PROCESS

With this issue of *Radical Software* we are initiating a videotape distribution and exchange plan which we hope will be the genesis of a true alternate television network (see page **11**).

Others have detailed the need for whole alternate economic support systems, but they have neglected media. Our feeling is that unless there's an alternate media as well, not just alternate content played over the existing structures, a lot of very positive energy may end up as just content for the existing context. Our contribution, we hope, will be in suggesting some (but not all) directions an information economy might take.

The upshot of all this is that *Radical Software* may be nearing its end as a print publication. Granted, the state-of-the-art of print (in terms of portability, random access and cost) is still more practical than video, but it's a different type of information. And after a few more issues we feel we'll have said all we want to say about TV. Then we'll just want to show it.

So we are only committing ourselves through *Radical Software* number six (Winter 1971). By then we will have either decided to take *Radical Software* into other areas which must be restructured as high access tools (e.g. computers, biological sciences—IF YOU'VE GOT FEEDBACK ABOUT THIS SEND IT IN NOW), or transfer it completely to videotape.

Meanwhile, however, a group from Canada (the organizers of Free Video in Montreal, see FEEDBACK) has asked if they can do the next issue themselves.

There is a good chance this will happen as Canada is far ahead of America in decentralized media and a scan on a different culture would be a good thing. Their knowledge would trend towards complimenting ours, rather than overlapping.

Also, while we don't see *Radical Software* as a high access support system, neither do we see it as an exclusive one just for us. In other words, if the structure we have set up (publishing, distribution, etc.) can aid others then we are open to different inputs. Letting others do the next *Radical Software* would also give us time to concentrate our full energies on getting the alternate network underway.

(X)

With the first issue of *Radical Software* we initiated the above symbol: a xerox mark. It was meant as the antithesis of copyright, i.e. do copy.
Our logic was that if you've paid for a copy of *Radical Software* the information becomes your tool for your own uses. Our economic safeguard was that it would just be cheaper to buy more *Radical Softwares* than to reprint huge sections for widespread redistribution.

Since issue one we've seen excerpts from *Radical Software* offset in a number of different places, all of which were themselves offering one kind or another of survival information.

However, Dr. Gregory Bateson, whose article appears on page three, wrote to us to say that while he had no objection to his piece running under a xerox mark, that would ironically leave him open to being ripped-off by copyright laws.

Specifically, Dr. Bateson pointed out that if he didn't copyright his article when it appeared in print, someone else could. And then they could paraphrase it, claim authorship and even royalties. Because there is no legal precedent for a xerox-right, we have copyrighted Dr. Bateson's writing.

However, the offer still stands—with added protection. Anything you see in this issue which does not have a specific copyright is covered by the following statement:
Xerox 1971. No rights reserved for non-commercial or personal use. All other applications or alterations only with author's permission.

$ $ $

We have raised our price from $1.25 to $1.50 a copy. The following will tell you why:

Issue Number Three Expenses

Veloxes	$ 55.00
Art Supplies	$ 150.00
Photostats	$ 224.00
Typesetting	$ 700.00
Printing (10,000 copies)	$2741.00
TOTAL PRODUTION COSTS OF ISSUE NUMBER THREE	$3870.00

This means that the material costs for each copy are @38.7¢. BUT THAT DOESN'T COVER ANY SALARIES OR OVERHEAD.

The labor required has been once one person fulltime for three months, another fulltime for two months, one parttime for two months; and finally four people fulltime for a month. That's an aggregate total of 30 man-week's of work.

During that time we've had no money for salaries. Our loft overhead has been covered by gigs at colleges. Our printing expenses for the previous issues are coming back from sales.

Since then we've received a $35,000 grant from the New York State Council on the Arts. It covers thirty weeks and is broken down: $24,000 for salaries (eight people) and $6,000 for production expenses of three issues of *Radical Software*, i.e. $2,000 an issue. (The salaries above are for more than *Radical Software* and the additional $5000 is for videotape and administrative expenses) e.g. accounting).

So that means we must recoup $1870 on production expenses plus another $500 or so per month for *Radical Software*'s share of our (Raindance's) loft overhead and maintenance (about 60%). Figuring one issue every three months, that's another $1500.

In other words, our total expenses, not counting salaries, were approximately $5370 for this issue. With the grant to defray costs that drops to $3370.

But *Radical Software* will have been defeated if it must rely on charity (not to say we're not thankful for the grant, we are) as ultimately anything more than seed money. Only if it's self-sustaining will it have succeeded as a total information resource.

So we figure we can make back the following on this issue:
Of this run about a third will be distributed by us (we have 750 subscribers, the rest for single mail orders). Our mailing and packaging expenses run 26¢ a copy (22¢ postage, 4¢ envelope). Thus, out of the $1.50 selling price we net @85.3¢ ($1.50 minus 38.7¢ plus 26¢, again not counting salaries or overhead.

The rest of our run, assuming it's all sold, will be consumed through distributors who get 50% off or pay @75¢ a copy.

That's a total of $5265 net to us from both second party and our own distribution before salary or expenses are taken away.

It's hard to say what salaries are because we don't think that way. But figure from the above listed personnel at $100 a week (the structure listed in the grant) and you get $3000 for this issue. Thus, if conditions are optimal we can net approximately $3265 for this issue. With the grant that comes to $5265 approximately.

However, we have a deficit covering nine months for the last two issues during which time only material expenses were returned to *Radical Software*, no overhead or salaries. During that time the money to pay for *Radical Software*'s process was essentially put up from other Raindance sources. As we didn't really consider salaries then, just figuring $500 a month overhead that equals $500 times nine or $4500. Subtract that from $5265 and you get, at optimal conditions, $765 total to cover back pay.

So, in short, assuming grant money and no demands for back salaries we're just about breaking even if this issue goes well.

RADICAL SOFTWARE

Editors: Beryl Korot and Michael Shamberg
Publishers: Michael Shamberg and Ira Schneider
Contributing Editors: Megan Williams, Louis Jaffe, Ira Schneider, and Dean and Dudley Evenson
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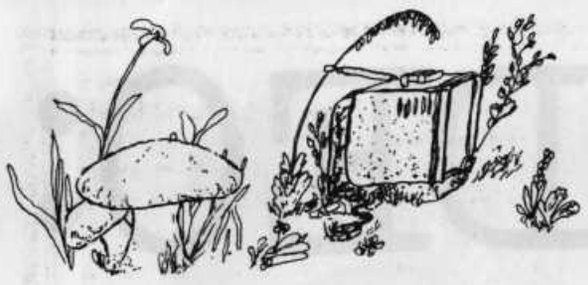
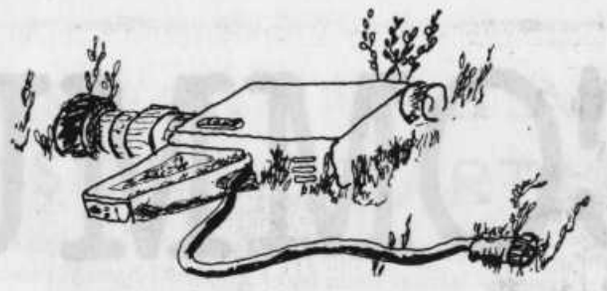
GRASS ROOTS

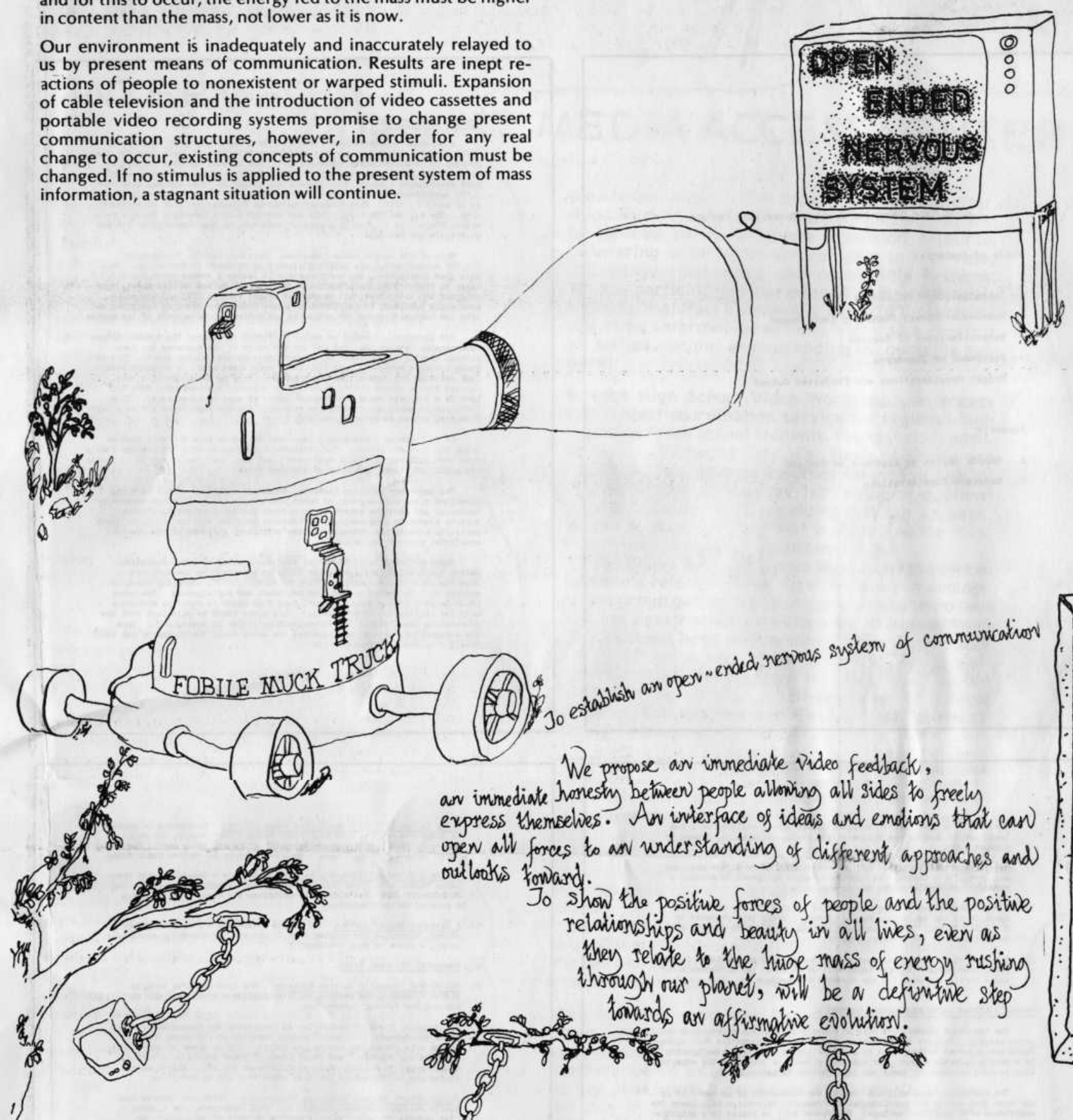




The present forms of communication have proven inadequate in relating individuals to each other. We are encumbered with mass communication: one million people talking to one million people. Personal intimacy is non-existent even on the levels of small groups relating to each other. Mass communication is also lacking in depth, thoroughness, quality, and integrity whether because of the monopoly of a few giant networks over the airwaves, or because television has been thought of only as a medium for marketing merchandise. Whatever the cause, if man is to live on, evolution must take place and it will happen only with our conscious effort. Evolution is dependent primarily on environmental pressures changing behavior patterns and eventually affecting the genetic structure of life, and for this to occur, the energy fed to the mass must be higher in content than the mass, not lower as it is now.

Our environment is inadequately and inaccurately relayed to us by present means of communication. Results are inept reactions of people to nonexistent or warped stimuli. Expansion of cable television and the introduction of video cassettes and portable video recording systems promise to change present communication structures, however, in order for any real change to occur, existing concepts of communication must be changed. If no stimulus is applied to the present system of mass information, a stagnant situation will continue.

And so? We want to hit the road not just because we like to travel, but because at the moment it's the easiest way to reach a lot of people, and it is people we are interested in. We want to catch them in the action of their daily lives, record them on our magic tape. We want to introduce people to eachother and we want to saturate them with information, information about human beings, "fellow Americans." Seize the time, capture the situation! History in the making, life recorded, but not just the life we read about in our mass media, or see on our network television stations. We believe there is more to life than war, tragedy, death. We want to learn much more about our world, to see what is really happening in our country, the glad, the bad, the good and the sad, much more than anyone has ever shown us.



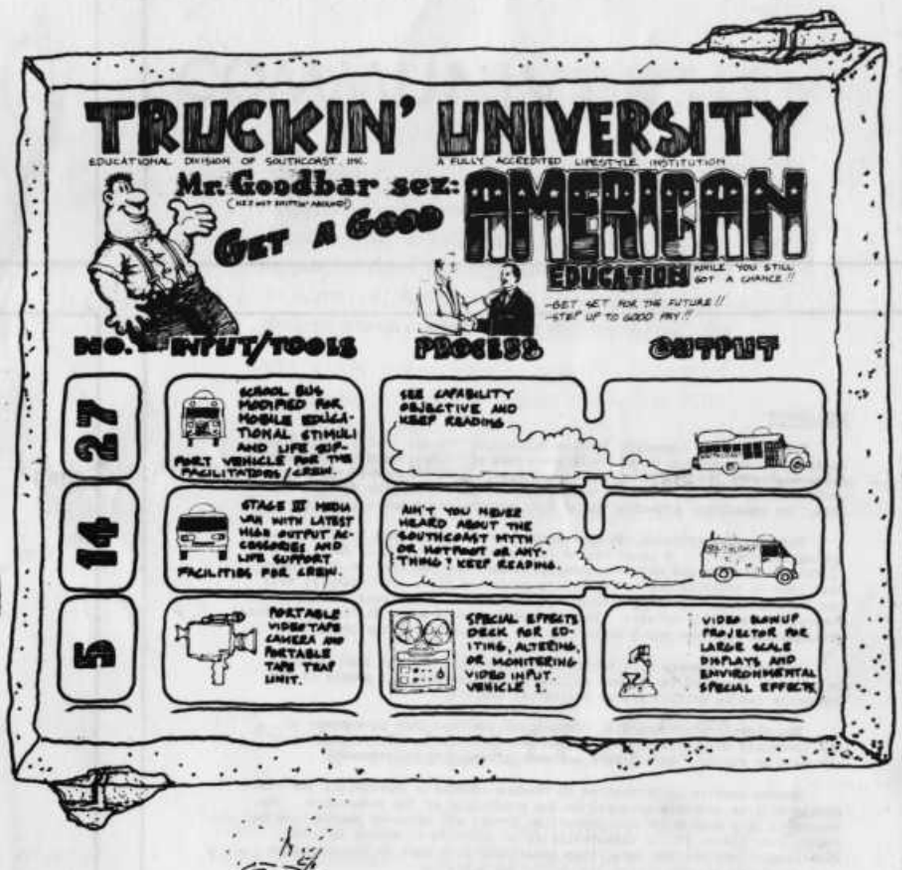
To establish an open-ended nervous system of communication

We propose an immediate video feedback, an immediate honesty between people allowing all sides to freely express themselves. An interface of ideas and emotions that can open all forces to an understanding of different approaches and outlooks toward.

To show the positive forces of people and the positive relationships and beauty in all lives, even as they relate to the huge mass of energy rushing through our planet, will be a definitive step towards an affirmative evolution.

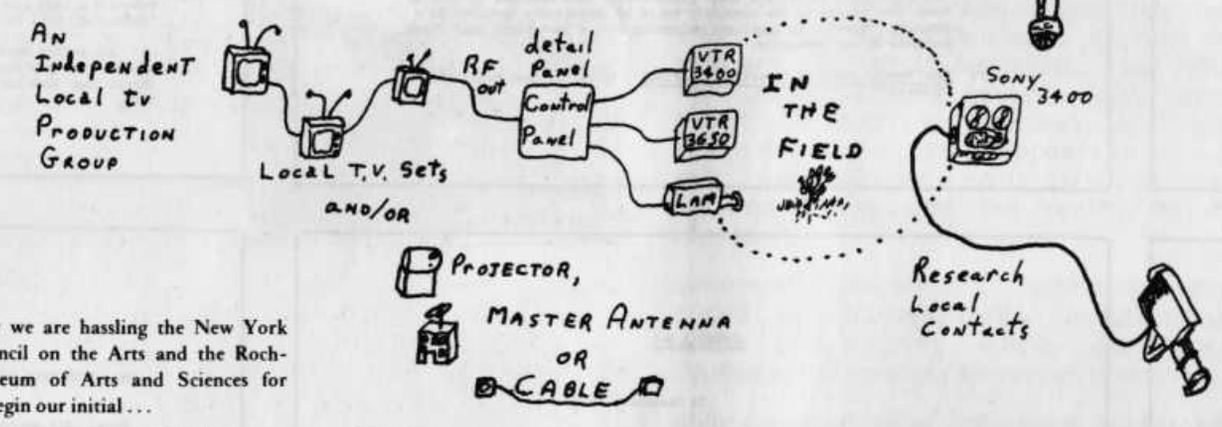
Once our mobile video bus is on the road, we will move to establish contact with local groups, throughout our travels, and work with them to set up video theaters where we can show the tapes we have made as well as tapes of other artists working in the video field. Universities, museums, churches, and community organizations will serve as initial inroads to the community, but as interest increases, the opportunities are limitless. At present there are already springing up all over the country, small groups of people who are working with 1/2 inch portable video recording systems, many of whom feel as disillusioned as we do with present means of communication, and who are also interested in finding an alternative. They too, want some national network of communication. Video theaters and tape exchanges are being proposed as one means to this end. In addition to this new approach we will work within the already established system of cable television and work to expand programming possibilities, hopefully to encourage a new kind of public programming.

And then—we want to turn around and show it to you, show it on your own television screen via cable tv or video cassette, ifpossible. And if that is difficult, you can see it on our tv because we intend to give shows. We want America to see itself as it really is, via tv. But not just television as an isolated medium. We want to create an environment with television as a focus, complemented by light and sound because we're interested in those things too. Music, beautiful images, abstract patterns of light, abstract patterns of sound, and multi-channel tv. Multi-media and multi-channel. Several television screens showing us several secnes, co-ordinated, complementary. An environment where you can relax, enjoy, be moved and be entertained. Where many people can participate and possibly even see a snatch of life that is their own.



MEDIA BUS

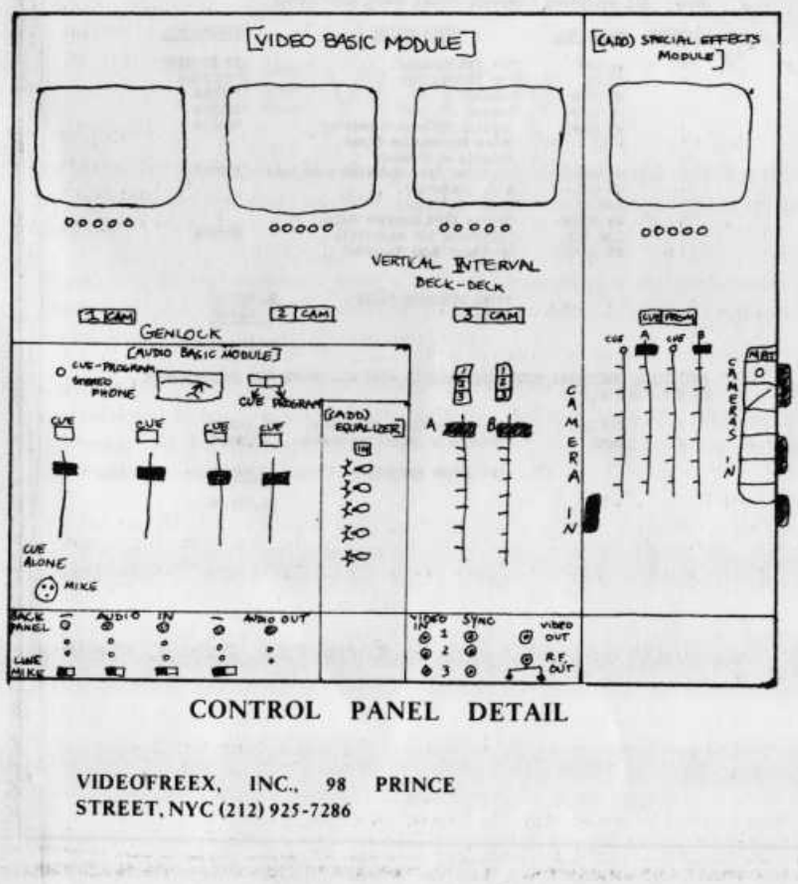
IS AN ATTEMPT AT ORGANIC VIDEO NETWORK EMERGENCE



VIDEO FREEX

WE TRIP OUT TO THE PLACE IN A VOLKSWAGEN BUS CARRYING A FEW MODULES OF 1/2" EQUIPMENT

Right now we are hassling the New York State Council on the Arts and the Rochester Museum of Arts and Sciences for Bread to begin our initial . . .



CONTROL PANEL DETAIL

Search-Inform. Receive Probes from the State: Maps; Facts; Contacts; Feedback Sheets through the Mail; Collect: Book Magazine, Radio, Video Emanations; and Telephone. In a word Research. Organize Flow for Efficient Information Retrieval.

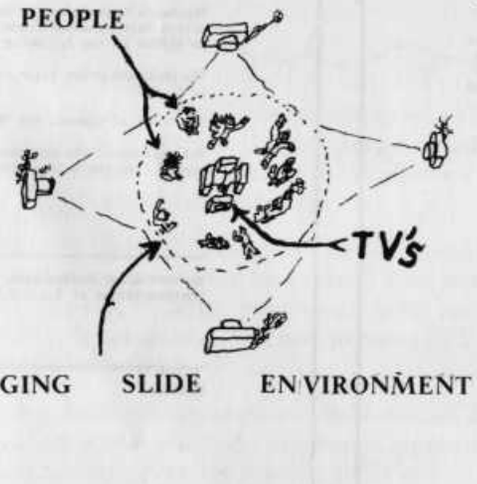
We want to plug the people into:

other people

local hardware

our tape library (cultural data bank)

a local distribution system (cable master antennae, etc.)



CHANGING SLIDE ENVIRONMENT

Pablo will work with us on interfacing slides and video.

Their experience with the older and more widespread slide and still photography medium will help broaden our research. A lot of the detail still has to be worked out (how to reach the community energy people). A few blunders are probably in front of us.

Tape will be produced and played back as soon as physically possible. Our Goal is to try to create a consciousness in the community that will leave them getting their own thing together.

CRASH PAD

VIDEOFREEX, INC., 98 PRINCE STREET, NYC (212) 925-7286

COMMUNITY VIDEO: A WORKING MODEL

SANTA CRUZ COMMUNITY SERVICE TELEVISION PROJECT

Conceived by:

Johnny Videotape and Friends

For further information contact:

Herbert Allan Frederiksen
465 Ninth Ave., Santa Cruz
408 - 476 - 0657

Santa Cruz Community Service Television Project

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-- Methods of Direct Community Involvement
-- Generalizations of Content
-- Statement of Standards
-- Budget Considerations and Projected Output

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A. Sample Script of Approach to Content
B. Hardware Considerations

GENERAL INTRODUCTION

A non-profit corporation, which will be a legal entity by January 15, 1971, is being created to produce television videotape in Santa Cruz for the purpose of intra-community communication. The impetus for this project is generated by pronouncements by the Federal Communications Commission which have established a policy that compels all community cable systems with over 3,500 subscribers to begin their own programming of local community origination as of April 1, 1971. This programming may be financed by local paid advertising. The goal of the F.C.C. rule and the Santa Cruz Community Service Television Project is to develop a greater awareness by the community of its own potentials and problems.

Most of the larger cable companies, including Pacific Teleprompter (17,000 subscribers,) are building studios in response to the ruling. This is a good development, but unfortunately it leaves a vacuum which S.C.C.S.T.P. hopes to fill. A studio situation is a form well suited to talk shows, news programs and interviews, but because of weight (140 Lb VTR) and equipment complexity problems, it is difficult to get videotape recording equipment out into the community where the action is and action is the essence of the medium.

For instance, it would be rather difficult to protray the dynamic interrelationship between the land and sea ecologies of the Monterey Bay Area without showing the physical environment that we are talking about. This is where portable equipment pays for itself many times over. A 21-pound videotape recorder and camera (battery operated) could be taken out in a boat, carried down a narrow cliff, basically go wherever the cameraman does and provide a complete sound and picture record of what he experienced. This porta-pak is small and unobtrusive enough to capture experience not as a performance, but as an occuring reality.

It is becoming increasingly important for us to know not only what we think but also what we do. For instance, a program on what the average family does that pollutes the local environment and what that family can do to reduce its pollution output, would be of enormous value.

The necessary hardware (cameras, videotape recorders, etc.) is being assembled along with a group of Santa Cruz people who possess the necessary technical and creative expertise to produce and teach others to produce quality community programming. A Videotape workshop will be set up by these people to educate the community in the techniques and some of the possible beneficial uses of the medium.

Budgetary needs will be met by paid advertising of local businesses during S.C.C.S.T.P. air-time which would be purchased by the corporation from the local cable company. Prior to April 1, 1971, community financial support will be needed to purchase equipment and pay expenses. The money could be paid into a business trust fund from which it could be withdrawn only for certain specified reasons. This money would be paid back once the corporation was financially self-sustaining (refer to Appendix B.) Once the equipment is secured and expenses are being paid, the community can avail itself completely of this service.

PHILOSOPHY

The Santa Cruz Community Service Television Project (S.C.C.S.T.P.) has as its goal the opening up of whole new areas of intra-community communications utilizing the medium of T.V. videotapes. Once the format of T.V. content moves away from network stereotypes of what a program should look like, the humanistic potentiality of T.V. experiences becomes limitless.

Videotape experiences can be designed to rise above the level of stereotyping and rhetoric. A point can be reached where people will dwell on similarities of toals and mutual interests rather than dwelling on differences that lead to polarization and defending points of view. For example, both the left and right of the political spectrum agree on the need for local control of community affairs. This is common ground where differing political philosophies can come together to work for improvement of the community.

Ecological concern cuts across all boundaries. Rather than standing on opposite sides of the street yelling at one another, all people in the community can be unified around ecological activity.

The video productions will communicate the idea that as members of the community we all have to deal with this given situation regardless of our role or status. We all have a stake in community improvement.

Beyond passive participation in viewing community television, the community will be actively involved in the production of the videotapes. The beauty of this medium is that production brings all types of people together - young, old, black, etc. - cooperating in an activity of mutual interest. When people complete the tape, they invariably look back on the communion that developed between themselves during the activity.

When people work toward the goal of communicating a problem or situation to others, they learn more about the positive and negative aspects of the community. In order to communicate the reality, one examines more critically and develops greater awareness.

Community re-appraised by members of the community can be a positive, contructive impetus for social change. The individuals in the community are opened up to what they can do personally and immediately to improve the community.

METHODS OF DIRECT COMMUNITY INVOLVEMENT IN SCCSTP

1) A Media and T.V. Production Workshop will be created by the corporation open to the entire community. The workshop participants will be taught the hardware and software knowledge necessary to create their own videotape production. People from various service organizations, for example, could then produce their own message to be shown on the cable station.

   There are many myths about T.V. production that will be overcome in this workshop. To produce a quality tape, one does not require a B.A. in electronics, ten years of production experience, or expensive

hardware. We have taught 7th grade public school children in a few hours how to operate the equipment and produce interesting pieces of communication.

2) An equipment access center will be established where anyone can come and rent, for a nominal fee, portable taping equipment to produce a message they wish aired to the community.

3) A tape library and viewing area will be created for the public use possible at the Santa Cruz Public Library. Every tape produced by S.C.C.S.T.P. will be available and indexed. A playback machine will be available to the interested party.

4) Information on the coming week's programming will be published in the local news media. All new tapes will be shown at two different airtimes during the week for the viewer's convenience.

GENERALIZATIONS ABOUT PROGRAMMING CONTENT

The videotape productions will as closely as possible approximate the given reality. Network documentaries rely heavily on narration that spoonfeeds pre-digested abstractions of what the viewer should be experiencing in a poorly pedantic manner. We want our viewers to draw from the experience what is most relevant to their own experiential background.

The community tapes will aim towards the alienation of no one. It is our hope that anyone who participates in community television will leave the experience with positive feelings. The viewer will be placed in a situation where he can learn about the social, cultural, political and human aspects of the community of which he is a part.

Content will be no problem because every member of the community has some message, service or expertise that he would like to share with others. In very short order the community will be contacting the production people with ideas and requests.

There are some content ideas, however, that have particular interest to the production team and give insight into what can be done:

a) Ecology - A videotape ecological history of the Monterey Bay Area. The program would visualize changes caused by man altering the bay environment. The bay s present state and projected future would also be demonstrated.

b) The Santa Cruz Migration - New people to the area would be given an opportunity to share their experiences of how they have adjusted. They might wish to relieve their frustrations as a newcomer by voicing them. New people to the community would be immediately involved in a community project. An excellent welcoming device that might shed fresh insights on our community.

c) Tape Weekly Board of Supervisors Meeting - Renew the town meeting concept.

d) A Day in the Life of a Santa Cruz Peace Officer - No editing to package an image - a natural flow with audio being street sounds, car radio, dialogue, etc., employing small battery operated taping unit. The viewer can begin to empathize with the policeman as another human being.

e) Create a Volunteer Community Renovation Service - Advertise with time-lapse visual of a house changing in appearance before your eyes. The Huckelberry Finn "let's all help whitewash the fence" feeling could be created in the community.

f) A Disaster Relief Service - If a fire occurs and a family is on the street, visualize the problem on T.V. and ask for community assistance (e.g., a place to stay overnight.)

g) Community Cultural Notes.

h) Two-Minute Community Service Messages - The spot would be totally visual - showing the service the organization performs and who to contact for further information.

   For example, Goodwill Industries Ad (employing the technique of time-lapse photography.) Goodwill people removing an old stove from the garage of a person who has no use for it. Cut to scene of stove being repaired and renewed. And final scene of yound couple on a limited budget happy to fulfill their cooking needs for $25. Visual at end states who to contact if you have items that can be re-cycled.

i) Public School Student Videotape Productions - These can improve community relations between schools and local taxpayers. We already have several secondary schools working on this project under our guidance. The tapes will also provide insight into how the students view their school environment. This approach is better than protest marches and building take-overs.

j) Hundreds of Humanitarian Organizations wanting to inform the rest of the community of their role to gain increased support and serve more people.

k) Re-Cycling - People are becoming more aware of the fact that things can be shared - a communal activity. Visualize church-related junk shops, used book stores, newspaper collections, garage sales, etc., pointing out that much more re-cycling can occur if people know how to go about it.

STATEMENT OF STANDARDS

The Santa Cruz Community Service Television Project will strive to maintain a high level of integrity and honesty. No image or information "packaging" will occur and we will aim at alienating no one.

All people appearing on videotape will be shown the tape on which they appear. If they find it objectionable, their part will be destroyed. Should they view their role with favor, they will be asked to sign a release form.

Hopefully, everyone who participates in S.C.C.S.T.P. willleave the esperience with good feelings. Instead of finger-pointing and name-calling, we will get down to the task of improving our community.

Advertisers will be given certain pre-conditions of good taste under which they must operate if they sponsor S.C.C.S.T.P. programming.

Our basic and most important interest is to help the people of the Santa Cruz community.

PRODUCTION BUDGET

The following budget fives a breakdown of the costs involved in producing a programming output of six individual half-hour community videotapes a week. The production crew will also devote one and a half hours per week to the media and T.V. workshop open to people of the community. One recognizes the relative low cost of the production of community input as compared to average local T.V. station cost. The average in-station production is $1,000 per minute of finished tapes.

Weekly Budget:

Production Crew Salaries	$1,000
Expenses (gasoline, etc.)	250
Magnetic Tape (consumed)	160
	$1,410 per week
Cost to create library viewing center (hardware)	$800
Cost to create equipment access center (hardware)	$1,300

Note: Hourly cost of cable television air-time at present unknown.

APPENDIX B-1

22 December, 1970

EQUIPMENT PURCHASE AGREEMENT BETWEEN NATIONAL VIDEO SYSTEMS AND THE SANTA CRUZ COMMUNITY SERVICE TELEVISION PROJECT

The Santa Cruz Community Service Television Project, through its representative Herbert Allan Frederiksen, agrees to purchase the videotaping hardware as listed on the following page of this agreement.

The purchase price to be paid by the Santa Cruz Community Television Project is $2,993.

The terms of payment are 10% down ($299) paid this day, 22 December, 1970.

The balance of the purchase price ($2,694) will be paid within a 60-day period from the date of this agreement.

Herbert Allan Frederiksen,
Representative of S.C.C.S.T.P.

Authorized agent for National
Video Systems, Inc.

WITNESS

APPENDIX B-2

RE: VIDEOTAPE HARDWARE BEING PURCHASED FROM NATIONAL VIDEO SYSTEMS, INC.

(Note: All equipment Panasonic except where specified.)

QUANTITY	MODEL NO.	DESCRIPTION	SERIAL NO.
1	an 69V	19" VTR Monitor	FX 0210059
1	TR 20	13" TV Monitor	686221h3
1	WV 350P	Camera	11838E
1	WV 220P	Camera	12489E
1	WV 600P	Special Effects Generator	10667B
1	M 67	Shure Microphone Mixer	
2		Tripods with Heads	
1	Marshal	15-75 mm rear-operated zoom lens	230720
1	NV u75	R.F. Converter	
1	NVB 31	Video Amplifier	
1	WV 7063P	Triple CCTV Monitor Unit	
1	LQM 10A	Colortran 10" mini-lite	B13216
1	NV 3020	½" Video Tape Recorder	
		TOTAL PURCHASE PRICE:	$2,850.00
		TAX:	143.00
			$2,993.00

ADDITIONAL EQUIPMENT NEEDS NECESSARY TO MEET ALL PRODUCTION REQUIREMENTS OF S.C.C.S.T.P.:

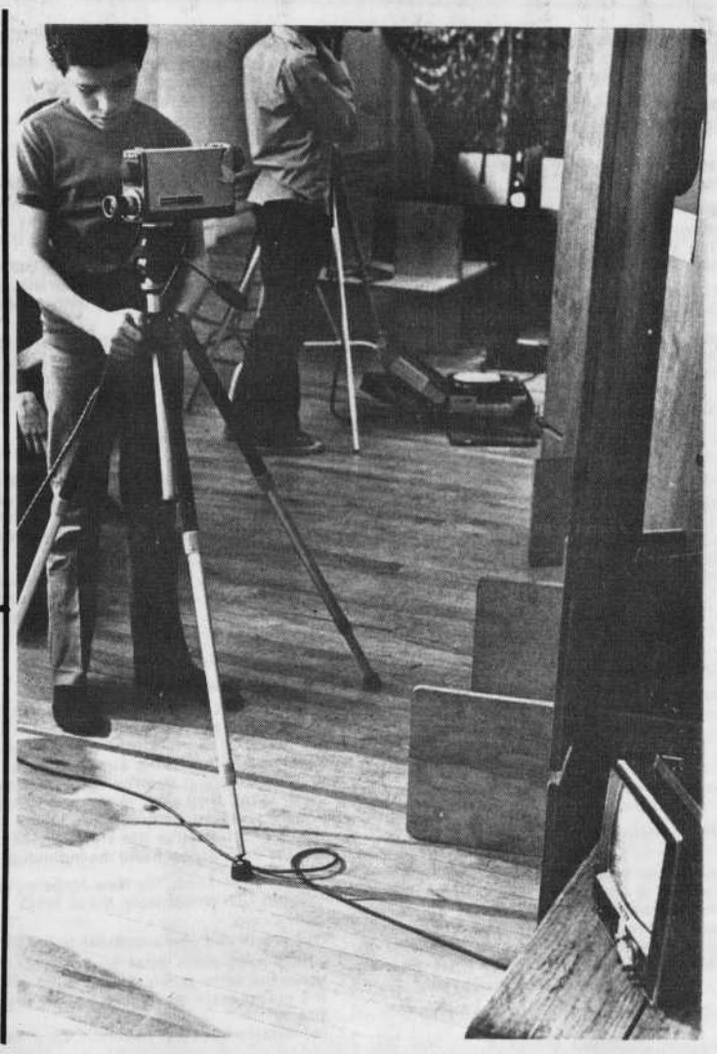
1	940-H I	Monochrome Video Processor	$1,390.00
2	Sony	Portable ½" Video Recorders	2,400.00
		PLUS ABOVE EQUIPMENT	2,993.00
			$6,783.00

clinton program

by Emanuel Jarogene

I am in the Clinton Program. It is a special and new program. We pick our own courses and every afternoon we go out. One afternoon course I have is a film workshop. We learn about video cameras. First they taught us how to use these cameras and then we started making our own shows and films. I've had the course for a half a year now and I enjoy it a lot. I will keep taking this course as long as they have it. It's just like a taperecorder. You tape it; then look at it. I have this course every week on Tuesdays. I've learned a lot in these six months and I hope to learn more. Later on in life it might help me to get a good job or make up shows or even good movies that'll be on television. I can say I'm learning a lot from this course cause I am. I even get a lot of fun out of this. So far the film workshop class has made a lot of shows and films and interviews with people outside. We have a lot of fun in this course. After we make our movies or shows we get to look at them on television (closed-circuit).

Clinton Project : Kids and Video



***If there's not enough equipment to go around, especially portables, it's hard to keep interest high. You can usually send out a crew of three per Porta-Pak (cameraman, sound man, and someone to hold the record deck) and give each one someone something to do. By that we mean that there has to be some piece of equipment for each one to hold so they feel part of something.**

Inside, the group usually breaks down into kids who want to work the equipment, those who want to perform, and hangers on. Some kids are timid about being taped and you shouldn't force them on camera. We found that even the kids who wanted to be taped most often became very reserved in watching themselves in playback.

***Don't build up a hardware mystique. The first day one kid ask us how much a Porta-Pak costs ($1,495) and then wanted to know "why are you letting us kids use it" because he thought it was so expensive. In that situation, just plunk it into the kid's hands and let him start shooting. You've got to find a balance between having a kid respect equipment and not being awed by its cost.**

Also try and minimize the difficulty of using the hardware, mainly because it's very easy to use. Instead of demand that kids circle around the equipment and get checked out on it as if it were an airplane or something, let them at it right away. They usually want to know how it works to solve a problem, not in anticipation of one. And that's a learning mode.

***Finally, don't lay a broadcast TV trip on them. Most of what you and they see on TV is behavior artificially conditioned by money and studio biases. While our kids often imitated TV (e.g. they did a news show) they quickly broke through its context with their own spontaneity.**

Moreover, the Porta-Pak can go anywhere so copying studio behavior is superfluous. If you don't have portable equipment you can still work with kids, of course, but in that mode it becomes more of a control system for an adult authority figure. Everyone keeps telling us about video equipment locked in school closets because teachers are afraid to use it.

Especially avoid scripts. Scripts are writing, TV is a visual or oral medium. What's the point of forcing assumed behavior when kids can reinforce their own spontaneous modes? The only pre-written stuff we sued was done by the kids themselves and they soon got out of that too.

Last fall we got a call from Phil Yenawine in the high school department of the Metropolitan Museum of Art. He was helping fund a filmmaking class and heard we were loaning out video equipment. (We were. But we aren't now because we kept getting ripped off). Could he use videotape to teach film?

Of course we said no, film and video are two different things, why didn't he just underwrite a tape course? Which he very graciously did. So for the past five months about a dozen junior high school kids have been coming to our loft one afternoon a week to learn and play with video. The piece here by Emanuel Jarogene tells what went on (after we asked him to write it).

We talk a lot about how unique video is and here one of our best students keeps calling it film. While the kids really loved doing video, it's obvious we weren't as effective as we'd hoped. So all we can do is lay out what went right and wrong and pass it on. There's just not too much information around about kids and video.

There were usually four of us to help the kids. Two teachers and two of us from Raindance. Except for yelling at them not to step on the equipment now and then, and telling them how to work it, we let them do what they wanted.

The first few weeks the kids went out on the streets and shot interviews. Then when the weather turned cold they stayed inside and acted out scripts that were written or sketched out, using props they'd bought. All of that was on their own initiative. Some of the resulting tape is very strong in its way. (We will exchange a one-hour edit for some of your tape. See Distribution section).

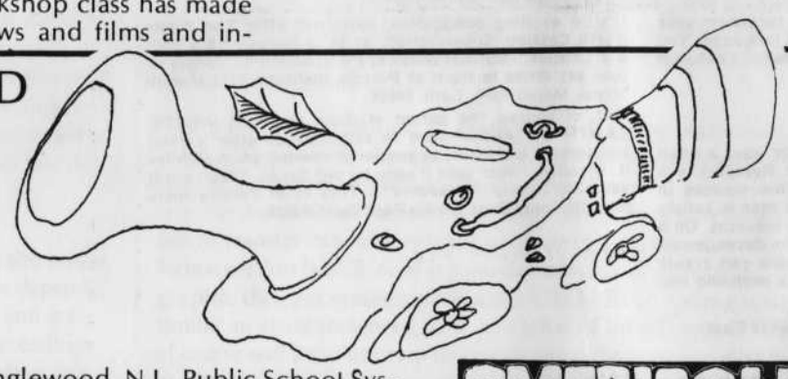
A few of the kids, like Emanuel, really got into making demands on the equipment's capabilities. They even asked to come on the weekends, when school was out, to keep trying out ideas. (We were only able to let them do that once).

While they also learned editing, our major failure was that none of them wanted to, or did, put together a finished piece at the end of the course. Of course, that may be our bias. Just as our being disappointed by our inability to get the kids to feedback verbally on their experience is probably more a reflection on our way of doing video instead of theirs.

What we can pass on from our experience is this:

INFORMATION OFFSPRING AND THE REGENERATIVE CYCLE: Video tape as a tool in restructuring the Public School System.

by Douglas White



An interesting experiment has just been completed in the Englewood, N.J., Public School System involving the collaboration of architects and videotapsters. The architects arranged for junior high students to construct an environment which involved many radical changes in the concept of public education. However, only two schools in Englewood were involved. The videotapsters were responsible for taping this event which has far reaching implications but involved very few people, and creating an impact on the culture at large.

The central issue was once you have created change on a small scale how do you escalate that change so that it effects the whole society? The answer lies in the fact that Amerika is an electronic culture. And so the experiment must be transferred into electronic information or in this case video tape. It is then subject to the principle of *Information Offspring and the Regenerative Cycle*. This means that once an event has produced electronic information it can then be broadly disseminated through our electronic networks. As a result of this the event is then capable of happening again and again all over the country.

The critical point is that the people who create the information offspring have a great deal of responsibility for they can manipulate the information so that it may not cause a regenerative cycle. The problem today is that control of the nature of information offspring and of the electronic networks through which it must travel is monopolized by a few powerful people. (To bring about change in Amerika we have to short circuit this existing network and create a free electronic cultural network.)

The following describes the Englewood experiment and the nature of information offspring that must be produced to create a regenerative cycle on a national level.

Not many people will argue with you these days when you say that children learn best by doing. For when children are totally involved in a process then learning becomes a natural result. Total involvement best describes the Englewood project. It was unique in that it involved both early and middle school students in the construction and use of an instant environment (or instant day care center) in the early school.

The environment was constructed by the middle school students. It was basically a large cardboard geometric indoor playground consisting of walk-in tetrahedrons, ziggurats, polypopagons and space coups. It had many nooks, cranies and different levels with places for children to slide, swing and hide.

The middle school students were divided into three groups: the Builders, the Placemakers and the Guides. The Builders went to the early school each day to fabricate and erect the environment which was held together by bolts, string, glue and tape. After the initial construction which took two days to complete, the Placemakers arrived to enrich the structure by adding color and texture.

The following day the early school children were introduced to their new environment by the third group, the Guides. They told the younger children stories, sang and played with them in their new surroundings.

There are several positive aspects that came out of this experience. First, the environment

served as a catalyst to create interaction between students, teachers and administrators where no interaction had existed before. Secondly, middle school students re-established contact with their early school and actually became involved in early school education. Many of the Guides taught the younger children through their stories and songs. Thirdly, the middle school children were totally involved in a new learning experience. The Builders found new meaning in math through the construction of geometric shapes while the Placemakers gained greater sensitivity to color, texture and form. They all experienced a great sense of achievement in viewing the younger children as they happily played in their new structure.

This project was initiated by Phil Winter and Sam Kornhauser of It Works, who were involved in negotiations with the Englewood school administrators and an interested teacher, Susan Segal. It took them eight months to work out the logistics. Once the arrangements were made they contracted Douglas White of Alternative Environmental Futures to produce a video tape documentary of the construction of the environment in Englewood.

The concept of Information Offspring and the Regenerative Cycle is largely responsible for determining the nature and quantity of material produced. This is how it worked in Englewood.

The event happened and produced information offspring.

1 It produced a second generation of itself which was a three hour documentary taped during the five day period of the experiment. This tape will be cut to thirty minutes and will be of immense value in introducing and orientating school administrators to the project. It can also be used to generate public interest in the project.

2 Supplementary Tapes: There are several areas where tapes are needed for instruction and orientation of the middle school children before they begin actual construction.

A) Tapes showing actual construction techniques and procedures.

B) Information dealing with the theoretical aspects of the structure so that the students will understand exactly what they are doing.

C) Tapes can also be produced dealing with peripheral subjects for use after the event has happened to initiate discussion about how a particular subject relates to the experiment.

All of this information is produced to create a regenerative cycle. The end result will be a total package consisting of the materials for the construction of the environment and the accompanying tapes (in cassette form) so that they can be distributed on a national level.

Once the experiment becomes widespread it will establish a basis for proceeding with more experiments based on these same principles. There can be a new level of interaction among individual schools, students and teachers. And there can be new opportunities for public education to become a more relevant experience.

Contact through Alternative Environmental Futures, 316 West 88th St., N.Y., N.Y. 10024.

Edwin Varney

If our plans go according to schedule, we shall have in hand twenty-five Sony Porta-pak units to lend to community organizations and individuals before the summer.

The slums of major cities resemble the ghettos of Europe in that they entrap people behind invisible walls. But the resemblance stops here. The older ghettos held a community of people with common religious and cultural heritages closely tied by an intricate communications system. Communications networks, run for and by slum residents in the U.S., are non-existent—excepting the "grapevine." Frantz Fanon suggests that a community will evolve only when a people control their own communications. If any sense of community exists in the black and Chicano ghettos, it exists by virtue of the sisters and brothers whose anger brings to the neighborhoods a common sense of revolution and/or apocalyptic despair.

A growing demand by Los Angeles blacks for programming relevancy and models of community owned and operated origination centers which reflect the minority culture and don't strain it through a "white screen" led to the implementation of the Watts Communications Bureau. In March, Nineteen Seventy, the Mafundi Institute of Watts and Communications Associates (CommA) from Santa Barbara, California joined together to form the Watts/Comm Bureau with an enabling grant from the Irwin-Sweeney-Miller Foundation.

The studios and head-end equipment of the CATV system will serve 5,000 subscribers in the Urban Redevelopment Project area with a dual cable installation that provides thirty channels of commercial and local programming. Watts/Comm will be housed in the Neighborhood Center built for Mafundi Institute by HUD and the City of Los Angeles.

The television system planned for Watts/Comm is a new concept in "interaction television." It not only permits voice feedback to the originating sources of the television programs—i.e., the offices of elected officials, storefront performing arts centers, schools, CAP centers, et cetera—but allows the viewer at home or in the storefront, or wherever the television set is placed, to plug in an inexpensive TV camera to send out his own video message. The system provides the capability of distributing many programs simultaneously with different sub-groups of subscribers having the opportunity to talk with the program source and, through the source, to each other. Two-way audio and video communications can generate dialogue, and dialogue can lead to community involvement and change.

It is a project that combines the issues of communication, community, and culture by means of a community based, community owned CATV network that will serve all ages and economic backgrounds.

The Watts/Comm Bureau will operate in the new Watts Urban Redevelopment Project now in the early stages of construction on 103 Street in South Los Angeles. The Mafundi Institute, a non-profit, community-controlled arts and cultural agency, will manage the Bureau—developing the programming and maintaining the operation as a public utility for the community at large. The purchase and installation of equipment, location of professional personnel, and the maintenance of ongoing program evaluation will be the responsibility of CommA. The Bureau will be equipped and operated in the following modes:

1. Experimental, two-way cable TV communications system giving subscribers access to locally originated programs, commercial stations, and special services. These services will include:
   (a) Daily consumer information.
   (b) Rumor control and a "switchboard" advisory service—answering questions on child care, welfare, transportation, jobs, legal services, et cetera.
   (c) Eye witness reports on community issues and events offering talk-back capabilities.
   (d) Broadcasts from local agencies and institutions.
   (e) Community relevant educational and cultural programming.
   (f) Stereo radio broadcasts amplifying the coverage of the radio broadcasting station.
2. Youth communications and training center for teaching film-making, TV news cameraman skills, and CATV operations, and offering paid positions in radio and television broadcasting to advanced trainees. This training operation will build initially on:
   (a) The experience of Mafundi Institute in beginning film instruction.
   (b) The West Coast operation of the training and placement program of the Community Film Workshop Council.
   (c) The elevation of the Watts Training Bureau, now operating at Mafundi, to a live operation.
   (d) The training and orientation of community persons in "interaction CATV" through the introduction of twenty-five Sony Portapak units into the community.

The Watts Communications Bureau has many objectives, but principally it will seek to breach the barriers to communication that exist in the black ghetto. The Bureau will start many dialogues—between youth and youth, between youth and adults, between various institutions, and between the people of Watts and the more affluent communities, who will discover from the Watts example that a community is not just a mailing address, but something to create, to make work, and a living environment which is inseparable from art and culture.

