Francisco CA.


Historical Information on Television: Helen Fitzgerald, Public Relations Records, ITT, 320 Park Avenue, New York NY 10022.

Smithsonian Institution, Historical Information on Television: Elliot Sivowich, Electricity and Nuclear Energy, Smithsonian Institution, Jefferson Drive, 20560.

The Yellow Pages: Tape-recorders & Players—sound and video, prerecorded; Television Systems-Closed Circuit; Television Program Producers—cable companies, station reps, broadcasting, artists’ agencies.

Documentary Explorations by Roy Levin. Interview with M. Shambreg.

Cable T.V. by Price Wicklein: Office of Communication, United Church of Christ, 289 Park Avenue South, New York NY 10010.


Expanded Cinema by Gene Youngblood: Dutton Paperback Originals (D 263).

Videospace by Brice Howard: National Center for Experiments in Television, 288 7 Street, San Francisco CA 94103.

MUSIC ON L.P.

J. Krueger

Olivier Messian: Quartet For The End Of Time (Angel S-36587); Turangalila Symphony (RCA LSC-7051); Et Expeclo Resurrectionem Mortorum (Columbia MS-7356).

Gyorgy Ligeti: String Quartet (DDG S-2543-002), Stomu Yamasu’ta : Music of Henze, Takmitsu, and Maxwell Davis (L’Oiseau-Lyre DSLO-1).

Hans Werner Henze: Double Concerto for Harp and Oboe—Fantasia-Sonata (DDG 139-396); Five Symphonies (DDG 2707-029).

Alban Berg: Three Pieces for Orchestra (Columbia MS 7179).

Andre Jolinet: Suite for Flute and Percussion (Erato STU 36587); Turangalila Symphony (RCA LSC-7051); Et Expecto Resurrectionem Mortuorum (Columbia MS-7356).

Hans Werner Henze: Double Concerto for Harp and Oboe—Fantasia-Sonata (DDG 139-396); Five Symphonies (DDG 2707-029).

Alban Berg: Three Pieces for Orchestra (Columbia MS 7179).


Anton Webern: Five Movements for String Quartet.

Arnold Schoenberg: Complete Music for Solo Piano, Glenn Gould (Columbia MS 7098).
Please enter my subscription for volume two of Radical Software to begin in October of 1972. Enclosed is $12.50 for all nine issues (a $5.05 savings since single issues will sell for $1.95).

NAME
ADDRESS
CITY STATE ZIP


Please send me the following back issues of Radical Software:

1. sets of issues 1-4 in a binder (@ $10.95) Enclosed is $10.95
2. copies of issue one (@ $3.00) Enclosed is $3.00
3. copies of issue two (@ $3.00) Enclosed is $3.00
4. copies of issue three (@ $3.00) Enclosed is $3.00
5. copies of issue four (@ $3.00) Enclosed is $3.00
6. copies of issue five (@ $3.00) Enclosed is $3.00
7. copies of Guerrilla Television (@ $3.95) Enclosed is $3.95

NAME
ADDRESS
CITY STATE ZIP
POSTSCRIPT

In his forward to the I Ching, C. G. Jung inquires of the book, asking its judgement about its present situation. Following his example I have asked the Ching for its judgement of Video City, and the Ching has replied:

TUI/TUI, hexagram 58—The Joyous Lake

Thus the superior man joins with his friends for discussion and practice. . . . Knowledge should be a refreshing and vitalizing force. It becomes so only through stimulating intercourse with congenial friends with whom one holds discussion and practices application of the truths of life. When the hearts of men are won by friendliness they are led to take all hardships upon themselves willingly, so great is the power of joy over men.

Video City has been made possible by: Tom Martin, Jeff Bower, Tom DeWitt, Lee and Mary Myers, Jack and Pamela Byars, Lois Stopple, Dan Moriarty, Gary Petersen, Max Crosley, Philo Farnsworth, I, II, & III, Henra Howard, Connie Beeson, VFA, Kay Harris, George Bailey, Ed Hearsh, Marty Rabkin, Tom Tadlock, Eric Seigal, Howard Wise, Ann and Larry Halprin, Henry L. Kampheofner, John Krueger, Stephen Beck, Don Hallock, Ann Turner, Herb Zettl, Phil McKanna, Mark Parode, Erni Burden, Gerard Van der Luen, Harriet Ainsworth, Francis Coelho, Peter Berg, L. Sears, A. Ginsberg, Bill Harris, Mary Canary, Satty, William Roarty, William Gwin, George Gray, Thomas Albright, TOAN, Sue Fox, Johnny Videotape, David Teske, Bob and Dorothy Sibley, Nancy Kleban, Michael Meyer, and many many others who contributed time and information in the spirit of friendliness.

In producing this issue we spent $1250 for 64 pages — we edited nearly 75,000 words into a 30,000 word text, and line screened 50 photos and 20 drawings or special type reversals. All this took 10 weeks during which we sustained ourselves with income from other work. It has been, then, a labor of love.

Without the help of ABRACADABRA we could never have done it.

Some of the material contained herein is copyrighted ©, some is not ©.

If you wish to communicate with us directly about Video City, write to us at 47 Clarion Alley, San Francisco, California 94110.

Phillip Gordon Gietzen
Editor