For more information on what they're doing, and for investigating possibilities of exchanging tapes, contact Don. D. Bushnell, CommA, 1540 Miramar Beach, Santa Barbara, Calif. 93103, or phone 805-969-1032.

OTHER NETWORKS TO PLUG INTO . . .

Challenge For Change Newsletter
This is a particularly good read-out from people who understand all of what decentralized TV is about.

Especially recommended is the latest issue: **Community Cable TV and You** which is the best primer on CATV we've seen.

Dorothy Todd Henaut, National Film Board of Canada. P.O. Box 6100, Montreal, Quebec

Inflatocookbook
is actually a soft vinyl folder full of random access sheets all about making your own inflatables. Good graphics. Good information. High use valoe. Done by Ant Farm out in California.

Ant Farm. 247 Gate 5 Rd., Sausalito, Calif.

Southcoast Notes
Self-described as "a random collection of the printed media that precipitates from our everyday activities" which are essentially the same as Ant Farm's, because Southcoast is essentially the same group of people.

The notes range from raps to drav.ings to designs and comp.tations. Also high use value.
804 Kipling, Houston, Texas 77006

Black Communicator
Most sources of information about media ownership, what the F.C.C.'s up to, and so on are geared for the people who control the switches, not the ones who need access.
This is the opposite. A really high information publication about media ownership monopoly, license challenges, and bureaucratic goings on. More than Blacks are disenfranchised from the media, and likewise **Black Communicator** is useful to a lot of different people.
Suite 405, 1730 M St., N.W. Washington, D.C.

Knowledge Industry Report
We get this as an exchange publication because we couldn't afford to subscribe. It's $52 a year for 26 (biweekly) issues. Each issue more or less concentrates on a single trend in the information "business' and the analysis is pretty good. A good source of no-hype information, but strictly from the money end.

Tiffany Towers, White Plains, N.Y. 10602

Videa 1000
We also get an exchange subscription to this one because it's $25 a year for twelve (monthly) issues. **Videa 1000** is all about video for the advertising community and it has high survival value in the sense of knowing your enemy. Sort of like reading **American Opinion,** the magazine of the John Birch Society, just to keep tabs on what the crazies are up to.

54 Park Ave., N.Y., N.Y. 10016

Domebooks: One and Two
They're put out from the **Whole Earth** facility and are good, warm, straight information on how to make your own survival structure.
Lloyd Kahn, 12,000 sKyline, Los Gatos, Calif.

Computer-Based Education Research Laboratory, University of Illinois
One of the articles in this issue was written out of here (see Umpleby) and they seem to be into practical, mass access uses of the computer, mainly in education. Also worth checking into.

A corollary of the group is the newsletter of **The Alternative Future Project at the University of Illinois** which is self-describing. Deals mainly with computers.

Innovation
This is a slick, glossy, limited circulation monthly magazine which is also expensive ($35) a year, but nonetheless the best management-oriented publication on technology and social change. It is to the 1970's what Fortune was to the 1950's.

265 Madison Ave., N.Y., N.Y.

Rand Reports
Not too many people know it, but many of the Rand Corporation studies are freely accessible even though they're sponsored by the military. Many of them have to do with media and communications and you can get their bibliography by writing them.

Like most analytical reports, they merely reconfirm your own common sense in very dry, ahuman language. You read them and say to yourself "I know that." Yeah, but you're not getting paid for it.

1700 Main St., Santa Monica, Calif.

The New Alchemy Institute
THE NEW ALCHEMISTS are searching for ways a small group might aid in creating a saner world. Research is in the areas of agriculture, aquaculture, new sources of power, and other skills aimed at enabling man to satisfy his needs without destroying his natural resources. On a social level, they seek to aid and foster the development of decentralized communities where people can create practical alternative life styles based on a profound respect for the biosphere and the individual.

Write to John Todd, The New Alchemy Institute East
P.O. Box 432, Woods Hole, Mass. 02543

Clear Creek
This is a brand new successor to the ill-fated **Earth Times** which went down after four issues. **Clear Creek** is just about the same publication, except with a different name. It's predecessor was worth having around and so is **Clear Creek.**
617 Mission St., San Francisco, Calif. 94105

Akwesane Notes is a newspaper which extensively covers all aspects of modern Indian life in North America. It is the best source I've read for giving one the feeling of the growing unifying consciousness of Indians on this continent. .getting a lot of people together. .filled with rich anecdotes of the past to future.

You can get copies by writing to Akwesasne Notes, Mohawk Nation via Rooseveltown, NY 13683. There are no fixed subscription rates. Just your help.

Mother Earth News is another one of those really fine getting-back-to-basic papers: practical "how-to" information especially focusing on land survival, and creating an information exchange among people with common concerns.

You can write to them at P.O. Box 38, Madison, Ohio 44057. (Single copy $1; one year/ 6 issues/ $5.00; two years/ 12 issues/ $9.00.

Big Rock Candy Mountain —Resources for our Education—is an extensive catalog of educational tools and processes which increase and extend self-knowledge and acquisition of knowledge (in their own words) "not by molding the learner into a pre-established pattern, but by providing resources to help him quench his thirst; not by teaching meaningless stockpiling leading to a dissatistied life, but by encouraging growth in the present leading toward a joyous old age; not by changing people, but by awakening a desire to change."

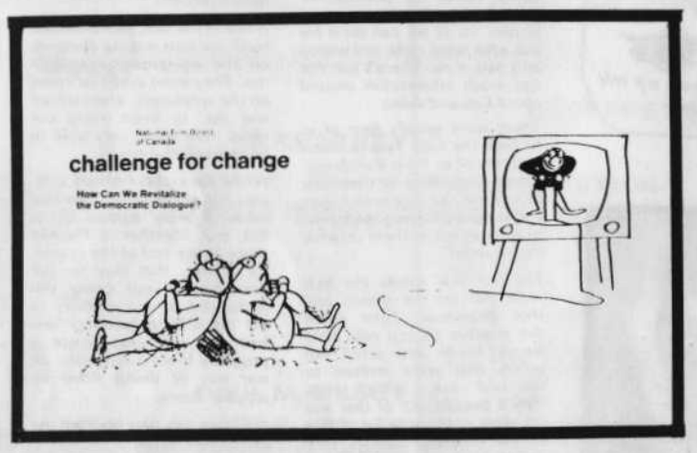
It's an exciting publication, patterned after **The Whole Earth Catalog.** Subscriptions at $8 (6 issues—2 big ones & 4 smaller, informal ones) are well worth it. (Single issues $4) Write to them at Portola Institute, 1115 Merrill Street, Menlo Park, Calif. 94025.

And, of course, the parent of them all—THE WHOLE EARTH CATALOG—soon to self-destruct after a final supplement and issue, as people go moving on. Watch for it. If you've never seen it send for old issues. They're still valuable (really "treasures"). They're at Portola Institute, 558 Santa Cruz, Menlo Park Calif. 94025.

dear people...enclosed is our propaganda...we're putting our book together now and could dig knowinf about you for that...are you into video? are you a collective or whatever? Anyway...drop us a line and let us know what you are...who you are aimed at...street people, students or others... vencereмos....jennie...source collective...

2115 S St., N.W., Washington, d.c. 20008

ANT★FARM



photos ~ susan miller

WHOLE EARTH CATALOG

Because we are a publication we can call up book publishers and ask for free "review" copies. In return we promise to send two copies of the review back to the publisher when it appears. The freebies we got were:
DESIGN WITH NATURE, by Ian L. McHarg. The Natural History Press, Garden City, New York. 197 pp. $19.95. 1969.

This book is both worth every penny and too expensive, because it should be much more accessible. The publisher says a low-cost paperback version will be out in late summer. In the meantime try and score it from a library, or a friend, or something.

Design with Nature is both a meta-manual and a manual for ecologically sensible community structuring. McHarg alternates a chapter of theory with one of practice. Specifically he shows how it's possible to embody an ecological sensibility in the pacement of roadways, homesites, and whole communities. Like any fine book, it's applications are broader than its chosen subject. McHarg's grid on physical systems can be overlaid on communications structures.

M.S.

THE STEP TO MAN, by John R. Platt. John Wiley & Sons, New York. 216 pp. $10.00. 1966.

John Platt is one of those scientists who thinks he knows enough to write a book. And he does. He's laid down a sort of cybernetic-systems grid on social process and it seems to work. It's one of the few books around which suggests software strategies in the service of social change.

M.S.

BIOLOGY AND THE FUTURE OF MAN, edited by Philip Handler. Oxford University Press, New York. 936 pp. $12.50. 1970

A transition book. A step in process. Partially old textbook (with no Appendix for accessibility) and partially a spread of information which is limited by the slow transfer of the written word. But it contains a pretty decent compilation of biological goodies and extends biology into other realms. A biological state-of-the-art report.

D.E.

VIDEOTAPE TECHNIQUES IN PSYCHIATRIC TRAINING AND TREATMENT, by Milton M. Berger, M.D., Editor. Brunner/Mazel, Inc., New York. 303 pp. $15.00. 1970.

This is one of the only source books on videotape as a unique medium. For that reason it's worth having, although the price is stiff.

On the other hand, it suffers from being an anthology, and from being an anthology written by doctors. It's hard to imagine that they have any human feelings towards their patients as you plow through the dry, clinical accounts of videotape use.

The only exuberance comes from the editor himself, Dr. Berger, who radiates a genuine understanding of potential video uses; and Dr. Frederick Stoller, who freely admits that the whole psychiatric-clinical context is no longer viable.

Not a one of them, however, conceives of a cybernetics of self which may be indigeneous to an electronic psychic world and culture. Thus, the good doctors detail the advantages of video as it pertains solely to existing modes of psychoanalysis and never get to suggesting that videotape per se may have a unique capability in a culture where media are as omnipresent as air.

M.S.

These books we either bought or got as gifts:

INFORMATION THEORY, LANGUAGE, AND CYBERNETICS, by Jagjit Singh. Dover, New York. 303 pp. $2.50. 1966.

The very best primer around which synthesizes all of the above in lucid, descriptive language. I got bogged down in the math, but the words can carry you through.

M.S.

THE INFORMATION MACHINES, by Ben H. Bagdikian. Harper & Row, New York. 359 pp. $8.95. 1971.

Bagdikian is an old media head, a newspaper man. This is another one of those books which you read and say: "I could have told you that," just like the Rand Reports (see Publications list), of which this is one which made it into book form.

On the other hand, its virtue is that Bagdikian is a very good old media head so this is a very good grid on media history and ownership.

Where it breaks down is in future projections which assess the obvious coming technologies (public access data banks, CATV, etc.) and fail to even begin to suggest what the psychic effects might be. All Bagdikian can say is that we're going to get more news so that means more detailed news. New ways of processing that video people and even dope smokers are already into aren't even considered as new media, probably because they embody new software, not hardware, technologies.

M.S.

FUTURE SHOCK, by Alvin Toffler. Random House, New York. 503 pp. $8.95. 1970.

Where to begin? *Future Shock* is a great title, and books which make it onto the "bestseller" list have a certain honesty about them because they speak to people's genuine needs.

This is easily the best inventory of effects and effect causing phenomena I know of. For that reason it's worth owning, but not until it comes out in paperback this spring.

What's really wrong with it is the whole hypothesis of future shock, which is mainly a condition of people who try and lay the past on the present and are then bewildered because they're not the same. But most media-children have no past (ahistory) so they don't suffer from the condition.

Thus, Toffler is totally incapable of detailing a sensible future shock treatment, although he tries in chapters which seem to have been tacked on at his editor's request.

Reading this would help you understand your parents in precisely the same way they would understand you if they read *Rolling Stone*.

M.S.

THE HUMAN USE OF HUMAN BEINGS, by Norbert Weiner. Avon, New York. 288 pp. (paperback). $1.45. 1950.

Like Fuller says, we're caught in twenty-five year feedback loops. Some of us had read this before, some of us hadn't, all of us think it probably makes more sense now than it did when it was published. Not all carry-overs from the 1950's are anachronistic. A seminal work, as they say.

M.S.

EXPANDED CINEMA, by Gene Youngblood. E.P. Dutton & Co., Inc., New York. 431 pp. $4.95 (paperback). 1970

Expanded Cinema is the very best sourcebook around on new media. And some of his meta-rap, like "The Audience and the Myth of Entertainment," which synthesizes information theory and pop culture, is downright brilliant.

The problem is that Gene writes about it instead of doing it. Thus he has a fascination for hardware almost *in vitro* without much sense of the social consequences of technolotу. He also treats things as "art" which somehow renders them peripheral to the culture instead of central.

We've used a small slice of this book in this issue of *Radical Software* (see Hardware) and other pieces of his in the first issue. So, despite its faults, it obviously has a lot of use for us. It should for you too.

M.S.

NOTES ON THE SYNTHESIS OF FORM, by Christopher Alexander. Harvard University Press, Cambridge, Mass. 216 pp. $6.75 1964.

If games like *Wiff N' Proof* and *Off-Sets* have taken on the ennui of *Monopoly* and you're looking to applications, these "notes" will take you through the process.
Alexander explores the relationships between the pattern of problems and the *process* of problem solving and then goes on to the relations between relations to give a topological approach to design.

The beauty of the book is that after laying out his process, he runs through a worked example (design of an Indian Village), gives a mathematical treatment of the worked example (programmed for an IBM 7090) and ties up with notes on the "notes" which include an extensive bibliography.

Alexander maintains that only the blessed have the necessary intuitive understanding of form and design, and as a safeguard against complete dehumanization 20th century designers must rely on new approaches. Here's one.

M.W.

LAST AND FIRST MEN, by Olaf Stapledon. Dover, New York. 213 pp. (paperback). $250. 1931.

Far out epic science fiction.

And if you don't know Dover books, check them out. A real resource.

M.S.

DUNE, by Frank Herbert. Ace, New York. 541 pp. (paperback). $1.25. 1965.

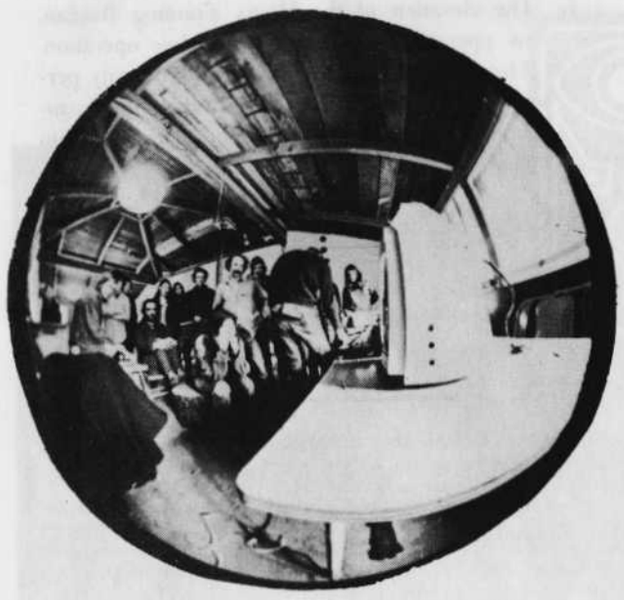
Dune mixes epic science fiction as parable with a keen ecological sensibility—also mythology, history, adventure, political intrigue, brilliant insights into women and politics, incredible reality-fantasy transcendence.

B.K.

INTEGRAL YOGA HATHA, by Yogiraj Sri Swami Satchidananda. Holt, Rinehart and Winston, New York. 189 pp., $4.95.

Beautiful, clear pictures and explanations of many, many positions and exercises to guide you. Easy to follow at your own pace, letting your body discover its right locations.

B.K.



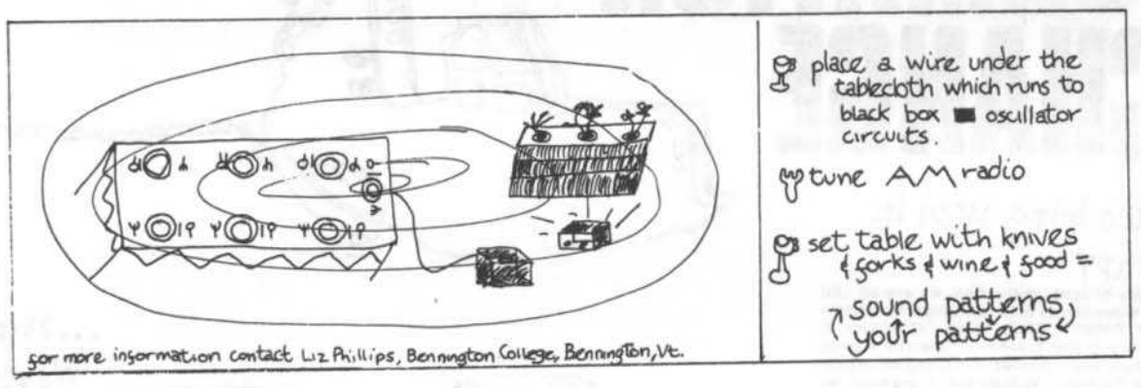
ecology center 10TH & HOWARD S.F.

project one

SOUND STRUCTURES

by
Liz Phillips

My interest when I began to build sound structures was to create a new kind of environmental space where the structure of the space was only defined by human interaction. In the space people could act as individual systems within a larger system.
To build sound structures I use electromagnetic fields where people actually become electronic components in the circuit. Therefore, the collective presence and movement of the people in the field feeds back audio responses. The field operates at radio frequencies. It takes a three-dimensional form which can be found only through physical involvement with the space. Then the structure is perceived as changes in audio tones. The tones are in response to the total actions and relationships of the participants. The people themselves, are also potential sound structures realized only through contact with other people. With the new feedback, audio and kinesthetic patterns evolve.



TENTATIVE DESIGN FOR A FLEXIBLE VIDEO ENVIRONMENT

By Ira Schneider

The design includes three basic zones: the feedback introduction corridor, the process television interaction space, and a video information center or observation area.

The feedback introduction corridor is designed as a transitional zone between recognitions of where the entrant has been and where he is going. The monitors in the corridor will feed back live television of the entrance to the space itself, the walk up the staircase and/or the elevator exit, and a preview of what the entrant will experience in the process television interaction space and the observation area. (Such a preview helps reduce the initial self-consciousness which people experience upon first seeing themselves "on television." (e.g., "Hi mom, I'm on TV").

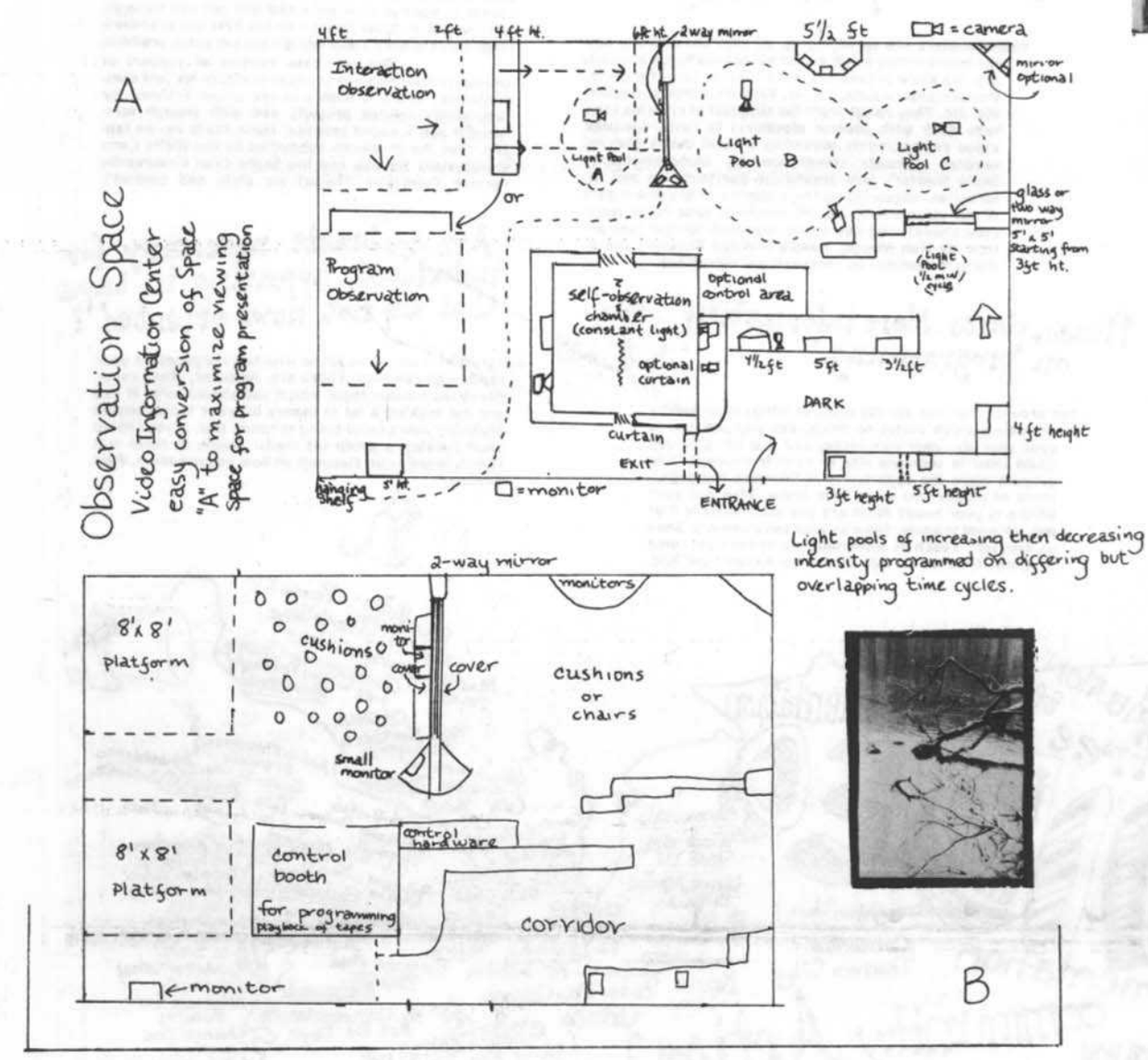
Upon turning the corner the entrant finds himself in a more brightly lit space in which he can observe (through a two-way glass pane) others participating in the process TV interaction space. (There is a possibility at this point that the entrant is picked up on a camera held by participants in light pool C).

After this point the entrant can choose to be a participant by entering into the process television interaction space. If one of the cameras which hangs from the ceiling is free then he can become an operator or he can enter the space as an actor. As an operator the participant can interact with other operators or mirrors (one or two-way) or monitors. If the entrant chooses not to participate he can pass on to the observation area and watch live TV of the antics of the actors and operators and perhaps of the observers, himself included. He may then choose to become a participant at some level or to remain and observe himself in the private self-observation chamber. The entrant therefore has the choice of being a passive observer or an active participant, either in a social space or in relative private. Unlike other museum video pieces (e.g. the "Information" show at the Modern), the participant is given maximum control over his own feedback.
If it is desired the gallery can be easily converted into a video information center (for showings of pre-taped programs) by simply turning off the cameras (and raising them to the ceiling or removing them) and possibly providing cushions for additional seating. The pre-tape programs can be played back through any or all of the monitors.

The gallery can also serve as a studio where tapes are recorded of the ongoing activity or of other planned activities. (In the latter case the two-way mirror can be removed to provide more space, while the self-observation chamber can be used as a control booth).

Storage of equipment not being used is provided for under the partitions and monitor stands.

Video cable can be strung across the ceiling beams and dropped through the hollows of the frame construction partitions to the built-in monitors and hanging cameras.



ALTERNATIVE FOR ALTERNATE MEDIA II
PEOPLE'S VIDEO THEATRE HANDBOOK

On the basis of relinquished responsibility by the many, the few have been able to monopolize power. Power is access to resources and control of accesses to resources. The technologies of mass media communications (satellite, broadcast, cable and closed circuit) make opportune a people's tool for access and input by the many into the decision making function of whatever social system prevails at any given moment. Here exists the arsenal of weaponry by which to confront the imperialization of human intellect inherent in our present systems of education, economics, government and culture. Relinquished power must be reassumed by the people forcing those whose vested interests are consumerships, constituencies, congregations, audiences, etc. to respond or go under in the mire of their own economics of dog eat dog competition. News is not information disseminated from a place of responsibility down to places of relinquished responsibility. We support government to have men oversee necessary bureaucracies but we do not hand over to them our rights of defining reality nor can we condone censorship and manipulation by information brokers salaried by any elite in the power struggle. The power struggle belongs to the people.

The closed circuit video tape system is the basic component of electronic media. Playback is instantaneous and the tools of production are one and the same with those of distribution: the VTR and monitor which can be carried into any situation; i.e., a living room, the street, a school, a TV broadcast station or cable channel for further transmission by air or line. Depending on the content, one could find their living room functioning as a city council chamber, the street, a psychology lab, a school, study halls in the Library of Congress, TV stations and cable channels as national and local polling precincts.

There are three basic areas in structuring a video theatre which is the basic unit for the production and exposure of individual information: 1) the facility; 2) content; 3) and broadening exposure. Facility refers to advertising, personnel, environment and admission charges. In NYC the *Village Voice* carries ads for about $15.00 weekly which in size and reach will suffice. Posters and fliers also help. Posters giving information on theatre location and hours of operation can be made up for about $50.00 per 1000 on cardboard. At least two people to take admissions and run tapes is necessary. PVT has, since its inception, conducted the Live-Forum during showings. This type of feedback format necessitates, then, a shooting crew (camera and interviewer). The environment—seating, number of monitors, size of space, etc., can be simply chairs facing one monitor or as has been created by Raindance in NYC, a multiplicity of space, alcoves, platforms facing a number of monitors placed in a variety of locations at different viewing levels providing a comfortable, lounging atmosphere. Global Village (also in NYC) orients their audiences towards nine monitors placed at one end of an open large loft space. PVT has evolved from a one monitor format to a livingroom, rug covered space, using three monitors in a half circle facing a larger half circle for seating on couches, chairs and on the floor. Lighting is sufficient for indoor shooting using 150 watt floods hung from ceiling pipes. *Generally, a space designed to stimulate interaction between members is most applicable to the video experience.* Videofreex, for example, has people up to their NYC production studio loft creating an atmosphere of intimacy between themselves and the audience. As to admission, whatever the traffic bears to cover at least advertising costs. In NYC a fair fare is $2.00. In Memphis, a group has access to a local movie house and shows tapes prior to film showings asking 25 cents above regular admission.

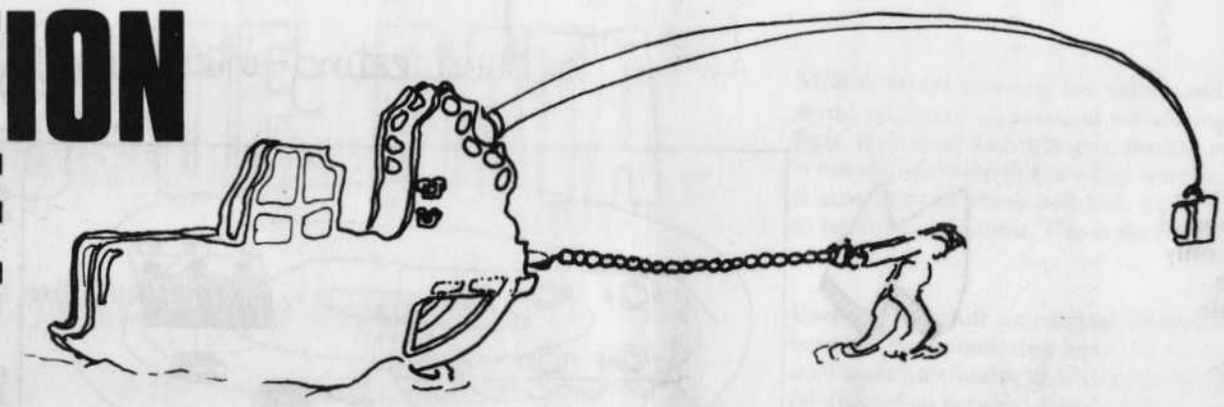
Content is not only the tapes shown but the program of tapes and the format. It can be anything from continuous showing of a variety of tapes, to tape-jockeying with live introductions to one tape, one-subject shows, to showings of tapes interspersed with live-forums for audience involvement. A proper show length is two hours. The best structures provide for maximum audience interaction. Video is not the frontal oriented theatre of movie house consumerism of product: *it is process.* On Thanksgiving 1970, the American Indians held a variety of demonstrations at Plymouth Rock. Out of PVT coverage was produced a 40 minute video newsreel. The following two weeks at PVT in NYC the tape was shown to Indian and non-Indian audiences. The Live-Forum that followed promoted dialogue between the various represented ethnic groups producing a tape having a unique interest of its own. Presently PVT is cooperating with the Younglords Party's Inmates Liberation Front (a group relating to the jails in NYC) in a three part, three week People's Video Forum. Besides showings of tapes on the issue, speakers are also present. All is videotaped in process and one week's tape provides the tape shown the next week. Each consecutive forum will involve more and various inputs of points of view. At this juncture, "Broadening Exposure" need be discussed. The production and exposure of information, whether entertainment or news, within the present video theatre context is limited. Cross communications between video theatres need be developed. Tape exchanges are a way. Considering the growth of cable in this country video people must address themselves to the macrocosm of the rampantly developing technology. For example, People's Video Forums on the jails could be extended via cable to larger audiences. The Forum format as a cablecast program could be made up of tapes produced at the theatre forums with speakers in the studio answering phoned-in questions from people throughout the city in living rooms. A resource of input could be activated and a city-wide consciousness of the issue raised. As we have seen, especially on FM radio in the music field, entertainment tapes could be aired on tape jockeying shows to a multiplicity of cultural and ethnic audiences. Locally originated and special interest-oriented news programs produced by the newsmakers themselves could provide more insightful public service programming. It must be remembered that media exposure is power and journalistic objectivity a romantic myth. The only potential for any semblence of fairness is to provide each citizen with an amplifier for the expression of self to others. There can be no better report on housing than the Spanish or broken English statements of a Puerto Rican telling and showing his or her East Harlem living condition of a rat infested, garbage stinking, 2 room, fifth floor walkup. The video theatre can function as a local information producing unit gaining the support of a constituency of citizens made up of individuals and groups based in the community. Local information services to the constituents, as to material, public services, health, etc., resources can become a new kind of advertising at low-low cost to the advertiser and can be of prime support value to the survival of the theatre. All this might be seen as community communication's centers, self-sustained by the community, open and accessible to all members of the community. Both as to production and exposure of their information. These centers then having access to cable could realize much needed media power. It is obvious that to cable owners this kind of situation would maximize subscription to their service, for the programs aired would be the desired fare of the people in the community since they'd produce them.

Some idea of cost for a producing/exposing theatre are as follows: 1) space—$150 monthly rental; 2) equipment —$5000 for two portable 1/2" video units and support systems; 3) tape—100 hours costing $6000 yearly; 4) Telephone, utilities, stationery, $700 yearly; 5) advertising—$2500 yearly; 6) transportation—$2000 yearly; and 7) personnel—4 full-time staff at $5000 each with a support video producers' collective who are compensated for work performed only and who share profits of tapes which prove to be lucrative. About $35,000 the first year can be cut in subsequent years as major equipment disbursements are no longer needed and community support through advertising and services is realized. Keep in mind that the above outlines the ideal condition from which to start. PVT (see **Radical Software II**—*Alternative for Alternate Media (1)* was started with $1700 worth of equipment and a paid for loft space. However, due to the growth of cable many foundations are becoming interested in supporting independent video program producers. Federal and state granting agencies are also beginning to act, if there can be enough collective insistence on funders, on cable owners, and local community powers. For development of community communications centers, the people can affect the course of events in confronting the imperialization of human intellect. As it stands now, cable ownership is monopolizing right under our noses not only hardware but software production and distribution. The FCC, which has questionable jurisdiction over cable because in most or all cases there's no crossing of state lines, must also be challenged. We, the people, must demand rights to access and exposure to cable lines of communications. None of us should sign cable service contracts without clauses which guarantee access to expose our information without sensorship on a regular basis on that cable line. We must make this issue a national political issue involving even presidential candidates' support. We must assume our responsibility of power and inherent right of self-expression without censorship. No one owns line of communications. If human intelligence has developed a means of broadening those lines, we thank the men and women as individuals who were instrumental in that effort, but we must not allow them to be rewarded with the power to determine our rights to utilization of those lines.

ALL MEDIA TO ALL THE PEOPLE.

In response to the above we invite your intellectual and material feedback to assist PVT in forming *The Committee for Democratization of Electronic Media (COMDEM).* Donations will go to establish a legal staff to approach redefining cable contracts, FCC rights over cable, campaigning for better cable, etc. COMDEM—PVT, 544 6th Ave., NYC 10011, 212-691-3254.

INFORMATION EXCHANGE



EXCHANGE INFORMATION

How is video being used in psychotherapy?

At these early stages of experimentation, we are all still learning what video can do with our minds. You might refer to Milton Berger's book, Video Techniques in Psychiatric Training and Treatment. **Merrily Paskal of Box 151, Shawbridge, Quebec is writing an article about video and therapy. She feels that video confrontation in itself has therapeutic value, although psychiatrists are quick to add that, with a trained therapist, the video is more effective. Joyce Wyden has been using video as feedback in working with groups back in working with groups (see Radical Software I). We would of course be interested in hearing from people who are experimenting in these areas.**

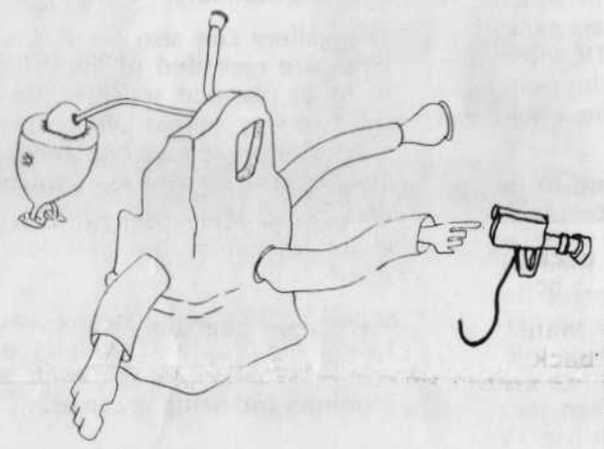
Interested in underground uses of feedback & different methods of setting up tv for bizarre performances.

Simple feedback (camera pointed into monitor recording itself, itself, itself, etc. and varying contrast and patterns) is probably one of the first video fun games most people discover. Other setups of varying complexity have also been developed, one of which is the double feedback delay loop (see diagram), which allows you to see yourself from fore and behind during different time sequences, present, 2 seconds past, 5 seconds past, and further and further into the past. hmmmm! Try it for yourself using different combinations of monitors, tape decks, and cameras.

Video feedback is one of the simplist ways of changing images. More abstract images can be formed using a video synthesizer. The Sony special effects generator (SEG) can also be used to create fades, wipes, double exposures, negative images, etc. using two or more live cameras. Shooting off a monitor sometimes has weird effects and varying brightness, contrast, and vertical and horizontal holds can increase abstraction.

How did I get a rhythmical drop-out throughout ½ inch tape that doesn't show up frame by frame?

Drop out is usually caused by dirty heads. However, sometimes the tape has been recycled too many times or is the old brown back tape. Black lines or white streaks across the picture may be caused by dirty rings. (Rings are on the white plastic cylinder at the axis of the two tape heads.) Refer to the Sony or whatever manual which will tell you the areas on the machine to be kept clean. Sometimes you can record over, but with clean heads.



How is video being used for change in values & awareness?

. . . a new global network of communication! Total access to information. More complete and positive communication. A more conscious evolution. Working with video usually means working with other people who share many of these concepts. The nature of the video medium lends itself to honest documentation, recording life as it is. Of course some people would abuse the medium, but more and more people are simultaneously arriving at similar conclusions, regarding video, that is, that it must be used in the interests of social change, to create an ecologically sound information environment.

At present, there is no real access to established channels of communication (i.e. broadcast networks, cable systems, cassettes) so in order to reach as many people as possible, we have to do a little legwork! Vic Gioscia of the Center for the Study of Social Change in N.Y. suggests that solidarity and revolution are facilitated by broadening the collective imagination. It would then follow that only if we use our tools in a creatively new and different way, will we have any effect on social consciousness.

Are there any groups working around Denver or Boulder? (OR ANYWHERE ELSE we haven't mentioned?!)

Yes! Surely you're there but how can we find you if you don't speak up? Write us a letter so we can tell everybody else who you are and what you're doing.

...next step is video. Where do I start?

BUY A PORTA-PAK! Beg or borrow one. Take out a loan. Sell your car. Go co-op. Form a video pool More can be done in groups anyway and it's more fun. Turn on your friends. Once you have the equipment in hand, the rest follows naturally. Start a video theater. Build a video environment. Take to the streets. Start taping your community. Instant replay. Give shows. Travel. Seek out other video people. Exchange tapes. There is no teacher, no school that can replace the experience of doing it yourself. And the price is right. Buying a Porta-pak is like buying a friend!

Want more information on video theaters, what they are doing, what they are showing.

Video theaters are springing up all over the country and the interest they generate for video tape keeps expanding. We know of theaters in New York, San Francisco, Philadelphia, Austin, Texas, Toronto, Canada, Boston, etc. etc. They range from the simplest of systems (one tape deck with several monitors) to more complex video environments involving several decks playing several channels simultaneously, complementary. Some theaters also emphasize participation and interaction, encouraging the audience to become a part of the video event. Double feedback tape delay loops (see above), and live forum feedback format (see article by Ken Marsh, People's Video Theater) are among the options for increasing involvement.

Please, please. More information on programming.

Look around! You can see the kinds of things other people are doing which varies so much, and you can look to your own life, your own niche, and just imagine you could show to someone else or even to yourself. You actually have the opportunity to increase the experience of people you don't even know. Who are you? Where is your head? What are you into? Believe it or not, we want to know. Show us your environment. Show us yourself. Teach us something we haven't yet come to know. Give us an experience we haven't yet had.

Can you suggest some outlets for ½ inch video tape?

Distribution systems are certainly being considered by many people working in 1/2 inch video and since the established channels have failed to meet our needs, philosophically and financially, we must certainly come up with our own answers. Simple tape exchanges are the first step toward getting our tapes circulated but we must also assure ourselves of some means of support. Rather than go into detail in this space, I refer you to articles by Ira Schneider, Paul Ryan, Allen Rucker and Michael Shamberg in the distribution section of this issue. We would be interested in all the feedback we can get on this subject as it is such an important aspect of our video lives.

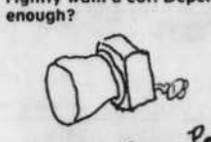
Please print more information on foundations & grants.

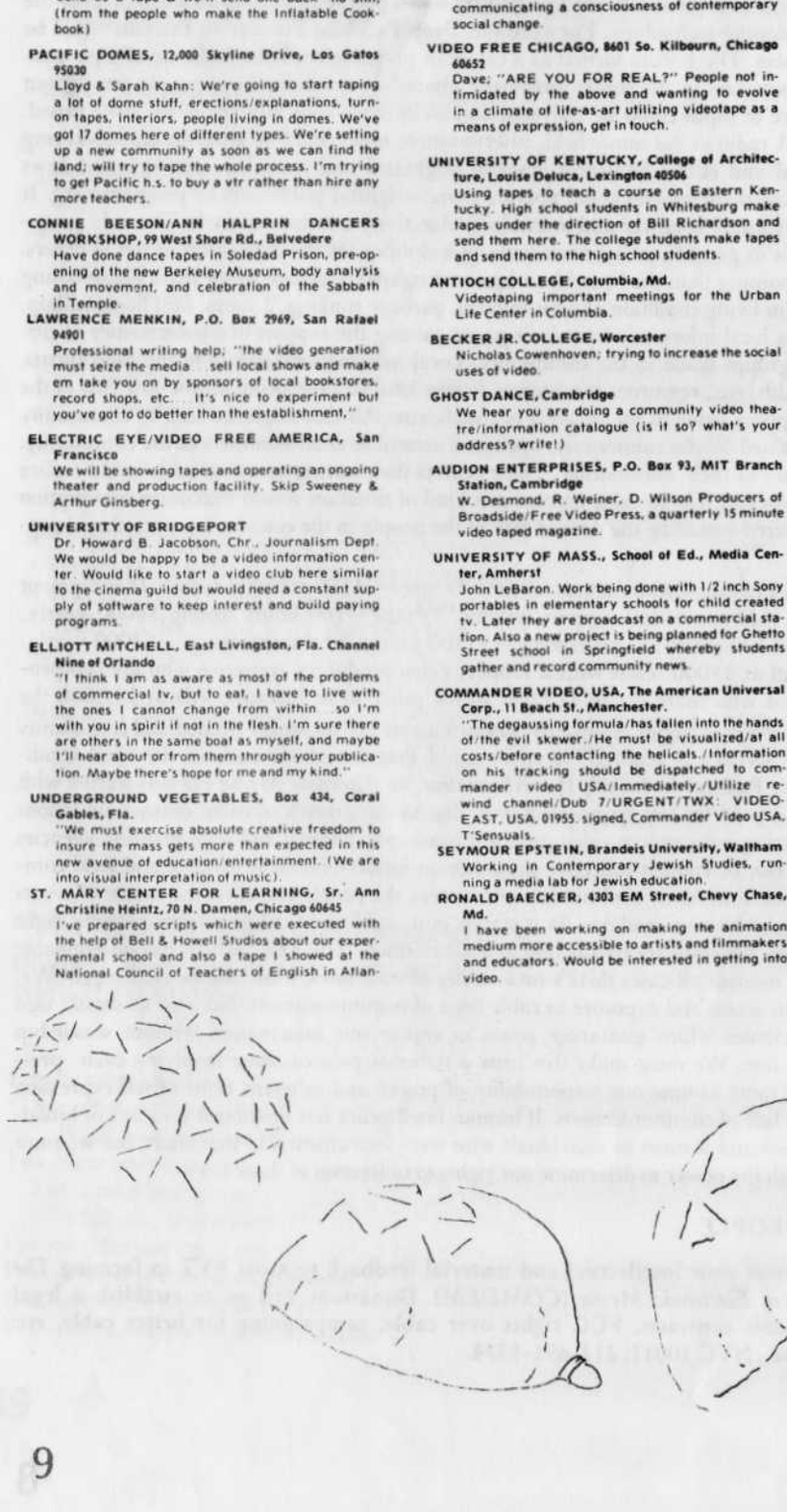
Foundations are slowly coming around to supporting the kind of work we are doing, but beware. They hold the carrot in front of your nose and will put you through changes! N.Y. State Council on the Arts has promised large sums to local video groups but has yet to produce.

The alternate method of support of coursel is offering your services in return for just compensation. There is money in the school systems for community related projects and with enough forethought and a sound proposal these funds may be tapped. (See the proposals submitted by the Watts Communications Bureau and the Santa Cruz Community Service Television Project for style and content).

Are contracts necessary for individuals appearing in tapes that are not news oriented?

To protect yourself, it would be wise to have people in your tapes sign releases. There are, however, other considerations besides legal which you should note. If you are not making a lot of money off your tapes, people probably won't mind being in them. But, if you should start making a profit off them, people in them will rightly want a cut. Depends on how you use them. Fair enough?





UNIVERSITY OF CALIFORNIA, Santa Barbara
Apollo (Art That Hurts)/Pleiades Communication (Richard C. Lailer) into light projection and holography. Instituting a class which will generate information and get us into the tv studio.

CAL ARTS, 7500 Glenoaks Blvd., Burbank 91504
Leonard Horowitz: "Video in the Streets" People doing, being, fed-back to each other, all together, laughing, smiling, games, etc.

UCLA, School of Architecture & Urban Planning
James Hirsch: perspective of Fuller-Youngblood rather than aesthetics. Interested in use of video-in ghettos, barrios, and blue collar areas. Also possibilities for the very elite to effect awareness.

ENVIRONMENTAL COMMUNICATIONS & VENICE FILM FRICASSEE
Have Shibaden and specially modified odetics time-lapse vt equipment

ANT FARM/SOUTHCOAST, 247 Gate 5 Rd., Sausalito
Send us a tape & we'll send one back—no shit, (from the people who make the Inflatable Cookbook)

PACIFIC DOMES, 12,000 Skyline Drive, Los Gatos 95030
Lloyd & Sarah Kahn: We're going to start taping a lot of dome stuff, erections/explanations, turn-on tapes, interiors, people living in domes. We've got 17 domes here of different types. We're setting up a new community as soon as we can find the land; will try to tape the whole process. I'm trying to get Pacific h.s. to buy a vtr rather than hire any more teachers.

CONNIE BEESON/ANN HALPRIN DANCERS WORKSHOP, 99 West Shore Rd., Belvedere
Have done dance tapes in Soledad Prison, pre-opening of the new Berkeley Museum, body analysis and movement, and celebration of the Sabbath in Temple.

LAWRENCE MENKIN, P.O. Box 2969, San Rafael 94901
Professional writing help; "the video generation must seize the media . . . sell local shows and make em take you on by sponsors of local bookstores, record shops, etc. . . . It's nice to experiment but you've got to do better than the establishment."

ELECTRIC EYE/VIDEO FREE AMERICA, San Francisco
We will be showing tapes and operating an ongoing theater and production facility. Skip Sweeney & Arthur Ginsberg.

UNIVERSITY OF BRIDGEPORT
Dr. Howard B. Jacobson, Chr., Journalism Dept. We would be happy to be a video information center. Would like to start a video club here similar to the cinema guild but would need a constant supply of software to keep interest and build paying programs.

ELLIOTT MITCHELL, East Livingston, Fla. Channel Nine of Orlando
"I think I am as aware as most of the problems of commercial tv, but to eat, I have to live with the ones I cannot change from within . . . so I'm with you in spirit if not in the flesh. I'm sure there are others in the same boat as myself, and maybe I'll hear about or from them through your publication. Maybe there's hope for me and my kind."

UNDERGROUND VEGETABLES, Box 434, Coral Gables, Fla.
"We must exercise absolute creative freedom to insure the mass gets more than expected in this new avenue of education/entertainment. (We are into visual interpretation of music).

ST. MARY CENTER FOR LEARNING, Sr. Ann Christine Heintz, 70 N. Damen, Chicago 60645
I've prepared scripts which were executed with the help of Bell & Howell Studios about our experimental school and also a tape I showed at the National Council of Teachers of English in Atlanta about the need for radical reform in high school English cirricula—especially contemporary media. It's called "To Know Ourselves." Our own freshmen & sophomores (mostly Chicano and Black) do great work in the studio. They have an intuitive sense for visual expression despite low standard "achievement"—they're all girls too.

SCHOOL OF THE ART INSTITUTE, Chicago
Philip Lee Morton is doing location "live" set-up experiences for demonstration to groups/schools, etc. Video, vt as an art form. His students are interested in exchanging tapes with other vt students (art departments.)

RICHARD GREEN, 1006 W. Main, Urbana 61801
Into video, food, and recycling. Planning to make some tapes on their ecological activities for exchange.

KNOX COLLEGE, Galesburg
Bob Shellenberger, Bruce Brabec: Using video tape in a social philosophy course as a means of communicating a consciousness of contemporary social change.

VIDEO FREE CHICAGO, 8601 So. Kilbourn, Chicago 60652
Dave; "ARE YOU FOR REAL?" People not intimidated by the above and wanting to evolve in a climate of life-as-art utilizing videotape as a means of expression, get in touch.

UNIVERSITY OF KENTUCKY, College of Architecture, Louise Deluca, Lexington 40506
Using tapes to teach a course on Eastern Kentucky. High school students in Whitesburg make tapes under the direction of Bill Richardson and send them here. The college students make tapes and send them to the high school students.

ANTIOCH COLLEGE, Columbia, Md.
Videotaping important meetings for the Urban Life Center in Columbia.

BECKER JR. COLLEGE, Worcester
Nicholas Cowenhoven; trying to increase the social uses of video.

GHOST DANCE, Cambridge
We hear you are doing a community video theatre/information catalogue (is it so? what's your address? write!)

AUDION ENTERPRISES, P.O. Box 93, MIT Branch Station, Cambridge
W. Desmond, R. Weiner, D. Wilson Producers of Broadside/Free Video Press, a quarterly 15 minute video taped magazine.

UNIVERSITY OF MASS., School of Ed., Media Center, Amherst
John LeBaron. Work being done with 1/2 inch Sony portables in elementary schools for child created tv. Later they are broadcast on a commercial station. Also a new project is being planned for Ghetto Street school in Springfield whereby students gather and record community news.

COMMANDER VIDEO, USA, The American Universal Corp., 11 Beach St., Manchester.
"The degaussing formula/has fallen into the hands of/the evil skewer./He must be visualized/at all costs/before contacting the helicals./Information on his tracking should be dispatched to commander video USA/Immediately./Utilize rewind channel/Dub 7/URGENT/TWX: VIDEO-EAST, USA, 01955. signed, Commander Video USA, T'Sensuals.

SEYMOUR EPSTEIN, Brandeis University, Waltham
Working in Contemporary Jewish Studies, running a media lab for Jewish education.

RONALD BAECKER, 4303 EM Street, Chevy Chase, Md.
I have been working on making the animation medium more accessible to artists and filmmakers and educators. Would be interested in getting into video.

CREIGHTON UNIVERSITY, Omaha
Eric Somers, Instructor in Communications; university cctv system. Summer workshop in experimental video.

CONCORDIA TEACHERS COLLEGE, Seward, Nebr.
Jack L. Middendorf, audio visual center. Using video in college classes, high schools, and in the campus elementary lab school.

SANDY LEEDER/VIDEO ACCESS, INC. 227 W. 13th St., NYC 10011
1. Swami tapes for yoga groups (Satchidananda, Venketesananda, etc.)
2. Organizing a bulk buying tape service for the video community. (1 hr. Sony V-32 @$23, 1/2 hr. V-30H @ $14.50 plus postage; Box of 12 hr. $ 276, 1/2 hr. $174).
3. Tapes with children's workshop school. 5-11 year olds making their own tapes.
4. Would like to exchange with video high school students in New York and in deep South. Anyone who is interested, please get in touch.

HARPUR COLLEGE, SUNY, Binghamton
Jack Amon. Setting up a 1/2 inch video tape station and would appreciate establishing and maintaining contact with other video groups. i.e. tape exchanges.

COLGATE UNIVERSITY, Hamilton 13346
Robin G. Halwas; need access to Sony SEG to complete film/tape documenting architectural change in Manhatten; dis-orientation resulting thereof, etc.

UNIVERSITY OF BUFFALO
Mitch Ackerman; Just to let you know we have porta-pack equipment here!

URBEX AFFILIATES, INC., 365 Rockingham St., Rochester
Larry C. Coppard; using video in training community groups in how to deal with community problems.

MANHATTEN COLLEGE, VIDEO COOPERATIVE
Thomas Hall, Riverdale; we have a student run cable tv system done in cooperation with Mt. St. Vincent College, scheduled to begin broadcasting by end of Feb. to students, administration, and faculty of both campuses.

EXPERIMENTAL TELEVISION CENTER, SUNY, Binghamton
Looking at into out of thru. Touching smelling threading adjusting listening outlining inlining pointing tasting planning timing talking living with videotape. Thinking un thinking the intertace of art and 1/2 inch. contact collaborate and sharpen Ken Dominick.

GUY PIGNOLET, VEGA, VIDEO CENTER URIS LIBRARY, Cornell University, Ithaca
I have brought back from Algiers two really heavy 1/2 inch tapes which I think should have maximum distribution: "The Bust of Timothy Leary," visuals of Leary and wife with audio overdub by Eldridge Cleaver. Also "The Panther Embassy in Algiers."

GEOFF STILES & PETER CUOZZO, 3701 Chestnut St., Philadelphia
Working to set up a local community oriented video project in Phila. area. Want to get together with other people who have 1/2 inch hardware: to develop, produce, and display new video material.

FOTO GRAY GANG, 1601 Pearl St., Austin
Charlie; a mosaic of 4 people starting a video theater. Need programs.

EUGENE PRODUCTIONS, 1239 Ingleside Ave., McLean, Va.
Interested in information regarding in-being theaters, what they are doing, what they are showing.

GERALD BYERLY, 2215 A Floyd Ave., Richmond
Virginia Commonwealth University, Art Education Dept. Would like to establish tape exchange with other video artists.

UNIVERSITY MEDIA SERVICES, Ft. Atkinson, Wisconsin
Lee Ann Mason, Box 151, Rt. no. 3; using video to teach English classes. Ron E.lis, an English professor produces his own pieces called "plastic poems" in his rural home.

WISCONSIN STATE UNIVERSITY, Stevens Point, Eric McLuhan
We have on campus a tv station that broadcasts for a brief period each day over local cable channel. We are trying to evolve this place into a sort of experiment/information center for this multi-state area using underground tv as the real education form for kids (classroom without walls) but totally divergent from so-called educational tv.

MIKE MILLS, Systems Engineer 8300, Bell-Northern Research
Box 3511, Station C, Ottowa. Interested in all aspects of visual communications, especially experiments dealing with two-way inter-actions. We are in the process of designing and running interaction experiments which will entail various kinds of storage (feedback) and hopefully will entail some computer-TV hybrids. Canada is an interesting position concerning cable & videophone.

NATIONAL FILM BOARD, Challenge for Change, Box 6100, Montreal 101, P.Q.
Dorothy Todd Henant; ten new Sonys!

McGILL UNIVERSITY, Montreal
Nelson Becker; free video is happening in Montreal. Gathering of international video freaks early March.

PEACE TV (who are you, where are you, what are you doing?)

INTERMEDIA, 2023 E. 1st, Vancouver, B.C.
"hi, friends!"

ENVIRONMENTAL CINEMAS, 730 Yonge St., Suite 217 Toronto
We are opening our first 100 seat videotape theater in downtown Toronto as a prototype. We are interested in product, presently on videotape.

GREGORY LOBOTOMOWSKY, 43 King St., London, W.C. 2
We're starting an underground video service here and would be interested in exchanging tapes with other video people. We intend to explore the spectrum of video programming from down-home reporting to spirituality in the tube.

JOE PAT, Rotterdam Arts Foundation, Afd. Tentoonstellingen, Kruisplein 30, Rotterdam-2
The first step on a video news service has now taken place. We're working from the art center with a mobile video unit. Also interesting in exchanging tapes.

FELIX DENNIS, "Oz" Magazine/"Ink" Newspaper 52, Princedale Rd., London W 11
Keep feeding. We aim to produce a newspaper with a heavy video feature each week.

CULTURAL DATA BANK

Raindance

1 hr. edit of *Clinton Project* tapes by Junior High School students. Traces video class from the first session to the latest.

1 hr. edit. Tender is the Tape II, a basic exercize in the grammar of video, a media primer. Video as a cybernetic tool. Assembled by Paul Ryan.

20 min. Knowledge & Industry III, an assemblage of a number of possibilities in the use of portable video equipment. Crisis in straight and alternate culture illustrated.

20 min. Media Primer, all about tv with Nicholas Johnson at Raindance, Drs. Al Scheflin and Vic Gioscia discussing the body language of David Brinkley, on-the-scene at Buckley HQ election night, a country wedding in New Hampshire, and assorted shots from the Raindance data bank.

10 min. CUKO, street theater with a wino

10 min. Nathans. The life and death of a hot dog.

30 min. edit. San Francisco Oil Slick. Rather comprehensive coverage of the event from beach to bird cleaning, volunteers, community spirit, and use of radio and telephone switchboards for communication and organization.

15 min. Oklahoma City. An eerie study of oil wells looming up out of shantytown backyards.

Also: (fantasy) Eddie the Oil Well Slayer

A day at Pacific High School Los Gatos, Calif.
Life in a dome, a visit with Lloyd & Sarah Kahn, the dome makers, and their students (free school)

10 min. edit. Canal Street General Store. "We don't make money here, but we have a lot of fun." Really New York.

½ hr. Standard Oil Man at Project One. San Francisco. Efforts by young ecology and communications people to explain their views. They also discuss their very effective communications system which operates out of the S.F. Switchboard, and which was of major assistance in mobilizing the community in a time of crisis (thousants of gallons of oil dumped into the Bay causing inestimable damage to the beaches and wildlife).

30 min. "Our Street" (getting to know our town, our neighborhood, what have you).
Kids with clackers, kick ball in the streets, and lots of kids, young and old freaking out on motorcycles.

30 min. edit. THE FAMILY. Haight-Ashbury. A very positive, productive group of 20-30 young people involved in self-rehabilitation and community service. A survey of their projects including a non-profit organic grocery store, an organic juice factory, renovation of a condemned apartment building, an old hotel, and a Victorian mansion, all with emphasis on creating a total environment through recycling old objects, refinishing, and bringing back their natural beauty.

30 min. Ann Halprin's Dance Workshop, performed prior to the opening of the new Berkley Museum. Dynamic tribal energy. Beautiful nude bodies.

30 min. The Nude Beach. South of Pacifica, Calif. An ordinary day at an unordinary beach. An environment.

Yolo County Fair. Cows, pigs, prizes, and people.

30 min. edit. Hanging out in the school playground, Berkeley, West Village.

1 hr. California edit. Driving West, Judy & Ben in L.A., Ben at recording session, Barry Gott on electromagnetisphere, Palm Springs, last days of Topanga, Tony & Frona picnic in Tilden Park.

Rand Corporation, Santa Monica. An interview with Nathaniel Feldman and Leland Johnson who have just completed a study on cable television, discussing the necessity for new kinds of low cost, community originated programming.

Eric Siegel. Discussion and demonstration of his electronic color video synthesizer.

30 min. edit. Guitar Factory. Creative guitar making from beginning to end.

Global Village

INTERVIEWS
Street Interviews on the Moon Landing.. Essex St. & Orchard St.
Jaakov Kohn and Lennox Raphael
Street Interviews on the Generation Gap
Tompkins Square, November 20, 1970 a profile

MUSIC:
David Peel & the Lower East Side at GV studio Dec. 1970
White Panther Rally (3 camera mix)
Holding Together
Fat Alice
David Peel & the Lower East Side
Mousey & Company at GV Studio (3 camera mix)
Tape A. Live Rock Feedback at GV Jan. 1971
Tape B. Live Rock Feedback at GV Jan. 1971
Tape C. Live Rock Feedback at GV Jan. 1971

FLAG SHOW AT JUDSON CHURCH:
Opening of show:
speeches dance group, flag burning
Press conference, Federal court building, NYC 2-5-71
Protest at Museum of Modern Art
Second Avenue Street Interviews on Flag Bust Theme 12-70
Flag Bust Interview—Judson Church
Rev. Moody, Jean Toche, John Hendricks,
Faith Rheingold. 12-70

THEATER:
Blue Soap, a play by Lennox Raphael at the Free Store Theater (3 camera)
Tape A. "Stalin"—"Red Lip"—play by Ed Wode at Free Store Theater
Tape B. "Stalin"—"Red Lip" (etc.) Jan. 16, 71
Tape A. Open Theater Exercises
Tape B. Open Theater Exercises

OTHER:
Women's Liberation Demonstration
5th Street Building Jan. 16 1971
Tape A. Kent Artists—Interview & Exhibition at Museum Nov. 14, 1970
Tape B. Kent Artists (etc.)

Tape A. Club Orgy—The Sexual Act on the Stage Jan. 1971
Tape B. Club Orgy—Interviews with Performers, and Manager of Club.

Tape C. Club Orgy—Play "Bushes"
Tape D. Club Orgy—Interviews
Tape E. Club Orgy—Book Store and Interviews

National Conference of Christians & Jews (12-7-70)
Tape A. Video Group Feedback
Tape B. Video Group Feedback

Tape A. Witch—In Central Park 10-31-70
Tape B. Witch—In Central Park 10-31-70

Tape A. Paul Silbey's Massage Trip
Tape B. Massage Techniques

Chinese New Year Dragon Dance ("Year of the Pig") 1-27-71

Hierophant Connection & Company at GV (3 camera mix)
Tape A. Eddie Howard & Group Jan. 1971
Tape B. Eddie Howard & Group
Tape C. Eddie Howard & Group

Tape A. The Inside Story of Bob Dylan Feb. 1971
Tape B. The Inside Story of Bob Dylan

Derick & The Dominoes—(on air)
Review of '70 N.Y.C. riots etc.—(on air)

KINETIC & EXPERIMENTAL:
Design Feedback Jan. 1971
Multi-camera Feedback—with the Vasulkas (JLR) Jan. 1971
Solarization Tape Jan 1971
Bob Baker Experimental Tape Feb 1971
Lower East Side Video Poem Feb 1971

PHOTO • DUDLEY

Media Access

VIDEO POTATOES (30 min) High-variety assemblage including content on wilderness survival, old people, the San Francisco Bay oil slick, a local fight over billboard construction, the legal rights of juveniles, the desert, random street encounters. Much taping by area high school students.

LIVING SPACE COMPOSITE No. 2 (30 min) Focus on alternate living experiments and accessible shelter materials. Home-made and hy-tech dome structures, inflatables, tipis, raps with owner-built homesteaders, building with waste materials, experimental playground constructions.

All tapes (Media Access and Ant Farm) Sony AV series ½". Available on Sony AV ½", Sony CV ½", and probably Ampex 1" formats. Along with specific request, please send raw tape of your own liking (if not, retail costs), a $15 service fee, and approximate mailing costs. Open to exchange or barter on a one-to-one basis. Make contact.

VIDEOFREEX, 98 Prince Street, NYC 10012 (212) 925-7286
Nelson Becker (Canada), Skip Blumberg, Nancy Cain, David Cort, Bart Friedman, Davidson Gigliotti, Chuck Kennedy, Curtis Ratcliff (California), Allan Scholom (Michigan), Parry Teasdale, Carol Vontobel, Ann Woodward, Fat Leo
All tapes ½" Sony Old and New Generation

GLOBAL VILLAGE, 454 Broome St., NYC 10012 (212) 966-1515
Rudi Stern, John Reilly, Joie Davidow, Laura Adasko, Wayne Hyde, Henry Heinbach, Shridhar Bapat, John Brumage, Bill Kutik, Susan Milano. All tapes are Sony AV Series

RAINDANCE, 24 East 22nd Street, NYC 10010 (212) 982-5566
Dean & Dudley Evenson, Louis Jaffe , Beryl Korot, Paul Ryan, Ira Schneider, Michael Shamberg
All tapes Sony AV & CV Series

PEOPLES VIDEO THEATRE, 544 Ave. of Americas, NYC (212) 691-3254
Ken Marsh, Elliot Glass, Elaine Milosh, Howard Gutstadt, Ben Levine, Judy Fiedler
All tapes Sony ½" AV and CV Series

MEDIA ACCESS, PORTOLA INSTITUTE, 1115 Merrill St., Menlo Park, Calif. (415) 323-5155
Richard Kletter, Shelly Surpin, Allen Rucker, Pat Crowley
All tapes on Sony ½" AV Series

ANT FARM/SOUTHCOAST, 247 Gate 5 Rd., Suasalito, Calif. (415) 332-9088
All tapes on Sony ½" AV Series

INTERMEDIA VIDEO BAND, 2023 East 1st Ave., Vancouver 12, B.C.
All tapes on Sony ½" AV Series

See issues I & II for other cultural data bank listing of Videofreex, Raindance, Global Village, Media Access Center, People's Video Theatre, and others.

Peoples Video Theater

VIDEO POLLS
Are men basically good? October, 1970

What do you think of the American Flag? September, 1970

NEWSREALS:
Women's Sufferage March, August, 1970

Puerto Rican Students Conference at Columbia, September, 1970
Puerto Rican March on U.N. "Puerto Rico Libre," October, 1970

Young Lords at People's Church: The Death of Julio Roldan, October, 1970

Opening of People's Park in Lower East Side, September, 1970

Tomkins Square Community Center Tour, November, 1970

The Environment Boomerangs (Ecology), October, 1970

Indian Thanksgiving at Plymouth Rock, November, 1970
I Wor Luen Health Clinic, November, 1970

DOCUMENTING OF COMMUNITY PROGRAMS
East Orange Model Cities Project, December, 1970**

VIDEO EXPERIMENTS
Hands, January, 1971
Street Scene, August, 1970
Dog Shit, July, 1970
German Youth Movement, July, 1970

WOMEN'S CULTURE SERIES:
The Supermarket (E. Milosh & S. Niiderman), January, 1971

Ultimate Mirror

Betty Friedan at the Columbia University Graduate School of Business

Junk 1971

Abstracts for the Colorizor

Clay Whitehead—Director of Telecommunications policy—the White House—first policy speech

Columbia-DuPont Awards for Broadcast Journalism 1970-71

All of the above Sony AV series

for more information about tapes available contact Richard Rubinstein,
308 West 82nd St., NYC 10024

Ant Farm/Southcoast

TRUCKSTOP/CAL ARTS (30 min) Trip with video nomads through LA with emphasis on CIA as a truck stop access to tools and information.

OAKLAND ROADSTER SHOW (30 min) Trophies, freeways, roadsters, customs, choppers, highway patrol film and excerpts from Alan Watts' "What's It All About" show.

ANT FARM INFLATABLES (20 min)

SALLY'S ASLEEP (20 min) Hanging out in the Bay Area.

SOUTHCOAST SUPER-8 FILM-to-VIDEO (20 min)

Intermedia Video Band

Bear Paw—**anti-western cowboy ghost town stagecoach nature dance**
14 hours Dec 70

B.C. Almanac—**selfreflexive documentation photographers National Film Board Show ½ hour Nov 70**

Mushroom Walk—**search for the elusive mushroom and back**
½ hour Nov 70

Channel Eight Interface—**guerilla video in TV studio feedback**
½ hour Dec 70

An Experiment in Theater and Perception of the Self—**Vancouver Art Gallery**
4 hour Oct 70

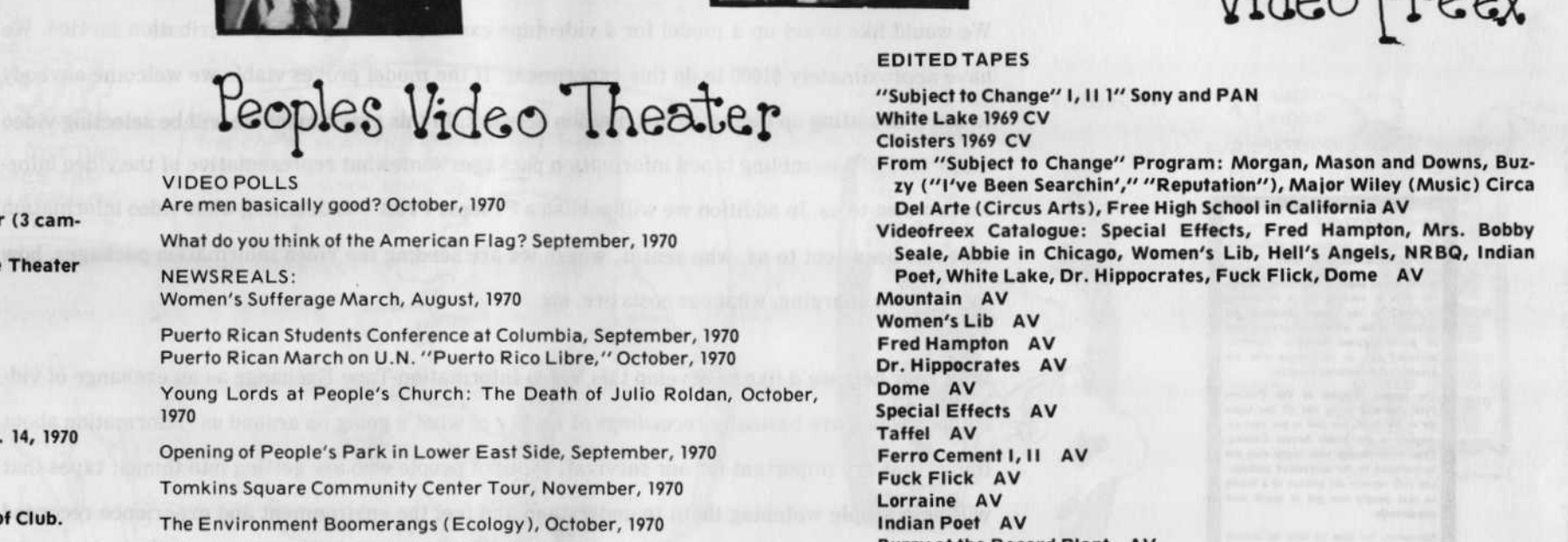
Satellite Gallery—**percussion concert documentation community be-in feedback event**
Dec 70

Christmas Eve Event—**music/light festival feedback-evening**
Dec 70

Videofreex

EDITED TAPES
"Subject to Change" I, II 1" Sony and PAN
White Lake 1969 CV
Cloisters 1969 CV
From "Subject to Change" Program: Morgan, Mason and Downs, Buzzy ("I've Been Searchin'," "Reputation"), Major Wiley (Music) Circa Del Arte (Circus Arts), Free High School in California AV
Videofreex Catalogue: Special Effects, Fred Hampton, Mrs. Bobby Seale, Abbie in Chicago, Women's Lib, Hell's Angels, NRBQ, Indian Poet, White Lake, Dr. Hippocrates, Fuck Flick, Dome AV
Mountain AV
Women's Lib AV
Fred Hampton AV
Dr. Hippocrates AV
Dome AV
Special Effects AV
Taffel AV
Ferro Cement I, II AV
Fuck Flick AV
Lorraine AV
Indian Poet AV
Buzzy at the Record Plant AV
Curtis' Abortion AV
Van Morrison AV
To Nantucket AV
Money AV
What's This For? AV
"Love America or Live" AV
Snow AC
Art II AV
Parry's Rap to the Rotary Club AV
Supermarkets for Progress: Organic Development—Conscious Interaction; The Food Line; The Group; Group Games (Rough) CV

Incomplete listing. Contact Freex for complete one.



THIS CASSETTE THING

Except for broadcast television, every major information medium in America had its genesis in men who started out because they felt they had something important to get across. Sure, they wanted to make money, but that was almost as a by-product of unique (although not always sane) visions. Think of the early days of any medium and there's a name associated with it, not an anonymous corporate structure.

Only broadcast TV began exclusively as a marketing proposition, carefully creating psychic wants instead of servicing genuine need.

Videocassettes are probably the most hybrid medium of the century. Because they have a little in common with books, long-playing records, magazines and, of course, broadcast TV, people from each of those old media are swarming over cassettes trying to figure out where the money is. All see the new medium as the next great ship to come in, and this time *they're* not going to miss the boat.

At Raindance we sporadically are gotten in touch with people who tell us: "I want to get in on this cassette *thing*." When they extend that as their only understanding of portable video, we tell them to fuck-off, in so many words.

It's practically impossible to find anyone who is concerned about cassettes as a money proposition who also has any particular passion about the medium. Of course they see it as fulfilling a need for people who are pissed off at broadcast TV, but they see that need only as another lucrative market. While it's also their cant to say: "we know videocassettes are going to require a different kind of information (from film or broadcast TV)," not a one I've talked to knows what.

The following is a compilation of interviews in person with Jeff Reiss, program director of Avco's Cartrivision cassette system; Irv Stimler, President of Optronics Library, a software house; some phone raps with P.R. men at other companies; and information I've gleaned from other print publications.

Most of the above are playing a game of roulette (potential high return gambling), but they're betting all the numbers. Thus, they have huge catalogs which cater to every imaginable taste, or they're into marketing surveys where money, not survival information, comes first.

Why this is all important to anyone in alternate television is that we've all seized upon new media tools because we're pissed off at the way the old ones are being used. So if it looks like the new cassette tools are being co-opted, then we've got to be very careful how we cooperate.

Of course we all need money to stay alive (until we find a way to do it without money). That's not the issue. What is the point is whether or not we might be trading off short term gains for long term debilitation.

There are a few bucks around from Avco and maybe Optronics for production. Yet any of our stuff would be part of a voluminous catalog sandwiched in with all sorts of bullshit. So what the packagers get for the few bucks they're willing to pay is practically all of our legitimacy, *but as fuel for their context.*

Moreover, when videocassetes catch on, its going to be clear that the people producing especially for the medium, as all of us in videotape inherently are, are going to be the major sources of the best material; just as the LP first imitated the concert hall and then became fabulously lucrative with a true electronic form: rock music.

The hipper cassette packagers are keeping their lines open to some alternate TV people, *but why should they reap future benefits if they're unwilling to underwrite what we're doing now, which is essentially their R&D?*

On the other hand, if we can get together a tape network of people making television for survival ends, if it also becomes a financial success will it pose a threat to interests like Avco or CBS who are pumping millions into what they hope will be a proprietary medium? They are already fanatic about how they will *control* their own distribution.

So here is the scan:

CARTRIVISION is a hardware system made by Avco, a conglomerate which, as I understand it, does some defense work along with conventional films and other things. The system has been licensed to Emerson for production, but from what we've seen it's not the best piece of hardware around. Avco plans to sell the deck in a package with a TV set and later a separate playback unit, but both configurations are particularly cumbersome. Moreover, Avco has its own standard which will be incompatible with Sony and the Europeans.

To push their hardware Avco is very heavy into programming and has compiled an enormous list of non-exclusive rights to practically every piece of old *film* around.

Jeff Reiss of Avco, their programming director, is a nice, honest guy who combines a genuine sympathy for alternate television with a sense that he's buying futures: someday it will be good business. But remember that most of Reiss' time is taken up hassling the rights to old cartoons and NFL football games, etc.

Reiss has offered contracts to three groups: People's Video Theater, Media Access Center, and The Ultimate Mirror. The PVT tape will be a compilation from their archive called "Liberation 70." Media Access has offered a tape about inflatables and domes. And Richard Rubenstein of The Ultimate Mirror is giving a lovely tape of an impromptu outdoor percussion and guitar concert on the island of Ibiza.

According to each, Avco has offered about $200 as production expenses towards finishing Porta-Pak tape onto a one-inch master. As even $200 is a lot of money these days, they've each accepted.

Jeff Reiss says that those three offers constitute almost all of Avco's production budget (remember they're buying pre-produced stuff) and he's certainly willing to consider other stuff. According to Ken Marsh of PVT, the contract calls for sales price as royalties.

The problem with Avco is that they're into a heavy public relations game and one day soon each of the above tapemakers is going to find himself on a press release along with old Super Bowl games. Even though people like Ken Marsh are particularly adamant that they will be returning fair money to the subjects of their tape, somehow combining the genuine legitimacy of the disenfranchised (e.g. PVT has done a lot of work with the Young Lords) with old movies and the like is more a reaffirmation of old media style than a creation of a new one.

OPTRONICS LIBRARY is a software house which has no particular system to hype although they reportedly are going to go with Philips.

The president, Irv Stimler, is former executive from MGM records. His catalog will contain software that only Optronics has rights to. Their most notable catch seems to be the movie, ***Battle of Algiers,*** which Optronics never ceases to publicize their rights to.

Stimler operates out of offices on 57th Street in New York and seems more in tune with how to make money out of cassettes than any particular sympathy for people who might genuinely want to get it off through video. He's not dishonest, and certainly likeable. Just business shrewd as its own end. In talking to him and scanning his company (there are only several employees including his college age son) and its board of directors (full of "names" like Clive Barnes), you get the feeling he wants nothing more than to keep his shit together to get bought out, soon.

Stimler was absolutely non-committal about front-ending any money to alternate TV producers except to say that he is willing to listen to any proposal and might ante up some money for tape. *After* a tape's made, of course, he says he would be interested.

Optronics has contracted with Global Village to produce a twelve issue video magazine, the first of which is supposed to be done in July and will be about using portable video.

VIDEORECORD CORPORATION OR AMERICA is a company up in Stamford, Connecticut around where CBS labs is located. The company's president, Dr. Stafford L. Hopwood Jr., used to work at CBS labs. Not unsurprisingly, Videorecord has selected the CBS-EVR system which is easily the worst idea in videocassette hardware (see Hardware Section).

This more or less reflects Videorecord's big name board of directors which, according to Sam Gale, the company's director of communications, "is full of men who have been involved with television for years." It includes William Bernbach, co-founder of the ad agency which bears half his name, and Eugene Rostow, now a law professor at Yale but once a member of the Johnson administration.

Gale concludes that Videorecord certainly understands that the cassette medium will demand its own software, but admits he sees no problems with using the EVR system, and absolutely finds it irrelevant whether or not production is done on film or videotape (of course, the EVR system doesn't care either).

Gale was scarcely aware of any alternate TV activity in the country, but interested, and certainly friendly to *Radical Software* on the phone, although a little paranoid about being quoted by us.

The spectacle seems to be a lot of men who grew up in radio and if they ever had any notion of the potential of TV never quite got it together to do anything to change broadcast. Primarily, Videorecord is interested in the so-called "institutional" market which means businesses and schools.

To hell with businesses, but if Videorecord tries to move material into schools then they're to be resisted because the EVR system is just too much of a rip-off to force on our kids. Videorecord is just another company, perhaps a little more competent, which thinks the way to develop the medium is to do marketing surveys.

While I'm on the EVR system, there is a group up in Boston called the American Program Bureau which is selling a package of ten one-hour shows and an EVR unit to colleges for $3,000. APB, as it's known, handles radical speakers like Abbie Hoffman and Dick Gregory and sure enough that's what the package is all about. According to someone who's seen some of the shows: "they're like regular TV except they say 'shit' and 'fuck' and don't bleep it out."

Aside from the alleged quality of the programming, the political superstar trip is awfully dead dada/data to pump through a new medium with the potential of cassettes. If Abbie Hoffman is really into everything free and understanding media then why has he lent (sold) himself to a system which is specifically designed not to be copied (although you can get around that too)?

What's worse is the thought of some university student group putting out three grand when for the same money it could acquire a Porta-Pak, editing deck and a semester's supply of tape and begin putting out its own information instead of laying back and moaning "entertain us ."

A similar potential rip-off is a company called NTS which is in New York City. They're the agents for *Channel One* and not surprisingly their package consists of two *Channel One* tapes. (The first of the two is called "Groove Tube," a raunchy, very funny satire on broacast TV. *Channel One* has been around with that stuff for five years now and it is to what's now going on in alternate TV what say Jack Kerouac is to the so-called "counter culture": a forerunner, but also a relic).

NTS will put equipment out into colleges which includes true videotape in the form of a Sony AV3600 deck for playback, but the design is pure hype to fool the uninitiated. It is a column or monolith of monitors with the actual deck resting on the floor with a six inch clearance on top which makes it practically inaccessible. Moreover, it's hardwired-in which makes you wonder about NTS' claim that they'll solicit student tapes for what they have been hyping as their own "underground television network (UTV)."

The other part of the two show package will be a thing called "New York" which was to have been the latest *Channel One* show but reportedly folded after a few weeks even though it was launched with half-page ads in the *Village Voice* (about $670 worth of advertising each time). The show's one accolade: "The Masterpiece of the New Video" was credited to none other than NTS. In other words, the show's own agent was telling people how good it was.

Well it was shit. It amounted to a kind of "Channel One Discovers the Porta-Pak" and consisted of two guys driving around New York and shooting a lot of tape from their micro bus. Occasionally they'd talk to someone and absolutely rip-off their information without telling what the tape was for, why they were being taped, or letting the subject see the camera.

Probably the height of the insensitivity was some interplay with winos. One asked for a quarter and Ken Shapiro of *Channel One* said he wouldn't give him the money because "I don't like you." Another piece of tape had Shapiro hassling a drunk by taking off his glasses and mimicking him. It's a long, tedious, boring self-indulgent piece of tape by a couple of guys who used to be the only game in town (with two-inch equipment) but got left behind when the Portables came out. So beware of NTS, especially if they're hustling your school. It's more of the "counter-culture" in drag. Strictly for the money.

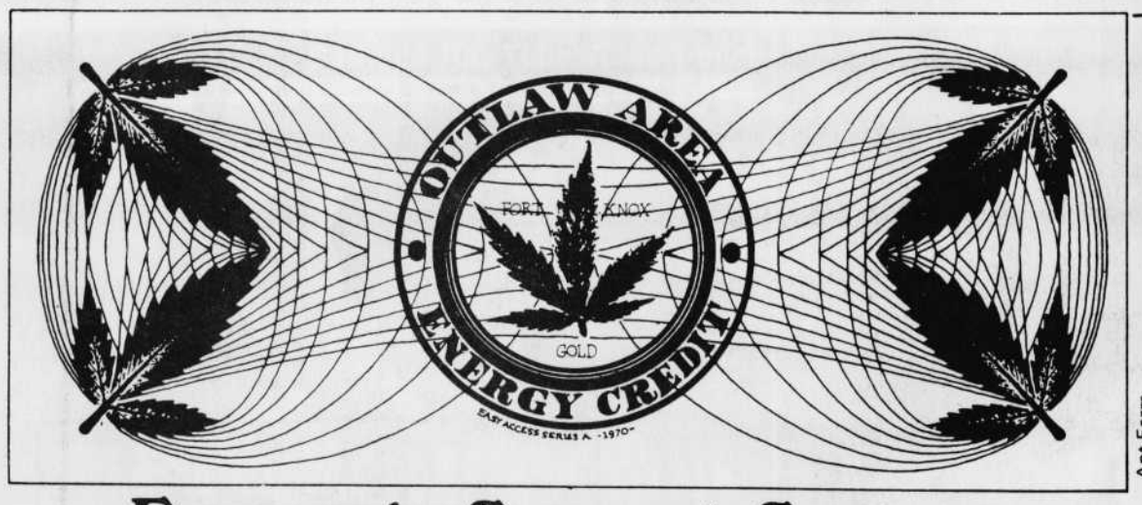
What does that leave?

There are other companies of course, but if any of them have a genuine interest in an alternate television they haven't emerged. It's just another marketing medium to them. This was really brought home at a videocassette "conference" we attended last November.

What happened was a few hundred executives who claimed to know that cassettes will provide kinetic information, anything you want, when and where you want it; these guys in their coats-and-ties all drove fifty miles out of New York City (to Tarrytown, New York) sat in a deadly dull motel ballroom, and listened to people talk for eight hours.

So it looks like we're going to have to try and do it ourselves and not as a hard-assed marketing plan, but in a lot of different ways. And we don't have to wait for cassettes. The information is here now on reel-to-reel configurations and tape exchange and some sales even are going on now, without the videocassette "industry."
And when the cassette machines do get here *we* can do our own copying and distribution because that's what videotape and decentralized media are all about.

Michael Shamberg



Ant Farm

Economic Support Systems

This is the linear version of a series of raps. Credit to participants later. The hope is that you will read, think, rewind a segment or two, and then read again. The subject (global) is attitudes with respect to economic support systems for video groups and alternative networks. The aim is to ask some of the right questions, lay down explicitly some assumptions while clearing up misconceptions: common sense and equipment glamour versus economic policy. The need is to experiment with economics *and* video information exchange simultaneously.

How do video groups generate themselves? How can they plug into existing economic support systems while seeking alternative production, distribution, and resource generation schemes. (Oops, we have to watch out for the pathology of language. There is great danger in becoming ill from the disease we hope to cure. There are pervasive properties in the existing processes—the habits and styles of thinking that can infect even the *terms for a cure*) *What means are available for the early growth and survival of video groups or alternative networks? What can be done, resourcewise, to foster the growth of alternative networks? How can we establish a sub-economy for video groups, directly related to the big one at least in the short run, yet differently structured? How can we judge the success and balance of the new with the normal while gauging its wholesomeness and independence?*

Needed: Basic attitudes coupled with solid practical advice on how to do. Suppose there are five people sitting around saying, "Boy, I would sure like to get into video or community television, or television as a self-educational tool." How do they get started, how do they grow and survive while finding alternative ecosound ways within the system to generate resources?

Economic problems: the first is that there will be no economics for a video group unless they can in some way generate a response prior to the need for investment (money). So far, in today's world, there have been only three sources of start-up money: welfare capitalism sources (government, foundations, food stamps); rip-off (subtle theft, direct theft, drugs); or inheritance (wealthy parents, relatives or friends who leave it to or give). The need is for some new forms of what venture capitalists call "seed money." The price of existing means (loans, direct investment in the corporation or partnership) often carry the obligation to produce along guidelines enforced (often not so subtly) by the investor. Picture a Bank of America Loan to *Video Zombies*—restrictions: no burning banks or Panther meetings.

Even with a solution to the problem of start-up money, there still remains **problem number two:** how can a video group generate the resources necessary to survive, i.e. food, equipment, tape, transfer or information, transportation, etc. Again, the classic ways are simple: be a middleman (sell other people's things to others who in turn sell them to "retail" buyers) or develop a product or service so distinct and valuable that people or institutions (CATV?) will pay to have it.

There are several grounds for concern with traditional means: the Sears-Roebuck mass-marketing approach exploits man and nature. . .one quickly becomes over-capitalized, over-exposed and indentured to capital. At worst the new system should be ecohomeostatic, at best it might even shrink (as opposed to growing). The products or services must not have bad influences on the environment (information and physical), they must be sound socially and for the individual (of, by and for the people).

We need solid advice and practical recommendations. Drucker, Theobald and others talk about new economic policies, global shopping centers, the age of communication, and the age of knowledge. But it is not clear that all such thought would work when one is concerned with access to information or the restructuring of video technology.

We must watch out lest we develop a new industry with new technologies. They loom larger in Wall Street eyes than steel mills or automobile assembly plants. They capture the imagination of the money firsters. Media Access Center as a glamour stock? Exploitive speculation (making survival money the end) will result either in failure or in value-free millionnaires—and we will all suffer again.

Meta-Manual

New technologies begin life by being mistaken for the ones they replaced. The car was first called "horseless carriage." Another name for radio was "wireless." And some people still see broadcast TV as "a radio with a screen."

There is a similar bias against portable video generated by people who are mired in old media. Film freaks question the potential of videotape as if it were merely "Polaroid movies" and are more concerned about what it can't do in imitation of film, rather than what it can do uniquely. Media instructors tend to be unimpressed by the Porta-Pak because for their money it's just expensive "Super-Eight." Even those who understand that the grammar of television is different from film, nonetheless mistake portables for a less sophisticated version of the old TV studio.

Portable video is a new, major medium. It is a high access form of our culture's dominant communications mode and precisely the opposite of product television which can accept only artificial behavior because it is based on a scarcity of time and equipment access.

The economics of portable video are subversive to anyone whose authority and security are based on controlling information flow. Thus the usual argument against portable video is that it has inferior "technical standards" which is a hype promoted by unions whose jobs are based on scarcity, owners who can't afford both their overhead and "equal time," and educators who build a mystique of expertise and certification.

Unlike product television, the Porta-Pak embodies technological evolution towards decentralization: reduced size and cost, increased ease-of-operation. As a totally self-contained system it gives control of information to whoever is being processed. Film, on the other hand, goes off to central processing and is usually programmed by people who weren't there when the information was compiled.

The bias of self-contained record, storage and instant playback punctures the estranging mythology of technology as something to be operated and therefore controlled by an elite.

Not only are portables simple enough for even kids to use, but they can take a system home and live with it. It's a high access technology. Most of America's media structures are the opposite: centralized and one-way.

Biological systems with those characteristics are usually unstable and non-adaptive. Because the way information slows through a system determines its structure, we can't expect our culture to embody ecological sanity unless our media are restructured to reflect that bias.

A media ecology demands decentralized, two-way information structures; just as survival pressure is now on to decentralize schools and governments to give control back to the people.

Our experience at Raindance is that the Porta-Pak works best in its own context:

Don't demand that portable video imitate another, product-oriented medium. Treat it instead as a general purpose technology which has many uses indigeneous to many different and unique behaviors. It's like the difference between an electric can opener, which is hardwired into one use, and a computer or the human brain, which have many uses independent of predetermined criteria of what is or isn't information.

Use portable video to process your own life, not to produce products which imitate life, or Johnny Carson and Walter Cronkite. Also avoid making superstars out of "alternate culture" heroes because that's the same old "leader" and "lead" bullshit. It's best to be intimate with video, not estranged by plastic modes of behavior put over on product TV.

So don't worry about initial inadequacies of technique. Everyone we know who's picked up a Porta-Pak for the first time used it to feedback on their own lives and environment because that seemed natural. Some of the strongest tapes we've seen are technically the crudest. It's a medium without experts. Not everyone writes novels, but everyone has writing as a tool.

And most important: structure your system to maximize access. Like guerrilla warfare, your heavy, centralized units should help support your most flexible one (the Porta-Pak), not vice-versa. If you want heavy hardware, (e.g. mixers, slick editing), design it as a technological support system in service to the portable. High flexibility is an optimum survival mode.

We are Raindance, 24 East 22nd St., New York, N.Y. 10010. Other groups with whom we work are: Fobile Muck Truck, c.o. us, Videofreex, 98 Prince Street, New York, N.Y. 10012. People's Video Theater. 544 Avenue of the Americas. N.Y., N.Y. and Media Access Center, 1115 Merrill St., Menlo Park, Calif. 94025.

But there are also many, many other good people who've gotten it together, especially in New York, along with groups who are getting it together. So this is a pretty incomplete list.

Manual

There are three standards of videotape and a fourth one coming: two-inch, one-inch, half-inch, and quarter-inch.

Two-inch or "high band" tape systems are indigeneous to broadcasting and are exclusively low access systems. They are temperamental, complex to operate, and stationary.

Generally, the wider the tape the more information it can hold. Two-inch systems, also called "quadraplex," lay the scanning signal perpendicular to the edge of the tape. All one and half-inch systems incorporate helical scan which lays the signal at an angle to the tape edge.

Typically, clean editing was once an exclusive function of two-inch machines. One-inch was first used as a cheaper version as their size and price range ($3,000 to $10,000) make them ideal for institutions with closed-circuit TV systems which imitate broadcast. Like two-inch, its editing capability is perfect.

There are no one-inch portables. However, all of the half-inch portables listed below can be interfaced with one-inch to provide perfectly edited one-inch masters.

The major technical problem with half-inch systems had been an unstable signal which precluded clean edits and even intra-system compatibility, in some cases. But most of the "technical" objections came from people who had a vested interest in limiting access to TV. Some of the best video we've ever seen was made on early, relatively crude Porta-Paks which were nonetheless flexible enough to go where people had something to record. Process versus product.

Moreover, many of the technical problems have been eliminated since the Porta-Paks were first introduced in 1968. There is now a Japanese standard of intersystem compatability between manufacturers (although not all the portables share it) which has a stable enough signal to be perfectly edited on relatively inexpensive (approx. $950) half-inch editing decks (e.g. the Sony AV3650).

Most of the information in this report is grounded in our experience with Sony. The system has many faults, but nonetheless has been the easiest to get and get serviced because of Sony's marketing acumen. Thus, the charts below give more space to Sony than the three other available half-inch systems, two of which are manufactured for two brand names.

The far right column of "coming" machines has more space than Sony because the systems listed there incorporate distinct advantages over the current Sony.

The charts are divided into four different scans:

Specs (for specifications). They're generally the same for signal-to-noise ratio (the strength of the signal in relation to inherent noise); audio range (VTR's have a separate, synched, magnetic soundtrack); tape speek (the faster it is the more information stored, but the less recording time); and resolution (most cameras transmit more lines than the tape actually stores, so deck resolution is more important than camera capacity).

The second generation systems all incorporate 2:1 interlace which essentially means that the synch-pulse is continuous and therefore the signal is stable.

System variables to look for are battery life and recharging time; standard microphones and lenses; and playback capability. Some Porta-Paks are record only and the signal won't playback through any TV set. Of course, a playback motor means a heavier unit which you may not need.

Design Intelligence. Even the best of the systems is an imitation of film technology. Rather than exploit the potentials inherent in electronics, Porta-Paks still have a small TV screen eyepiece between your eye and the lens. They could be separate. A lens in your hand, for example, and a monitor on your wrist. They're also still configured as guns, with triggers. And are thought of as packs, i.e. something you carry but which isn't part of you.

Other **Design Intelligence** criteria are how accessible is the tape path for monitoring and threading, can you get to the guts for repairs, and configuration of cable jacks and inputs and outputs.

Experience. This tells you what has screwed-up both electronically and mechanically from our own experience. Where we have none it's been left blank for others to feedback and fill in our ignorance.

Support. Some Porta-Paks are less flexible than others first, because they have few inherent options; second, because other units in the manufacturer's line aren't too good; and third, because they're less than a total system in their inability to interface with support technologies like one-inch and cable television.

This section also evaluates the quality and accessibility of dealer service.

PORTABLE VIDEO

A RADICAL SOFTWARE STATE-OF-THE-ART REPORT

EDITING

Electronic editing is done by putting your master (original) tape on one deck and recording it onto a second deck in a desired sequence. (The edited tape is thus an assembled copy, or second generation). Simply sequential editing is called "assembly." Inserting material in an edit is called an "insert" edit.

Insert editing is a function of more expensive machines as it requires a more complex internal mechanism. Assembly editing is the most rudimentary form and can be done whenever you have two tape decks. The results vary from clean cuts, if the system has an inherent editing function, to mild instability in systems where a dubbing (copying) function is made to serve as an editor.

It is also possible to edit tape manually by actually slicing the tape. However, in electronic editing you preserve the original master and are spared manual labor. (Manual editing is done by chemically developing the top of the tape to find the synch marks and then cutting between them. The edit plays back as a wipe up from the top.)

Generally, the more sophisticated your editing set-up, the less portable it is. Both modes have advantages. On the one hand it's nice to be able to turn out slick, finished products. On the other, being able to do on the scene crude edits means that community groups can have a cheap, quick, self-contained set-up; and similarly you can go practically anywhere there's an electrical outlet and not have to return to civilization if you don't want to.

Thus, a general editing support system breaks down into three basic levels:

LEVEL ONE: This is the simplest and most flexible editing support system. (We have used Sony equipment here not as an endorsement, but because we know it best. Comparable models from other manufacturers would serve the same function). Pure, basic editing.

At this level your actual Porta-Pak deck is used for playing back the master tape. It feeds into either another Porta-Pak deck (which is thus a complete field system) or the cheapest and most portable table deck.

In the Sony system, this would mean an AV3400 (Porta-Pak) feeding into another AV3400, or into an AV3600, a table model which lists for $695.

Going from the Porta-Pak to Porta-Pak is essentially a copying system which would allow you to leave a copy on-the-scene and take one with you after you have shot tape with two cameras. Using an AV3600 in place of a second Porta-Pak is both cheaper and frees up the portable for more shooting while people inside can watch what's been edited.

Typically, Sony has no conception that people would want to edit from a Porta-Pak. Thus, they make no cables to do the job. It's quite simple to wire them up yourself however, for an investment under $10. Wiring diagrams are next to the pictures of the machines.

LEVEL TWO: At this level your Porta-Pak is not involved and a table deck is used to feed the master reel into a heavier table deck. (Of course you can use two of the cheapest table decks, but for only a few hundred dollars more you get a lot of added flexibility).

The two possible decks shown here are the Sony AV5000 and the Sony AV3650. The AV3650 is a special editing deck which allows you to modulate incoming audio and video signals (other decks have what's called Automatic Gain Control which does the modulation automatically). While the edits you get are perfectly clean, there is a problem with the sound which lags a second or two. Thus, your sound kicks out or in before or after your video.

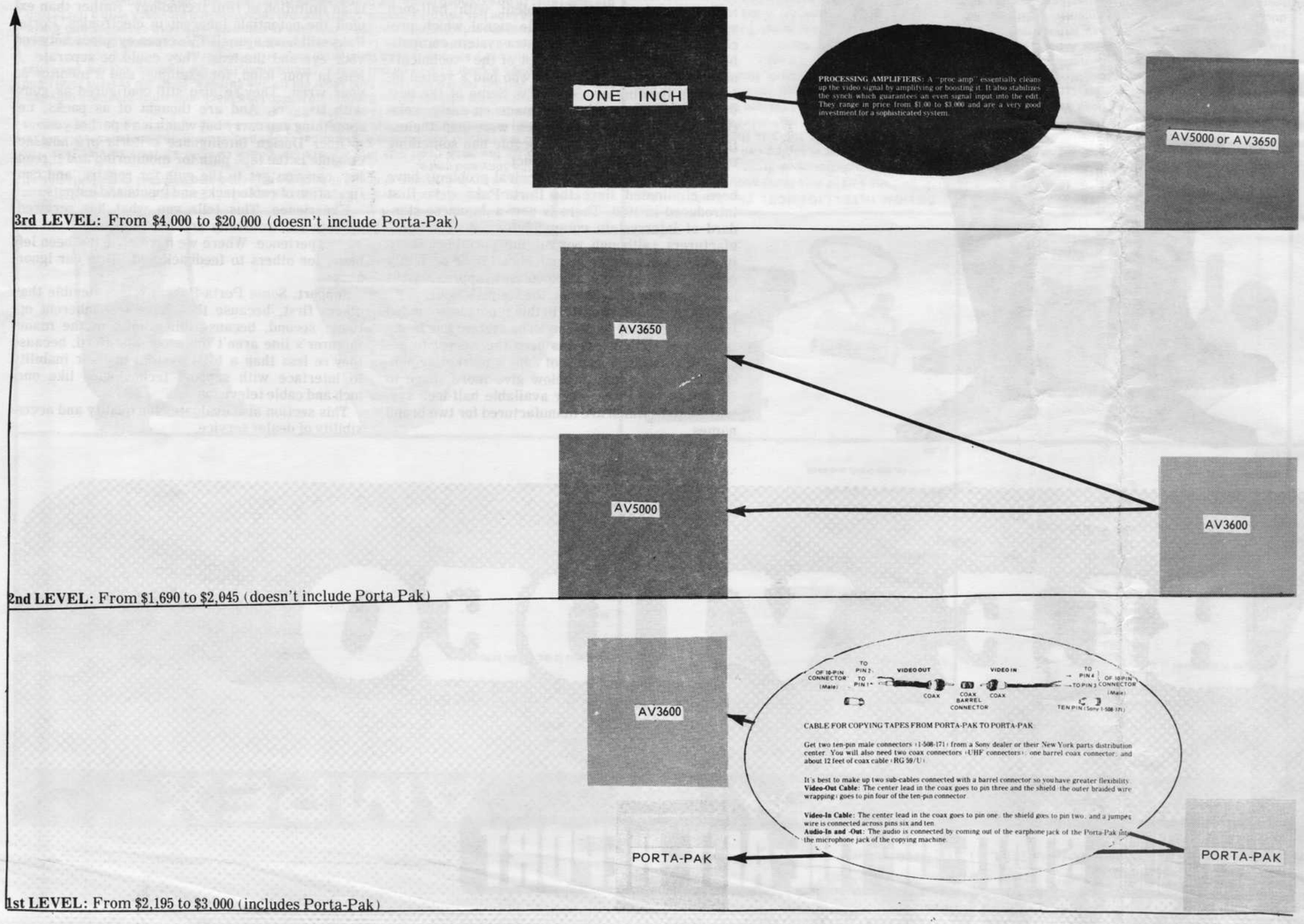
At this writing, the AV3650 is the latest of the Sony line. Previously, the AV500 offered maximum control. Its features include slow-motion and still-framing, a manual video gain control, and color record and playback (see COLOR for state-of-the-art in portable color systems). The AV3650 does not have color. The AV3650 lists for $995, while the AV5000 goes for $1,350. Unless you need color the AV3650 is by far and away the best thing to get.

LEVEL THREE: Here you use a half-inch table deck (actually any of the three mentioned) to feed into a one-inch machine. A good one-inch machine has perfect assembly edits and optional perfect insert edits. Most have two audio channels as well, along with controls over both audio and video modulation. One-inch machines are also upgradable to color with plug-in modular circuit boards.

The advantage of one-inch is you're practically assured a perfect master, especially if you run the incoming signal through a processing amplifyer (which essentially cleans the signal up and stabilizes the synch).

The disadvantages are that one-inch is non-portable and much costlier. They range in prace from $3,000 to $19,000. One-inch tape is also much more expensive than half-inch ($60 an hour versus $30) and there is no intersystem compatibility as in half-inch. Thus, with a one-inch master you've got to find a one-inch machine of the same make.

As for experience, we've only used a Craig which worked well. However, Videofreex have their own one-inch IVC and say they get good results with it.



SPECIAL EFFECTS

A SPECIAL EFFECTS GENERATOR: A special effects generator mixes camera signals and produces a composite image of either fades and dissolves (images superimposed) or wipes (one pushing the other off the screen).

The Sony Seg-1 ($595) will mix two cameras at once but has inputs for four. Thus, you can have a four camera system with two being recorded at any one time.

Special effects systems will use the Porta-Pak cameras (and feed into a Porta-Pak deck) so if you've got a lot of indoor shooting they're a good investment and a whole different way to do video. The Sony also has a negative switch to reverse black-and-white in the image.

Remember though that for every camera you feed into the system you need a separate monitor to see what's coming in. Thus, if you have a four camera set-up you need five monitors, one each for the cameras, and one for the composite image.

GEN-LOCK: A Gen-Lock system allows you to mix a live and a tape signal. Mixing two tape signals is impossible in half-inch technology (although you can do it optically by playing back on two separate monitors and shooting off the screens and mixing through an SEG).

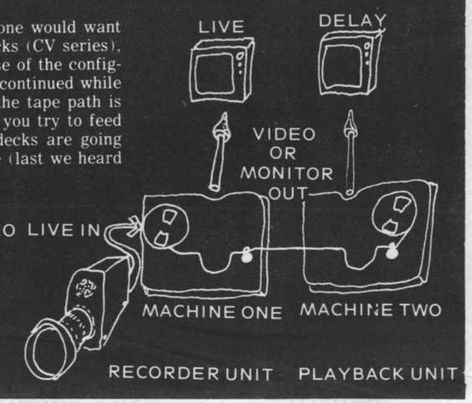
It works by the live camera synching-up with the tape signal which drives the system. It's simplest use in is in titling. Cheap ones start at $400.

COLORIZER: These simply are no color portables. You can, however, add color electronically to prerecorded black and white tape with a colorizer which feeds color information to the existing signal.

The effects range from almost natural colors to wild solarized tones which can look very good. Most colorizers are custom made. (CTL Electronics in New York City lists their at $950.)

TAPE DELAY: This is a mechanical set-up which can be enormously effective. As in this drawing, all you do is position two decks next to each other, record on one, and playback on the other. The actual time delay is a function of the distance between the decks. If you have two playback decks you can have two delays; three, three delays, and so on. You can also do a sound delay just by hooking up the microphone. Very freaky, mesmerizing effects.

Typically, Sony has no idea that anyone would want to do this. Thus, their old system decks (CV series), which were perfect for delays because of the configuration of the controls, have been discontinued while the new series (AV) is designed so the tape path is obstructed by the control lever when you try to feed from one deck to another. But CV decks are going very cheap so if you can get a couple (last we heard $295) you can do delays.



CENTERFOLD

FOLD

HOW TO BUILD A PORTA-PAK SUPPORT SYSTEM

COMING — SEE FRONT FOR OTHER PORTA-PAKS

AKAI

SPECS

model: VT-100

tape width: ¼"

playback: yes

viewfinder: optical

width: 4.1 lbs. + 12.8 lbs. equals 16.9 lbs. (camera + deck)

battery life/recharge time: 40 mins/8 hrs
recording time: 20 mins

tape speed: 11⅞" ips (inches per second)

camera/deck resolution: 400/200 lines

signal/noise ratio: better than 40dB

interlace: ?

temperature range: ?

microphone: built-in

lens: 10-40 zoom f/1.8

price: $1,295

DESIGN INTELLIGENCE: The Akai has two major differences which set it apart from the other Porta-Paks. One, it uses quarter-inch tape. All the others use half-inch.

The advantage of quarter-inch videotape is that it's fabulously cheap compared to other standards. Quarter-inch is the same size as audio tape (for reel-to-reel machines) and lists for $7.95 for twenty minutes as compared to $14.95 for twenty minutes of Sony videotape. The disadvantage of quarter-inch is that it has less information storage capacity as reflected in the 200 lines resolutions of the system, the lowest of any.

The other unique feature of the Akai is that it has a small detachable monitor which clips onto the recording deck. The camera itself has an optical viewfinder which means reduced weight. Overall this means that Akai is the first system not to place a tiny TV screen between your eye and the lens in imitation of a film camera.

SUPPORT: The Akai is, of course, on its own standard. This means you are limited solely to the Akai line for back-up editing and table deck replay. As we understand it there are only two other decks in the line, one black-and-white, and one (¼") color.

The problem is that it's literally impossible to find an Akai dealer, at least here in the East. Roberts Corporation used to be the Akai distributor (and the machine was called Roberts) and we saw it about a year ago at an electronics show in New York.

Since then Roberts got nowhere with distribution and Akai took the rights back. Now they have an office in Los Angeles, but the only east coast representation is one man who lives in Philadelphia and it's impossible to get ahold of him. He doesn't answer his phone. So even though the machine has distinct advantages, you'd probably do best to wait until Akai gets itself together. Meanwhile we can only list it as a "coming" Porta-Pak.

EXPERIENCE: None, of course, except for fondling it once at that electronics show. But we have gotten correspondence from Australia and Germany where people said the system worked very well and in one case (Australia) was even broadcast.

TAPE

Tape is too damned expensive ($35 an hour list price). Everybody is trying to find a way around the high cost. Some people even use computer tape but it's very hard on the VTR heads causing them to wear down quickly. So what you save in tape (used computer tape, we've heard, can be gotten for as little as 50¢ an hour) you pay back in head replacement and down-time (new heads are @$90).

Sony has two kinds of tape. The old one was brown and has been discontinued. New tape has a black back which generally means higher information capacity and less drop-out. Sony and Scotch (all high energy tapes have black backs) are the best from our experience. Stay away from Memorex and Ampex. Other hardware manufacturers also have their own brand name tape but most of it's made by the same company (Fujica) in Japan.

As the Porta-Paks take 30 minute reels, that's mostly what we use. They list for $18.95. We (and you should) pay $13.95 a half-hour in quantities of a dozen.

But even that's too much. Everyone's talking about a tape buying co-op and initial inquiry to 3M (manufacturers of Scotch video-tape) is that we would be able to get half-hour rolls for under $10 and hour rolls for under $20.

If anyone knows of a cheaper, better source, let us know. Or is any manufacturers read this, the video groups in New York are ready to buy up to $10,000 worth collectively. So get in touch.

COLOR

There are no color Porta-Paks. Sony has a half-inch color table deck (AV5000a) which will also play the black-and-white tape from a portable (AV3400). But there is no portable color recording deck (battery operated). And while you can get a color camera, the cheapest one is $5,000 and exclusively non-portable or tripod mounted.

Even the coming Ampex Instavideo Porta-Pak has its color circuitry in a stationary mode and no camera. (See Specs).

Sony has announced, however, a low-cost (under $1,000) color camera to be marketed by year's end in the U.S. From pictures we've seen, it's relatively small and compact (30 pounds), but nonetheless tripod mounted and dependent on an external electrical outlet.
Sony claims, but it's impossible to believe any manufacturer until you actually see the product in a showroom (and even then sometimes) that they have a prototype color Porta-Pak in Japan which should be on the market next year.

BATTERIES

A major annoyance of the Porta-Paks is the short battery life (from 45 mins to an hour). Of course they're rechargable, but to do extended shooting you have to carry a supply and they're heavy (5 pounds a set).

We have gotten around this problem by using a movie camera battery belt (Cine 60) which is worn around the waist and lasts three to four hours. But they're expensive ($350).

Media Access Center in California says they've been using Honda motorcycle batteries which last up to five hours, are cheap (about $15), and rechargable. The drawback is that they're heavy (9 pounds) and must be carried in a back pack rig (along with the recording deck).

LENSES

The Porta-Pak cameras all take C-mount lenses which are standard on 16mm movie cameras. You can also get an adaptor for using Nikon and other 35mm still-camera lenses.

The lenses that come with the cameras are alright, but their resolution quality could be better. Our own experience is with a fixed focus (in addition to the zoom) 25mm lens which has a speed of f/.95, very fast, for low-light-level shooting.

We've also used a fish-eye lens which is very freaky, especially on faces and sense of receding space, but ultimately harder to use than it first seems. Videofreex swear by a normal wide angle lens which they say is the most effective one for pure television. They use a 12mm Cosmicar. We use a 10mm Bolex. Cosmicar also makes a 9mm lens which is faster than the standard zoom (f/1.9). Either way the effects trend towards incredible verite with some distortion in close-up.

Definitely get a wide angle lens as your first additional one. They're indispensable.

MICROPHONES

There are basically two types of microphone: directional and omni-directional. All of the Porta-Paks have omni-directional mics, some of them are built-in.

However, all have jacks for auxilliary mics. If you use one you either need a sound man, or you have to tape it to the top of the camera or leave it in a permanent position.

From experience, we've yet to find a standard microphone with a Porta-Pak that was worth anything. The one built-in to the Sony is only good for conversations between a few people in a small room. Otherwise everything sounds like Grand Central station.

We have been using Sony ECM-22 directional microphones with some success. Another popular one is the Electro-Voice 635. Generally, a good auxilliary mic runs from $65 to $500. Some have their own power supply (batteries) which is like a back-up in case of deck malfunction. Definitely recommended for your Porta-Pak system.

CORRECTIONS

Some of the information here is probably wrong, some incomplete, and perhaps not completely up-to-date. So write in and tell us and we'll include it in the next **Radical Software.**

Our address is: **Radical Software**, 24 E. 22d Street, New York, N.Y. 10010 (212) 982-5566.

FOLD

FOLD

CENTE

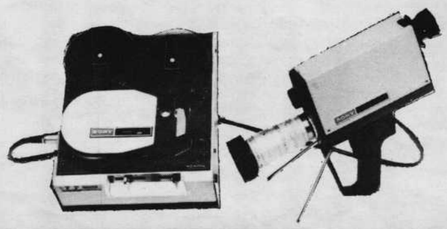
PORTA-PAKS

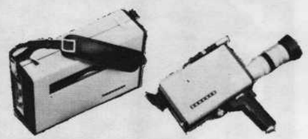
INDICATES TYPE ONE (COMPATIBLE) STANDARD ◄

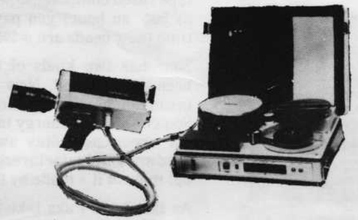
HERE

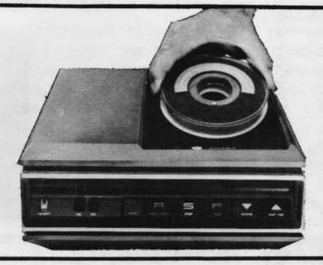
COMING

SONY	PANASONIC CONCORD	SHIBADEN APECO	CRAIG	AMPEX
SPECS	**SPECS**	**SPECS**	**SPECS**	**SPECS**
model: AV3400 ◄	NV 3080 (Panasonic) ◄ VTR 450 T (Concord) ◄	SV-707U (Shibaden) TELE-TAPE BATTERY PAK (Apeco)	6406	Instavideo ◄
tape width: 1/2"	1/2"	1/2"	1/2"	1/2"
playback: yes	no	no	yes, but manual rewind	yes
viewfinder: CRT (cathode ray tube)	CRT	CRT	CRT	CRT
weight: 6 lbs. plus 19 lbs. equals 25 lbs. (camera plus deck)	5.5 lbs. plus 15 lbs. equals 20.5 lbs.	6 lbs. plus 15 lbs. equals 21 lbs.	6 lbs. plus 15 lbs. equals 21 lbs.	5 lbs. plus 15 lbs. equals 20 lbs.
battery life/recharging time: 50 minutes/8 hrs. recording time: 30 mins	80 mins/10 hrs. 30 mins	?/5 hrs 20 mins	?/? 22 mins	?/? 30 mins
tape speed: 7 1/2 ips (inches per second)	7 1/2 ips	7 1/2 ips	9.5 ips	7 1/2 ips
camera/deck resolution: 400/300 lines	525/260 lines	525/300 lines	450/250	525/300 lines
signal/noise ratio: greater than 40 dB	greater than 40 dB	40 dB	more than 40 dB	?
interlace: 2:1	?	2:1	2:1	2:1
temperature range: 32-104 degrees	40-104 degrees	?	?	?
standard lens: 16-64mm zoom f/2 C-mount	15-75mm zoom f/2.1 C-mount	14-70mm zoom f/2 C-mount	15-45mm zoom f 1.8 C-mount	4 to 1 zoom, C-mount
microphone: built-in	auxilliary	auxilliary	two built-in, one front, one back	built-in
price: $1,495	$1,250	$1,395	$1,500	$1,300









DESIGN INTELLIGENCE: Sony is both so good and so bad it's hard to know where to begin.

In its favor, Sony was the first manufacturer to come out with Porta-Paks (their CV series) and the first to make a quantum leap with a second generation: a toally self-contained system with record and playback (the CV series was record only) through **any** TV set (using an RF converter which changes the output signal to a broadcast one. $39.95 extra). The Sony also has playback through the monitor eyepiece for on-the-scene previewing which can really turn on people you've just taped and help build an instant trust.

On the downside, the Sony camera and deck seem to have been designed by engineers **in vitro,** not for people **in vivo.** The camera is overly heavy and not well-weighted. The pack is very cumbersome and can only be carried in a leather case which obscures visibility to the tape path so you can't run quick checks on whether or not its running right. (see **Experience**)

Sony has its own form of mini-plugs for microphones which are incompatible with other manufacturers'. While the cable from the camera to the deck is a stanard ten-pin, that is the only way to get in and out in video mode. Normal systems accept coax plugs which are universally compatible. In essence, this all means that technological support is not inherent in the system and any options, like editing with a Porta-Pak, require special modifications.

SUPPORT: The rest of the Sony half-inch line (AV series) is pretty good. With a modified cable (see back) you can have editing on a compact table deck (AV3600) for only $650 more. The pack itself has audio dubbing and still-framing.

Next up in the Sony half-inch line is their color deck (AV5000) although cameras are not yet compact or cheap enough, and certainly not portable. The final piece is a full-blown editing deck (AV3650) but they've only been around a month or so and we've not gotten feedback yet. First reports are that it's pretty good except for sound which has the usual two second lag on cuts.

As for dealers, Sony is everywhere. Service will always vary individually, of course, but in terms of getting parts we'd count on Sony everywhere in the U.S.

EXPERIENCE: The Sony Porta-Pak has many, many faults, partly because they rushed it into production which meant that those of us first owners have been doing the necessary field testing. Here are the results:

Mechanically the problems are many. The control levers break off after not much use (they're made of plastic). You'll never see anyone who uses their Porta-Pak a lot who has a camera eyepiece intact. They break off like crazy because of poor hinges which can't take much stress. Finally, it's very easy for the tape to become wrapped around the capstan inside because the reels don't hang onto the spindles. This means that you think you're recording and open the deck up later to find a useless spaghetti of videotape. If you're moving around a lot this can really be a problem.

Electronically, the system could be better overall but there doesn't seem to be any recurring problem.

DESIGN INTELLIGENCE: The configuration of the record deck (more rectangular than Sony) makes for a better weighting and the camera has a detachable microphone instead of a hardwired one. But there is no playback mode on the Porta-Pak itself (tape must be transferred to another deck).

Panasonic actually makes two models of Porta-Pak although they are visually the same. The one not listed here is on their old standard which had a high recording speed (12 ips) and therefore a low recording time (14 mins) and was compatible with only Panasonic decks. Sony, on the other hand, has discontinued its old series (CV) Porta-Paks (which had no play-back) and table recorders.

SUPPORT: Panasonic has a generally good reputation, especially in its half-inch editing. But not all of its current line is Type One (the compatible) standard. As for Concord, its marketing organization is much less solid and hearsay feedback is that it's not very reliable to work with.

EXPERIENCE: Except for encounters with the Panasonic table decks, we've never used the Porta-Pak except demos at trade shows.

DESIGN INTELLIGENCE: The configuration of the deck is similar to that of the Panasonic/Concord and likewise the Shibaden/Apeco has no internal playback. Still not much of an improvement over the Sony.

SUPPORT: Shibaden has a good reputation, most of their equipment is made for professional use (although they've just been bought out by Hitachi, a Japanese electronics conglomerate), and they just make video hardware. As for Apeco, its an offshoot of a Midwestern company whose main product is office copying equipment. Neither one seems to have a high access marketing and servicing system.

EXPERIENCE: None.

DESIGN INTELLIGENCE: The Craig has one nice, and one sort of nice thing about it. First, there are two microphones, one front, one back. This means that whoever is taping can also talk into the soundtrack. The other thing is that the Craig has playback but only with a manual rewind. This offers the convenience of a total system without the extra weight that a rewind motor means. Like Sony and Ampex, it also has playback through the camera eyepiece as well as any TV set.

SUPPORT: The Craig is not Type One standard although there is one model in the support line that is. But it's pretty hard to find a dealer.

EXPERIENCE: Except for some editing we did once from Sony half-inch to Craig one-inch, which worked very well, we have none.

DESIGN INTELLIGENCE: Ah, here it is, the first total system Porta-Pak. Instavideo (it used to be called Instavision but Ampex changed it because someone else had that copyright) has all the options of the Sony and more.

This is because the pack itself sets into a more stationary (weight 6.5 lbs.) service pod. The back of the pod is a regular patchboard with standard coax and audio in-and-out jacks. (Of course, it also interfaces with a regular TV set through the antennae plugs, like the Sony). This means you don't have to hassle modifications to do editing.

The pod is upgradable with modules. Basic price is $800 for a black-and-white playback only system. For $900 you get record too (plus $400 separate for the camera, or $1,300 system total) and another $100 buys a color clip-in circuit board. (Remember that the module, not the pack, has the additional circuitry so color is not a function of the Porta-Pak per se).

The reason for all this is that Ampex (in conjunction with Toshiba, the Japanese company which will do the actual manufacturing) wanted a machine to compete with both cassettes and Porta-Paks. Thus, the tape has two play modes. One is normal recording and playback with a thirty minute tape time. In an extended mode, for prepackaged material, it will play 60 minutes.

Here's some more goodies: The tape has a plastic leader and is self-threading. You don't have to touch the tape path. There is an internal brush activated by a button for head cleaning. And a pulse code button which electronically marks your last stopping place so next time you insert the tape it will do an automatic high speed search.

You can also do electronic editing, still-framing, and slow motion (no other Porta-Pak has that). There are two sound tracks which means the option of stereo, and of course the system subscribes to Type One standard.

Finally, you can adjust tape tension (Sony has only a tracking control on its portable) and both audio and video input levels. The control levers themselves are configured like an autiotape cassettes recorder for easy control and access.

What's wrong with Instavideo? Well, the camera design is awfully hokey, sort of an old movie (or video) camera in drag.

Another major problem is that although tape is compatible with other systems, the physical reel is indigenous only to Ampex. Thus although you have the electronic capability of playing another systems tapes, you are totally restricted mechanically.

SUPPORT: Ampex has a generally bad reputation in its one- and two-inch lines. They have too many mechanical parts and down time is high.

Instavideo is their only half-inch machine and they have done a pure paranoid thing. They keep hyping it as a non-professional machine, but people are going to start producing with it. This means that come editing time to stay with Ampex you've got to go to at least a $6,000 machine (in one-inch format).

Not many people can afford that. As a result Ampex will be used for shooting, its competitors for editing support. So for every Porta-Pak they sell, Ampex will generate business for another company. Control instead of service.

EXPERIENCE: Ha! The only machine we've seen represents three prototypes travelling in America. In that form they're high Technology costing about $75,000 apiece. There simply are no production models available (Ampex claims late summer). They wouldn't even let us touch the thing at a demonstration which consisted of one vacuous model shooting another ratting her hair. They were even too paranoid to let us shoot the scene with our Sony, which they made us keep in a closet.

So, even though the thing shapes up as the next generation of Porta-Pak, a major improvement over the last, stay skeptical until you can actually feel and buy one.

See Back For Specs on **Akai** Porta-Pak

Economic Support Systems Cont.

You picks your value and pays your money. The automobile, especially the Model T, represented a major value choice of modern man. It stood for mobility, freedom, and energized the knitting together of a nation. Men moved in autos from farm to industrial town. Only freaks are walking back. Most technology and industry is experience-based rather than information-based. Edison was an experienced craftsman ("Invention is 98% perspiration," he said). But computers and television (enormously successful generators of resources until the cancellation of cigarette commercials) are early examples of the resource possibilities inherent in information. "Information is capital."

There are opportunities for survival resources (things that we can control with respect to outcome, a moral commitment, based on participation in the network). You *can* rip off broadcast television, film, cassettes.

Your local cable system is going to want to put out bullshit programming and will pay a video group to do that, but only that. You can work for a university TV station, etc. The university, as bad as it is, has exploitable functions: a marketplace for ideas, a source of equipment, money to support people, a generation and inculcation point for people and ideas.

One scheme for developing resources: consulting for the normal system—re hip programming. The hip/alternative network/video group system needs information right now, even if it is delivered via traditional methods. At the same time the alternate methods need development. If a hip show, for instance the Bobby Seale rap out of KQED (called "Staggerlee") comes over TV, people with beer cans in their hands will sit in their normal mesmerized state. It is not information for them, they have no control over it. But getting Bobby Seale out is important. Producing and televising such programs (for a fee) is *not* just a rip-off, but is important to the subculture. If a commercial station can be convinced that a show with important content can and should be delivered, the value of the show (re info for the subculture) outweighs the harm done by the way it is delivered. The alternate system is living, once again, in the cracks of the majority culture. *The danger, of course, is that the alternate system will become so used to the normal system's way of delivery that they no longer search for alternative ways.* The search will continue so long as there is dislike for the existing delivery systems.

In short, the need for information (at the moment) outweighs the negative aspects of delivery schemes. Hopefully, the development of alternative distribution schemes will provide "better" information. In the meantime, resources flow to alternate video by consulting: "we will use your channel, but we want to open the locks at our will." But that may well only produce nickels and peanuts, while opening up a large opportunity for straight exploitation of the subculture. In Kesey's words, "Keep away from the media, man, cause that's what done it. . . I know because I've been on the end of it so much. The media does a thing, it's like this . . . " There is a need to be damned conscientious, to spend enormous amounts of time protecting your flanks, playing around with how to do while not being screwed. That may not be possible for video groups struggling to stay alive. Are there funds for survival or capital return in plugging into the existing system: Broadcast, Cable, Cassette and Film?

FEEDBACK INTO FUTURE ISSUES IDEAS ON HOW TO ESTABLISH THE STRUCTURE OF VIDEO GROUPS, SOCIAL ASPECTS, AND (NOT LEAST) THE ECONOMICS OF ALTERNATE MEDIA (VIDEO GROUPS, ALTERNATE NETWORKS, ACCESS TO SOFTWARE, EQUIPMENT INCLUDING NEW EQUIPMENT DESIGN). PART OF THE GROWTH OF ANY VIDEO THING MUST BE AN ACTIVE CONTRIBUTION TO THE WHOLE SYSTEM.

The issue: What system to set up, what goes across it (or how it is used) that makes it significantly different or worthy of resource support. Cable may be an output, a way for people, tape, and feedback to come together. Maybe regional centers where people watching video can come back to those making or distributing tape. One of the problems: inaccessibility of equipment. How many people in the movement have compatible portapaks? Maybe 200 providing 5,000 people access via the *Whole Earth Catalogue*. Everyone has a formula for the success of things. When the telephone first started, runs one such formula, it was used locally in towns, cities and communities. But they couldn't talk to another community. So Bell developed a long line service to link the cities together. The *Whole Earth Catalog* success, it seems, is that it performs a service; a direct, objective, touch-feel service. You read the Catalog, you mail in something, you receive and use it or read and imitate—it is possibility-expanding. It gives its readers an immediate vehicle for access and response. We all feel that about video tape, but we are yet to make it work.

Ira Schneider started this rap with Jerry Kindred and Les Rosen. Allen Rucker, Pat Crowley and Richard Raymond added most. Jerry Kindred did most of the writing.

In order to get video going on such a service, we must get the hardware to the people. Just viewing a television set and cassette playback is not enough—the need is for cameras, tape and knowledge of how to use—like learning to write. We need some hold on hardware design, a toehold into reproduction and distribution. But the alternate culture shies away from technology. Technology itself is so far a self-devouring thing. Something is designed and produced, it becomes the demand basis for something that is better. Everyone is waiting anxiously for the cassette, while buying soon to be obsolesent portapaks. Can video survive an exponential rate of obsolesence? Suppose the subculture developed its own gear, how would it avoid the cycle—clever design and distribution promotes stocks and conglomerates. Will some kind of sharing blunt the competitive edge and break the pattern? Henry Ford, Alex Bell, and James Hill had the advantage of a simpler time.

But maybe we are looking in the wrong direction for wisdom. There is recently a lot of speculation on new mediums of exchange (see the discussion of tokens in the January '71 *Supplement to Whole Earth*). Maybe "access" itself is a higher form of exchange. How does it work to get things done? My information favor to you today will be returned someday by you or someone else—the old blueblood trick.

Everyone is now talking about networks. It seems we need to avoid the "massive encompassing one" or "the one" that would destroy autonomy. If you begin at a particular point with an expertise (Lloyd Kahn and doming) you should work towards orienting your network around that existing interest. Avoid central systems and hierarchies. Networks are not imposed, they happen or grow. But we still need to invent or discover ways to generate the resources by which they can grow or survive. The connecting mechanism should be subtle, preserving the cells. The networks will be different and diverse-sharing, maybe, certain assumptions and says to develop, grow, have.

A recurring conviction. If it is not well done, it will fail. Things that are really good get picked up on. It is not going to happen without responsible competence. It just isn't possible to talk your way into a new kind of life that will allow everyone to be happy, a good attitude is not enough. It is necessary to run bookstores or printing presses, to work hard at generating things that are marketable and saleable if the money part of things go.

For video groups: Just because you've read *Radical Software* and are into the video thing, don't think people are going to hand you money out of good faith. Video groups must be other than aesthetic dandies. It is so easy to play with video, to make Dadaesque little things by intercutting off-air video with the man on the street. Video must somehow generate a new form of audio-visual information. Too many people are into turn-on television. There is so much that can be used for this purpose with no residual effect or worth. Maybe the difference is between outsider and insider—those who observe and report and those who participate in the process. Availability of easy rip-off mechanisms in video are everywhere. But to do so means selling soul, raping principles, and fouling up the energy balance.
The service of telling other people what you as a video group are doing is not that good. *Media to the people* and CATV raps are too often just hypes. Maybe the only service that a video group can perform on a non-personal level is to supply tapes, but then we run up against the inaccesibility of hardware problem.

It seems to come down to this: when a media or video group arises it must focus its service on its existing community, the local scene where it can actually perform a service within the limits of its energy.

What are the values and beliefs that are shared by video group and its community? In the process of creating networks, we must be very attentive to what the value is that we are sharing. Too many systems seem to have failed by attempting to match a wide variety of values to a large group. People seem differentiated in these matters—a large group of people will have only very few values in common. For most Americans to date, for instance, the value that they have held together is the need to survive economically. As we get beyond that point will social change, personal growth, learning how the orld works, and educational development compel people?

If you don't dig the thing that someone else is doing with video, that's cool. They'd like to hear your complaints and consider your proposals. If they don't dig your proposal, go off and do your thing. Especially during the formative phases outside comments have heavy impact, especially if you are willing to share in the creation. But don't pick up on the business of bad mouthing that someone; just begin in another direction if your disaffection is that great. A plurality of solutions appears more viable (and possibly more healthy) than a single all-encompassing one.

Don't feed on. Input into and then use with wise selfishness if you must.

Enough philosophy. Next we'd like to deal with concrete ideas on economics, distribution, and the like—or at least the ground rules for these. If you are really interested write to Media Access Center at Portola Institute, 1115 Merrill Street, Menlo Park, California 94025.

TOWARD AN INFORMATION ECONOMY

by Paul Ryan

> *"There is an internally recognized beauty of motion and balance on any man-healthy planet," Keynes said. "You see in this beauty a dynamic stabilizing effect essential to all life. Its aim is simple: to maintain and produce cordinated patterns of greater, and greater diversity. Life improves the closed system's capacity to sustain life. Life—all life—is in the service of life. Necessary nutrients are made available to life by life in greater and greater richness as the diversity of life increases. The entire landscape comes alive, filled with relationships and relationships within relationships."*
>
> *Dune* appendix on ecology

. . . Been struggling with the economics of alternate video for three years now. In that time I've been involved with one rich patron, a Ford Foundation project in Newburgh, New York, various independent consultancies, and the recent New York State Council on the Arts/Video Movement Game. In most every case financial decisions have been in the hands of people other than those involved in the actual processing of information. In most instances this control has worked against the people involved. Equipment gets shuttled in and out of situations arbitrarily. The glorious turn-on gets no follow through and hopes turn to bitterness. The "if only" syndrome of powerlessness takes over. When you get mixed up with a bureaucracy, the bureaucracy can be depended on to reduce everything to its safe and sorry time grain. If there are semi-creative bureaucrats who have pet projects it's worse. Sitting on fat salaries, they play a sloppy politics of attrition—helping divide up a scene, hitchiking on people who have been doing it without money. Because they ultimately determine where large sums of money go their ideas and say-so acquire a disproportionate weight. Among those struggling to survive in video the presence of a large sum of capital such as the original quarter million of the State Council brings out the worse of old style politics—non-cybernetic, crude and beyond repair. All this is compounded by the sheer fact of being in the city where it is near impossible to sustain networks of trust relationships. In short, the funding of video by grants thus far has been a bummer—high promise, low yield and all the time eating up people's budgets of flexibility. Nor is the grant scene self-sustaining. After a year you know your mistakes well enough to do it better and there is no bread. Newburgh left a lot of unhappy kids.
Meanwhile, back at the marketplace, Avco, EVR and friends are stockpiling information for home and cable along traditional marketing lines, treating information as capital, not understanding relevance. They continue to hype people to the glories of this bullshit so they will scream sock it to me on through the seventies and make their stockholders rich. By 1980 they will have enough audiences "pinpointed" (a term used in a Rand report on Cable) so that in effect we will move from the saturation bombing of American brain cells via broadcast television to pinpoint bombing via cable and cassette.

Where do you go? Capitalism itself is rightfully under onus with dissidents. Profit-making corporation is an instant turn-off for many of us, save those who have been "cleared" of their "money hang ups" by Scientology. Given the ecological situation, having a lot of money in a Swiss bank so you can buy the best anti-pollutant face mask just doesn't make it.

But then where do you go? As Frank Gillette, the original conceiver of Raindance would say—capitalism is like heating a house with coal. It's dirty, sooty, nobody likes it, it's a pain in the ass to manage, but it keeps the house warm until we find something better. One has only to read Norman O. Brown in *Life Against Death* on "Filthy Lucre" to realize the enormity of the money-dirt-excrement nexus that has been keeping our house warm. My sense of strategy as to how to move toward the polymorphously perverse resurrected body Brown calls for is by way of an information economy. The movement away from capitalism toward ecological narcissism is, at least in part, the embodying of mind infomorphs. By **infomorph, I mean an organism that relates to itself and its environment in a way that respects and optimizes all possible transforms of differences that make differences.** It does not identify one variable, such as profit, and attempt to maximize that variable at the expense of the whole.

Our capitalist economy renders life unidimensional—more and more the same; uniformity via homogenous quantification. By contrast an information economy thrives on variety and diversity, quality not quantity, differences that make differences. More simply stated the problem is one of how do you work in such a way that the flow of money follows the desired flow of information and not vice-versa? And how do you insure that there is enough money to do it?

There is a critical mass, a certain amount of machines and money necessary without which there is no way to manage transforms of differences. To cultivate a consciousness congruent with current complexity one must have enough quantifiable resources to pass critical thresholds and recycle what is relevant. Buddhism is beautiful but it is an oversimplification given the need for increasing the diversity of life. Spiritual riches via voluntary poverty may be a cop out. God is not transcendent, he is immanent in our experience, in this planet. We need embodiments of mind, not disembodiments. There is enough to go round. There are enough people interested in relevant communication so that we can begin to pay each other fairly for services rendered. Open accounting will help prevent some rip off. We cannot be giving it away all the time for free in dramatic gestures, while the capitalist economy packages the drama for its own development, giving not a shit for alternate culture. When someone suggested to Warner Brothers that they air Woodstock footage over network television as a serial in keeping with what would be proper eletric liturgy he was told, "ah—we're making over 50 million on the movie, don't bother us with that."

We need to think our way through the horns of the profit, non-profit dilemma into an information economy. Deliberate minimization of a variable such as profit (the non-profit ethic) is as dangerous cybernetically as maximizing profit or in the purity of non-profit, but distributed throughout the biosphere in accord with patterns of relevant information flow.

In our current situation there are a number of mechanisms that disenfranchise people from their own money: insurance companies, taxes and an unresponsive government, and educational institutions which thrive on real estate and the power to certify knowledge rather than the ability to process information for people. The great virtue of the *Whole Earth Catalog* has been no bullshit information based on use and consequence of use. Contrast this with TV advertising that manipulates mythologies up front to trigger consumer response in subliminal ways In the *Whole Earth Catalogue* the flow of money began to follow the flow of information.

InfomorphOne
Organization of Ignorance

Since only the user is in a position to know what is relevant for him and how he wants to access relevance and information exchange must include the user from the beginning. Much of this happens naturally in just watching different tape and becoming aware of wanting to see more of this and no more of that.

At another level it is necessary to deal with desired information in a more coherent way. A healthy relation to the unknown is critical. Otherwise we grow rigid and die the death of explicitness and repetition. "I love Abbie Hoffman" reruns become reactionary. A mind that concerns itself too much with what it knows cannot maintain a good guessing way. Openness to the unknown is part of having a feel for what is relevant as things develop, a sense of the significant differences while there is still time to make a difference. Such access to relevancy is part of the freedom to self-correct that information economy can supply. What we don't know is an infinite resource, inexhaustibly recyclable. It seems possible to develop out of our ignorance a culture with a fullness of feedback such that we would not be recurringly faced with the choice between cannibalizing the human relations we have or solo-tripping to regions where we cannot relate to those we love nor ask them to trust.

A coherent relation to the unknown is possible through an organization of ignorance. Organization of ignorance is a research technique Peter Drucker explains in *Landmarks of Tommorrow* by discussing Mendeleev's discovery of the periodic table of chemical elements. At the time Mendeleev was working only 60 odd elements were known. Rather than trying to puzzle together the known elements, Mendeleev began to ask himself what he had to know about what he did not know in order to make sense out of what he knew. He allowed the intervals, the gaps in his knowledge, to play a part in his conceptualization. In other words, he organized his ignorance.

Sample Organization of Ignorance Input

Hour of the ocean
Tape of CATV Projects
Rap with Stewart Brand on Economics
Rap with a drop out from Scientology
Interpersonal relations in Commune
Children in Commune
Raps for high school kids by college kids on college
Raps by dropout users about their experiences
Rap with veterans returning from Vietnam
Tape in South Vietnam
Tape from African student on life in Africa
Daily life tape of situationalits
Tape on abortion in NYC
Critiques of Bucky Fuller
Woman's Liberation Movement raps with women on where they feel its at directed toward men
Rap with Weathermen
Rap with people who have left the city living in country, how they are doing
Edited version of Keep by Frank Gillette
Raps with people on planting electrodes in brains
Documentation of Earth works by different artists
Check out *Whole Earth Catalogue* and inputs

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ARTISTS' NEEDS

by Eric Siegel

Up until now, the video scene in America has been centered in New York City and San Francisco. It has manifested itself in the form of various video groups or as individuals.
The groups have become somewhat like clans, and in my opinion are quite closed. If you make videotapes and wish to do a good editing job . . . where do you go? Or if you wish to show your work to the public in a theater . . . where do you go?

The existing video groups here (New York) are not into editing individuals' tapes or public showings. So you are forced to join one of the already existing groups or making your own. This is a ridiculous state of affairs to say the least. I now would like to suggest the way I think the video structure should be set up:

1. A special **editing lab** should be set up in every major city in the world. All equipment can be kept in excellent working condition by two well-qualified people, one an engineer, the other a technician. The lab should be open 24 hours a day. The fee should be low enough for everyone to afford. Something like $15-$20. American money per hour. People would be able to call up for an appointment, come down and work the machines themselves if they choose or be assisted by the 2 people present.

2. A **public video theater** where anyone could rent time to show their tapes to a special audience or party. The theater should be able to hold at least 200-300 people comfortably. It should have a thick rug on the floor and huge video screens on the walls with a stereo high fidelity sound system. Again, rental fees should be reasonable so an individual can afford it. About $75 per hour. The theater could be open every day. The theater would not have to worry about successful showings because its income would be from *the showing fee.*

This fee could vary according to the day and time. Saturday night would be the highest showing fee. Something like $150 per hour. The artist would have to advertise the showing himself and could charge any admission he thinks he's worth. The theater would not take any gate cut so that if the artist becomes successful the artist becomes rich.

This is a reinforcing system. And a profitable one for both parties involved. Advertising could be added with the consent of the showing artist to raise extra revenue. Public service commercials could also be run, again with the consent of the showing artist.

If no one sets this system up—I shall.

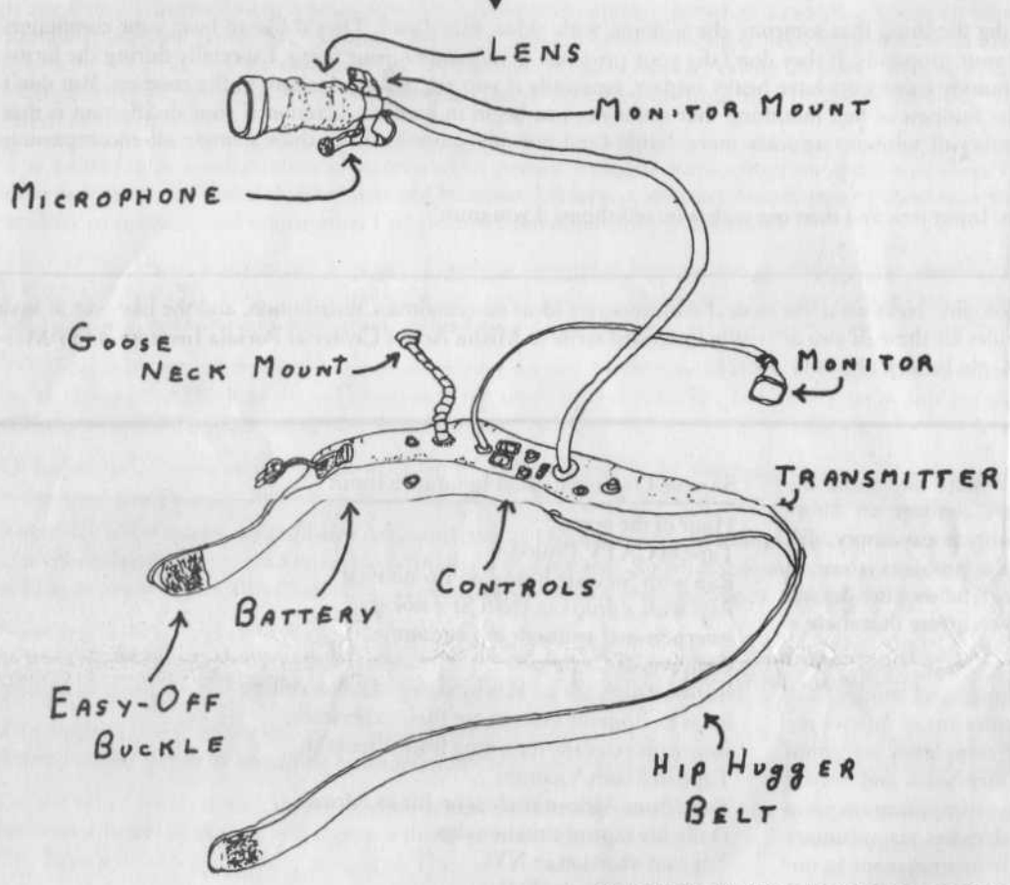
HARDWARE: DESIGN AND CONSEQUENCES

applicationbulletin

SONY VTR DIVISION

SONY CORPORATION OF AMERICA / VTR DIVISION / 47-47 VAN DAM STREET, LONG ISLAND CITY, NEW YORK 11101

A HUMAN DESIGN FOR A PORTA-PAK



Design Inputs: Paul Ryan, Ira Schneider, Dean Evenson

Sony helps create 'super' salesmen

HARDWARE RAP

In January Ampex showed off its new Porta-Pak (Instavideo, see centerfold state-of-the-art report) and by chance a lot of alternate video people ended up at the demonstration in a hotel meeting room.

While a lot of straight dealers sat on folding chairs and the rest of us laid out on the floor, one of Ampex's engineers read a rap from a script and every now and then held up cue cards to emphasize what he was saying.

After that Videofreex asked him a lot of technical questions which was a turn on because it was obvious they knew as much, if not more, than your average Ampex dealer.

While the machine itself promises to be a whole new generation of portables, and the Ampex engineer was very gracious and friendly towards us, it became obvious that the people who most understand technology are the last ones to be consulted on design decisions.

As the excerpts from these *Sony Applications Bulletins* and the picture of cops using the Ampex machine show, hardware designers are strictly oriented towards the markets they know.

There is no design constituency among alternate video people equivalent to institutions and government. Yet our numbers and purchases (including school media money) are probably increasing rapidly. Nonetheless, none of us get consulted on the consequences of video technology until after the fact.

There are many, many things wrong with video equipment, most basically the entire design of the portable which imitates film technology. The eyepiece, for example, still sets between your eye and the lens even though, as a tiny video screen, it could be positioned elsewhere with say a lens in your hand and a monitor cantilevered off your chest.

Moreover, the recording deck is cumbersome and poorly weighted. And internal controls are minimized so the hardware directs you rather than vice versa.

What can be done? How can we form an alternate design constituency?

If somebody could pinpoint all the alternate video money being spent the manufacturers might become hip to a new market. Or you can simply write the maker of your equipment and tell them what pisses you off. They do respond.

But probably the best thing to do is mutate your own hardware. Buy their basic units and reconfigure them for your own needs. Then patent it. This gives you the right to give away your designs to whomever you want, while protecting yourself from being ripped off.

Here in New York City, Shirley Clarke has scored a grant which will be used to design a portable video camera that will embody human, rather than marketing intelligence. It will not, she says, be like a gun with a trigger for "shooting" people. Instead of a weapon which hides your face it will include a lens as part of the wrist for inobtrusive taping and relating. If you've got practical designs, pass them on and we'll print them.

Sony improves driver education Sony's job in the Navy Sony helps mental health Army develops film strip with Sony VTR Sony helps settle Hurricane Camille claims Sony: self-trainer for computer salesmen Sony bridges information gap at SON ...the better one

Sony CCTV: New technological 'weapon' spies on Sony helps Timerman Products in sales, training, production Sony aids crime Sony Stops So for enforcement agencies Sony trains real Sony helps stop dropouts Sony helps boost patient Sony: eyes beneath the sea So Sony sparks sales training at Rodale Sony at Menninger: mirroring the mind

EQUIPMENT STANDARDS

by Eric Siegel

PART I—Sony the First and Worst

In the last issue of this publication I advised people to switch over to the new Sony standard. I told you we were up against the wall, as far as equipment goes—and at that time Sony had the only back pack available. The Sony back pack camera is the worst piece of engineering I have ever seen in my life. If you want half of your video tape chewed up and your pictures to be totally inaccurate electronically, then get it. It is bound to give you more trouble than anything else...Now, I can advise you of a piece of equipment I really believe in, so much so that I am buying it for myself. It is the Ampex Instavision back pack camera. The camera *has* DC restoration, and the pack records color. It has still frame and two sound channels for stereo sound. It uses a modified reel which Ampex calls a cartridge and threads itself automatically. It is cheaper than the Sony and is built strong . . . Sounds nice so far . . . now the only catch . . . you will most likely have to wait until winter '71. However let me make it clear that I have not used this piece of equipment and it is only speculation on my part. So, as far as it goes, all that I emphasize is that at this time all this equipment is a gamble.

PART II—The Global Video Standard

I should think we are all agreed that the reason we are engaged in this work is to achieve a unified planetary consciousness utilizing the videotape medium (for now). If those of you in England, Holland, Germany, France, Italy, Sweden, Denmark, Norway, Russia, etc., all use the video standard of your own country (usually 625 lines, 50 fields per second) then you will be defeating the very aim of your existence: that is, to change the state of our planet using the most effective electronic mind altering device developed in the history of our species . . . TELEVISION. Does the mind of America need to change the world or does the world need to change the American way of thinking. In either case a communications network must be set up between the USA and the rest of the planet. The alternetwork must adhere to the same technical standards if this project is to have a real impact. I shall now give my reasons why I think everyone should adopt the American 525 line 60 field per second system:

1. The alternetwork is already developed and going on in America;
2. more American 1/2" new standard equipment is in operation now than any other standard;
3. few people have bought equipment in Europe so far and those of you who have can use them to transfer your pre-existing tapes onto the American Standard AV system;
4. any tapes you make will have to undergo scan conversion before your local TV station can play them;
5. the American standard is just as clear as the European 625 line standard except there are 100 less scanning lines. This difference is very small. The American Standard has the advantage of no perceivable flicker on the picture tube because of the faster field and frame rate.
6. You could use European standard monitors by making a simple modification of the vertical oscillator and deflection circuit. This could be on a switch;
7. this would enable tape transferring between all countries with no technical hassle;
8. income can be made by selling your software to American cable television companies. They would be very interested in VIDEO FREE EUROPE.

I have given you all the reasons I can think of—the main one being so we can exchange information. The rest is up to you to decide. This paper Radical Software *shows we are doing our part.*

Cathode-Ray Tube Videotronics

Excerpted from *Expanded Cinema* by Gene Youngblood, Copyright 1970

The underlying principle in creative use of videotronic hardware might be called "video synthesizing," just as we speak of sound synthesizing in the Moog process. There are no special restrictions inherent in the video signal as opposed to the audio signal. Anything that can be done with sound can be done with video if the proper hardware is available. The basic ingredient of alternating current is identical in both processes, and represents potential for as many variations as the equipment will allow. Just as the new filmmaker seeks to synthesize all the elements of his technology, so the video artist attempts to synthesize the possibilities of his medium in the creation of electron synaesthetics.

Since present television studio equipment was not made for the purpose of aesthetic experimentation, artists have been forced to work within parameters that amount to video imitation of cinematic techniques: electronic equivalents of cinematic wipes, fades, superimpositions, and traveling mattes. There are, however, certain advantages in working with video systems to achieve variations of these effects quite unlike their cinematic counterparts, and with considerably less expenditure of time and effort.

The Television Camera

In standard photography a photosensitive emulsion on a strip of acetate is exposed to lens-focused rays of light that form an image in the emulsion. A similar principle is involved in television except that the image is translated into coded electronic-signal information and is then "erased" to make way for another image. Inside every TV camera, instead of film, is a photoconductive camera tube. These tubes are called variously Image Orthicon, Vidicon, Staticon, and Plumbicon, depending on the chemical makeup of the tube's photosensitive surface, which is called the photocathode screen. For many years the Image Orthicon was the standard camera tube. Recently, however, the Plumbicon, whose photosensitive surface is composed of lead oxide, has become the popular camera tube.

According to how much light is focused onto the surface of the photocathode screen, each tiny photosensitive element becomes electrically charged, building up a "charge pattern" across the screen proportional to the lights and darks of the televised scene. This charge pattern is swept across, or "read," by a beam of electrons emitted from a cathode gun in the camera tube. The beam neutralizes each picture element on the photocathode screen as it sweeps across, producing a varying electric current that corresponds to the pattern of light and shade in the televised scene.

As each photoconductive element on the screen is scanned by the electron beam and relinquishes its information, it is said to be "wiped clean" and can therefore respond to any new light image it may receive through the camera lens. This charge-forming and systematic "reading" is a rapid, continuous process with the entire photocathode screen being charged, scanned, and recharged thirty times per second to produce a constant scan-line pattern of 525 lines resolution, the standard in the United States.[6]

The Television Receiver

The video picture signal thus produced is subsequently amplified and cabled through a video switcher/mixer console in the studio control room where it is transformed back into a picture on monitors that operate like home television receivers. Cathode-ray tubes in television receivers are called "kinescopes." In them, a cathode gun like the one in the camera tube sprays the phosphor-coated screen with a beam of electrons synchronized with the exploratory beam in the studio camera. The phosphor coating glows in the path of the beam as it scans the picture tube. Horizontal and vertical "sync pulses" keep the two beams in step.

A beam of constant strength would produce a white rectangle of fine horizontal lines, which is called a "raster" and is the basic field of the picture. But if the beam's strength is varied, the trace-point brightness is varied also. When the video signal is made to regulate the picture tube's beam, a pattern of light and shade can be built up on the screen's phosphor corresponding to the distribution of lights and darks focused through the camera lens—thus a duplication of the televised scene. This picture fades and is continually replenished by the rapidly-scanning beam so that we see a clear, complete image. In relatively low-resolution systems such as the 525-line U.S. standard, a so-called rolling effect of the scan-lines can be detected on the picture tube. In high-resolution systems of 1,000 to 5,000 lines, however, the resulting image is unflickering and extremely clear.

The same principles are involved in color television except that four camera tubes are incorporated inside each camera: one each for the basic colors red, blue, and green, and one black-and-white tube for use in aligning and resolving the three colors. In color television receivers, three cathode guns instead of one are used to scan the phosphor screen, electronically "mixing" the palette according to the distribution of hues in the televised scene.

[6] Gerald Millerson, *The Technique of Television Production* (New York: Hastings House, 1961) and Howard A. Chinn, *Television Broadcasting* (New York: McGraw-Hill, 1953).

MEDIA

MISUNDERSTANDING

VIDEOTAPE VERSUS FILM Half-Inch, 16MM, and Super 8

by Louis Jaffe

In both film and videotape the moving picture is a series of still images. Actually, the film picture is still because the whole frame is exposed to light in a single flash of the shutter, but in video the different areas of the picture are traced at different times by the tip of a sweeping electron beam. One sweep of the entire picture is called a field.

Sixty fields appear each second. Two phosphorescent points continually trace the screen, using the same scanning pattern the reader's eye uses on a page. As one field fades, a second is being drawn. The constantly regenerating image on the screen is an exact reproduction of how motion is scanned electronically in the camera.

Watching sound film, we see twenty-four different pictures a second, interspersed with instants of darkness. In fact, the screen is dark about half the time, but the flicker rate meshes with the human eye's retinal image retention, and we see a persistent picture. This picture is the wall-sized, optically focused shadow of the image on the film.

The movie image is the light of the projector reflected off the screen, as the TV image is a surface of phosphorescent bits. Greys in the projected film are the light being kept from shining through the film by a barrier of silver grains. The light that does get through projects the pattern of the grain in the film which is the fabric of the image. The brightest part of a projected film image is white light passed through clear film and a lens and reflected off the white screen.

Watching television we see a sheet of glass, its far side coated with phosphors, being swept by the tips of two electron beams. The phosphorescence excited by the passage of the beams in several hundred geometrically exact lines is the television image. Its brightest part is the flash set off by the strongest electronic pulse recorded on the tape. It is an image with brilliance and luminosity that film can't achieve.

Of the many formats in film and video, there are just three in which the equipment for recording picture with sync sound can be carried and operated by one or two people and these formats are also the cheapest. The three, half inch tape, 16MM and super 8, are compared for vital statistics in the following table. The figures given are rough means and will vary widely among the many makes of equipment. The evaluation of image sharpness is based on just informal observation.

	½ IN. TAPE		16MM		SUPER 8	
CONTINUOUS RECORDING TIME:	30 min.		11 min. (400 ft. magazine)		2 min. 40 sec.	
SHARPNESS:	slightly below Super 8		double that of Super 8		slightly better than ½ in. tape	
PRICE OF MATERIALS:	$12/½ hour		$40/11 min. (B&W mag stripe processed) $110/½ hour		$4.00/2 min.–40 sec. (processed) $45/½ hour	
PRICE OF EQUIPMENT:	camera & port. deck	$1500	camera	$1400	camera	$250
	editor	1000	editor	150	tape rec.	100
	monitor	250	tape recorder	400	editor	30
		$2750		$2650	projector	250
						$630
WEIGHT:	camera	4 lb.	camera	9 lb.	camera	3 lb.
	port. deck	16 lb.	tape recorder	6 lb.	tape recorder	4 lb.
		20 lb.		15 lb.		7 lb.

What these figures don't show is the production time difference between film and tape. Film takes hours or days to arrive at the point where tape is the instant after it is recorded.

No sync sound film process is as simple as video where sound and picture are recorded side by side on the same piece of tape and can be played back in sync immediately. The film process which comes closest uses a strip of magnetic emulsion on the film so that sound can be recorded in the camera. Using this method, you can have a sync-sound original ready for showing in a few hours. Other processes all have to go through the step of transferring separately-recorded sound onto the film, which means two separate trips to the lab with the cutting-room time in between.

At present, there are no battery-powered half inch portable video recorders that can record color. The first low-cost half inch color decks appeared recently, but there is still no portable color camera. All the figures in the table are for black and white.

In general it seems that half-inch tape is taking over from 16MM in documentary or reporting functions where easy sync-sound, long recording time, and immediate playback and replication are important, and film is holding its own with color and the big screen.

Because videotape stores information as electronic code, it interfaces with a wide variety of electronic systems. The television signal can be analyzed by a computer, just as information stored by a computer can be displayed on TV. The film process interfaces directly only with other photographic processes: film is printed onto film to make duplicates, individual frames are printed on paper to make photographs. For showing on TV, film is translated into electronic code and stored on videotape.
In film, copies are always inferior in quality to the original. When video is duplicated the signal can be electronically cleaned by a processing amplifier resulting in a second-generation image sharper and tonally richer than the original.

Video cameras have no moving parts and are silent. The 1/2" portable deck produces a low hum whether recording or not, so that people nearby don't know they are being recorded unless they see the tape reels turning. Some of the 1/2" portables are so silent that they do not seem to intrude on quiet conversations. People notice when a movie camera is running, because the system makes no noise at rest, but whirrs during filming.

Special effects such as fades from one image to another or superimposition of two images are accomplished in film by double exposure in the camera or special printing techniques in the lab. In video these effects are produced by electronic mixing of signals.

The film method is time consuming, and if a mistake is discovered after processing, the whole process must be repeated again on new film. In video, you just fiddle around with mixing controls, record, and re-record until you get the effect you want.

The film process is one in which variables can be changed one at a time through generations of experimentation where hours of cutting and calculation may be devoted to a few minutes on the screen, whereas the video image must be mixed while the tape is running in exactly the same length of time it takes to play it back. The tape can be re-recorded as many times as necessary to get it right, but the experimentation must be done in real time.

There is as yet no way to edit 1/2" tape as precisely as 16MM film. Editing film is a matter of cutting up the film, glueing it together in a new order, matching up the sound, and going to the lab for a new print. In 1/2" videotape there are complications to this method. First, the helical scan means that there is no one point on the tape where an editor can physically cut between pictures; they all over-lap. A second problem is the track of control pulses which lies next to the sound cut.

To circumvent these problems of physical cutting, videotape is edited by duplicating from one tape machine to another. The original tapes are played on one machine and selected sections from them are recorded on the other. This method creates the problem of timing the instant when, as the first tape recorder is playing, you switch the second onto "record." You have a sequence already copied down on the second machine which you want to end at a specific point, and you are going to add on a following sequence from the original tapes playing on the first machine which begins at a specific instant. With both machines rolling, how do you manage to reach the end of the sequence on machine two at the same instant you reach the beginning of the sequence on machine one?

In order to fix this instant, the machines would have to be rolling together with absolute interlock. At present, no interlock system exists in 1/2" tape, and you have to accept minimum half-second errors in cutting, which makes editing dialog very difficult. Although these editing problems have been completely solved by computerization of the process, the cost is high, and the solutions haven't been applied to 1/2".

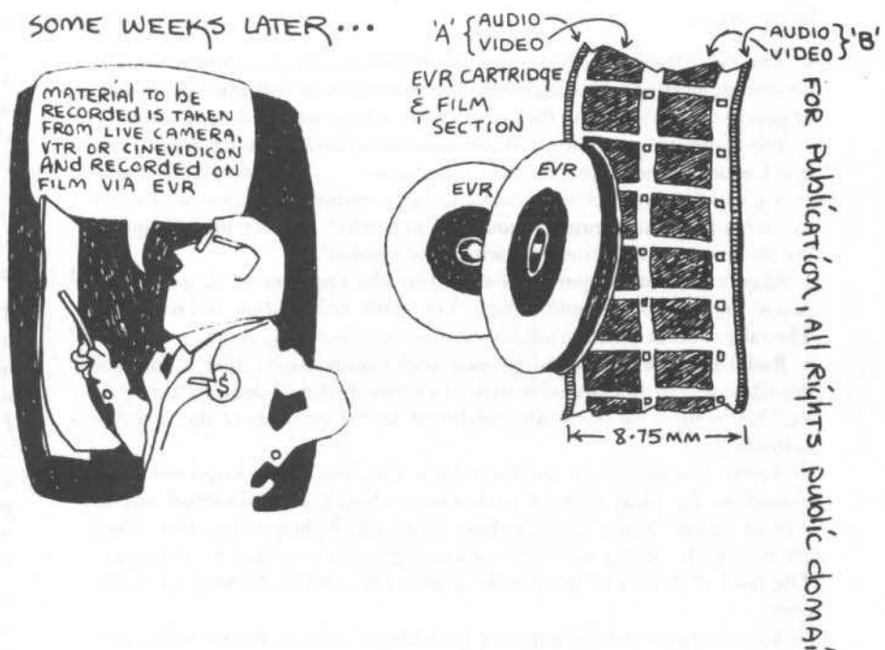
To summarize the videotape process: optical image and sound are both translated to electronic code and recorded magnetically. They are played by the exact reverse of the recording process. One signal brings image to picture tube, the other brings sound to speaker.

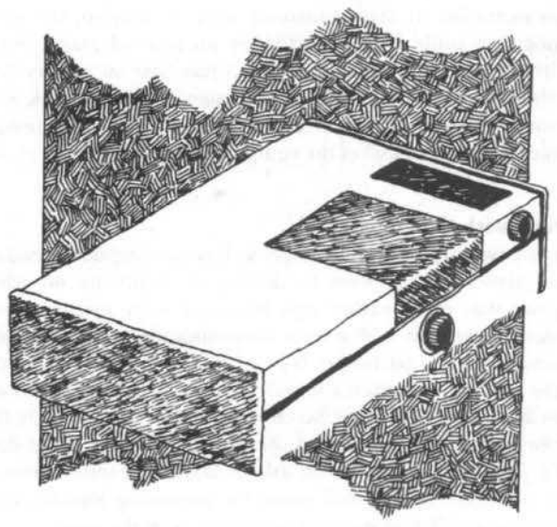
The film progression is: Optical image preserved on film through chemical processing becomes stencil for optical projection. Sound is recorded magnetically, translated to optical code stored on film beside image, and translated back to electronic signal for playback.

The film process is a one way avenue out from experience recorded, as tape is both an avenue out, and a circuit of immediate feedback into the experience as it occurs. Videotape can be played back as soon as it is recorded, and seen as part of the situation that produced it. It is this capability which gives tape a clear advantage over film for use in all forms of educational experience, from encounter groups to industrial training, where it is valuable for people to see themselves in action as others see them, while they still remember freshly how they felt as they were being recorded.

Film isolates events for people to see in a theatrical context at a later time. Tape can create the same contextual isolation of subject (if it is not played back right after recording) but it can never duplicate the theatrical setting of film. Going to theater, or even setting up home projector and screen, is a special excursion. To watch a film we drop what we are doing, darken the room, and gather in the dark with our attention focused on the screen, which is the only light in the room.

As movies are a theatrical experience, television is part of our "normal lives." The television set is a piece of furniture in everybody's house. We watch TV with the lights on and often leave it on at the edge of what we are doing. A face filling the largest home TV screen is just about life-size.

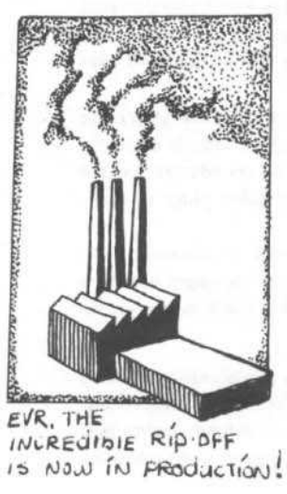




MEMO; EVR
(Extremely Vile Ripoff)
TO; All departments
FROM; The CAP'N

Well done boys! With this system and our control of the supply of cartridges, we'll be filthy rich in no time!

With the tight format and very fine grain of the film material it'll be impossible for anybody to move in on us.



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ASPECTS OF DATA

by Frank Gillette

"Appearances to the mind are of four kinds. Things either are what they appear to be; or they neither are, nor appear to be; or they are and do not appear to be; or they are not and yet appear to be."

Epictetus

(1)

What was not apparent has become real. What is not apparent will become real. Within the *Historical* epoch reality, or what is "real", is equated with the amythic, or the absence of myth. (The word "myth" is thereby relegated to a synonym for "false".) *Amyth's* function is the preservation of precedent, knitting its version of continuity with the past to the *status quo*, and finally to the force of example. *Amyth* deforms the negentropic value of informational process by appealing to *Amytbic* authority, appealing to history, appealing to its past patterns of self-idealization. In effect *Amyth* permitted, even invited, man to ignore the ecological consequences wrought by the complexification and influence of his tools. In Nietzsche's phrase *Amyth* is "the exhaustion that gazes backwards"

(2)

(Survival through lexical re-structuring . . . a capacity to articulate the interface between paradigms.)

Rigidified paradigms as tautological loops: As they rigidify they 1) destroy the sense of mystery, 2) lose their reverence, 3) can connect exclusively with what they "know", 3.1) with what is routine, 3.2) such that change is comprehended as disconformation, and 3.3) self-perpetuation is confined to a uniforming process.

Since man's rate of change is fundamentally dependent upon redefining the alternatives to extinction, the method of definition employed becomes a measure of its own success—its meta-method. The intention to survive (adapt) is subsequently reflected in the range of methodological resources selected to describe the condition. Methods, like specialists, die with the environments that create them. But the application of atrophied methods (bureaucracies, ideologies, fossil fuel systems, whatever) is the result of obsolescence another level up, in the sense of *Model* informing *Metbod* with coherent purpose.

(3)

Models reveal meaning (or value) and select method, implicitly or explicitly. The system of models (or myth) employed in practical calculating and engineering is assumed accurate for the description of its effects upon total environment, forcing reality to be seen as a mirror image of intention. For example, if it is not the intention of fossil fuel systems to pollute they can be so engineered as to inhibit pollution or make it acceptable to those polluted. Since engineering in a sense is expedience, the initial decision, at least, is to render it acceptable. This is the ceremony of "crisis management".

(4)

Every lexical shift or cultural re-stratification is a response (an adjustment) to emergent inconsistencies between the dominating myth, in this case *Amyth,* and reality feedback. As accelerating rates of shift exceed some indefinable critical point the myth itself is voided. Sometimes the shift is as subtle as the proverbial distinction between factors A & C, but not between A & B and B & C. Sometimes not. Currently man's experience is *overlapping* relative to the end of one paradigm (or psychic space) and the beginning of the next occupying the same time. In this context man's experience is interface-space, beyond the historical *Amytbic* epoch and prior to its successor. And while anticipations of the successor constitute its outer reaches (its initial parameters) they can in no way reflect the order-of-magnitude of its optimum development, or peak-form. The unexpected is permanent.

(5)

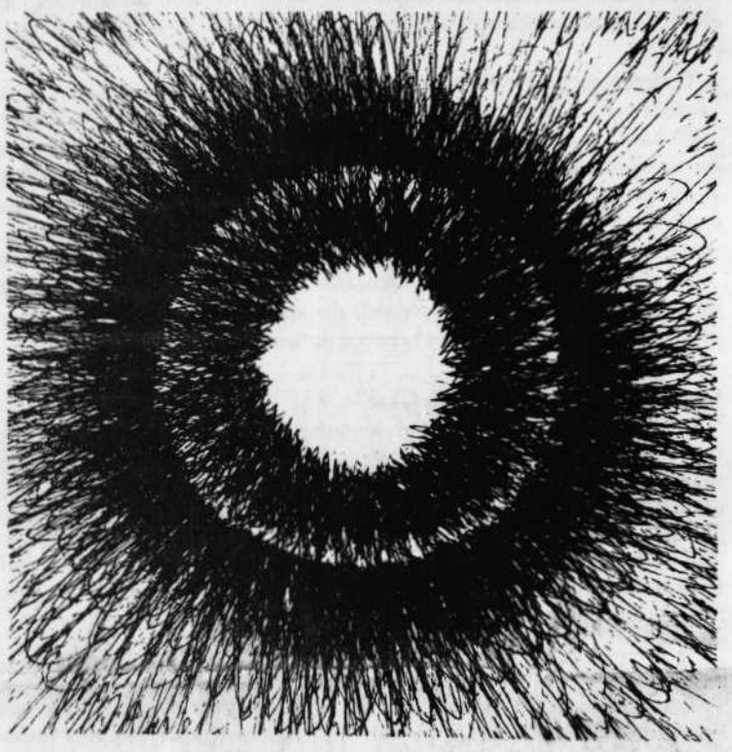
Interface-space is the model of no model. The *future in the present* is a recurring unfinished puzzle with confirmation/disconfirmation as the function of feedback and no one model remaining central and accurate without adaptation to feedback. Man's models place his special-case experience in the pivot of an aggregate of subsumations (or judgments). The final subsumation (the final sum of parts) constitutes the manifest interactions of the *collective-subjective*—the collective influence of subjective experience. Between the inexorable objective and the *collective-subjective* all resolution of contradiction and attempts to control or direct are conditioned by and restricted to the mental processes peculiar to the brain of this species. As a biological entity man must breathe oxygen, acquire nourishment, rest himself, and maintain the equilibrium of his ecology as well as reflect on the condition of existence and the potential of his being. He must, in fact, integrate the relative and changing requirements for survival with the ontological aspects of existence.

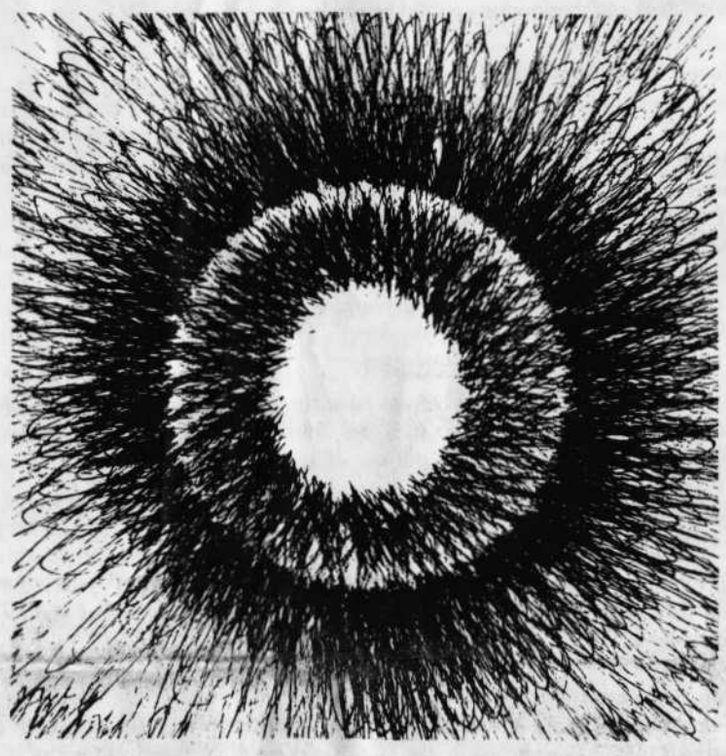
We cannot merely engineer survival; and although we've ossified and lost our capacity to celebrate it, *mystery* remains our only experienced absolute.

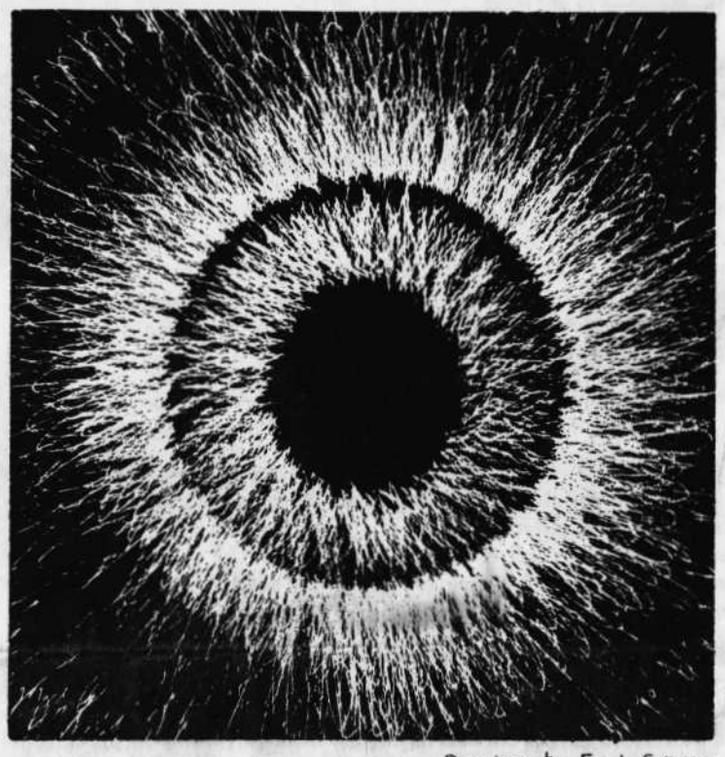
(6)

Knowledge of ignorance posits faith in the unknown. What we don't know is *ground* to the *figure* of the known. Elements of that *figure* persistently merge and are lost to the *ground,* reappearing elsewhere as *figure* again without preparation or alibi. We (our cultures, myths, systems) are traumatized by this unremitting interaction of the knowable and its passage to the *bete noire,* the void.

ASPECTS of DATA is six excerpts from chapter one of Frank Gillette's forthcoming book *THE MOOD AND ITS PURPOSE* copyright Gordon and Breach, New York.







Drawings by Frank Gillette

In a world of biological, chemical and physical pollution, it seems to me that we are overlooking the semantic pollution in our environments as we attempt to restore our ecological balance. At some point in our educational and experiential progression, we must allow for systematic analysis of the media which affect our lives. (Print, plug, electronic, phototropic, chemical, physical, kinesthetic, etc.)

Following will be an attempt to gain coordinates on the network-concept of Media Ecology by using "telegraphic" language. (Please fill in the blanks.)

MEDIA ECOLOGY

Media—Forms and Formats of Energy and Information

Form—symbolism, perception, abstraction, generalization, translation, storage & retrieval

Formats—print, electronic electrons (electrified), light, telegraph, telephone, radio, records, television, tapes, film, holography, etc.

Energy—Mass times the Speed of Light squared

and vice versa . . .

Information is Energy (and vice versa).

Ecology—the study of; knowledge of; Systems and their interactions.

System—a closed cellular, insular concept with borders.
(a contradiction in terms since you can't put borders on can't) Kant.
BUT by *agreement*; by definition; borders are placed upon processes, ideas, things.
Definitions, delimitations, prescriptions, contents, abstractions, etc. are *PUT ONS.*

A SYSTEM EXISTS ONLY BY DEFINITION
A WORLD EXISTS ONLY BY DEFINITION
A WORD EXISTS ONLY BE DEFINITION
A VIEW EXISTS ONLY BY DEFINITION

Definitions *allow* you to see	things ideas processes about	processes and ALSO ideas things
prevent you from seeing	things ideas processes about	processes. ideas things

(Definitions are Sun-glasses of different hues & colors)

DEFINITIONS are POINTS OF VIEW // are POINTS FROM WHICH TO VIEW

YOU SEE WHAT YOU WANT TO SEE

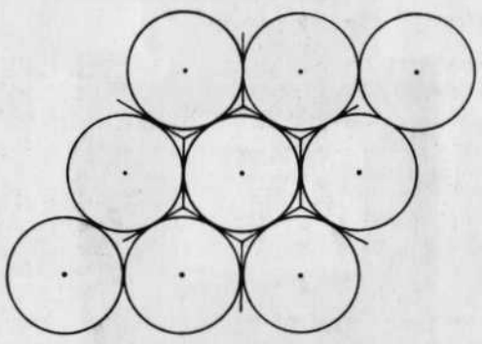
You see what you know
See what you know you
What you know you see
You know what you see
Know what you see you
What you see you know
You see what you know you see
You see what you know what you see
You know what you see you know
You know what you see what you know

A SYSTEM IS A DEFINITION (POINT OF VIEW) (A WAY OF SEEING)

It has
1) Purpose
2) Point of view
3) Rules
4) Roles
5) Rights
6) Restrictions
7) Requirements
8) It Changes
   a) It is changed
   b) It does the changing
9) It affects
10) It is affected.

MEDIA ARE SYSTEMS

Media Ecology—The study of a medium of communication and its affect upon other media/society.
The study of the affect of other media/society upon a medium of communication.
The study of people and their affect upon media/society.
The study of the affect of media/society upon people.



MEDIA ECOLOGY

by Raymond Arlo

DEFINITIONS/POINTS OF VIEW/SYSTEMS/MEDIA/are *like* METAPHORS:

Line	vs.	Grid
PRINT	vs.	PLUG
Consecutive	vs.	Simultaneous
Individual	vs.	Collection
Segregated	vs.	Intergrated
Course	vs.	Attitude

Metaphors are like definitions/points of view/systems that you use to "see" the world, yourself, reality. You can use the above dichotomies/dialectics as "sun-glasses" to look at institutions and life around you.

EX (Educational Past and Future). Ex. ex. In the past, we used to "take" *courses* in school inferring a *two*-dimensional reality, obstacles to "hurdle", *lines of thought* to "follow", *grades* to "achieve", *rankings* and *degrees* to "strive/strife" for, *ground* to "cover", etc. etc. In the future, we will "explore" the outer/inner dimensions of *multiple* realities, "discovering" *attitudes* to assume, "projecting" *probes* into the unknown, "free-falling" through time/space/life with our own *coordinate* systems providing equilibrium, not being "forced" to rely upon *gravity* to maintain status quos but "flowing free" (each one of us) on No collision course. All internal systems A O.K. This space-craft MAN/EARTH harmoniously balanced.

SOME QUESTIONS TO ASK: (Substitute *any* medium of communication for T.V.)

1) How is T.V. affecting our value structures? Our ideas of self, family, society, world? Our feelings about self, family, society, world?
2) In turn, how do our ideas and feelings affect what is on T.V.?
3) How does T.V. do what it does? What does it DO to what it does? How does /can/ it present reality? Through what point of view does it view?
4) As a system? How does T.V. operate? What are its purposes, rules, roles, rights, restrictions, requirements? (For viewer and practitioner)
5) As a definition (point of view/metaphor) what does and how does it allow us to "see"? What does and how does it prevent us from "seeing"?
6) How does T.V. affect other media? (Movies are bigger and better than ever! (Vaudville has been electrocuted!?) (Newspapers COVER the news!) (All the news *fits* the print!) (Radio is a 24 hours a day ENERGY.)

LANGUAGE IS A MEDIUM FOR/OF COMMUNICATION

Every "language" has
1) Structure (relationship of parts—temporal, spatial, auditory, visual)
2) Purpose (Human purposes)
3) Point of View (Bias)
4) Audience (Prejudging, predicting)
5) Tone (Affective domain, subliminal and supraliminal)
6) Consequences (Shaping power, educative, persuasive, propagandic)

"THE LIMITS OF MY LANGUAGE ARE THE LIMITS OF MY WORLD"

Ludwig Wittgenstein, waiting for the
A train at 42nd St.

ANY AND ALL MEDIA ARE LANGUAGES

Languages/Media are Systems, Definitions, Metaphors, Points of Views that we use (by agreement, sometimes) to describe/prescribe *our* "reality"

SOME MORE QUESTIONS TO ASK:

1) How can we find the "VOICE" of the various media?
2) What metaphors are attributable to radio, records, T.V., Tapes, film?
3) What particular/peculiar metaphors are used by practitioners/participants/professionals of the media?
4) What is the "dialect" of each medium? What is its special jargon, argot, slang, idiom?
5) What prejudice/prejudging does it have, does it do?
6) What view of society, institutions, groups, families, individuals does it have?
7) In what "light" or "heat" are "THEY" viewed, reviewed, previewed?
8) In what "shadows" are "THEY" concealed?
9) Through what "prisms" are "THEY" distorted?
("THEY")—society, institutions, groups, families, individuals)

Rx (prescription)—"We must educate for Media Literacy." (End of commercialism)

TO THE DEGREE THAT ONE CAN REGULATE (CONTROL) THE INPUT AND OUTPUT OF ANY SYSTEM (ones self included) TO THAT DEGREE, ONE IS CREATIVE AND TOGETHER WITH AND IN THE WORLD AND HENCE IN HARMONY.
(There then would be no need for EITHER/OR ME/THOU BEING/NOTHINGNESS)

LASER LIGHT IN VIDEO SPACE

By Willard Van De Bogart

This article attempts to bring insight into the nature of electromagnetic fields which exist within the universe. Particular attention will be made to show the associations of electromagnetic fields within the brain and with laser beams, video tape, and a brief interfacing of liquid crystals.

Video reality, in video space, is the ability to create a media environment which will enable a person to translate the interruption of space and time of physical reality, in universe space.

The loop that is presently being formed around the planet earth must be intersected by an information system which travels at the present universal constant of light energy. With laser technology it is now possible for man to control photons by putting them in a collimated beam. This photon control system of lasers can be interjected into other objects in the 3-dimensional world to see light defraction and interference patterns. These patterns can then be joined or "transduced" into video space. This will then allow a person to be the observer of the experiences of one's own creations. This is because the neuronal delay system will be forestalled temporarily while we adjust to comprehending patterns at the speed of light.

Keeping in mind all of the brain's inherent delay systems it is important to set up immediately new electromagnetic coding systems and information systems which will be able to recall and retrieve at a rate in a system commensurate with the function of all the electromagnetic fields within the universe. Therefore, by itself video space is of an entropic nature and mind is of an anti-entropic nature. It is important that light information bits be channeled into a man-machine language for instant retrieval.

Magnetic fields effect liquid crystals in the same way they effect the visual cortex neurons. The amplitude variation of the visual cortex neurons depends on many input frequency modulations as a result of stimulation and activation of all the nerve endings. The eye with its ganglion nerve endings only requires less than one percent activation to effect retained coding that exists in the DNA/RNA system. When the visual cortex neurons are activated they transmit light information bits to the neuronal coding system within the brain. This process occurs so fast the visual coding takes place before conscious recognition of external objects are ever seen. This delay system is identical to video delay systems now in operation. As a result of this delay system occuring with neuronal activity the external world can only be interpreted as a result of activated electromagnetic fields in the brain. The brain's delay system occurs so fast that it triggers our responses before we actually see. This has been referred to as the brain's second sight unit. When we do see we are only seeing externality as a result of activated neuronal activity by photons. No longer does man see his world as a result of the medium of nature, but instead only by constant activation of the medium of our technologically induced electromagnetic systems.

Information is now being received, and stored by a man-machine interface system. The cybernetic man is actually a walking video computer system. The brain's delay system enables one to enjoy intellectual activity within universal electromagnetic fields. The electromagnetic fields also contain free electrons. These free electrons potentially enable another evolutionary bonding to take place for man. Now man can bring together, as Robert Mallary refers to it, the "Transduciveness" of one medium into another. Recent EEG testing has validated McLuhan's philosophy that the medium is in fact the message. It is now possible to interpret reality as electromagnetic force fields. Buckminster Fuller states that when two elements are bonded to form a new element the combination is stronger than the separate elements, i.e. . . . synergy.

Solid state electronics enabled the development of the transistor. When the transistor's internal structure is analysed we find it to be PNP/NPN. The transistor, therefore, is also a manifestation of our human physiological system of coding of the DNA/RNA system. Our brain functioning is a universal constant as the transistor has universal electromagnetic fields. Therefore, in our strivings to understand our extensions we must now realize that the video technology will soon be the loop of communication on the videosphere. Gene Youngblood, devotee of video extensions on earth, might also look deeply into video space which is surrounding the video sphere. Fuller recognizes that the eyes are electromagnetic senders as well as receivers. Our sending of electromagnetic fields is a result of our neuronal activity constantly being effected by photon emission systems. McLuhan also feels that there is a "big kinetic component which is non-visual." Nam June Paik feels that video systems should "imitate the function of eyes."

Video space, however, is universal space since all space is composed of electromagnetic spectrums, and since the TV tube is an electromagnetic system or photon emission system we have to recognize that is a regenerative mechanism which we build our intellect on. We are in fact transistors. The fact that since PNP and NPN are the source system for photon emission systems one can clearly see that the universal electromagnetic spectrum is now creating video space which is a brain delay system manifested in the electronic extended state.

The above being the case all thought functions by man must, in order for him to transcend his extensions and his ability to create more anti-environments in which to understand more environments in which we live, be done in a 4th dimensional mental framework. Work must now be done in linguistics to transfer random thought patterns into neuronal activity of light information bits which need a minimal amount of activation to create holographic thought systems within the DNA/RNA coding system which is similar to electromagnetic field activation of liquid crystals. The ideal state of course will be to function on one neuron which we can allot for free choice or creative intellect on our own volition. All other neuronal activity must be coded into a feedback system which functions by the law of conservation of energy. When we do this we will then be able to penetrate into the smallest of sub-atomic particles constantly using our free neuron which is the electron extension of the free electron. When we reach this state we will then be ready for the next evolutionary bonding. Sub-atomic interactions is the secret to particles which go faster than light. As Gerald Feinberg states "the existence of these particles is not inconsistent with the theory of relativity."

Editor's Note

PPN/NPN coding refers to the negative and positive properties of the materials used in the construction of the trilamelar structure of transistors.

The DNA/RNA (Deoxyribonucleic Acid and Ribonucleic Acid) System has a coding based on the four letter language of nucleotides and the twenty letter amino acid language (proteins). DNA is the stuff of genes which acts as the primary information source directing the production of proteins via a code of three necleotides or submolecules within the DNA molecule. A sequential transference of information from DNA to a series of RNA molecules and finally the placing of amino acids (the building blocks of proteins) in a growing polypeptide chain to form a protein.

The DNA/RNA system is a web of interacting energy and molecule exchanges which require proteins to affect the information carried by DNA. Biological systems have no actual primary molecules. All molecules involved in the web of interactions are important for the web to continue as each step must take place. Of course, there are many routes to keep the web flowing but once the flow occurs each step has become as important as the last.

Video space is a space which is man's extended neuronal activity. Man must now realize that the communication he is surrounding the planet with is demanding that it be penetrated by new information. It is now necessary to be able to visualize wave formations in photon emission systems that are induced creatively. Frequency variations are interfaced to interrupt video space. Sound and light will take on new dimensions. Brain wave formations if interfaced would also result in patterns which could be regulated by intellectual activation. The next interfacing will be brain wave formations with liquid crystals. It will only then require an optical computer to induce those electronic light information bits which will activate the holographic mental image coding system. It has been shown that information bits or dot patterns is sufficient to discriminate various associative patterns or information in the "real world". Each light information bit pattern will have stored in it all the light interference patterns which will be reconstructed by laser beam transmission to a receiver in a brain wave machine. The images will occur in the brain the same as on a liquid crystal screen. The next evolution will be thought patterns generated by the optical computer utilizing lasers and video play back systems.

However, since the extensions of video is an extension of man no further developments will take place unless an information system is devised which is beyond the present 3-dimensional system. The video loop is a loop which the electronic extension demands in order for it to function. Man must interject into these video space patterns via light information and via the best utilization and control of electromagnetic particles. This can now be done with laser beam technology. The new realm of the laser is therefore to use its collimated beams of light for creative purposes. The video system must utilize lasers to understand video linguistics within a 4th dimensional state. The mechanism or linguistics we can utilize to observe the 4th dimensional system may be the third eye which has been found to exist in certain life forms. Perhaps the use of 4 video cameras suggested by Nam June Paik is the best beginning. 3-dimensional video is merely the video loop. The oscillations of all electromagnetic fields between lasers and video systems creates an interfacing which is presently the most dynamic system for a man-machine interface. The next system will be lasers communicating information bit patterns to the brain and the brain in turn activating liquid crystal walls. The manual changing of electromagnetic fields to see images induced on liquid crystals is in the near future.

All communication systems now enter a new realm of things that seemingly exist but do not exist. Sounds heard but not heard. Images seen but not seen. Man now has to enter new dimensions of consciousness with his media and the mediums of his media if he is to survive with continual creative intellectual activity on the planet earth. Video space is a space which demands penetration by universal systems. Light is a universal system. The quanta of all energies must now be understood and used if we are to survive as a species with intellect. We are at the dawn of a self generating machine culture which will perpetuate itself at the expense of human extinction. We as a race must realize our potential to understand our electronic communication systems and the space in which they function. The complete understanding of all electromagnetic systems is the only answer to continual creative intellect.

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Contact him at Calif Inst of the Arts, Burbank, Calif

DIAL ACCESS INFORMATION RETRIEVAL SYSTEMS

By Van Ftergiotis

By the dialing of a mere three digits, a student listens to the Kennedy-Nixon Debates, an elementary teacher views a biological phenomenon with the class, an English Department Head presents a videotape on micro-teaching techniques during his departmental meeting, a high school Social Studies class views video segments on the urban crisis, an avid physics student listens to present-day scientists discuss the impact of ovonic devices, a junior high student learns how to operate the calculator before him while viewing instructional segments on calculator operation, those interested watch a commercial telecast of an Apollo Mission.

Unusual? In this day and age of media-inundated educational institutions? Not particularly. But what if the media activities just described can happen simultaneously throughout a school system via a single media system?

I'm referring to Dial Access Information Retrieval Systems (DAIRS)—vastly underrated systems of audio and video transmission.

Dial Access affords the educator a flexible media library, one that easily adapts to individualized instruction and modular scheduling, and that at the same time is operationally more economical, effective and efficient in its design than the hundreds of pieces of classroom and library media devices that it would take to even approximate the most minimal playback function of Dial access.

Hence, these systems contain the seeds of a technology that is destined to revolutionize accessibility to audio and video information for all learners wherever and whoever they may be.

The need for the incorporation of modes of communication such as Dial Access in our schools is now not only feasible, but necessary, if we are to perpetuate the "individualized instruction" ethic in an environment with an overabundance of both information and people.

How does Dial Access work?

When a user dials for a program from a remote location, (carrel or classroom) the switching/transmission complex relays the dialing to the program center, starting the videotape recorder or the audiotape deck that was dialed. When the user is finished with the program or breaks the signal for any number of reasons by switching to OFF, the tape deck in the center rewinds back to the beginning of the tape and awaits the next signal to start. Cues imposed at the beginning and end of program segments instruct the machine as to the length of the program. It is conceivable that all the users of the system could be watching and listening to the same program throughout the network, or to a variety of programs at the same time. Many efforts have been made to date to allow students to have access to the beginning of any program, rather than to dial in while a program is "in progress". But many of these experiments have proven costly and not feasible. However, trends in the present Dial Access market show developments that will greatly reduce the cost of buffer systems to allow their incorporation into the smallest of Retrieval Systems.

The number of audio and/or video program sources depends on the requirements of the particular learning environment as does the number of student positions (carrels) and large group instruction areas that would have large TV monitors and sound systems.

Because these systems can handle numerous segments of audio and video information, many systems are now abandoning the use of program channels and printed program sheets in favor of computer managed systems that can automatically display for users the programs available. Intercom capability between user and control center allows for instant attention to technical problems and program requests.

Utilization

The flexibility and adaptability of Dial Access lends itself to just about every conceivable learning situation—with instant access to one or more segments upon request. Now you don't have to stop that great discussion because the program is going to start at 11 am sharp—*you* decide when the program is to start. If you as a teacher perform best and prefer the lecture method, fine, we'll have the 5 minute segments ready when you want to present the charismatic figures of Martin Luther King, Ghandi, Hitler, and the Beatles. And the elementary student who lags behind in cursive writing, how marvelous that he can work in a carrel with a videotape whenever he chooses, and deliver a complete paper to his teacher when he's finished without having to feel the frustration of not being able to keep up.

Large group, small group, lab groups, individualized study, elementary and secondary levels, all can use Dial Access in a different way—the way in which it will best fit the learning situation.

Software Development

The search for software in a Dial System continues at a pace that is surely unfamiliar to even the most avid AV Director. When you consider a video capacity alone, let's say twenty channels, each can handle from one to roughly twenty (20) programmed segments in a single day . . . 400 video segments . . . and then there are audio channels to consider . . . !

The capacity of the system could easily frighten anyone responsible for software to quickly dub lengthy films, entire LP recordings, 2 hour seminar sessions, and endless slide trays—anything, just to feed the monster *something!* And I regret to say that many systems have done just that. But how can we provide at least a respectable amount of software of both fine quality, and relevance?

The local production of both audio and video materials is of course the ideal, but many facilities are limited in what they can do both in audio and video because of lack of funds and high-level personnel. In addition to local production of materials there are other avenues that can be explored.

To achieve concise, well-defined segments, materials need to be edited, segmented, altered by additional or multiple soundtracks, etc. There is no longer the need for a teacher to show a 60 minute film if what he really needs are two 8 minute segments from that film. 16mm film, 35mm slides, filmstrips, educational and commercial broadcasts, studio productions, recordings all are potential sources for Dial Access banks.*

All users should constantly be tapped for information on the up-dating of materials. Recommendations for purchase, previewing, editing, segmenting, dubbing and discarding of materials can easily be accomplished by students, teachers, in short, any system users. This kind of information is invaluable to those responsible for the accumulation of software and its use.

Today and Tomorrow

Dial Access Systems have recently become even more highly sophisticated in concept and design. Manufacturers have now designed computer-managed systems that have brought Dial Access out of its infancy. A few years ago "expandability" was the key word—being able to expand the number of programs available, expand the number of receiving stations, add video, convert to color, etc. Now "flexibility" has been added accommodating changes of educational philosophy in the system environment, access to the beginning of a program, archival retrieval, student response systems, providing diagnostic information, time-shared student recording, exclusive access and control, and dedicated program access.

The new computer-managed systems permit trunkage, thereby eliminating the need to buy equipment based on 100% usage as educators have been forced to do up until now. (This cost-effective feature will undoubtedly silence certain nervous types who are constantly comparing the cost and effectiveness of single item A-V equipment in carrels to Dial Access equipment.)

Diagnostic information through computer programming now can provide printouts on student usage, program usage, peak periods, total program access computed against program time, etc., that will provide for proper evaluation of the system and all its functions. The computer will also help solve the problems of programming in an ever-growing software system.

New systems for program sources, buffering capabilities, archival storage, etc., have led manufacturers to explore the videodisc, video and audio cartridge and cassette, EVR, and high speed duplication devices. Dial Access will continue to flourish because existing and aforementioned capabilities are becoming inherent design features of these systems.

The future is bright; the technology solid. The content and instructional designers must *absorb* and then *interpret* the technology that is altering the learning environment. Only then can we design systems of software development and utilization that are meaningful to the learner—whoever and wherever he may be.

Portions of this article previously appeared in the Proceedings of the Conference on Visual Literacy, 1970, Chicago, Illinois

*Consult ERIC Newsletter No. 1, Summer, 1968 for current and proposed legislation on copyrights.

As I was putting this together, I thought that it would be a good idea to have a question/answer section in the RS where I could answer questions from readers of RS, users of DAIRS, or those contemplating the use. There always seems to be so many questions from people at various levels of learning, and other type institutions on software, utilization, program development, feasibility, technical advances, etc. that a question corner or some such would provide continuity of information to the readers. It's just a thought. I would be very interested in tackling that sort of thing. And if I felt incapable of answering some of the questions, I could tap people in various fields that could shed some light on answers to questions.

Address your inquiries to Van Ftergiotis, Consultant
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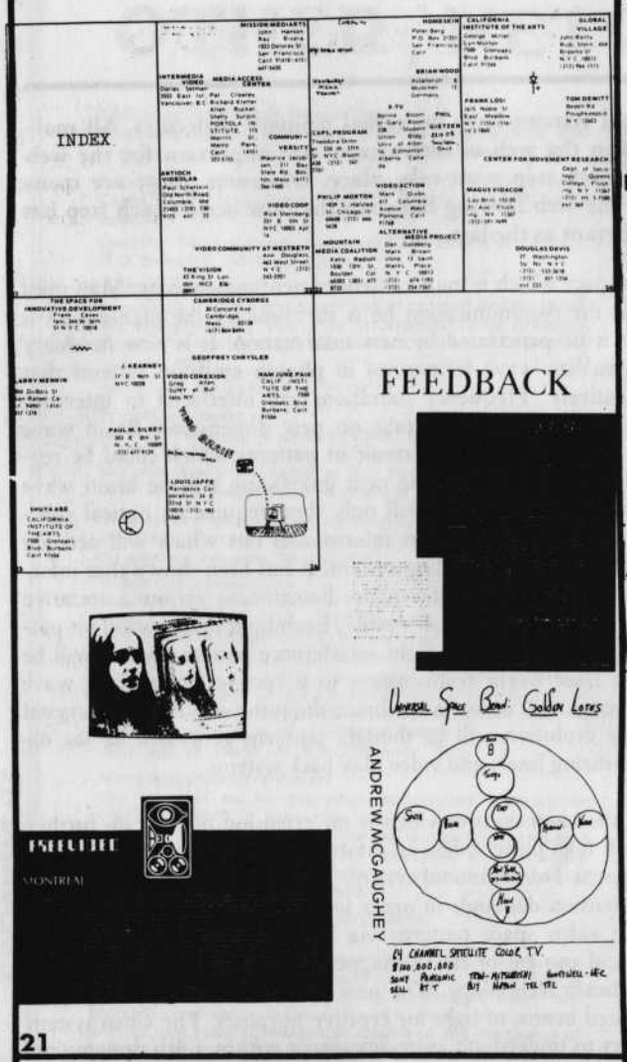
West Hartford Public Schools,
975 North Main
West Hartford, Conn. 06117



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INFORMATION MUST BE ENTERTAINING in itself

MISSION MEDIARTS
John Hanson, Ray Rivera, 1023 Delores St., San Francisco, Calif. 91410 (415) 647-5420.

INTERMEDIA VIDEO
Dallas Selman 2032 East 1st., Vancouver, B.C.

MEDIA ACCESS CENTER
Pat Crowley, Richard Kletter Allen Rucker, Shelly Surpin, PORTOLA INSTITUTE, 115 Merrill St., Menlo Park, Calif. (415) 323-5155.

ANTIOCH VIDEOLAB
Paul Schatzkin, Old North Road, Columbia, Md. 21403 (310) 730-9175 ext. 22.

COMMUNI–VERSITY
Maurice Jacobsen, 211 Bay State Rd., Boston, Mass. (617) 266-1400.

VIDEO COOP
Rick Sternberg, 221 E. 5th St. NYC 10003 Apt. 14.

VIDEO COMMUNITY AT WESTBETH
Ann Douglass, 463 West Street, N.Y.C. (212) 243-2201.

THE VISION
43 King St. London WC2. 836-0897.

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CORPS TV
Ken Ryan
Community Action Council
Box 132, Newfoundland, N.J. 07435

NYC CABLE ACTION
THEODORA SKLOVER
433 E. 51st
NYC 10022
(212) HA1-1795

NEWBURGH MEDIA PROJECT
c/o Things Inc
Foster Town United Methodist Church
Newburgh, N.Y.

CAPS, PROGRAM
Theodora Sklover, 250 W. 57th St. NYC Room 430 (212) 247-7701.

PHILIP MORTON
1839 S. Halsted St., Chicago, Ill. 60608 (312) 666-5628.

MOUNTAIN MEDIA COALITION
Kelly Radloff, 1030 13th St., Boulder, Col. 60302 (303) 477-8732.

HOMESKIN
Peter Berg, P.O. Box 31251, San Francisco, Calif.

BRIAN WOOD
Astallerstr 8, Munchen 12, Germany.

X-TV
Bernie Bloom or Gary, Room 238, Student Union Bldg., Univ. of Alberta, Edmonton, Alberta, Canada.

PHIL GIETZEN
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San Fran., Calif

VIDEO ACTION
Mark Dixon, 417 Columbia Avenue West, Pomona, Calif. 91768.

ALTERNATIVE MEDIA PROJECT
Dan Goldberg, Mark Brownstone, 13 Saint Marks Place, N. Y. C. 10013 (212) 674-1193 (212) 254-7267.

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CALIFORNIA INSTITUTE OF THE ARTS
George Miller, Lyn Morton, 7500 Glenoaks Blvd. Burbank, Calif. 91504.

GLOBAL VILLAGE
John Reilly, Rudi Stern, 454 Broome St. N.Y.C. 10012 (212) 966-1515.

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TOM DEWITT
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CENTER FOR MOVEMENT RESEARCH
Dept. of Sociology, Queens College, Flushing, N.Y. 11367 (212) HI 5-7500 ext. 369.

MAGUS VIDACON
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DOUGLAS DAVIS
27 Washington Sq. No. N.Y.C. (212) 533-3618/ (212) 421-1234 ext. 233.

24

THE SPACE FOR INNOVATIVE DEVELOPMENT
Frank Cavestani, 344 W. 36th St. N.Y.C. 10018

J. KEARNEY
17 E. 96th St. NYC 10028.

LARRY MENKIN
304 DuBois St., San Rafael, Calif. 94901, (414) 457-1378.

PAUL M. SILBEY
303 E. 8th St. N. Y. C. 10009 (212) 677-9129.

ELECTRONIC INTIMACY IS NOT THE SAME AS CARNAL KNOWLEDGE.

SHUYA ABE
CALIFORNIA INSTITUTE OF THE ARTS, 7500 Glenoaks Blvd., Burbank, Calif. 91504.

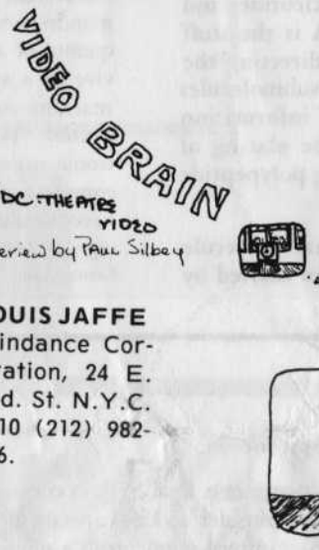
25

CAMBRIDGE CYBORGS
30 Concord Ave. Cambridge, Mass. 02138 (617) 864-8494.

GEOFFREY CHRYSLER

VIDEO CONEXION
Greg Allen, SUNY at Buffalo, N.Y.

NAM JUNE PAIK
CALIF. INSTITUTE OF THE ARTS, 7500 Glenoaks Blvd. Burbank, Calif. 91504.



LOUIS JAFFE
Raindance Corporation, 24 E. 22nd. St. N.Y.C. 10010 (212) 982-5566.

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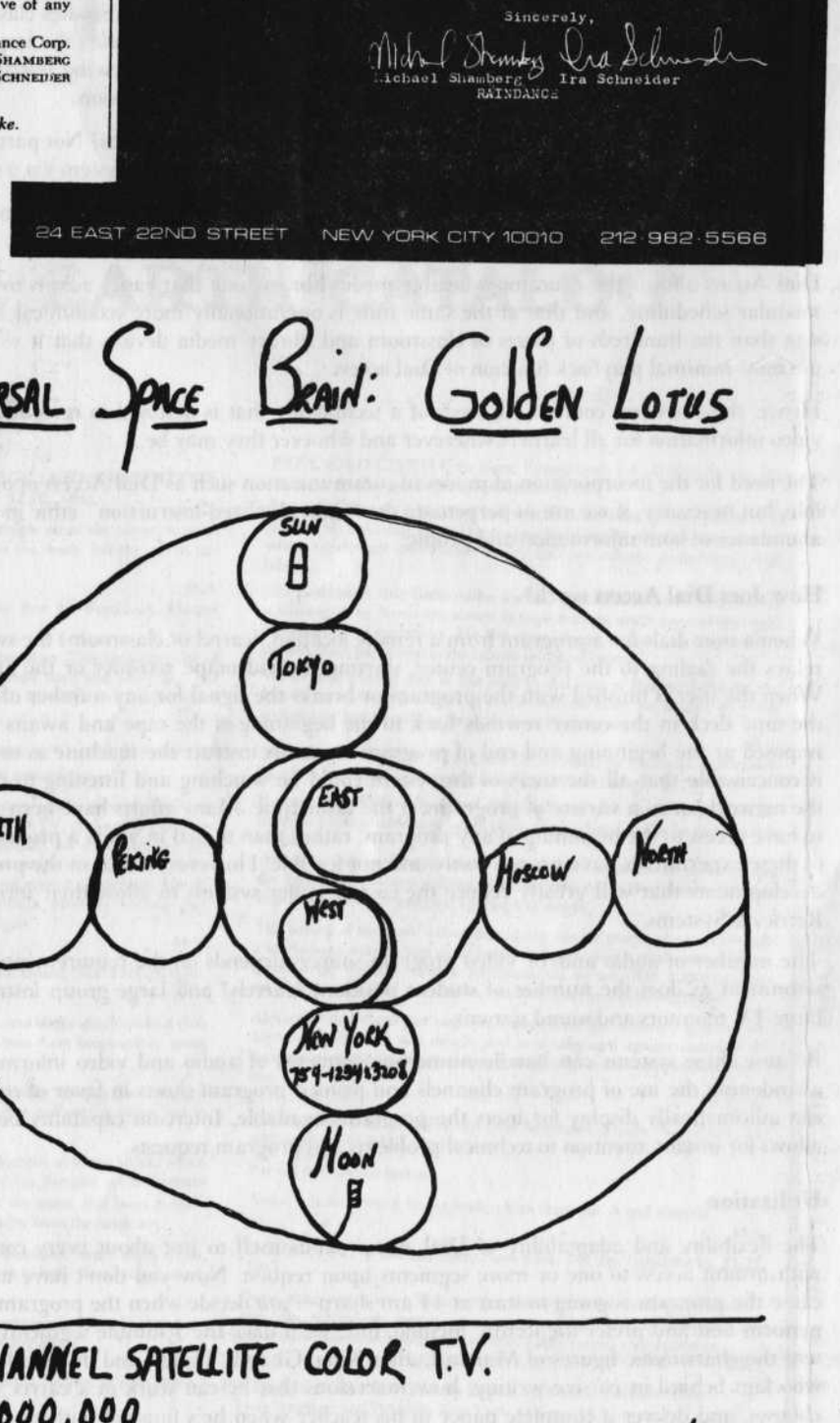
FEEDBACK

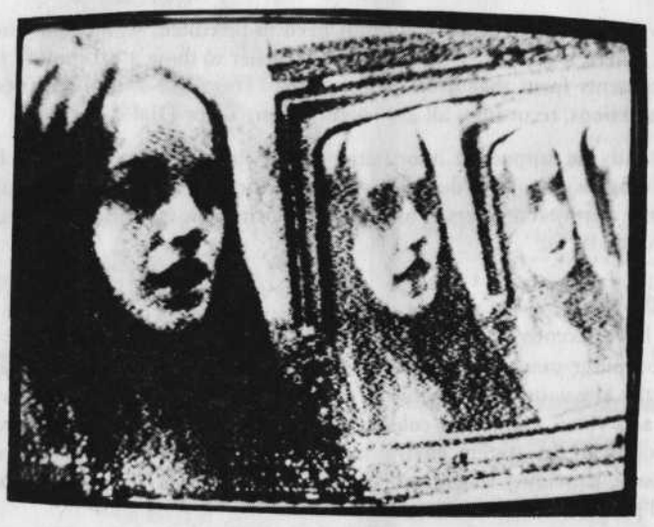


■ Alternate television is not, as you picture it, a strident confrontation of lifestyles, but an attempt to guarantee exposure to all views and especially to avoid inaccuracies in conventional media by letting people generate information about themselves independent of unseen controls.

The picture you label as illustrative of our concept of information is not of us, not our studio, nor representative of any of the material we videotape.

Raindance Corp.
MICHAEL SHAMBERG
IRA SCHNEIDER
New York City

✓ NEWSWEEK *regrets the mistake.*



FREEVIDEO

MONTREAL

In Montreal, the snowbound city, another gathering of media freex has taken place, this time just video people. Coming together, our egos clashing, finding we are not exactly of one mind as we had wished, trying out of our diversity to put forth an alternate line to the future. Since Goddard and before, we had all been working to develop whatever it was we considered to be *the* alternative television, each of us believing in our own way. And then we met each other again to learn how many different directions we had all gone off in, each of us having found a different approach to the change we all believe to be inevitable if this world is to keep from self-destructing.

We were talking to some of the people from *Challenge for Change*, a group supported by the Canadian Film Board, who have been doing some really fine work with video in community development. They were lamenting the fact that it seemed that most of the people at the gathering were not really into community action. (Just prior to our conversation there had been a general meeting at which ideas and egos had flown from cable action to decentralized distribution networks to video show places, tape exchanges, etc., with everyone trying to sway the group toward his pet project.) Later we spoke with a fellow from Bell Research who has been doing experimentation in interaction and feedback, but he was feeling a little down because no one seemed to be interested in anything but community action! hmmmmm.

The Canadians seem to have gone off in more different directions than most American groups and they have been fortunate enough to have a good deal more support from local networks and cable stations than is the case in the States. The conference was good because it brought many of these local groups together for the first time. They seemed energized by visiting groups, mostly from New York, who have been at it a bit longer, and from their coming together; they seem ready to put many of their ideas into action.

Montreal was just another point in a continuing dialogue which has begun among video people and many questions were raised which have yet to be resolved. Hopefully we can come together again real soon, maybe in your city!

INTERMEDIA VIDEO

We are **Intermedia Video**, *the obvious extension of a large group (Intermedia) who have been working out of Vancover, b.c. for more than four years. Vancouver is a Sony city, with us, both colleges, and the local cable enterprise all working in the current 1/2 inch AV series for maximum compatibility and inter-access. We think you have a nice paper and are glad that you like the idea of lots more people getting out of that strictly consumer role in the information barrage. We are interested in image exchange, networks and stuff like that.*

ANTIOCH VIDEOLAB

We have two Sony AV 3600's, three 3400's, a studio camera, a camera switcher, a few monitors, and a variety of accessories, all of which spend about half-time in Columbia, half-time in Baltimore, and half-time on the road somewhere en route.

We've been building a video information network between the three "geo-centers". Tape is recorded at all three centers and edited into weekly half-hour "Campus Video-Feedback" presentations. We've encountered an abundance of problems editing with the 3600 decks and then our playback situations are extremely forced. Next year we're thinking of cassette playback units (probably Ampex) to provide free access in each center.

In December we were granted $1800 to buy tape and additional equipment to develop local programming for the CATV system that will start operation next fall in Columbia. Columbia is the Ideal Mindless Environmental Model for all of Rectilinear Amerika to follow on the trip to plastic mediocrity. Our trip with the cable is to create an information loop between the management and residents such that current residents become involved in the development of the rest of the city. We're using videotape to examine the effects of a plastic model city environment on human life styles and figure to use cable to feed that information back to the community.

We're using videotape and film to document design and construction of a one-acre air-supported vinyl bubble which will house the entire Columbia center in the fall of '71. If all goes as we'd like it to (an outrageous presumption) we'll be building a geodesic dome underneath the inflatable to house our VideoLab and wiring all the other sections of the structure in a closed circuit two way video system.

The process at Antioch is an internally-directed process that relies on the ability of an individual to identify his own needs and gather the resources to fulfill those needs . . . We are trying to record and document educational processes that go beyond the fragmentation of information that we found in high school and straight college . . . We are discovering "videologic" a way of organizing our experiences with tape that seems to provide us with the sort of creative outlet that we need after twenty years of Commercial Mind-Rot.

Would like correspondence (or telephonic communication) on tape exchanges and distribution in general . . . feedback on Ampex Instavision . . . may be taping FCC cable hearing in March . . . always willing to share anything technical or metatechnical . . . looking for modifications to AV3650 to allow 2nd audio track and video inserts . . . and people.

THE VISION

VISION say that they know what young people want to view and that this is supported by thorough market research. The content breakdown of the program reflects the known demand:

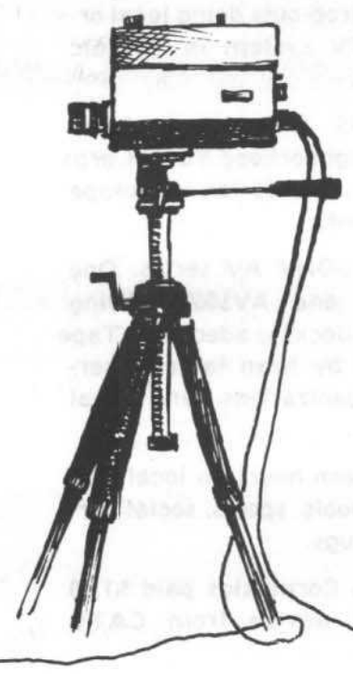
Music and drama presented with a real understanding of the performers in an atmosphere that gives musicians and actors a chance to relax and be themselves. Drama here means Street Theatre and experimental work.

Community Information and News. How the various communities, the blacks, the students, the hippies, the political extremists, the underground, the young people, the skinheads and Hells Angels, the communes, are creating a new society within the old. International and local news relating to this.

Art for the Media: TV and film made specially for TV transmission. The exploration of TV's unused functions: as an art form, as a means of reinforcing emerging community concepts.

Technology and Science: Not only the marvelous acts of technological discovery but their practical applications, from lightshows to sound systems, clothes, information services, video cassettes, telepathy, cybernetics, ecology. People want to understand applications that benefit their needs.

Feedback. No TV company can cope with feedback, which is, simply, people saying what they do and don't like and want. TV should tune in to the people.



MEDIA ACCESS CENTER

We are four people—Pat Crowley, Richard Kletter, Allen Rucker, and Shelley Surpin—and we can best be defined as an alternate television resource, generating information and software in 1/2" video technology (currently) and compatible systems. We are particularly interested in community uses of video, manifest in access to local CATV systems and other information outlets; video as a catalyst for self-education; and expanding the guerrilla network.

Scripps High School Video Workshop: An access and project-coordination service for regional high school and free school students, foundation-funded, located in Redwood City, Ca. Pat and Shelly are directors. The process involves informing kids of the availability of Sony AV 1/2" equipment, showing them how to use it, providing critical feedback. We try to push projects that will involve the most kids in both production and presentation.

Projects so far/in progress include a tape on the juvenile's relation to the legal system; an ecology action group gathering community response to protest the construction of billboards in a downtown area (played back at Planning Commission meetings); a Pacific High (free school) student's perceptions of his environment for showing at his old Eastern prep school; a self-definition of a local school-within-a-school; an Eastern look at Henry David Thoreau.

Seattle Project: As resource people, Media Access provided information, workshops, and training on the uses of the 1/2" video for a community television network (cable, closed-circuit, street and storefront theaters, meeting halls, etc.), for community organizers, model cities neighborhood councils, inner city activists, radical eco-political groups, citizens from various federal programs interested in increasing their voice in community affairs.

In addition, Media Access people worked closely with Oscar Productions, a ghetto film workshop run by and for minority high school students under the direction of producer Nate Long.

Our current work also includes: a community-focus cable series in Redwood City; conference gigs at the annual USSPA conference in LA, the Conference on Economic-Political-Social Survival at San Jose State, a projected Bay Area Video Conference in the Spring; workshops at the University of Minnesota, Stanford; a Process Awareness project with Interaction Associates in Berkeley; getting tapes together, out, in, and around.

VIDEO COMMUNITY AT WESTBETH

alternatives, extensions, rearrangements of present communications facilities—new ways to use available tools...each of our primary "tools" is ourselves...our intuition, brain/nervous system, body, emotional makeup...unconscious and conscious feedback...start appears to be with self...see what we can understand about existing things and the reality of the moment...

community-conceived |community-produced community-viewed closed circuit video broadcasting within the block-square artist housing known as Westbeth...

given: resources of individual artists and families...video used as a self teaching tool...

program range: evenings around the kitchen table, news and information relevent to resident, films, artistic treats, tenant gripes, recitals, childrens hour, direct feedback during or after scheduled programming...

augmenting hardware: cable driver (used, under $400) or RF modulator (around $50) converts video and audio signal to broadcast signal; antenna splitter ($5.95) functions as antenna coupler; reception through RF or CD broadcast TV channel jacked with a master antenna coupler with matching transformer ($5)...

financing: first broadcasts will be with loaned equipment...presently seeking ways to do it on our own.

WHO ARE VISION?

Paradise Productions (Lindsay Clennell and Sheldon Rocklin) made videotapes of the Bath Festival and have 3 color feature movies to their credit: *Vali, Dope* and *Paradise Now* (originated on 1/2" monochrome videotape). Lindsay Clennell is consultant to *Intertel* for film-from-tape transfer. Both have extensive video experience.

TVX, a branch of Institute for Research in Art and Technology are the first program company in Europe to make material for video cassettes. They have taken TV on to the streets and opened a video cinema. This year over 70 people have trained in the use of TV portables. Broadcasts have been made on networks in UK and Europe. TVX is John Hopkins, Cliff Evans, John Kirk and Steve Herman.

Also joining the collective is Lawrence Atkin, brilliant video engineer who worked on the *Vitronics* process for Technicolor Labs, and has built one of the new second generation color synthesisers.

WHAT NEXT?

VISION, based on the new Arts Center at 43 King Street, Covent Garden, is equipped to produce programs ranging from street and community TV to Color Broadcast. It will be selling worldwide to film, TV and cassette markets, and to video cinemas and cable TV networks.

VISION plan to open a West End video cinema early in 1971 to show this material.

MISSION MEDIARTS

Mission Mediarts, Inc. is a non-profit community production company in San Francisco's Mission District; a mixed community of American Indians, Anglos, Asians, Blacks, Chicanos, Filipinos, Latinos, and Samoans. *Mediarts* is presently running film and video workshops to train and employ Mission District youths in both film and video production; and to expose their work to people both inside and outside the community by gaining control of and producing shows for the film/video/media channels of communication. These include VHF local and national, educational and commercial television; local UHF TV channels; local and syndicated CATV stations; and intra-community use of 1/2" and 1" video units.

At present, four films produced by *Mediarts* have been aired on PBS as part of KQED's "San Francisco Mix" series; negotiations are in progress with KQED for a weekly local half hour TV series on Mission Community life to be totally written, directed, edited, and produced by *Mediarts* using KQED's 2" black and white portable equipment and their 2" color mobile unit; and the Video Workshop has produced a 20 min. 1/2" tape as part of a community broadcasting proposal for a local UHF station.

This is only the beginning. More important is the eventual total control of the Media by community ownership and operation of the broadcast facility and transmitter. It is in this area that the CATV, 1/2" or 1" tape units, and the video cassettes are crucial. Wresting partial control of the existing media is a temporary goal. More important are steps to create an alternative media organized around local communities which produce, control, and transmit programming quickly, cheaply, flexibly, and are responsive to the people of that community. This means ripping off CATV franchises which up to now have been gobbled up by the Networks or by white capitalists interested in the fast buck; it means developing methods of cheap, fast production; it means using portable equipment owned and operated by the community; it means developing a national community distribution system so local programs can be aired around the country (the recent Cleaver-Leary interview, for example—which I assume was recorded on 1/2" or 1" tape, could have been immediately cabled into communities all over the country, with no loss in quality; as it was, few stations dared to air the tape, and the quality was terrible); it means, in other words, Black and Third World ownership and operation of a substantial piece of the media.

Mission Mediarts is attempting to deal effectively with all of these areas. We have talked with or read about few groups around the country who are on the same trip. We would like to hear from anyone who is paralleling our efforts, anyone who can put us in contact with the right people and/or bread, or anyone who can provide immediate film or video resources.

COMMUNIVERSITY

WE HAVE about a dozen people within the cooperative who are currently involved in the formation of a videotape collective . . . the support of the Clearinghouse Media project at the Univ. of Massachusetts who have verbally pledged about one thousand dollars toward the establishment of a videotape, media clearinghouse for Boston.

WE CAN immediately provide videotape equipment so that local tapes and tapes from all across the country can be viewed . . . have videotape equipment available for use by people in the community . . . and have a nice down-home atmosphere where people can just come and relax, watch home-made T.V., share some ideas, and get involved, plus anything else the individual and collective energies wish to generate.

VIDEO COOP

The VIDEO COOP is beginning. We'll buy tape and equipment cooperatively and distribute to our members at cost plus a small percentage. It's for everyone in the video community, so let's get it together. Quickly. We need that independence.

het instituut voor jeugd- en ontwikkelingswerk,

stationsstraat 11, assen

(05920-12047)

NYC CABLE ACTION

In response to a recent article in the **Village Voice** exposing some of the inadequacies of NYC's present cable contracts, a CATV ACTION COMMITTEE has emerged. If interested in affecting the growth of cable television in the five boroughs of our town contact Theodora Sklover, 433 E. 51st. St.NYC 10022 (212) HA1-1795. Maybe if there are enough of us who are willing and caring we can make something different happen!

NEWBURGH MEDIA PROJECT

Newburgh Media Project was Ford Foundation supported designed for high school kids to use media in the community (69-70). Cable access was there for the asking. Censorship became a problem when kids showed tape over cable from Cambodia Demonstrations in Washington. Project has lots of such hassles with school board etc. Best thing about it is that right now the kids are working towards getting access to equipment and doing it on their own through Things, Inc.

Contact Tom Scalzo, Andy Perrota, Louie Stark and Gail Cohen c/o Things, Inc., Foster Town United Methodist Church, Newburgh, N.Y.

CORPS TV

Twelve high-school drop-outs doing local origination on a CATV system in Passaic County, New Jersey.

SOURCE OF FUNDS..Department of Labor..Neighborhood Youth Corps Program ($3,000 for Videotape equipment).

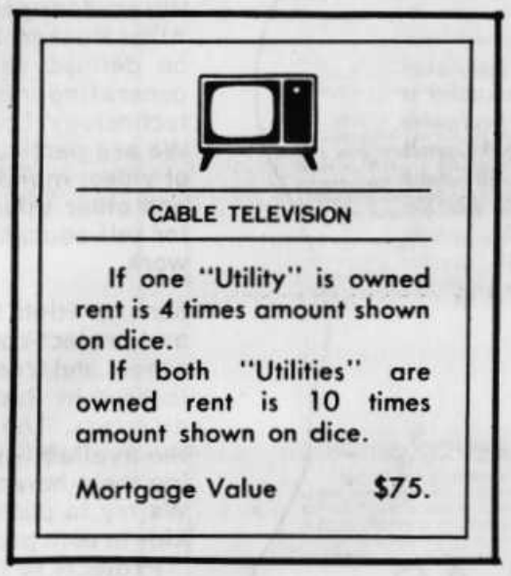
HARDWARE..1/2" SONY AV series. One AV3400, one AV5000..editing between decks is adequate. Tape supplied by town fathers, service organizations, and local business.

SOFTWARE..Fourteen hours on local politics, schools, sports, social services, drugs.

Neighborhood Youth Corps kids paid $1.60 per hour..technical advice from CATV system.

Interested in tape exchange..(201) 697-4555.

Contact: Ken Ryan, Community Action Council, Box 132, Newfoundland, N.J. 07435



HOMESKIN

Missed the mail while we were in Canada making a tape of the Doukhobors—nonviolent-mad bomber-antireligious-Christmen, free land—fuck governments—house American draft evaders—learn how to do ten years in prison—you are god. Boss people. Practicing communalists since the 17th century in Russia. Great farmers and wood workers. Older brothers The tape is *FREE LAND: DOUKHOBORS AND LONGHAIRS IN CANADA*, 1 hour 1/2" Sony.

We're trying to promote a mobile viewing rig to take tapes to places where free people can dig free information—an intercommunal generator-driven information scene. A caravan would make it. A number where the video aspect is only part of a celebration-visit. Hopefully it would act as a cultural support for post-civilization rather than a rip-off in the name of old-civilisation. Do you know a way to get help for the project?

HOMESKIN tapes are *TRIBAL LETTERS*, life-acted, without narrative or interior monologue. Point is simple: original information (and most experience/info is original) must restore the sense of awareness. (Everyone is aware-all experience is horizontal; nobody gets more, just different.) **Nowsreals.**

If video tape is going to liberate anyone it must be used non-hierarchically no imposed "frame."

BRIAN WOOD

I am just negotiating a reconstruction of my hardware systems with Bavarian T.V. and hope eventually to have a complex of gear housed in a 10 meter dome that I shall build myself (praise be the domebook 1). In the meantime I shall be acquiring a range of Sony equipment familiarising myself and some friends with the possibilities, and hopefully entering into a tape exchange. Our standard will probably be 625/50 cycles but I shall try to have your standard available for playback.

The Olympic games next year are already dominating the vibrations of the city. I would like to get my vidome on the site at that time and do an organic coverage of the event. From the number of people coming through I gain the impression that this place will become video city during the games. (games!)

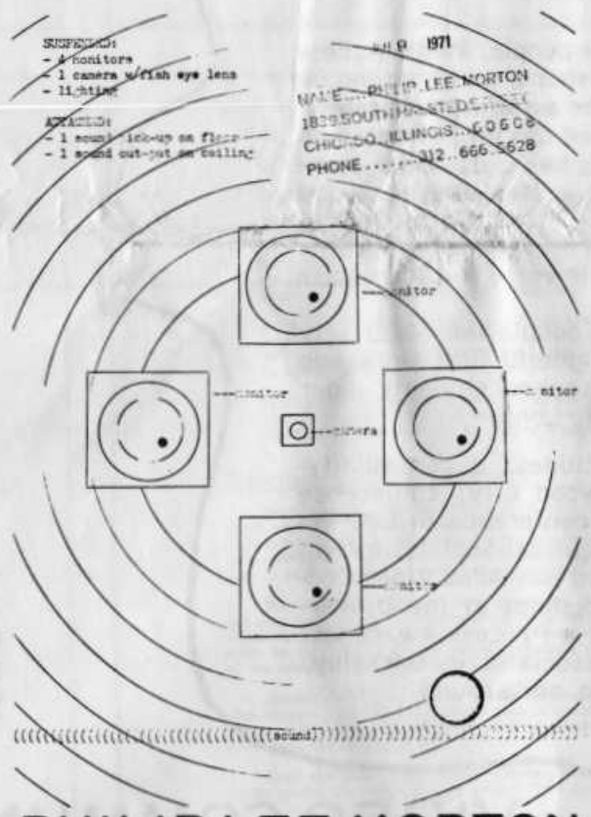
NOVA SCOTIA COLLEGE OF ART AND DESIGN

We have had our VTR equipment for only a year and the students and faculty have to book weeks in advance to find a time when it is not being used. So far a group of 12 students have made a video portrait of the college on six twenty minute tapes which give the students and faculty a unique forum for self-examination. Visiting artists to the college have used it as a printmaking device and the sculpture department uses VTR to record projects involving time, space and sculptural concepts. As an artistic/information tool the possibilities for its use seem unlimited.

For more information contact Bruce Parsons, N.S. College of Arts and Design, Nova Scotia, Canada.

CAPS, PROGRAM

New York State Council of the Arts has funded an individual artists program through the New York Cultural Council Foundation. This program, the Creative Artists Public Service Project, has completed its first round. The deadline for new applications has not been set. For information contact: Theodore Sklover, CAPS Program, 250 W. 57th St. Room 430, NYC. (212) 247-7701.



X-TV

There is a group of us here out of the Univ. of Alberta who are getting a thing together called X-TV. It's new and very loose at the moment but... slowly possibilities of getting ahold of VTR equipment and video studios are opening up. What we'd like to do is to make contact with people who have tapes available—hopefully later on exchange tapes.

VIDEO ACTION

Video Action is part of the growing network of underground video groups aiming at relevant software for the forthcoming video cassette and equipment industry. Our main problem is lack of sufficient financing to purchase needed equipment. To begin production our "studio" would require almost $1600 from some outside source. We are seeking suggestions as to how we could obtain funding from some other company or group.

ALTERNATIVE MEDIA PROJECT

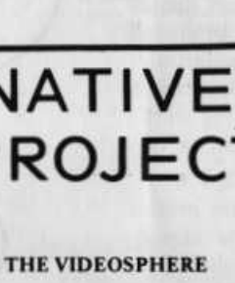
OPEN LETTER TO PEOPLE IN THE VIDEOSPHERE

During the latter part of April and the beginning of May there will be a series of anti-war, anti-oppression demonstrations held in Washington, D.C.

We feel that it is important that the ALTERNATE TELEVISION MOVEMENT be present for these demonstrations in order to provide coverage from a perspective that differs from the traditional perspective of mass media. To this end, we are beginning to pull together a VIDEO CENTER in D.C. for the duration of the demonstrations; we hope that many "underground" video operations will come to Washington in order to provide the widest possible coverage wherever possible. We are now working with people in Washington to find a space; we are trying to get D.C. press passes; and we are presently preparing a package of information about D.C.

If you have videotape equipment, preferably Sony AV series and are interested in covering the SPRING OFFENSIVE TO END THE WAR, please call May Day Video Center, Antioch College, Old North Road, Columbia, Md. 21043, 301-730-9175 or 5469. Well send immediate information.

amp



The Alternative Media Project is a newly formed non-profit corporation which has been organized for development of more responsive communications systems. The AMP was born at the Alternative Media Conference held at Goddard College in June of 1970. We are now expending our energies toward a free Video Festival to demonstrate the new video technologies for developing community information originating centers, to relate cable TV and networks, and video as an art form. Also included will be a look at some more futuristic uses of this new video technology.

This will be the second event sponsored by the Alternative Media Project. Like last year's conference in Vermont, its success depends entirely on the number and variety of inputs to it. Individuals and groups on both coasts are now helping to plan the festival but we still need to contact many more people. If you have software, hardware, ideas that you think people should know about or if you simply want more information about us and the festival, please get in touch.

PHIL GIETZEN

January 10, 1971

Dear Ira:

The more I dig RSN the more I dig RSN. We have been connecting with folks out here by the score. Video Free America came by Mary Myers and while they were there Robbie Robinson from Channel 13 NET and SUM came by. Dallas has a TV-VT scene. They have one of the 43 theater screen (30x40) projectors and are getting it together to do a rock concert in a closed circuit system using the 42 other theater screens as outlets.

We are using a studio called Telemation now. National Video Systems Video Van is bankrupt. They have a b/w truck with (2) RCA 330, (1) RCA 310, switcher, SEG and lots of goodies for sale at around $25,000 including the International Harvester Van. Telemation using IVC equipment is building CATV studios for Foote, Cone and Belding and some other CATV folks in the area. We are using their facility under the patronage of the guys who bought Shaprio's West Coast Franchise for Groove Tube. We dig it cause its a nice studio and they don't bug us about what we are doing. Video Free America has a Sony AV 5000 but no color monitor or RR converter. Steve Beck at the National Center has AV 5000 too.

You got tapes we can see? Can we get them? Procedure? Would RSN publish a rap with Van Dyke Parks at Warner Bros. 7 Arts. He is head of Video Tape division. Use to get in on in the recording scene. Had a not quite LP hit but the record was still out of sight. The Palace Theater caught on fire last night. I woke up as the fireman was breaking out the window glass and coming in. Nothing serious as it turned out. The seats inside the theater were on fire. Tell Teske if you see him the sound system is all fucked up.

Love you all

Gietzen

MOUNTAIN MEDIA COALITION

We are planning a large fair on the University of Colorado Campus at Boulder to take place at the end of April. As part of the media aspect of the fair, we are asking for your help in pulling this thing together. We need tape, equipment, interested visitors, guidance and ideas.

The fair is to provide a time and place where individuals and groups of the community can exchange information, ideas, and experiences relating to the problems, activities, and directions which we have as a community. It will provide people with exposure to new ideas, techniques, and environments of intercultural communication.

The fair will be filmed and video taped for future experiencing and media distribution in a traveling University project as an example of an innovative community action project.

If you wish to participate, have ideas, or want more information please contact us.

CALIFORNIA INSTITUTE OF THE ARTS

JANUARY 29, 1971—8 PM THROUGH JANUARY 30, 1971—8 PM

time: idea of twenty-four hour video event; forty-eight half-hour videotapes

audience: members of California Institute of the Arts observation of audience activity: no consciousness of the passage of time as videotape time or as clock time; evaluation and judgements: television watching patterns of a group in contrast with the television watching patterns of an individual; real time effects: exhaustion habit began to predominate; those involved with the event watched television in the same way that they would watch a clock; no value judgements of videotapes as participants began to experience real time

videotape: an event in itself as well as a record or documentation of an event

observation of videotape activity: videotapes became the only perceptible measurement of time; videotapes took on the real time quality of being non-repetitively repetitive; provincial quality of Institute members' tapes provided a contrast for the tapes stemming directly from television; videotapes become classical in their usage as a means of processing selection of subject matter or form/form or subject matter

observation of mergeance of audience and videotape activity: any phenomenon which becomes repetitive in its structure ceases to be communication or expression; remember the showing of the Raindance tapes at Cal Arts: videotapes exemplified ordinary material spliced and condensed into one continuous action; videotapes as hardware become generators of sophisticated information as software; the provincial qualities of the tapes in the twenty-four hour performance could not manifest the sophistication of the videotape as hardware because the videotapes themselves were too much involved with their activity as real time processes; once videotape information is processed, the qualities of the information become communicative and real situations become a part of the vast frame of reference to the outside world: the provincial becomes universal in a communicative sense; common philosophy assumes the characteristics of the hardware that communicates it; allowed to remain or to be shown in their own real time context, they do not maintain their communicative qualities because the viewers of the videotapes become participants in the videotapes' time; time experiences itself

Changes are made from week to week as new material is shot and edited down into cohesive segments. Other sections of the program are deleted when they no longer seem relevant to the general program flow. New material is always being shot as the juggling of time, tape, and circumstances make possible. These compositions are edited onto three one-hour reels and are timed out is such a way that matching segments come up simultaneously on the three channels. Further editing takes place live as the three channels are punched up through our switcher onto the matrix of monitors. Sound is mixed through a mic mixer as the different channels of audio work in counterpoint or juxtaposition to the imagery.

This program is a combination of many different kinds of information. The flow from one to another with certain segments acting as transitional bridges is crucial to creating a program experience out of a wide range of available raw material. In the viewing of these unedited taped ideas occur as to potential relevance in the overall compositional structure of the mix.

PROGRAM NOTES: FEBRUARY/1971

VIDEO MIX & COMPOSITIONS: RUDI STERN

CHANNEL 1	CHANNEL 2	CHANNEL 3
Sheep Shall Safely Graze Lower East Side Video Poem by Joie Davidow		
Colorized Moon Landing Appollo 14	Essex and Orchard Street Interviews	Market Crowds
Bhun Laser Projection with Lloyd Cross	Chinese New Year *Year of the Pig* 1/27/71	
Martello Interview First *Witch-In* Central Park	*Witch-In* Fantusi	Witch In
Mouse and Co. Global Village Studio	Hierophant Connection & Co	
Interview with Paul Krassner	St. Mark's Place	
Generation Gap Street Interviews		
Club Orgy Interviews	*Busbes* A Club Orgy Stage Show	Book Store at Club Orgy
Colorized Bodies a composition by Joie Davidow	Colorized Bodies	
Paul Silbey's Massage Instruction Course	Massage Techniques	
Open Theatre Mix—Chami Chaikin	Theater Exercises	Theatre Exercises
Titles	Faces Composition	

GLOBAL VILLAGE

VIDEO MIX & COMPOSITIONS: JOHN REILLY

CHANNEL 1	CHANNEL 2	CHANNEL 3
Titles Solarized Dance Camera: Edin Velez		
Street Interviews—St. Mark's Tompkins Sq. with Wayne Hyde		
Subverted Commercials		
Women's Lib (5th St. Building) Laura Adasko Susan Milano, Renfreu Neff	Street Tape of Protest Bust at 5th St. Building	
Stones Mix	R. Kennedy, M.L. King	Faces of Dead
Club Orgy with Bill Kutik	Stage Performance at Club Orgy	
Solarized Feedback		
Abbie Hoffman Interview: Allen Katzman	John & Semantha (with Laura Adasko)	
Final Mix . Videotapes shot at Woodstock	Abbie Hoffman Central Park Peace March	Video Feedback (Woody & Steinunn Vasulka, J. Reilly & L. Adasko)
	Bob Kennedy Assassination	
Titles (flow across matrix)	After death-Electronic feedback of complete disorder	Acid Tripper *I Don't Want to Die*

FRANK LOSI

A GLOBAL TELESYMPHONY FOR BROADCAST LIVE VIA TELESTAR SATELLITE

Select a great work of music preferably a symphony or an overture. (Great works of rock will have to be excluded as they are best performed by a single voice. For instance Dylan's voice communicates more then a two hundred voice choir. And secondly rock is really more a form of literature as performed by mouth.)

This one work of music should be performed simultaneously in exact synchronization by as many conductors and symphony orchestras as possible around the world.

This would be broadcast *LIVE* around the world via telestar satellite. There would be a central world program director who would flip the various switches based on his selections from hundred's of monitors at central control. As that each of the orchestras would be in exact synchronization with the others the music would flow and sound like it was performed by one orchestra. Only the images would change. Each shot transmitted would be labeled live from London, New York, Tokyo, etc.

Split and multiscreen images would be utilized showing as many or all if possible performing at the same instant.

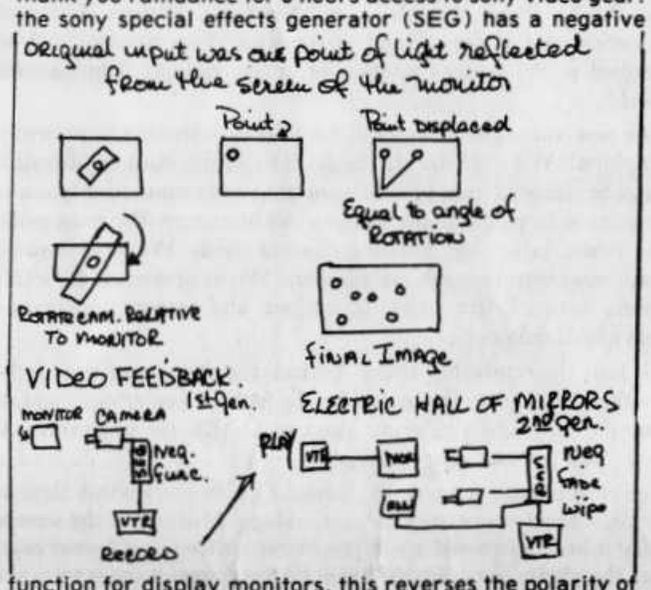
Each orchestra would be recorded by the same number of cameras in the same positions. For instance at one instant show the hands of all the conductors.

By split and multiscreen create patterns. For instance in split screen shows a conductor on the left half from a camera below him from an angle so that his arms extend to the right. Show his counterpart on another continent from below but from an angle so that his arms extend to the left in the right side of the split screen. This would create a simple mirror like effect. More complicated versions are possible so that through the utilization of spit and multiscreen a Busby Berkley like TV effect can be created.

Show the world wide TV audience applauding people everywhere who have witnessed this event. Remind all viewers everywhere that we are all one audience.

TOM DEWITT

thank you raindance for 8 hours access to sony video gear. the sony special effects generator (SEG) has a negative



function for display monitors. this reverses the polarity of an image each trip around the feedback loop (1/30 sec.) creating shimmering bands of alternate b&w.

MAGUS VIDACON

In the sense that s o c i a l i n t e r a c t i o n exists, we attempt to define this form of behavior as such, and then to apply the definition to various types of situations:

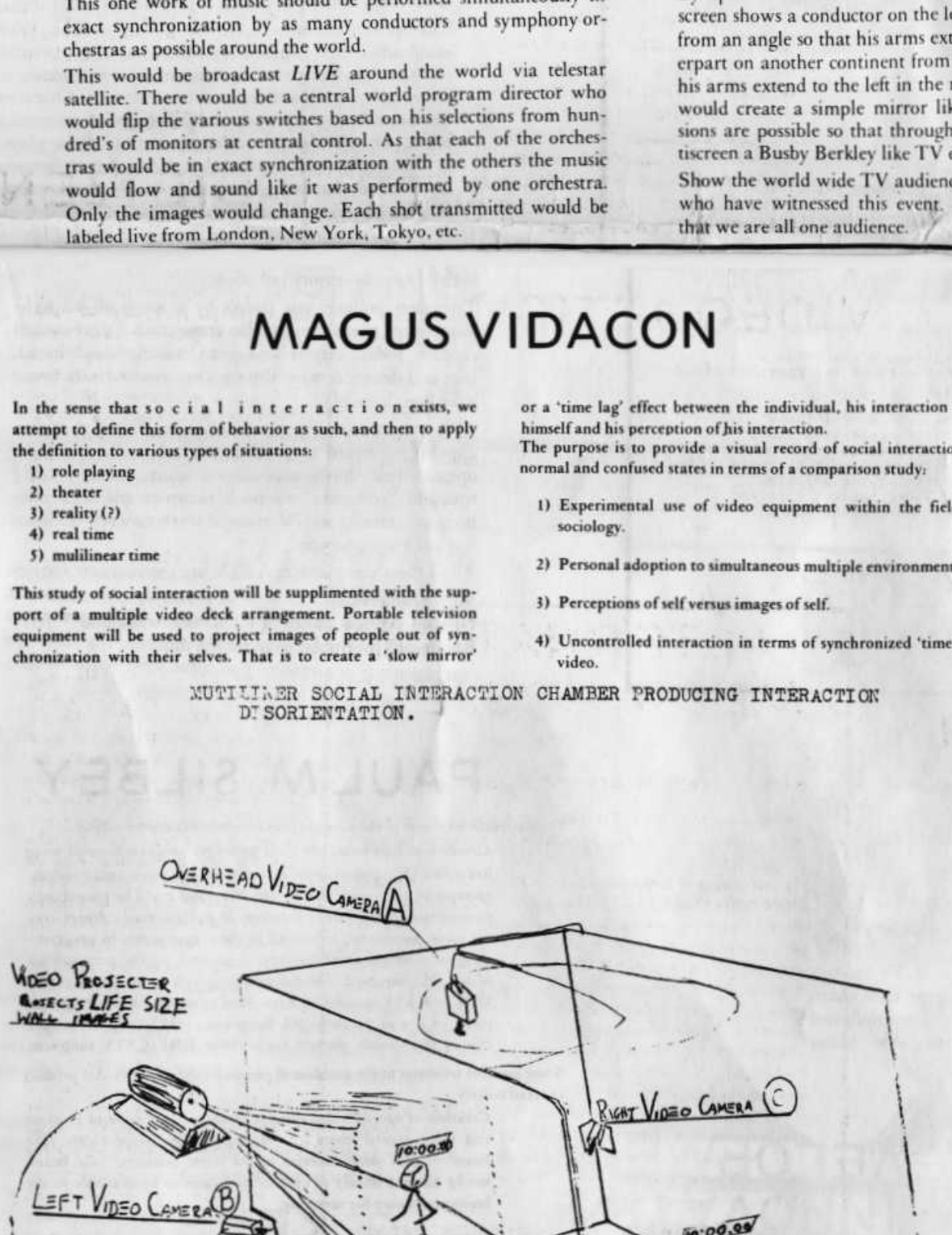
1) role playing
2) theater
3) reality (?)
4) real time
5) mulilinear time

This study of social interaction will be supplimented with the support of a multiple video deck arrangement. Portable television equipment will be used to project images of people out of synchronization with their selves. That is to create a 'slow mirror' or a 'time lag' effect between the individual, his interaction with himself and his perception of his interaction.

The purpose is to provide a visual record of social interaction in normal and confused states in terms of a comparison study:

1) Experimental use of video equipment within the field of sociology.
2) Personal adoption to simultaneous multiple environments.
3) Perceptions of self versus images of self.
4) Uncontrolled interaction in terms of synchronized 'time lag' video.

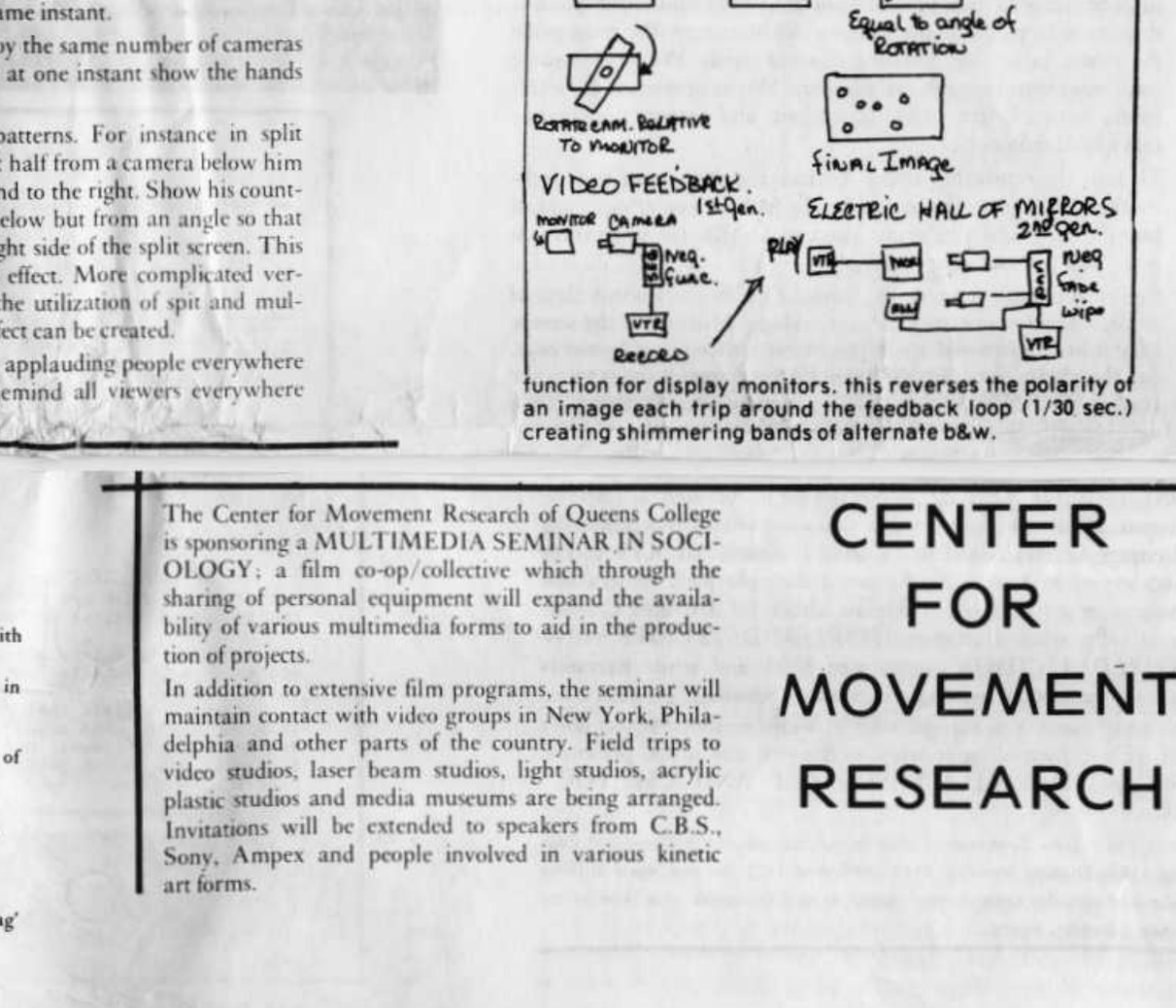
MUTUAL SOCIAL INTERACTION CHAMBER PRODUCING INTERACTION DISORIENTATION.



CENTER FOR MOVEMENT RESEARCH

The Center for Movement Research of Queens College is sponsoring a MULTIMEDIA SEMINAR IN SOCIOLOGY; a film co-op/collective which through the sharing of personal equipment will expand the availability of various multimedia forms to aid in the production of projects.

In addition to extensive film programs, the seminar will maintain contact with video groups in New York, Philadelphia and other parts of the country. Field trips to video studios, laser beam studios, light studios, acrylic plastic studios and media museums are being arranged. Invitations will be extended to speakers from C.B.S., Sony, Ampex and people involved in various kinetic art forms.



DOUGLAS DAVIS

RANDOM NOTES ON THE NEW TELEVISION

Density on the TV tube. I had hoped to get four levels of activity going at once in *NUMBERS*, a videotape event for the Boston Symphony Orchestra, produced at WGBH-TV. I wanted to see through four things, watch them all happening, one over the other. What I discovered was . . . how easy this is with electronic overlay. The TV picture is dense but separable . . . You can see through things. At the end we had hands writing numbers, kids painting them, computers punching them out, digital clocks ticking them. Four times fusing into one. TV is denser than

The kids in the parking lot wanted to know: When are we going to be on TV? That question ages every day. Soon everyone will be on TV.

One day without warning we set up the VTR system in the studio while my students were working—at the Corcoran Art School, in Washington, D.C. The first VTR picture they saw was themselves. One by one they left their drawing boards and came to the camera. Soon they were taping each other, and sitting, like kids, on the floor before the monitor during playback. Now they are making life studies with tape and handling it like a professional tool. But at the first it was raw process impact, reaching back into their past, to the earliest moments of consciousness in front of the lighted screen, like magic.

Bodies in bed can be smeared on a black and white camera.

At *WITNESS: A MARRIAGE EVENT* the camera passed through everyone's hands, just as it did in *LOOK-OUT!* last year. People videotaped each other. Children videotaped feet and small animals.

What we all seem to be doing

What we all seem to be doing is breaking very hot news on the world through the art system. That's all it is, a system of fast, intense communication—which is a great deal: the TV system must get to be the same, fast. Whatever art was in the past, it's the hot information line now—outside the sciences. No accident that Sony, Paik, Warhol, and Vanderbeek all had the same idea at once.

FROM: AMPEX CORPORATION
401 Broadway
Redwood City, California 94063

John Kane (415) 367-4151

December 30, 1970

Richard E. Fiore has been named manager of the Ampex Corporation in Westfield, Massachusettes, it was announced by Lawrence Weiland, ...ager, video products division.

Fiore, former p... Radiation Laboratories (ERL), I... been with Ampex since March, 1968.

Fiore replaces ...en named consultant to the departme...

In his new posi...sible for product planning and ma...ent. The RF systems department pred...d UHF television transmitters and ant...al equipment for commercial, educat...s.

Fiore and his family live in Westfield, Massachusettes.

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LARRY MENKIN

The Writer's Guild of America, West, East is looking into that video tape, CATV crystal ball and hoping it can do something about growing unemployment. You, underground press, youth—send reporters to THE FIRST CONGRESS OF AMERICAN WRITERS to be held in New York City, April 19 & 20 to explore the many problems of new communications, cassettes, CATV etc. The Congress is sponsored by: American Poetry Sosiety, Mystery Writers of America, Newspaper Guild of America, P.E.N. (Poets, Essayists, and Novelists), Writers' Guild of America, and Writers Guild of America West. Sessions will be devoted to the writer's position in an increasingly dehumanized world . . .

The new video generation will not tolerate television as presently employed. We will seize the media. The media must be liberated, must be removed from private ownership and commercial sponsorship, must be placed in the service of all humanity. We must make the media believable, responsive to our needs. We must assume conscious control over the videosphere. We must wrench the intermedia network free from the archaic and corrupt intelligence that now dominates it . . .

To beat the censorship thing. To kick the shit out of the blacklist thing. To ignore the boob tube. To fuck the boob tube. You can buy the programs you want. You can MAKE the programs you want. Just you and your cassette . . .

You're the video generation. Brought up in the environment of video. Instant war scenes. Instant ecology. Murder on the screen. Play it back again and again. See the students gassed by the cops. See the ghetto riots. See the networks laughing all the way to the bank—ABC, NBC, RCA, CBS—all in the manufacturing of the video cassette field. All moving into CATV . . .

I answered when they asked me in 1948 why was I producing *ONE OUT OF TEN*, an all Negro cast in commercial suspense dramas. Why was I interested in videotape when I was producing directing *52 MUNICIPAL COURT* dramas at KTLA, Los Angeles; when I used the Ampex instant playback camera and monitor in a special event display schtick for a United Crusade event rally, when I produced *HARLEM DETECTIVE, NEW WORLD A COMIN'*, introduced black and white narrators in audio-radio-play lessons for elementary schools . . .

It's your move. You can get with it. Video cassettes. If you don't get with it, then all your work in the past and in the present is bull shit. THEY'LL RIP YOU OFF AND USE YOU AGAIN . . .

From *Space Time Continuum Memo* by the man who created-produced *Captain Video*, Dumont Network, 1949 and sees in 1971, the new world of home video tape cartridge cassettes, your chance to sieze the media, your hope for the future, if there is a future . . .

THE SPACE FOR INNOVATIVE DEVELOPMENT

Changes:

Frank Cavestani has formed his own company **Frank Cavestani, Inc-Video Productions** and left C.T.L. Electronics.

"I will continue to be associated with **C.T.L.** and Mr. Lui but now only on a part time basis. My immediate concern is at **The Space for Innovative Development Inc,** 344 W. 36th. St., NYC 10018 where I'll be consulting a number of groups on video and will be director of **Space Video Arts.** I've also been working on a videotape of the **Beach Boys** for Strimband International and Warner Bros. but what excites me most is **Space Video Arts** where I have the possibility of making a number of dreams come true.

People, if you have an interest in video or are deeply into video please write me at Space telling me what you would like to do for I have the real possibility of being able to help people to reach their goals. **Space Video Arts** and **Space for Innovative Development** will have a formal opening sometime in June."

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(212) 576-4703

NEW YORK (10017, 285 MADISON AVENUE

February 19, 1971

Radical Software
24 East 22nd Street
New York City, N. Y. 10010

Dear Sirs:

About two months ago I sent you a check for a subscription and three copies of each of the first two issues of Radical Software.

When my secretary and I called several times you said you had mailed out the issues third class.

I can't believe that even third class mail could take this long. And unless I receive those copies and any further issues, per my subscription, I intend to report you to the Better Business Bureau for malpractice.

Yours truly,

Hanley Norins

Hanley Norins

HN/bc

CTL ELECTRONICS
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J. KEARNEY

Television is an ecological problem.

It is one of many new technologies producing considerable wastes. Unlike most other technologies, television wastes its pollutants in human minds.

A pre-occupation with violence in much adult and most children's programming is one of TV's more controversial characteristics. The mind pollution of TV violence is the moral vacuum of the tube. Rarely is violence on television presented in a revolting, wretched, gut-churning, primative-animal (de-humanized) context. It is common, trivialized, repeatedly cartooned, associated with heroic climaxes, removed from the context of underlying cause, and through sports, senselessly glorified.

One of the causes for its prevalence is its facile use for excitement or adventure. Follow an imaginary graph of the emotional intensity of character development in a TV adventure show (spies, police, western, etc.). The sound track of the show, particularly background music, could visualize the intensity of suspense. The apex of excitement in the entire show and the smaller peaks come at the moments of violence. The chase leads to the climax: the music rises, the voices turn frantic and the explosion comes. Yet the pain and the gore is never shown—on the contrary, one is usually left satisfied with the heroic climax. It is no wonder sex is considered obscene in America. Television pollutes the mind.

Television pollutes human sexuality. Natural, joyful sex is never shown on television. Television is a multi-sensual ball-tickler in commercials, but it's just a tease. While some ads tempt, others harp on insecurities, like many cosmetic ads. Plots of shows and many commercials envision sex as a reward for wealth, possessions. Characters can be wolves, temptresses, exhibitionists, or puritanical, naive, or duty-bound sexless creatures; game-players or wise-to-the-world cynics; but rarely if ever sensuous, uninhibited, fun-loving or nude. In Denmark couples merrily partake of sex on the screen, quite naked, and good movies don't have to be ruined or banned because they portray life as it is. American TV's sexual sickness is a vile form of sensory pollution.

Television pollutes our bodies by brain-wash ad techniques used to make our bodies crave trash. Sugar-soaked candies, sodas, cereals and gum, vitamin-dead bread, beer and deserts remain although tobacco and hard booze have been banned.

TV's programming patterns are so repetitious that they appear to create a psychological dependency. Soap operas, quiz shows, talk shows, sports and especially situation "comedies" all hook many people. The phenominal stability of TV ratings, week-to-week confirms this addictive property.

All of these eco-problems of TV are the real core-curriculum for kids!!

Newton Minow called TV "a vast wasteland;" Jerry Rubin calls it "Bubble gum for the mind."

COMMUNICATION

Fax

Radar

vtr

TV-Telephone

space

PSYCHOLOGY

eye camera

Toy-TV-toy

population concentration deconcentration

GENERAL TV

Semi-conductor type

hard *flexible*

Large screen TV

Projection Type

thin cathode ray tube

idophrol

Thin TV

light bulb

cathode-ray

I am describing below a tentative chart of TV ecology system. The chart is by no means a linear flow chart. All 50 elements can be connected in many complicated ways. Inputs and outputs are interchangeable. Many sub-categories are inter-combinable, too.

SHUYA ABE

Television and Ecology

Whether people are conscious or not, Television, perhaps a kind of MIND pollution at present stage, has already helped a great deal in cleaning up the air. Just imagine . . . if one-third of ten million New Yorkers comes to the Times Square every night to watch movies, instead of turning on their set at home . . . what would happen to the pollution???

INDUSTRIAL USE

Recording device

electronic beam recorder

heat-resistant camera for furnace

microfilm

Band compression-TV standard change

Monitor (many thousand scanning lines)

ART AND ENTERTAINMENT

electronic wall paper

EDUCATION

cassette gallery

As a memory pad

video-synthesizer for home use

video disc

selecta vision

MEDICAL USE

robot

Memory tube

x-ray camera

ECOLOGY

weather infra-red camera

deep-earth

deep water camera

Investigation

automat

MEDIA COMBINATIONS

planning

evr

Imagine, if we do one-third of our business on picture-phone and cut back our driving by one-third, how it would help the pollution.

sony porta pak

Pope Critical of Standards Of the Radio-TV Industry

ROME, Jan. 16 (Reuters)—Pope Paul VI has described the broadcast industry as a mirror of the values of contemporary society but said that its standards often fell far short of the Christian ideal.

The Pope's statement was made in a message sent on his behalf by the Vatican Secretary of State, Jean Cardinal Villot, to an assembly of the International Catholic Association for Radio and Television meeting this week in New Orleans.

The Pope said it was essential that, "as convinced Catholics, the faithful engaged in this profession should see to it that the image of our faith is not missing in the general picture of contemporary life reflected by the media."

PAUL M. SILBEY

Some possible solutions to the area of video coverage of cassette output . . .

Creation of half hour, one hour or longer program formats using live video DJ's and excerpts or cassettes. Programs could include excerpts of new tapes, 'oldies', etc. Programs could be geared only to entertain, present news pertinent to our different cultures, create social awareness, or mix all of these approaches to programming into unique combinations, dependent on the personalities of the DJ's involved. The finished programs could be offered to UHF or CATV stations on a one-shot or ongoing basis. Programs could be live or prepackaged. Programs could be offered to specific or nationwide markets via selective UHF/CATV contracts.

Some possible solutions to the problem of personal contact with video product in retail outlets . . .

Creation of special video cassette stores, or new sections in presend video/record stores . . . equipped with special video 'juke boxes' to play short excerpts of the latest cassettes. 'Juke boxes' would allow a library of current programs to be available to the buying consumer for sampling.

Creation of a chain of environmental stores that mix 'aquarian' products—for example, water beds, color organs, tech art products, and video cassette viewing areas. In this way, the entire environment could be saleable.

Creation of entertainment oriented video sites—for example theatres utilizing video projection equipment . . . or coffee house locations utilizing small monitors at each table hooked up to a master 'juke box' (similar to audio units now found in diners or short order restaurants)

Possible solutions to the problem of personal contact with video cassette product in home situations . . .

Creation of a video magazine.

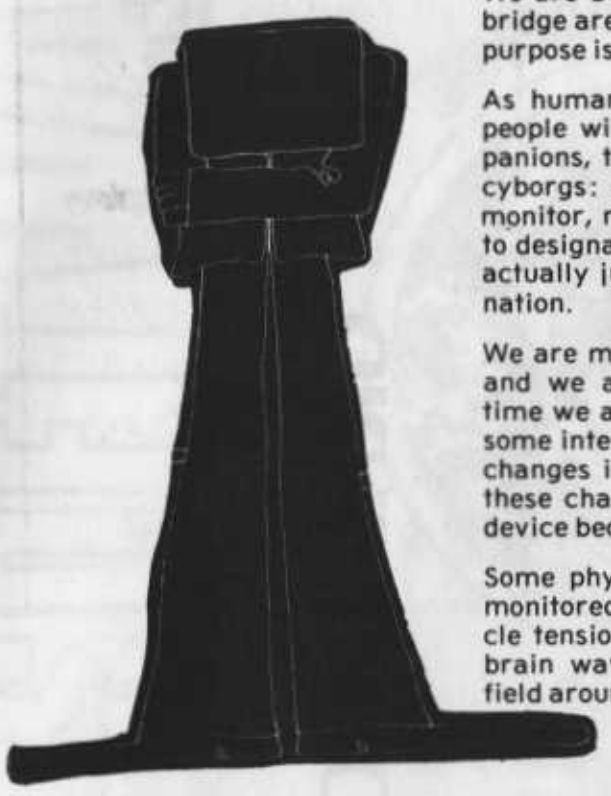
Creation of sampler tapes showing excerpts of a software house's artists and programming. (similar to Warner Brother's non-profit sampler records)

Creation of video clubs, where cassettes could be mailed out on an inspection basis, or on a 'revolving return of the cassette' basis.

Creation of a direct dial access system between subscriber homes and central video library repositories.

The ideas and concepts just outlined are only some of the possible methods of presenting videotape software output to an interested public. I would like to suggest that alternate culture people start thinking of the marketing part of video as an opportunity for meaningful work activity . . . in conjunction with existing video hardware and software companies, or if this is not possible, to start totally new marketing and distribution companies, cooperatives, or work communes. For further dialogue, feedback or more specific information, contact PAUL SILBEY.

CAMBRIDGE CYBORGS



We are a group of artists, engineers and scientists in the Boston/Cambridge area who have formed a company called Cambridge Cyborgs. Our purpose is to make the concept 'cyborg' and its implications known.

As human intelligence extends itself more and more via electronics, people will be able to use little thinking machines, or electronic companions, to perform a variety of tasks for them. It is then only a step to cyborgs: cybernetic organisms, men with machine attachments which monitor, modify, or take over bodily functions. We use the word 'cyborg' to designate not only the man but the machine attachment itself. Each is actually just a part since the true Cyborg is created only in their combination.

We are manufacturing cyborg attachments for commercial distribution and we are planning cyborg exhibits for art shows. At the present time we are primarily involved with the type of cyborg which monitors some internal physiological activity. It gives you immediate feedback of changes in the activity being monitored. Your increased awareness of these changes allows you to gain control of the activity. With use, the device becomes an electronic extension of your central nervous system.

Some physiological activities related to physical health which can be monitored and changed are blood pressure, body temperature, and muscle tension. Those related to emotions and states of consciousness are brain waves, emotional arousal (skin resistance), and the electrical field around the body.

How feedback gives control can be illustrated by the Alpha Cyborg which allows you to control your states of consciousness by monitoring your brain waves. There are four distinct states of consciousness in man which can be monitored in terms of his physiology. These are waking, sleep, dream, and the Alpha state. The Alpha Cyborg filters out the Alpha frequency from your brain waves, amplifies it, and displays it as a modulated sound. This feedback lets you know what thoughts or feelings are leading you in the direction of the Alpha state and which are not. The Alpha state is one of profound relaxation and yet the mind is quite alert. It is a sort of first step towards any inward experience. It has been theorized that just as sleep and dream are natural states necessary to relieve stress and fatigue, so is the Alpha state natural, its function being to relieve deeper stress and to allow the consciousness to renew itself. Once you have knowledge of the Alpha state, you have opened doors within your mind which perhaps you did not know existed.

Through the use of bio-feedback equipment, we are learning that the mind and the body are not separate in man. Physiological functions that for centuries were thought to be beyond conscious control can be within our command. The overall effect of the use of these devices is not known. Instruments capable of measuring physiological changes (the electroencephelograph, the polygraph, the electrocardiograph) have been confined to use in hospitals and laboratories. Only as people begin to use machine attachments and to realize the possibilities in man-machine combinations will the social impact of cyborgs be felt.

VIDEO CONEXION

THOUGHTS OF THE VIDEO CONEXION

It is the responsibility of REVOLUTIONARY MEDIA groups to **create** a new life through a medium, rather than to **duplicate** the old one with a medium.

Experiment is a major prerequisite to any Revolutionary Art, merely to document Revolutionary life is not enough. That is characterisitcally the goal of the 'Pig Media,' usually occurring after the fact, usually attempting to reproduce the fact, and generally seen to be counter-revolutionary. Changing the Media from its present situation is revolution.

To build a new society from the framework of the old.
Theme of the I.W.W.

One Big Common Carrier
major goal of the V.C.

GEOFFREY CHRYSLER

There has been a change in economic thinking lately from the gold standard to the energy standard. However, the true standards of wealth are human intelligence, human energy and energy from the sun. Men are now realizing under the energy standard that solar energy conversion machines will make an amazing new world but without the intellect of men these machines will never be built and without human energy the intellect is futile. Youth possesses the energy and the intellectual initiative. The men who now control the economic processes are fully in the grasp of the Neolithic culture process where tremendous profits are being made in the manufacture of instruments of death.

Excerpted from *The Enduring Past is What Prevents the Future from Being Made Durable.*

INDIANS' FIRST VIEW OF THE CARS.

NAM JUNE PAIK

#CIA calling 1971. Fil

nam juge paik

Dear Ira and Beryl..

we enjoyed your video demonstration at Cal Arts... especially shoe shine man's monologue by People's Video...

Paul Valery xxx or so said that there are only two poles in poetry... (abstract and romantic) and poetry is swinging between these poles like a pendlum....Do you think, that we..(after three wars and 4 technological break-throughs.).found one more poles...(that war in my head watching your show)...and with all new mannipulative possibility in the time-parameter of video tape (eg., feedbacks, instant or delayed palybacks, loop, speed-changes, and sync pulse and scanning mannipulations) etc etc..) ..did we find a new pole in TIME ? besides the one way flow of time from past to present and future ??? That we never have freedom, but an illusion of freedom ...and small illusion is freedom and vica versa... all this fateful that comes from this is..

with this complicated sentiment (a sign of old man) I am sending you for the reprint of an ill-fated old paper , which was printed to be a flier at my 1967 February concert with Charlotte Moorman... in that night of Opera Sextronique, we ended up in New York's now famous xxxx "Indecent Exposure" case... long long time ago before "Hair".

Time goes fast ..since Li Tai-Po..

Accerelation of time à la Toffler is a mythe..

I hope Time goes obliquely...

neither fast , nor slow... nor "rerun"...

An Tape Cycle of you and Frank Gillete demonstrated, Time parameter is the most intriguing part of video...
please, don't correct English Erin, John Cage said so.

AC/DC . . . THEATRE VIDEO

AC/DC, Heathcote Williams' new play, opened on February 23 for a limited run at the Chelsea Theatre in Brooklyn, N.Y. The story interweaves Williams' comments and reaction to our Media culture with an extensive use of video. Presented as a piece of theatre, the play starts on a high energy level and stays there throughout the performance . . . as five actors representing a combination of astral freaks flash on their feelings and interactions. Certainly three new epithets have hit the media community . . . "media rash," "media turd" and "media sludge." Although the acting and language create and sustain a series of verbal overloads, the anticipated use of video is generally unsatisfying. So, Art Gimberg and Skip Sweeney of Video Free America, who created and operate the video elements, were asked to comment . . .

How was AC/DC proposed to you?

Well in a way, we proposed to them. We've worked with the Chelsea before, and we thought that here was a chance to explore the video medium through this play. This past December, we read the play and thought that the way to do it right was with lots of video delay, lots of live video action from different camera points of view, and lots of feedback to illustrate another timespace dimension. The final director's concept was more traditional, and we were relegated to being the 'cosmic wallpaper.' We wanted to explore the relation of the live actor to video, so this was a great disappointment not to be able to do so. Equipment delays played a heavy role here, since we didn't get the equipment until the last moment, and it was to act as a bridge between the live actors and the video medium. So it was impossible to have the video working while rehearsals were inprogress . . . which was where the creative video-actor would be turned on to being amplified through video. But they wanted the total attention and we ended up supporting them. In a sense, we were considered a distraction. However, we put together three one hour tapes for use in the show in a couple of days.

What did you like the most in AC/DC?

Well, the end. Feedback is the window into the fourth dimension, which we felt would be perfect for the last ten minutes of the play. Here, we did go far out with it, especially when the lead actor blows his mind, and a feedback series is shown on all 18 monitors. Also, when one of the characters speaks of schizophrenia, the use of the live video image, shown in different points of view is very reinforcing . . . it amplifies the information beautifully, the first act's use of video is basically an overintensified sentinel surveillance system, which is a pretty low key use. Perhaps the most far out feature of the play was the creation of the most elaborate matrix of live, feedback, and delay system. It's a 6 x 8 matrix, with minimum loss over 135 feet of cable. Inputs are three cameras on stage plus one in the control room, an SEG used as an input, and three running VTR's. We superimpose through the SEG box into monitors on stage. It's a passive switching system where any one of the inputs can be put on any one of the 18 monitors. In terms of potential, we ocassionally use the maximum, such as during an epileptic fit by one of the actors when we use a heavy mix of violence images taken from all kinds of tapes, films and photos. In the final analysis, we plugged video into the theatre production in a way like a light designer does. It works moderately well, and now we want to go further. So we've been thinking of writing our own play, and at this point, we have a lot of thoughts along these lines. By the way, we would like to thank the general alterate video community in New York. Everybody was cooperative, and we felt that had needs arisen, we could have gotten the use of many tapes, equipment and help. We ended up using tapes from Global Village. We got a good "deal" from CTL electronics, even though they didn't provide technical support for their stuff. Jackie Cassen, Peoples Video Theatre and Raindance offered lots of good tapes, but we weren't able to use them. Lee Kaminski and Sandy and Jim Video Access have been great, too. They are helping technically run the show . . . they came around to help right when we needed that physical assistance. So, dissension non-withstanding, we just have a sense of being in a 'family.'

PAUL SILBEY.

LOUIS JAFFE

An Appeal to the Wandering Eye

There is a malady which ruins more tapes than all technical malfunctions put together Somebody has just shot a half hour tape of, say, a rock recording session; and after all that is a very hip subject, and there will be music on the sound track. But if the photographer had the wandering eye I can't even watch it.

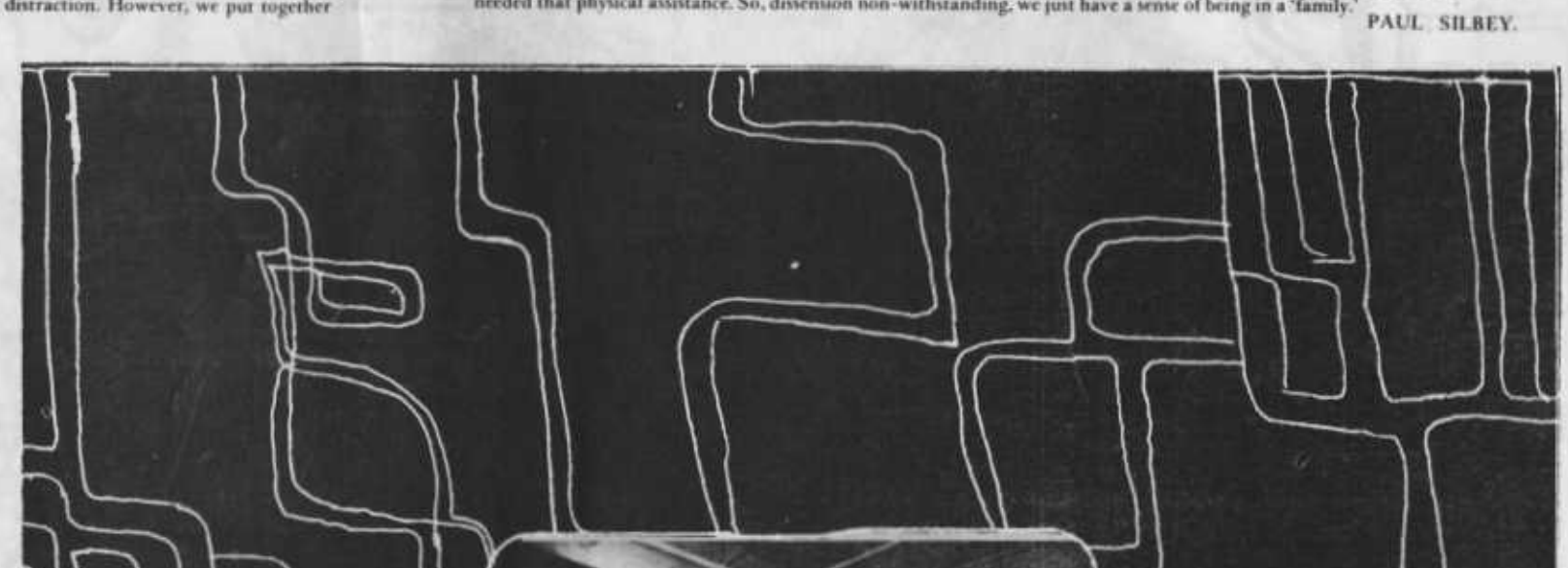
Somebody comes into a situation with his fantastic recording device and prints out his vision of the situation. So often his vision consists of a constant casting around for something to see. He is afraid to settle on one aspect of the situation, one operation, one detail, and just watch it and let it develop. He fears that by letting the camera's vision simply rest on one thing for a period of time he will miss something vital going on somewhere else.

So I am watching the screen and I see something like this: A sweeping pan across the studio in wide angle (barely enough time to make out that there are musicians standing around with instruments) going into a rapid zoom into an out-of-focus close up. As the focus is pulled in, the picture resolves into someone's hand tuning a guitar, just as the camera pulls away zooming back into a semi-wide angle of someone bending over doing something to an amplifier. As he stands up the camera moves on (his face comes into view just as he goes off the edge of the screen). Meanwhile, the camera zooms into a telephoto of fuzzy hair and two eyes, while all the time the tuning of the guitar which was seen briefly early in the sequence is heard off screen.

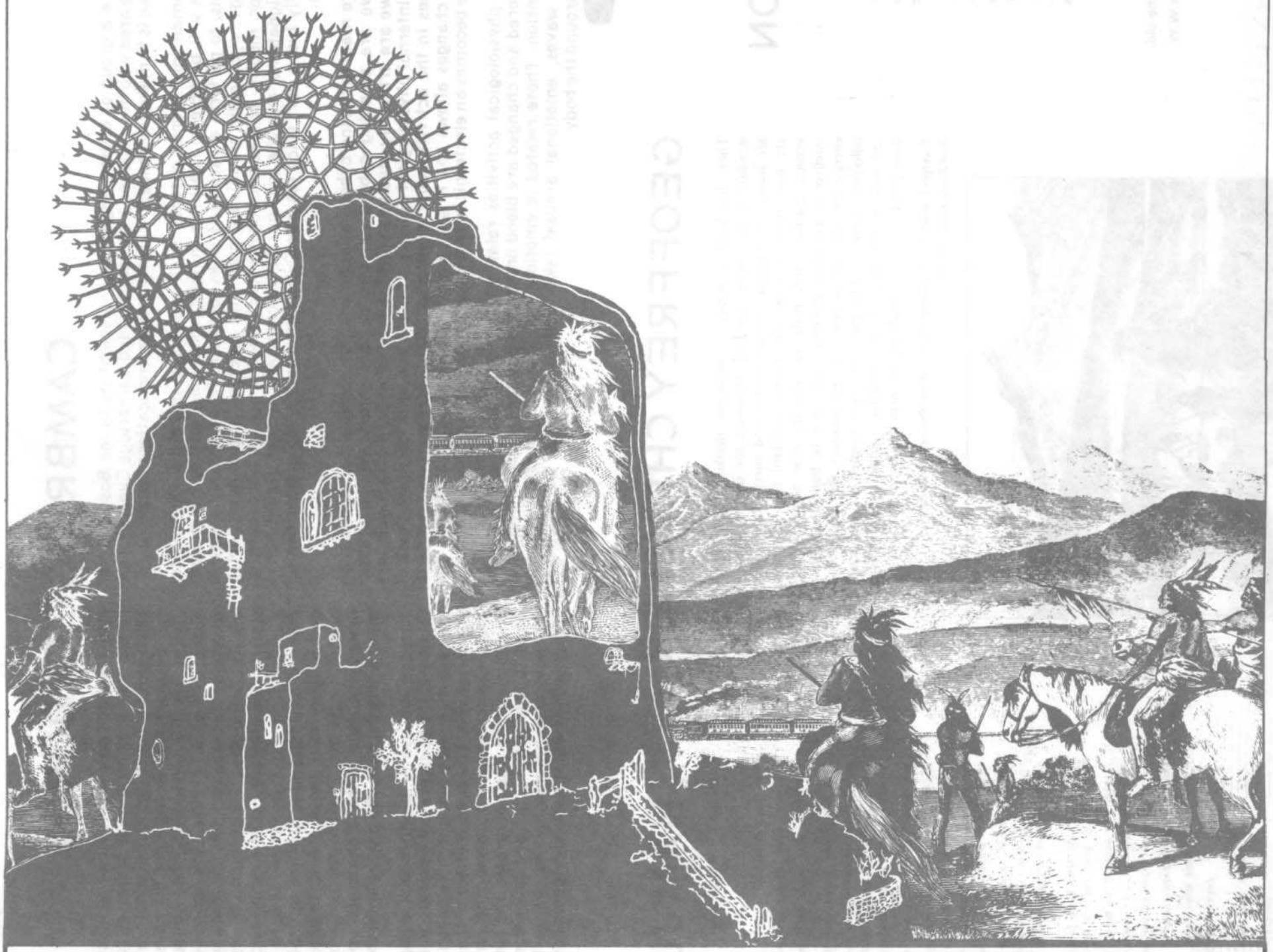
I appeal to the wandering eye—show me that first wide angle shot of the studio long enough for me to register what kind of a room I'm in. Take it in a slow, slow, gliding pan, and take a leisurely zoom up to that guy's hand; take time to gradually concentrate my attention on this closeup detail of the general scene I just saw. Pull the focus if you can *while* you are zooming (slowly) so that when you reach that hand tuning the guitar it will already be in focus. And now that you have this beautiful, precisely-framed closeup of the hand, STAY WITH IT. Just hold the frame on this simple scene and let me see his fingers turning the tuning keys while my ears hear the pitch of the notes changing. Then at last knowing that it has been long enough for me to really see the gesture, pull slowly away.

Probably you stayed with the tuning scene long enough to miss the guy bending over his amplifier, but that's all right, it doesn't matter, just watch the image panning through your finder, and let your next moves be shaped by what comes into view. If an out-of-focus face suddenly comes in on the right side of the picture SLOW your pan gradually while pulling the face into focus, and once it's in focus, STAY WITH IT. If the owner of the face up and walks across the room, follow him and do a controlled zoom while changing the focus so that he stays framed and sharp as he walks.

Granted, this is a specific shooting situation, rather low key, and this is a specific way of responding to it with tape. Sometimes you have to break the flow and reorient yourself suddenly to catch a new development in the situation. But please, for my sake, don't just let your eye wander. Pick something, hold on to it, and let me really see it.



GRASSROOTS TELEVISION



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We are accepting subscriptions only through issue number 6 (Winter 1971). We're not soliciting subscriptions beyond then because we feel it's possible that **Radical Software** as print may have served its function and we'll want to do it solely as videotape. But reader feedback will determine need.

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CYBERNETIC GUERRILLA WARFARE

by Paul Ryan

To fight a hundred times and win a hundred times is not the blessing of blessings. The blessing of blessings is to beat the other man's army without getting into the fight yourself.

The Art of War Sun Tzu

Illustrations by Claude Ponsot

Part I GUERRILLA STRATEGY AND CYBERNETIC THEORY

Traditional guerrilla activity such as bombings, snipings, and kidnappings complete with printed manifestos seems like so many ecologically risky short change feedback devices compared with the real possibilities of portable video, maverick data banks, acid metaprogramming, Cable TV, satellites, cybernetic craft industries, and alternate life styles. Yet the guerilla tradition is highly relevant in the current information environment. Guerrilla warfare is by nature irregular and non-repetitive. Like information theory it recognizes that redundancy can easily become reactionary and result in entropy and defeat. The juxtaposition of cybernetics and guerrilla strategy suggests a way of moving that is a genuine alternative to the film scenario of NYC urban guerrilla warfare "Ice". Using machine guns to round up people in an apartment house for a revolutionary teach-in is not what the information environment is about. All power does not proceed frm the end of a gun.

We suffer the violence of the entropy of old forms—nuclear family, educational institutions, supermarketing, cities, the oil slick complex, etc., etc. They are running us down, running down on us and with us. How do we get out of the way? How do we develop new ways? This ship of state continues to oscillate into runaway from its people and its planetary responsibilities, while efforts continue to seduce us onto boarding this sinking ship—educational loans, fellowships, lowering the voting age. Where did Nixon come from anyway? How did that leftover from the days of Elvis get to be Captain of our ship, Master of our fate?

How many Americans once horrified by thermonuclear war are now thinking the unthinkable in ecological terms with a certain spiteful glee of relief at the prospect of a white hell for all?

Psychedelic my ass: Children of A-Bomb.
Bob Lenox

Nobody with any wisdom is looking for a straight out fight. We have come to understand that in fighting you too easily become what you behold. Yet there is no way on this planet to get out of the way. Strategy and tactics need be developed so the establishment in its entropy does not use up our budgets of flexibility. The efforts to enlist the young in the traditional political parties by '72 will be gross. Relative to the establishment and its cultural automatons, we need to move from pure Weiner wise Augustinian Cybernetics into the realm of war game theory and practice in the information environment.

The most elegant piece of earth technology remains the human biocomputer; the most important data banks are in our brain cells. Inherent in cybernetic guerrilla warfare is the absolute necessity of having the people participate as fully as possible. This can be done in an information environment by insisting on ways of feeding back for human enhancement rather than feeding off people for the sake of concentration of power through capital, pseudo mythologies or withheld information. The information economy that begins in a guerrilla mode accepts, cultivates and depends on living thinking flesh for its success. People are not information coolies rickashawing around the perceptions of the privileged, the well paid, or the past. People can and do process information according to the uniqueness of their perceptual systems. Uniqueness is premium in a noospheric culture that thrives on high variety. Information is here understood as a difference that makes a difference. The difficulties of a negentropic or information culture are in the transformations: how do we manage transformation of differences without exploitation, jam or corruption that sucks power from people.

I am not talking about cultivation of perceptual systems at the expense of emotional cadences. Faster is not always better. Doing it all ways sometimes means slowing down. Internal syncing of all facets is critical to the maintainence of a flexibility and avoidance of non-cybernetic "hang-up" and "drag."

The bulk of the work done on cybernetics from Weiner's guided missiles through the work at IBM and Bell Labs along with the various academic spin-offs has been big budget establishment supported and conditioned by the relation of those intellectuals to the powers that be distinctly non-cybernetic and unresponsive to people. The concept of entropy itself may be so conditioned. Witness the parallel between Weiner's theoretical statements about enclaves and the enclave theory of withdrawal from Vietnam. One of the grossest results of this situation is the preoccupation of the phone company and others with making "foolproof terminals" since many potential users are assumed to be fools who can only give the most dumb dumb responses. So fools are created.

The Japanese, the people we dropped the A-Bomb on in '45, introduced the portable video system to this country in 1967, at a price low enough so that independent and semi-independent users could get their hands on it and begin to experiment. This experimentation, this experience, carries within it the logic of cybernetic guerrilla warfare.

Warfare . . . because having total control over the processing of video puts you in direct conflict with that system of perceptual imperialism called broadcast television that puts a terminal in your home and thereby controls your access to information. This situation of conflict also exists as a matter of fact between people using portable video for feedback and in situations such as schools that operate through withholding and controlling the flow of information.

Guerrilla warfare . . . because the portable video tool only enables you to fight on a small scale in an irregular way at this time. Running to the networks with portable video material seems rear view mirror at best, reactionary at worst. What is critical is to develop an infrastructure to cable in situations where feedback and relevant access routes can be set up as part of the process.

Cybernetic guerrilla warfare . . . because the tool of portable video is a cybernetic extension of man and because cybernetics is the only language of intelligence and power that is ecologically viable. Guerrilla warfare as the Weathermen have been engaging in up to now and revolution as they have articulated it is simply play acting on the stage of history in an ahistoric context. Guerrilla theatre, doing it for the hell of it on their stage doesn't make it either. We need develop biologically viable information structures on a planetary scale. Nothing short of that will work. We move now in this present information environment in a phase that finds its best analogue in those stages of human struggle called guerrilla warfare.

Yet this is not China in the 1930's. Though there is much to learn from Mao and traditional guerrilla warfare this is not the same. Critically, for instance, in an economy that operates on the transformation of differences a hundred flowers must bloom from the beginning. In order to "win" in cybernetic guerrilla warfare, differences must be cherished, not temporarily suppressed for the sake of "victory." A la McLuhan, war is education. Conflict defines differences. We need to know *what not to be* enough to internally calculate our own becoming earth-alive noosphere. The more we are able to internally process differences among us the more we will be able to process "spoils" of conflict with the entropic establishment—i.e., understanding the significant differences between us and them in such a way as to avoid processing what is dangerous and death producing. Learn what you can from the Egyptians, the exodus is cybernetic.

Traditional guerrilla warfare is concerned with climate and weather. We must concern ourselves with decoding the information contours of the culture. How does power function here? How is this system of communications and control maintained? What information is habitually withheld and how? Ought it to be jammed? How do we jam it? How do we keep the action small enough so it is relevant to real people? How do we build up an indigenous data base? Where do we rove and strike next?

Traditional guerrilla warfare is concerned with knowing the terrain. We must expand this to a full understanding of the ecological thresholds within which we move. We must know ourselves in a cybernetic way, know the enemy in a cybernetic way, and know the ecology so that we can take and take care of the planet intact.

The traditional concern is for good generals. What's desirable for us is ad hoc heterarchies of power which have their logistics down. Cybernetics understands that power is distributed throughout the system. Relevant pathways shift and change with the conditions. The navy has developed war plans where the command is a fleet moves from ship to ship every fifteen minutes. It is near impossible to knock out the command vessel.

The traditional tricks of guerrilla warfare are remarkably suited for cybernetic action in an information environment. To scan briefly.

Mixing "straight" moves with "freak" moves. Using straight moves to engage the enemy, freak moves to beat him and not letting the enemy know which is which.

Running away when it's just too heavy. Leave the enemy's strong places and seek the weak. Go where you can make a difference.

Shaping the enemy's forces and keeping our own unshaped, thereby beating the many with the few.

Faking the enemy out. Surprise attacks.

The business of deception in guerrilla warfare is a turn off for most people in this relatively open culture. This is simply an area that need be better understood, if we are to be successful. People feel that concealing is unethical. Yet overexposure means underdevelopment. Many projects die of too much publicity. There is a sense in which we are information junkies feeding off each others unlived hopes. The media repeatedly stuns the growth of alternate culture in this country through saturation coverage. It is hard for an American to just keep his mouth shut and get something cooking. You are what you reveal. The star system renders impotent by overexposure and keeps others impotent through no exposure. Seeming different is more important than making a difference. Deception in guerrilla tactics is an active way of avoiding control by an alien, alienating intelligence. When a policeman takes your name, he takes over. I know a guy who is inventing another identity for the computer. There is a virtue of mistrust and wisdom in knowing significantly more about yourself than you reveal. *Love Thy label as thyself.*

We retreat in space, but we advance in time.
Mao

Count the Cost. We need develop an information accounting system, a cultural calculus.

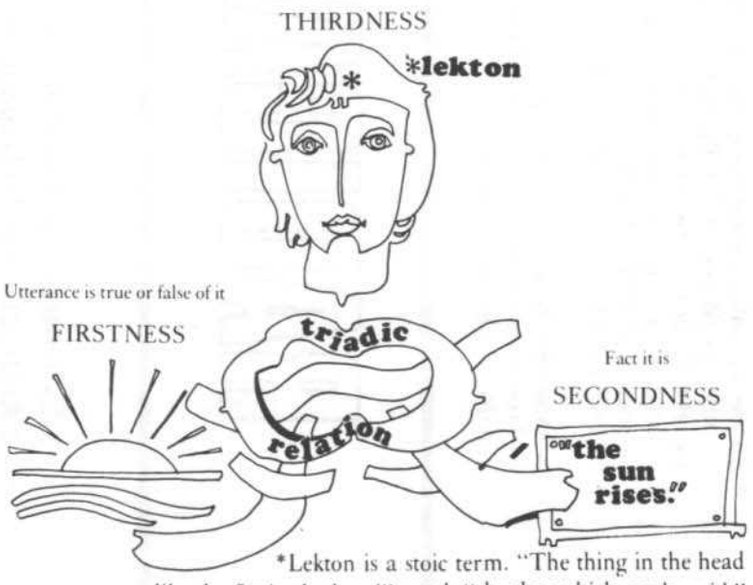
Use the enemies supply. With portable video one can take the Amerikan mythology right off the air and use it as part of a new perceptual collage.

Be flexible. In cybernetics, flexibility, the maintenance of a good guessing way is critical.

Patience. Cybernetics is inherently concerned with timing and time design. It is a protracted war.

Do not repeat a tactic which has gained you victory, but shape your actions in an infinite variety. Water sets its flow according to the ground below; set your victories according to the enemy against you. War has no constant aspect as water has no constant shape.

Sun Tzu



*Lekton is a stoic term. "The thing in the head like the fist in the hand" equals "the that which can be said."

Part II ATTEMPTING A CALCULUS OF INTENTION

Calculus of intention was a concept developed over many years by the cybernetic wizard, Warren McCulloch. He was in the business of brain circuits. McCulloch felt that dialogue breakdowns occurred largely because we lacked a logic that could handle triadic relationships. Here is his description of the problem of the calculus of intention.

The relations we need are triadic, not diadic. Once you give me triadic relations, I can make N-adic relations; but out of diadic relations I can't go anywhere. I can build strings and I can build circles, and there it ends.

The great problem of the nervous system is the one concerning its core, the so-called reticular formation . . . This reticular core is that thing that decides whether you'd better run or whether you'd better fight, whether you should wait, whether you should sleep, whether you should make love. This is its business and it has never relinquished that business. It is a structure incredibly simple when you look at it, but the problem that I'm up against is the problem of organization of many components, each of which is a living thing, each of which in some sense, senses the world, each of which tells others what it has sensed, and somehow a couple million of these cells get themselves organised enough to commit the whole organism. We do not yet have any theory that is capable of handling such a structure.

Communication: Theory and Research ed. Thayer, Lee, Thomas, Springfield 1967. McCulloch's commentary on "Logical Structure of the Mind."

I have not made a thorough study of McCulloch. It would take years. I do not know if what follows satisfies that criterion he established for such a calculus. I have maintained a certain organization of ignorance relative to formal cybernetics and formal topology. In fact, what follows would not, it seems, satisfy the kind of discreteness, one-two-three, that McCulloch seemed to want. However, such discreteness may not be necessary.

My approach stems from work with McLuhan that preoccupied me with the problem of how to maintain congruence between our intentions and our extensions. McLuhan talked of orchestration of media and sense ratios. Neither cut it. Orchestras just aren't around and sense ratios or *sensus communis* is a medieval model, essentially a simile of meta touch. Gibson's book on the senses considered as perceptual systems is richer in description of the process. It includes McLuhan's personal probing ability as an active part of the perceptual system.

While the following formulations may not in fact work as a calculus of intention I put them forth both because they have been exciting and useful for me and because the calculus itself seems a critical problem in terms of cybernetic guerrilla warfare. Dialogue degenerates and moves to conflict without an understanding of mutual intent and non-intent. While it does not seem that we can work out such a common language of intent with the people pursuing the established entropic way of increasingly dedifferentiated ways of eating bullshit; it is critical we develop such a language with each other. The high variety of self organizing social systems we are working toward will be unable to co-cybernate re each other re the ecology without such a calculus of intent.

This calculus of intention is done in mathmatical topology. **Topology is a non-metric elastic geometry. It is concerned with transformations of shapes and properties such as nearness, inside and outside.** Topologists have been able to describe the birth of a baby in terms of topological necessity. There is a feeling among some topologists that while math has failed to describe the world quantitatively, it may be able to describe the world qualitatively. Work is being done on topological description of verbs that seem common to all languages. Piaget felt that topology was close to the core of the way children think. Truck drivers have been found to be the people who are most able to learn new jobs. While driving truck for Ballantine one summer, it became apparent to me why. Hand an experienced driver a stack of delivery tickets and he could route in five minutes what would take you an hour. It was a recurring problem of mapping topologically how to get through this network in the shortest amount of time given one way streets etc.

I should say that my own topological explorations have a lot to do with a personal perceptive system that never learned phonetics, can't spell or sing, and took to topology the way many people seem to take to music. The strangest explicit experience with topology I've had came via a painter friend, Claude Ponsot, whose handling of complex topological patterns on canvas convinced me that a non-verbal coherent graphic thing was possible. The following transformations on the klein bottle—klein worms, if you will—came in the context of working with Warren Brody on soft control systems using plastic membranes. Behind that are three years of experience infolding videotape. I checked these formulations with a Ph.D. topologist. He had not seen them before, questioned whether they were strictly topological. As far as I know, they are original.

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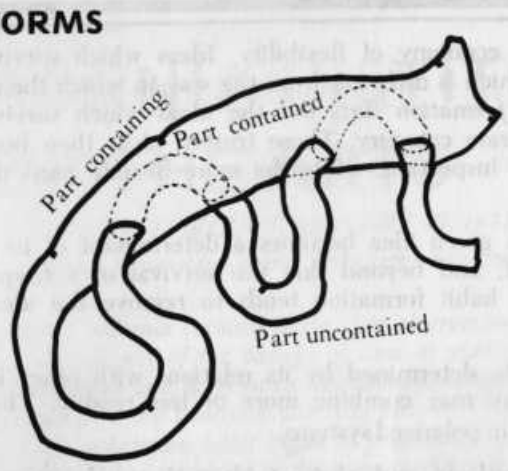
KLEIN WORMS



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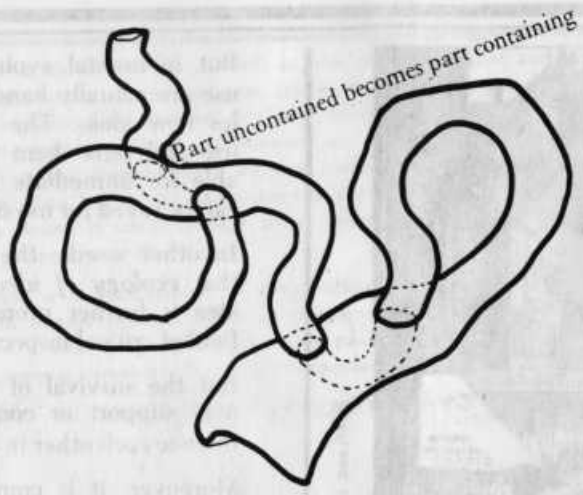

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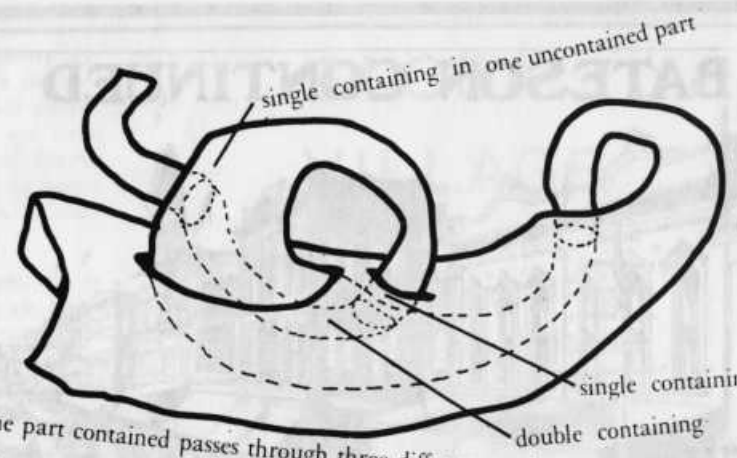

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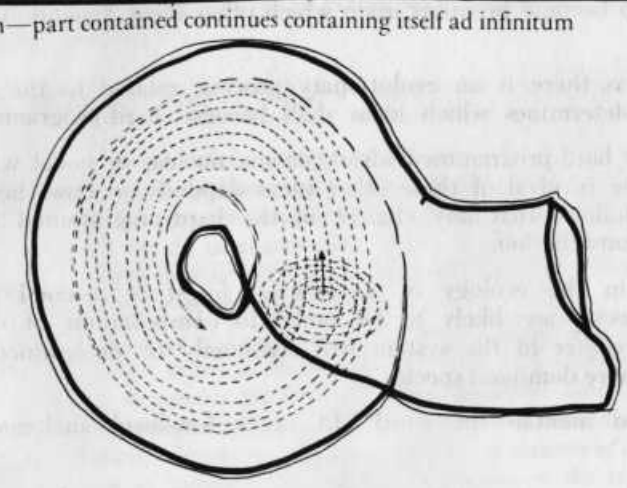

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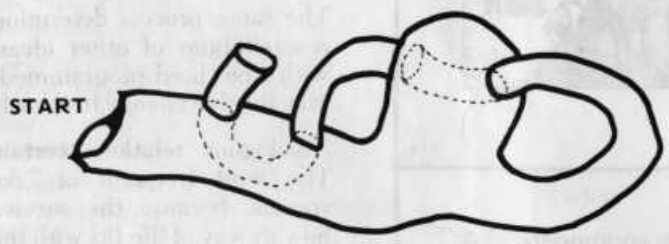

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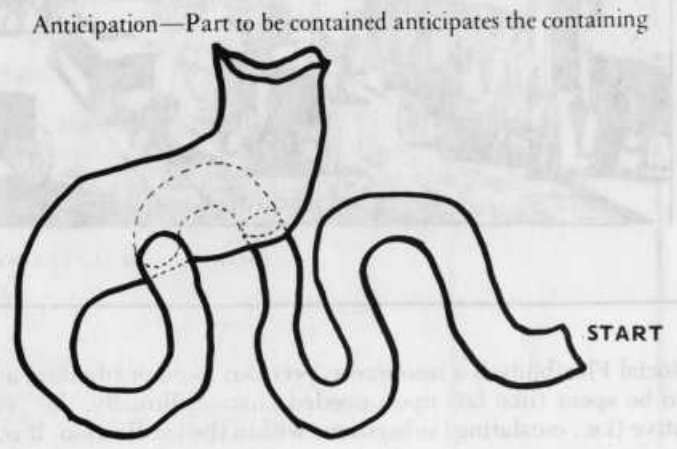

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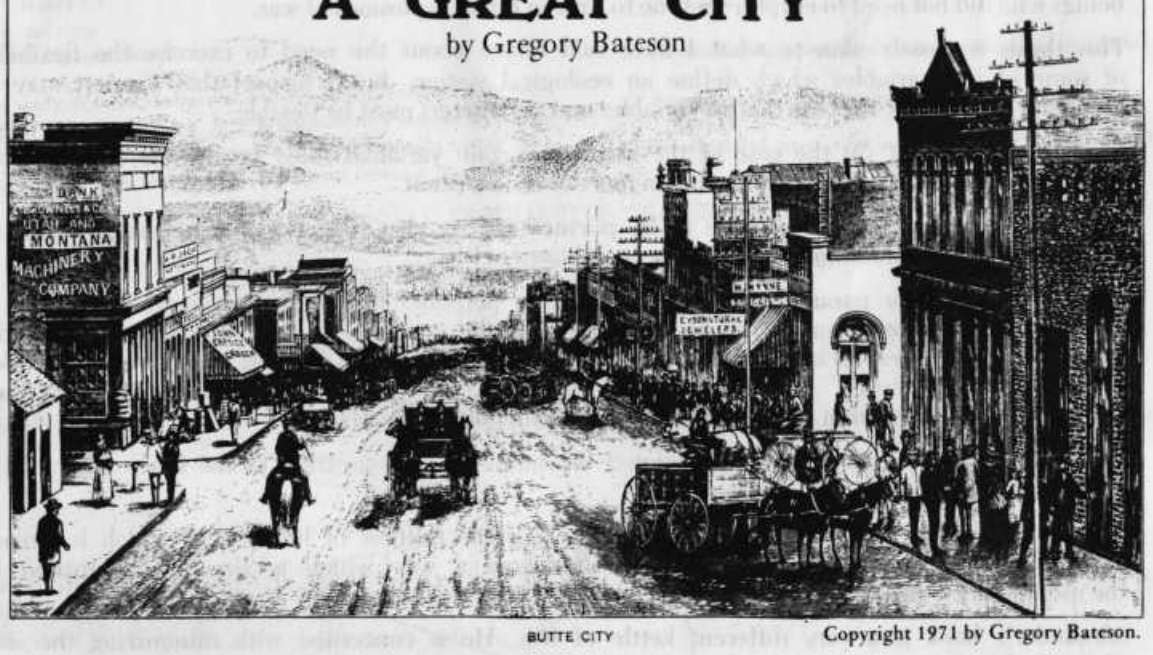
RESTRUCTURING THE ECOLOGY of A GREAT CITY

by Gregory Bateson



BUTTE CITY

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Originally prepared for a symposium of city planning, Oct. 26-31, 1970, sponsored by the Wenner-Gren Foundation for Anthropological Research.

This position paper consists of the following parts: 1. A rather lengthy gathering of generalities about biological systems; and 2. An attempt to apply these generalities to practical problems. Since I know little about Manhattan, I have chosen two books by authors who are involved in problems of city life and planning and have applied the touchstone of theory to these books.

First, it will be convenient to have not an ultimate goal but some sort of abstract idea of what we might mean by ecological health. Such a general notion will both guide the collection of data and guide the evaluation of observed trends.

I suggest then that a healthy ecology of human civilization would be somewhat as follows:

A single system of *environment combined with high human civilization* in which the flexibility of the civilization shall match that of the environment to create an ongoing complex system, open-ended for slow change of even basic (hard-programmed) characteristics.

We now proceed to consider some of the terms in this definition of systemic health and to relate them to conditions in the existing world.

I. **A High Civilization.** It appears that the man-environment system has certainly been progressively unstable since the introduction of metals, the wheel, and script. The deforestation of Europe and the man-made deserts of the Middle East and North Africa are evidence for this statement.

Civilizations have risen and fallen. A new technology for the exploitation of nature or a new technique for the exploitation of other men permits the rise of a civilization. But each civilization, as it reaches the limits of what can be exploited in that particular way, must eventually fall. The new invention gives elbow room or flexibility, but the using up of that flexibility is death. (I owe this insight to Mr. Philip Wylie.)

Either man is too clever, in which case we are doomed, or he was not clever enough to limit his greed to courses which would not destroy the on-going total system. I prefer the second hypothesis.
hypothesis.

It becomes then necessary to work towards a definition of "high."

A. It would not be wise (even if possible) to return to the innocence of the Australian aborigines, the Eskimo and the Bushmen. Such a return would involve loss of the wisdom which prompted the return and would only start the whole process over.

B. A "high" civilization should therefore be presumed to have, on the technological side, whatever gadgets are necessary to promote, maintain (and even increase) wisdom of this general sort. This may well include computers and complex communication devices.

C. A "high" civilization shall contain whatever is necessary (in educational and religious institutions) to maintain the necessary wisdom in the human population and to give physical, aesthetic and creative satisfaction to people. There shall be a matching between the flexibility of people and that of the civilization. There shall be diversity in the civilization, not only to accommodate the genetic and experiential diversity of persons, but also to provide the flexibility and "pre-adaptation" necessary for change (e.g., the heterozygosity of wild species.)

D. A "high" civilization shall be strictly limited in its transactions with environment. It shall consume unreplaceable natural resources *only* as a means to facilitate necessary change (as a chrysalis in metamorphosis must live on its fat). For the rest, the metabolism of the civilization must depend upon the energy income which Spaceship Earth derives from the sun. In this connection, great technical advance is necessary. With present technology, it is probable that the world could only maintain a small fraction of its present human population, using as energy sources only photosynthesis, wind, tide, and water power.

II. **Flexibility.** To achieve, in a few generations, anything like the healthy system dreamed of above or even to get out of the grooves of fatal destiny in which our civilization is now caught, very great *flexibility* will be needed. It is right, therefore, to examine this concept with some care. Indeed, this is a crucial concept. We should evaluate in our survey, not so much the values and trends of relevant variables, as the relation between these trends and ecological flexibility.

Following Ross Ashby, I assume that any biological system (e.g., the ecological environment, the human civilization and the system which is to be the combination of these two) is describable in terms of inter-linked variables such that for any given variable there is an upper and a lower threshold of tolerance beyond which discomfort, pathology and ultimately death must occur. Within these limits, the variable can move (and is moved) in order to achieve *adaptation*. When, under stress, a variable must take a value close to its upper or lower limit of tolerance, we shall say, borrowing a phrase from the youth culture, that the system is "uptight" in respect to this variable, or lacks "flexibility" in this respect.

But, because the variables are interlinked, to be uptight in respect to one variable commonly means that other variables cannot be changed without pushing the uptight variable. The loss of flexibility thus spreads through the system. In extreme cases, the system will only accept those changes which change the tolerance limits for the uptight variable. For example, an over-populated society looks for those changes (increased food, new roads, more houses, etc.) which will make the pathological and pathogenic conditions of over-population more comfortable. But these *ad hoc* changes are precisely those which in longer time can lead to more fundamental ecological pathology. (For a discussion of the *ad hoc* problem, see attached "Statement on Problems Which Will Confront the Proposed Office of Environmental Quality Control.)

The pathologies of our time may broadly be said to be the accumulated results of this process—the eating up of flexibility in response to stresses of one sort or another (especially the stress of population pressure) and the refusal to bear with those by-products of stress (e.g., epidemics and famine) which are the age-old correctives for population stress.

The ecological analyst faces a dilemma: on the one hand, if any of his recommendations is to be followed, he must first recommend whatever will give the system a positive *budget of flexibility;* and on the other hand, the people and institutions with which he must deal have a natural propensity to eat up all available flexibility. He must create flexibility and prevent the civilization from immediately expanding into it.

It follows that while the ecologist's goal is to increase flexibility, and to this extent he is less tyrannical than most welfare planners (who tend to increase legislative control), he must also exert authority to preserve such flexibility as exists or can be created. At this point (as in the matter of unreplaceable natural resources), his recommendations must be tyrannical.

* *Notes on the Syntheses of Form* by Christopher Alexander, Harvard University Press, 1964; and *The Uses of Disorder: Personality and City Life* by Richard Sennet, Knopf, 1970.

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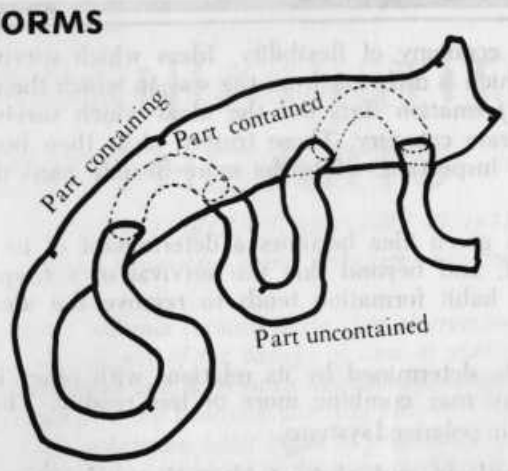
KLEIN WORMS



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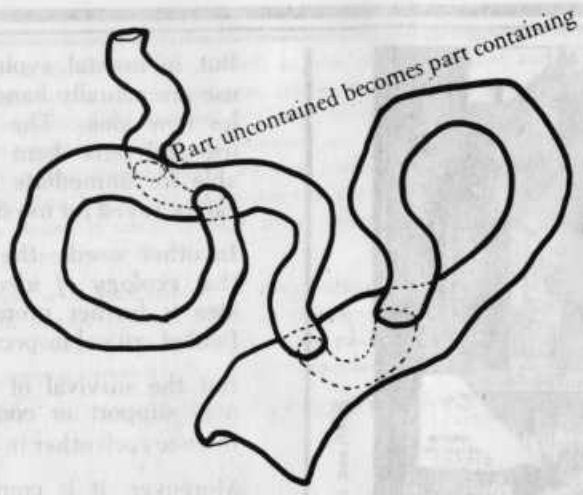

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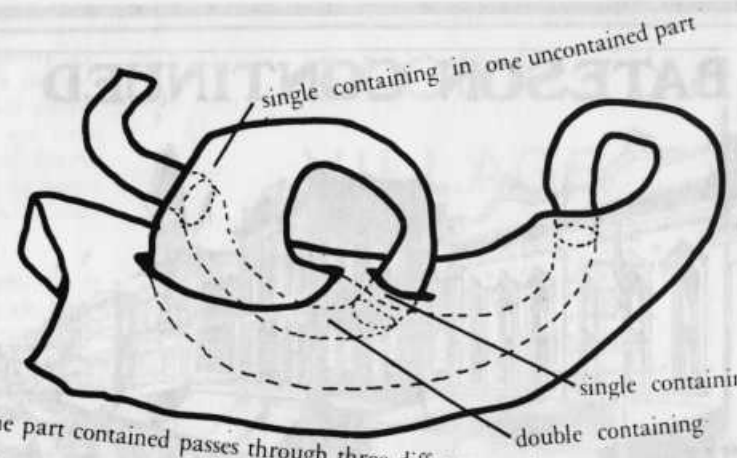

One part contained passes through three different modes of being contained

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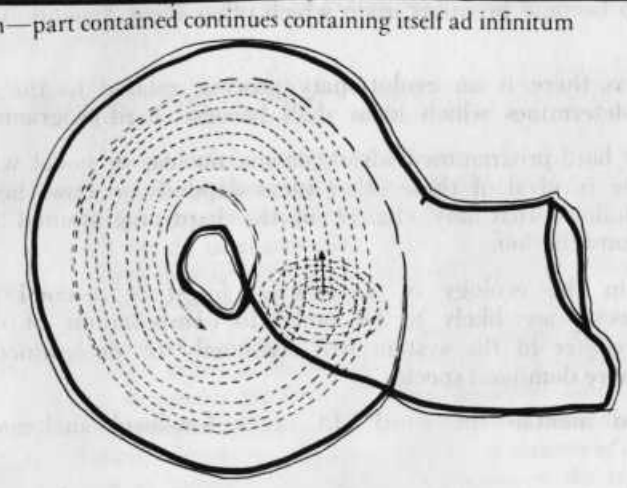
Inspin—part contained continues containing itself ad infinitum



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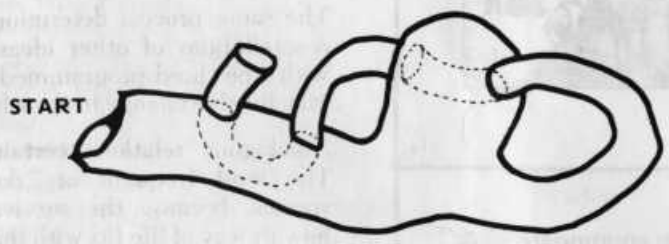

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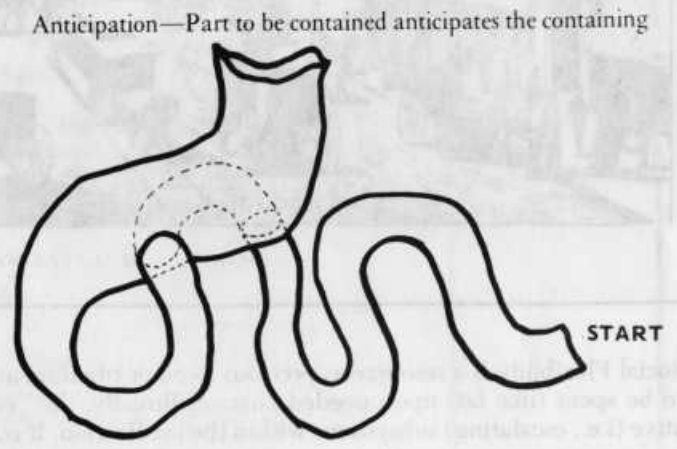

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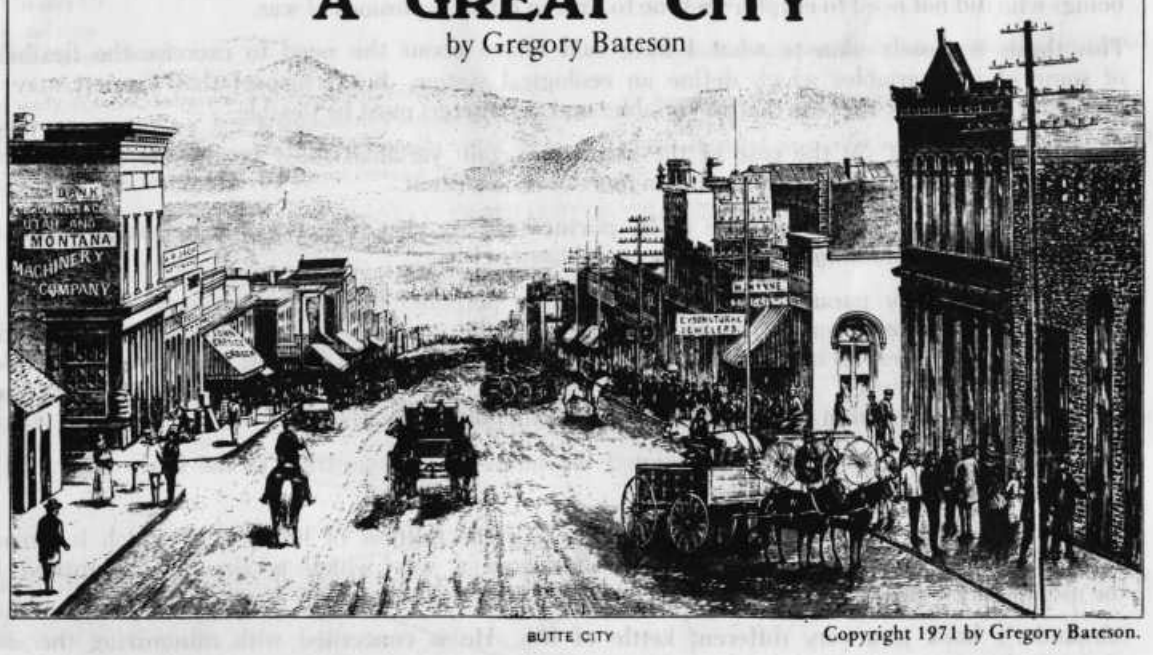
RESTRUCTURING THE ECOLOGY of A GREAT CITY

by Gregory Bateson



BUTTE CITY

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Originally prepared for a symposium of city planning, Oct. 26-31, 1970, sponsored by the Wenner-Gren Foundation for Anthropological Research.

This position paper consists of the following parts: 1. A rather lengthy gathering of generalities about biological systems; and 2. An attempt to apply these generalities to practical problems. Since I know little about Manhattan, I have chosen two books by authors who are involved in problems of city life and planning and have applied the touchstone of theory to these books.

First, it will be convenient to have not an ultimate goal but some sort of abstract idea of what we might mean by ecological health. Such a general notion will both guide the collection of data and guide the evaluation of observed trends.

I suggest then that a healthy ecology of human civilization would be somewhat as follows:

A single system of *environment combined with high human civilization* in which the flexibility of the civilization shall match that of the environment to create an ongoing complex system, open-ended for slow change of even basic (hard-programmed) characteristics.

We now proceed to consider some of the terms in this definition of systemic health and to relate them to conditions in the existing world.

I. **A High Civilization.** It appears that the man-environment system has certainly been progressively unstable since the introduction of metals, the wheel, and script. The deforestation of Europe and the man-made deserts of the Middle East and North Africa are evidence for this statement.

Civilizations have risen and fallen. A new technology for the exploitation of nature or a new technique for the exploitation of other men permits the rise of a civilization. But each civilization, as it reaches the limits of what can be exploited in that particular way, must eventually fall. The new invention gives elbow room or flexibility, but the using up of that flexibility is death. (I owe this insight to Mr. Philip Wylie.)

Either man is too clever, in which case we are doomed, or he was not clever enough to limit his greed to courses which would not destroy the on-going total system. I prefer the second hypothesis.
hypothesis.

It becomes then necessary to work towards a definition of "high."

A. It would not be wise (even if possible) to return to the innocence of the Australian aborigines, the Eskimo and the Bushmen. Such a return would involve loss of the wisdom which prompted the return and would only start the whole process over.

B. A "high" civilization should therefore be presumed to have, on the technological side, whatever gadgets are necessary to promote, maintain (and even increase) wisdom of this general sort. This may well include computers and complex communication devices.

C. A "high" civilization shall contain whatever is necessary (in educational and religious institutions) to maintain the necessary wisdom in the human population and to give physical, aesthetic and creative satisfaction to people. There shall be a matching between the flexibility of people and that of the civilization. There shall be diversity in the civilization, not only to accommodate the genetic and experiential diversity of persons, but also to provide the flexibility and "pre-adaptation" necessary for change (e.g., the heterozygosity of wild species.)

D. A "high" civilization shall be strictly limited in its transactions with environment. It shall consume unreplaceable natural resources *only* as a means to facilitate necessary change (as a chrysalis in metamorphosis must live on its fat). For the rest, the metabolism of the civilization must depend upon the energy income which Spaceship Earth derives from the sun. In this connection, great technical advance is necessary. With present technology, it is probable that the world could only maintain a small fraction of its present human population, using as energy sources only photosynthesis, wind, tide, and water power.

II. **Flexibility.** To achieve, in a few generations, anything like the healthy system dreamed of above or even to get out of the grooves of fatal destiny in which our civilization is now caught, very great *flexibility* will be needed. It is right, therefore, to examine this concept with some care. Indeed, this is a crucial concept. We should evaluate in our survey, not so much the values and trends of relevant variables, as the relation between these trends and ecological flexibility.

Following Ross Ashby, I assume that any biological system (e.g., the ecological environment, the human civilization and the system which is to be the combination of these two) is describable in terms of inter-linked variables such that for any given variable there is an upper and a lower threshold of tolerance beyond which discomfort, pathology and ultimately death must occur. Within these limits, the variable can move (and is moved) in order to achieve *adaptation*. When, under stress, a variable must take a value close to its upper or lower limit of tolerance, we shall say, borrowing a phrase from the youth culture, that the system is "uptight" in respect to this variable, or lacks "flexibility" in this respect.

But, because the variables are interlinked, to be uptight in respect to one variable commonly means that other variables cannot be changed without pushing the uptight variable. The loss of flexibility thus spreads through the system. In extreme cases, the system will only accept those changes which change the tolerance limits for the uptight variable. For example, an over-populated society looks for those changes (increased food, new roads, more houses, etc.) which will make the pathological and pathogenic conditions of over-population more comfortable. But these *ad hoc* changes are precisely those which in longer time can lead to more fundamental ecological pathology. (For a discussion of the *ad hoc* problem, see attached "Statement on Problems Which Will Confront the Proposed Office of Environmental Quality Control.)

The pathologies of our time may broadly be said to be the accumulated results of this process—the eating up of flexibility in response to stresses of one sort or another (especially the stress of population pressure) and the refusal to bear with those by-products of stress (e.g., epidemics and famine) which are the age-old correctives for population stress.

The ecological analyst faces a dilemma: on the one hand, if any of his recommendations is to be followed, he must first recommend whatever will give the system a positive *budget of flexibility;* and on the other hand, the people and institutions with which he must deal have a natural propensity to eat up all available flexibility. He must create flexibility and prevent the civilization from immediately expanding into it.

It follows that while the ecologist's goal is to increase flexibility, and to this extent he is less tyrannical than most welfare planners (who tend to increase legislative control), he must also exert authority to preserve such flexibility as exists or can be created. At this point (as in the matter of unreplaceable natural resources), his recommendations must be tyrannical.

* *Notes on the Syntheses of Form* by Christopher Alexander, Harvard University Press, 1964; and *The Uses of Disorder: Personality and City Life* by Richard Sennet, Knopf, 1970.

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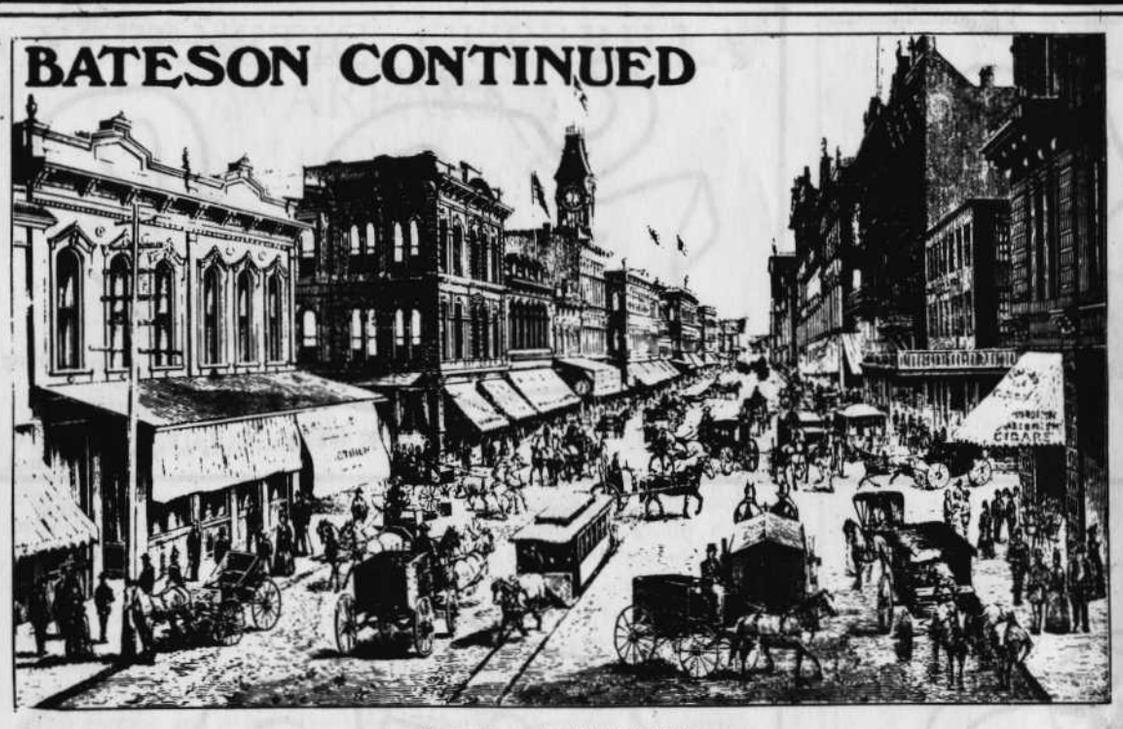


PORTLAND, OREGON.

MARVELS OF ENTERPRISE.

Social Flexibility is a resource as precious as oil or titanium and must be budgeted in appropriate ways, to be spent (like fat) upon needed change. Broadly, the "eating up" of flexibility is due to regenerative (i.e., escalating) subsystems within the civilization. It is, in the end, these that must be controlled.

It is worth noting here that flexibility is to specialization as entropy is to negentropy. Flexibility may be defined as *uncommitted potentiality for change.*

A telephone exchange exhibits maximum negentropy, maximum specialization, maximum information load, and maximum rigidity when all its circuits are in use and one more call would jam the system. It exhibits maximum entropy and maximum flexibility when none of its pathways are committed. (In this particular example, the state of non-use is not a committed state.)

It will be noted that the budget of flexibility is multiplicative or fractionating (not subtractive, as is a budget of money or energy).

III. **Distribution of Flexibility.** Again following Ashby, the *distribution* of flexibility among the many variables of a system is a matter of very great importance.

The healthy system, dreamed of above, may be compared to an acrobat on a high-wire. To maintain the ongoing truth of his basic premise ("I am on the wire"), he must be free to move from one position of instability to another, i.e., certain variables such as the position of his arms and the rate of movement of his arms must have great flexibility, which he uses to maintain the stability of other more fundamental and general characteristics. If his arms are fixed or paralyzed (isolated from communication), he must fall.

In this connection, it is interesting to consider the ecology of our legal system. For obvious reasons it is difficult to control by law those basic principles upon which the social system depends. Indeed, historically, the United States was founded upon the premise of freedom of religion and freedom of thought—the separation of Church and State being the classic example.

On the other hand, it is rather easy to write laws which shall fix the more episodic and superficial details of human behavior. In other words, as laws proliferate, our acrobat is progressively limited in his arm movement but is given free permission to fall off the wire.

Note, in passing, that the analogy of the acrobat can be applied at a higher level. During the period when the acrobat is *learning* to move his arms in an appropriate way, it is necessary to have a safety net under him, i.e., precisely to give him the freedom to fall off the wire. Freedom and flexibility in regard to the most basic variables may be necessary during the process of learning and creating the new system.

These are the paradoxes of order and disorder, which the ecological analyst and planner must weigh.

Be all that as it may, it is at least arguable that the trend of social change in the last 100 years, especially in the USA, has been towards an inappropriate distribution of flexibility among the variables of our civilization. Those variables which should be flexible have been pegged, while those which should be comparatively steady, changing only slowly, have been cast loose.

But still and all, the law is surely not the appropriate method of stabilizing the fundamental variables. This must be done by the processes of education and character formation—those parts of our social system which are currently *and expectably* undergoing maximum perturbation.

IV. **Flexibility of Ideas.** A civilization runs on ideas of all degrees of generality. These ideas are present (some explicit, some implicit) in the actions and interactions of persons—some conscious and clearly defined, others vague, and many unconscious. Some of these ideas are widely shared, others differentiated in various subsystems of the society.

If a budget of flexibility is to be a central component of our understanding of how the environment-civilization works and a category of pathology is related to unwise spending of this budget, then surely the flexibility of ideas will play an important role in our theory and practice.

But frequency of validation of an idea within a given segment of time is not the same as *proof* that the idea is either true or pragmatically useful over long time. We are discovering today that several of the premises which are deeply ingrained in our way of life are simple, untrue and become pathogenic when implemented with modern technology. (Several of these ecologically pathogenic ideas are marked with asterisks below.)

A few examples: "The Golden Rule," "an eye for an eye," and "Justice."
"The commonsense of scarcity economics"° *versus* "the commonsense of affluence."

"The name of that thing is "chair"° and many of the reifying° premises of language.

"The survival of the fittest"° *versus* "the survival of organism-plus-environment."
Premises of aesthetics, mass production,° challenge, pride,° etc., etc.

The premises of transference, ideas about how character is determined, theories of education, of all biological fields.

Patterns of personal relatedness, dominance, love, etc.

The ideas in a civilization are (like all other variables) interlinked, partly by some sort of psycho-logic and partly by perceptual consensus about the quasi-concrete effects of action.

It is characteristic of this complex network of determination of ideas (and actions) that particular links in the net are often weak but that any given idea or action is subject to multiple determination by many interwoven strands. We turn off the light when we go to bed, influenced partly by ideas of privacy, partly to reduce sensory input, etc.

The result of this multiple determinism has been called "over-determinism" and is characteristic of all biological fields—

Against this complex background it is not easy to construct a theory of flexibility of ideas and to conceive of a *budget* of flexibility.

There are, however, two clues to the major theoretical problem. Both of these are derived from the stochastic process of evolution or learning whereby such interlocked systems of ideas come into being. First we consider the "natural selection" which governs which ideas shall survive longest, and second we shall consider how this process sometimes works to create evolutionary *culs de sac.*

(More broadly, we regard the grooves of destiny into which our civilization has entered as a special case of evolutionary *cul de sac.* Courses which offered short-term advantages have been adopted, have become rigidly programmed, and have begun to prove disastrous over longer time. This is the paradigm for extinction by way of loss of flexibility.)

In a simple learning experiment (or any other experience), an organism, especially a human being, acquires a vast variety of information. He learns something about the smell of the lab; he learns something about the patterns of the experimenter's behavior; he learns something about his own capacity to learn and how it feels to be "right" or "wrong"; he learns that there is "right" and "wrong" in the world. And so on.

If he now is subjected to another learning experiment (or experience), he will acquire some new items of information; some of the items of the first experiment will be repeated or affirmed; some will be contradicted.
In a word, some of the ideas acquired in the first experience will *survive* the second experience, and natural selection will tautologically insist that those ideas which survive will survive longer than those which do not survive.

But in mental evolution, there is also an economy of flexibility. Ideas which survive repeated use are actually handled in a special way which is different from the way in which the mind handles new ideas. The phenomenon of *habit formation* sorts out the ideas which survive repeated use and puts them in a more or less separate category. These trusted ideas then become available for immediate use without thoughtful inspection, while the more flexible parts of the mind can be saved for use on newer matters.

In other words, the *frequency* of use of a given idea becomes a determinant of its survival in that *ecology of ideas which we call Mind;* and beyond that the survival of a frequently used idea is further promoted by the fact that habit formation tends to remove the idea from the field of critical inspection.

But the survival of an idea is also certainly determined by its relations with other ideas. Ideas may support or contradict each other; they may combine more or less readily. They may influence each other in complex unknown ways in polarized systems.

Moreover, it is commonly the *more generalized and abstract* ideas that survive repeated use. The more generalized ideas thus tend to become *premises* upon which other ideas depend. These premises become relatively inflexible.

In other words, in the ecology of ideas there is an evolutionary process, related to the economics of flexibility, and this process determines which ideas shall become hard-programmed.

The same process determines that these hard-programmed ideas become nuclear or nodal within constellations of other ideas, because the survival of these other ideas depends on how they fit with the hard-programmed ideas. It follows that any change in the hard-programmed ideas may involve change in the whole related constellation.

(Analogous relations certainly obtain in the ecology of a redwood forest or a coral reef. The most frequent or "dominant" species are likely to be nodal to constellations of other species, because the survival of a newcomer to the system will commonly be determined by how its way of life fits with that of one or more dominant species.

In these contexts—both ecological and mental—the word "fit" is a low-level analogue of "matching flexibility.")

V. **Exercise of Flexibility.** It is asserted above that the overall flexibility of a system depends upon keeping many of its variables in the middle of their tolerable limits. But there is a partial converse of this generalization:

Owing to the fact that inevitably many of the subsystems of the society are regenerative, the system as a whole tends to "expand" into any area of unused freedom.

It used to be said that "Nature abhors a vacuum," and indeed something of the sort seems to be true of unused potentiality for change in any biological system.

In other words, if a given variable remains too long at some middle value, other variables will encroach upon its freedom, narrowing the tolerance limits until its freedom to move is zero, or, more precisely, until any future movement can only be achieved at the price of disturbing the encroaching variables.

In other words, the variable which does not change its value becomes *ipso facto* hard-programmed. And, indeed, this way of stating the genesis of hard-programmed variables is only another way of describing *habit formation.*

As a Japanese Zen master once told me, "*To become accustomed to anything is a terrible thing.*"

From all of this it follows that to maintain the flexibility of a given variable, either that flexibility must be *exercised,* or the encroaching variables must be directly controlled.

We live in a civilization which seems to prefer prohibition to positive requirement, and therefore we try to legislate (e.g., with anti-trust laws) against the encroaching variables; and we try to defend "civil liberties" by legally slapping the wrists of encroaching authority.

We try to prohibit certain prohibitions, but it might be more effective to encourage people to know their freedoms and flexibilities and to use them more often.

Characteristically the exercise of even the physiological body, whose proper function is to maintain the flexibility of many of its variables by pushing them to extreme values, becomes a "spectator sport," and the same is true of the flexibility of social norms. We go to the movies or the courts—or read newspapers—for vicarious experience of exceptional behavior. And *per contra,* our flexible variables are monstrously exercised in war and revolution.

(How did Ancient Rome prevent the Saturnalia from becoming addictive?)

VI. **Applications.** I shall now consider the thesis of Richard Sennett's book, *The Uses of Disorder.*

The book is about making mature human beings in city environments. He argues:

1. At adolescence (and he is presumably but not explicitly concerned with male adolescence) a person's powers of action are disproportionately great, compared with his experience. There is thus a temptation to withdraw from action into a purified and simplified philosophy of life which will avoid recognizing the rough-and-tumble which is life's fullness.
2. This purified and simplified philosophy, Sennett argues, is the theme of suburban middle class life and of modern city planning, slum clearance. In general, the attempt to achieve *clarity* in life plans and designs is an expression of this withdrawal.
3. In poverty-stricken and racially mixed neighborhoods, men grow up with multiple contacts and multiple struggle. This makes for a greater richness in daily life—and perhaps for human beings who did not need to erupt from time to time in major explosions of war.

This thesis is closely akin to what I have said above about the need to exercise the flexibility of some of the variables which define an ecological system. But I suspect that Sennett may be going too far. It is not the case that *all* variables and parameters must be flexible.

I argued above that (in the case of the acrobat) certain variables must be flexible in order that other variables and parameters may remain more or less constant.

Flexibility is not an absolute value to be pursued for its own sake but is a necessary condition for the *survival and stability* of certain other conditions of life.

Which conditions or parameters should we seek to perpetuate? Sennett recommends the use of disorder for the preservation of some possibly higher order—but the precise sort of order which is to be preserved is undefined except by the contrast which Sennett draws between "adolescence" and "maturity." The "disorder" of Sennett's ideal city is to shake people out of their tendency to withdraw from the fullness of life into some sort of "head trip."

As I read it (and I may be wrong), Sennett recommends an "ego trip" in the hurly burly of the city as a cure for withdrawal into a head trip.

I believe that this is only another way of avoiding the fullness of life, a way which is already conventional in many parts of our civilization and a way which is already bankrupted by the uses to which we put technology, when guided by competition and ego premises.

Alexander's book is a very different kettle of fish. He is concerned with minimizing the sorts of *misfit* between a technological produce (a kettle or a city) and the uses of that product. He does not discuss the effect of using his product upon the souls of the people who use it. The book is, in fact, illustrated by an example in which Alexander works out in detail the steps for designing an Indian village for 600 people. In this example, the whole complex detail of Hindoo culture is taken as given—as the condition to which the product must be adapted—and which (therefore) will inevitably be perpetuated by the use of the product. We may pray for the inhabitants of his village that the philosophy of life incorporated into it is not too full of nonsense.

The question which I raised in discussing Sennett, "What variables should we preserve?" is simply answered by Alexander in terms of the synchronic characteristics of the given culture at the given moment. This would be fine and useful for the restructuring of Manhattan *if* we were dealing with a problem of fitting plans to an already accepted and existing philosophy and way of life. Nevertheless, Alexander has contributed importantly to the techniques of planning and design.

I return to the question, "*flexibility for what?*" How should we identify the sacred?

The best answer I can give to this question is in terms of cultural transmission. What little biology we know indicates that in all such systems, if there is a differentiation between reproduction and on-going life (i.e., a differentiation between soma and germ plasm), then the *relative* stability of the latter is essential. And all that was said above about the pathogenic result of the loss of flexibility goes to show that these pathologies expectably hit those parts of our culture which are relatively unchanging in other (healthier) cultures—i.e., the transmission \$ystem.

We return then to the old truisms that reproduction is (and "should" be) the spice of life—not *multiplication,* but *replication.* And that, at the social level, the core institutions are the family, the school and the church.

It is for these (or rather, the processes which these perform) that flexibility must be achieved and maintained in the remainder of the system.

These should be (but today are not) the sources of delight.
It is conventionally assumed that family, school and church should be the backbone, the source of rigidity in the community. This is upside down.

This paper has now opened more questions than I can answer. So I need your help—

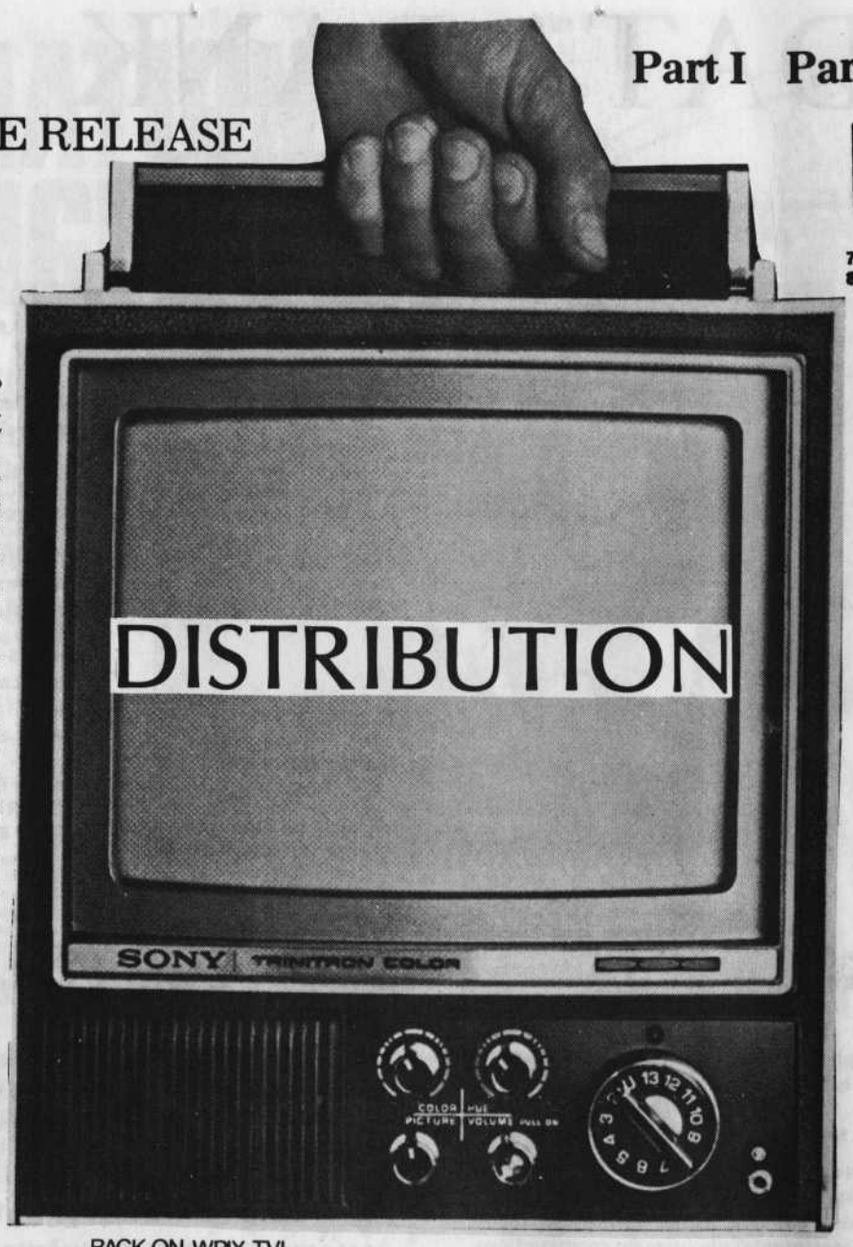
Part I Part of the problem

FOR IMMEDIATE RELEASE

CBS Cleans House: Rural Shows Out, Law and Order In

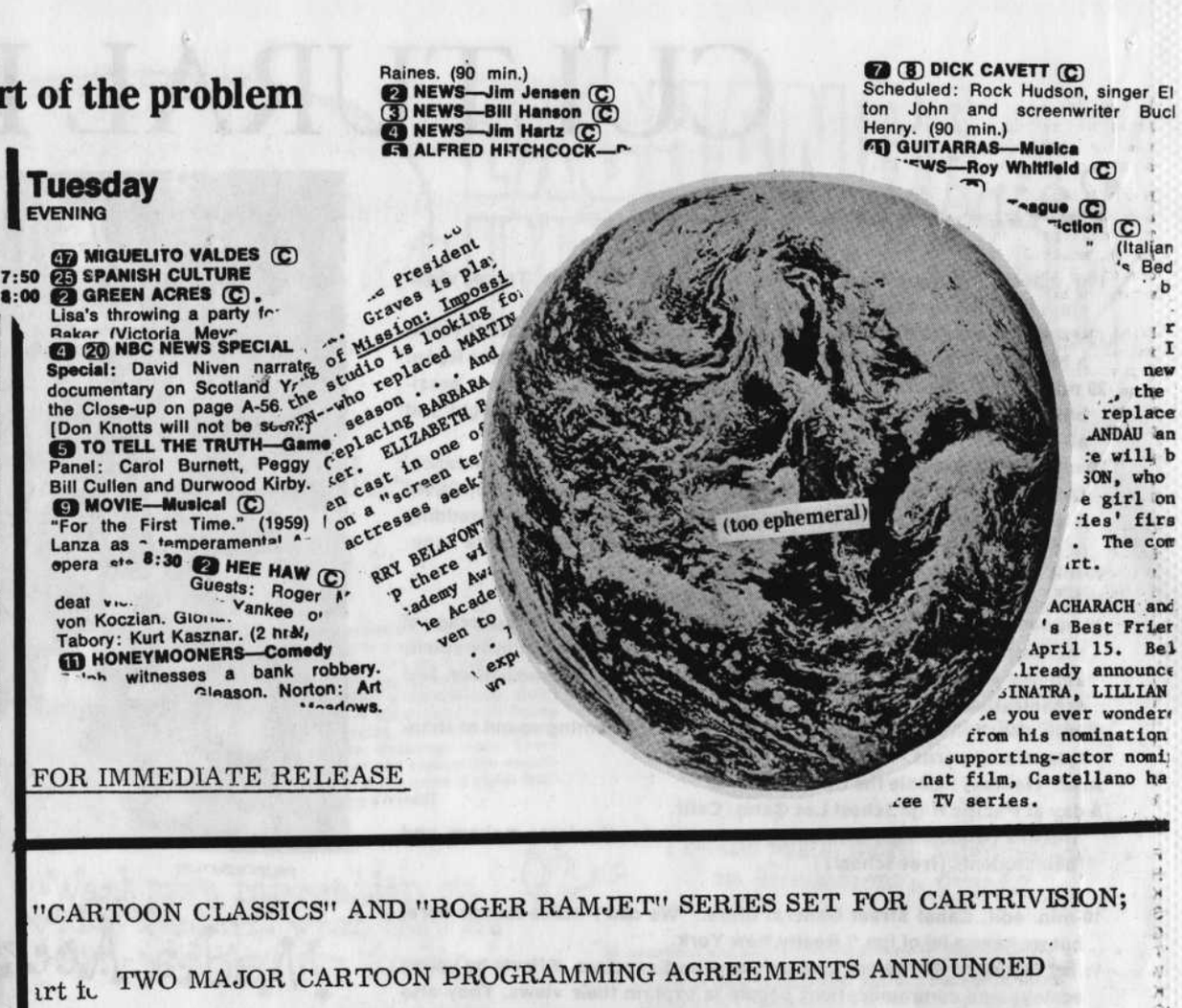
No Beverly Hillbillies? No *Hee Haw*? No Andy Griffith or *Mayberry R.F.D.* or *Green Acres*? No. Not even *Family Affair*? This is *CBS*?? Next fall it is. The network went the rumor mill one better—it didn't just "de-ruralize" its prime-time line-up. It cleaned house as never before at a season's end. Out, besides all those "corn pone shows," as one CBS official dubbed them, went Ed Sullivan's 23-year-old vodvil hour, Jim Nabors, *Men at Law*, *The Interns*, *Hogan's Heroes*, *To Rome with Love* and *Lassie*. Altogether, 13 series, to be replaced by eight new ones (four hours a week having to be turned back to local outlets under the FCC's new three-hour rule). The new entries: a 90-minute movie made for TV (giving CBS three movie nights weekly); Glenn Ford in *Cade's County*, hopefully a 1971 version of *Gunsmoke*; William Conrad as *Cannon*, a 1971 private-eye modeled after Dick Boone's role in *Have Gun—Will Travel*; David Janssen as O'Hara, a Treasury agent; Rod Taylor and Dennis Cole in an unnamed drama about two 1914-style crime chasers; Dick Van Dyke in the role of a small-town Johnny Carson; Sandy Duncan in *Funny Face*, based on a 1957 Audrey Hepburn-Fred Astaire movie; and Dean Jones in *The Chicago Teddy Bears*, ribbing Chicago's 1920 gang days. Conspicuously missing from the line-up: Jackie Gleason. Also gone: *60 Minutes*, being moved to Sundays at 6 P.M. (ET). But CBS

Viewers watching their TV at 7:30 (ET) in the evening next fall can expect to see many an old familiar series they thought the networks had dropped. Reason: local outlets will be programming 7:30-8 on five out of seven nights and most probably will fill the time with retired network fare. The FCC asked the networks to program 8-to-11 but granted waivers (requested by ABC and NBC) permitting 7:30 starts on Tuesday and Sunday nights.



BACK ON WPIX TV!

BOYS! *Earn extra spending money. Join TV Guide's Young M*



FOR IMMEDIATE RELEASE

"CARTOON CLASSICS" AND "ROGER RAMJET" SERIES SET FOR CARTRIVISION;

TWO MAJOR CARTOON PROGRAMMING AGREEMENTS ANNOUNCED

SIX GOLF LESSONS WITH GENE LITTLER

TO BE FEATURED ON AVCO CARTRIVISION

Cartrivision as

result of a new programming agreement announced today by Jeffrey Reiss,

program planning for Cartridge Television Inc., a subsidiary of Avco

and Ted Snyder of Color Music, Inc.

Cartridge Television Inc. has signed with

FOR IMMEDIATE RELEASE

Part II Perhaps part of the solution

What Do You Want Good Grammar or Good Tapes?

talk is cheap

SURVIVAL TELEVISION

Broadcast TV has low survival value. Channel and time scarcity mean high money, low access. Either artificial superstars affect behavior, or "announcers" interface between you and the camera Seeing yourself, or people who relate to your life style, is impossible. Yet broadcast TV is our dominant media environment.

Many of us working in portable video do it not just as a means of personal and collective expression, but also as an antidote to the psychic straightjacket of commercial television. TV is just too powerful a tool to leave to the advertisers alone.

A system has order, a flowing from point to point. The highest function of ecology is the understanding of consequences.

Dune Frank Herbert

For the past year at Raindance we've been talking about alternate information systems and a decentralized video information communications network. Judging from the feedback we've been getting lately (letters to Radical Software, phone calls, people coming to our Saturday night shows) more and more people are getting into using portable 1/2" video taperecorders and making tapes of their schools, their streets, their environs, and the people who inhabit them. We've had inquiries from people trying to set up videotape facilities, or groups, or theatres at universities or in communities who would like to see videotapes of other places made by other people.

Most of these people have some kind of funding to allow them to acquire tapes but they haven't yet gotten to making tapes or they've just started and haven't yet done anything they consider that good.

As with any high survival mode, decentralized TV is of a high variety which just can't be supported by 50 million people like a broadcast television show.
This means that a true alternate network, or distribution system, must respect diversity. It has to be able to pass around one copy of a tape as easily as a hundred, or a thousand.

We would like to set up a model for a videotape exchange and equitable distribution service. We have approximately $1000 to do this experiment. If the model proves viable we welcome anybody to use it in setting up their own distribution network. In this experiment we will be selecting video material and assembling taped information packages somewhat representative of the video information sent to us. In addition we will publish a **Process Print-Out** detailing what video information tape has been sent to us, who sent it, where we are sending the video information packages, how much we're charging, what our costs are, etc.

With your help we'd like to develop this Video Information-Tape Exchange as an exchange of videotapes which are basically recordings of reality of what's going on around us: information about things that are important for our survival; tapes of people who are getting into things; tapes that will help people watching them to understand and feel the environment and experience recorded on the tape. Because the information is indigeneous to real needs, and not produced in anticipation of a commercial outlet, it trends towards high survival value.

PROCESS PRINT-OUT

The function of the function of The Process Print-Out will be twofold:

It will be an ongoing debriefing on how the plan is working so as to involve everyone in the actual planning and working of the alternate network, and to guard against valuable expertise accruing only to the people who are actually administering the plan.

The second function of The Process Print-Out will be to list all the tapes we've received, not just in the ones excerpted in the Video Access Catalog. Thus, even though your tapes may not be included in the assembled package, you still receive the service of a listing so that people can get in touch with you directly.

Moreover, we plan to hold no master tapes unless we agree to distribute yours (at a price structure predetermined by you) independent of the Video Access Catalog.

Thus, the assembled tape which goes out will be a third generation copy which helps protect you from commercial ripoff without your knowledge. Also, because you hold your original tapes people must contact you for further access to them. You therefore become your own distributor and the alternate network stays decentralized.

So that's the plan. We offer tapes now for exchange or sale. When we get more software we assemble a Video Access Catalog. Then that catalog is offered for sale (or exchange). You get a return proportionate to the amount of your tape which is included (figured in minutes).

Even if your tape is not included, you get the benefit of a listing in the Process Print-Out and people can contact you directly. Of if your tape is included, unless we arrange to do your distribution, you retain your master and do your own. Thus the system stays decentralized. And print serves as the video access model.

Videotape Exchange — How it Works — Videotape Exchange

We are assembling several videotape packages of 30 and 60 minutes (Sony AV series, or Type One Standard) which include our material and video material by other groups and invididuals in the U.S., Canada, and elsewhere. We would like to exchange these for a half-hour or hour of video information tapes which you've made.

In other words, you send us thirty minutes of your software, we send you thirty of ours. You send us sixty, we send you sixty. And so on. You get to see what we've taped and we get to see what you've taped.

That's the first round.

Then we'd like to assemble all or part of the tapes we've received into a Video Access Catalog. This will be a composite tape which will both have information value in itself and display the range and kind of tapes being made. Unless you designate otherwise, we will assume that you have no objections to the tape you've sent us being included in a subsequent package.

We would like to offer the Video Access Catalog tapes, both the ones we've assembled and the ones we will be assembling, for $55 an hour outright purchase (both raw tape and software) or $28 a half-hour.

Or, if buyers send us a blank tape, then we will dub the software onto it for $30 per hour, and $15 per half hour. Those are the information charges.

If you request it we will offer duplicates of your entire tape for sale (or rental). You decide on the price allowing us 25% of the sale or rental price if you supply the dupes or $45/hour ($23.half hour) if you expect us to make the dupes.

in N.Y. State include 6% tax

Video Cassettes Are Official at Time,Inc.; Cartridge Television Files

After ten months as a "venture", Time-Life Video has now matured into a formal "service" that is committed to producing video record programs in a variety of hardware formats, starting with Avco's Cartrivision.

Bruce Paisner, general manager, has spent much of that time criss-crossing the country and foreign continents looking at hardware systems and program packages, and now says Time will produce programs in such areas as skiing and the environment (with Robert Redford), musical education with Leonard Bernstein, cooking, golf and sex education. He described the Video Service as the missing "program and distribution link", between hardware systems and the consumer.

First programs will be produced in Avco's Cartrivision format, and are expected to be out in early 1972. Time says it'll market "primarily" by mail (no surprise in view of its experience with Time-Life Books) and expects retail cost of a half hour instructional program to be $10-12. One way of promoting the service may be to give away a free video record with each machine sold. Time estimates there will be four million video players in the home by 1975.

No doubt encouraged by the Time decision, Cartridge Television, Inc. filed with the SEC on March 5 to sell 1.1 million shares at a maximum price of $20 per share. Cartridge Television is now owned 50% by Avco, whose ownership would drop to 23% after the sale.

CBS--Lost in Shipment; RCA--Sorry, Wrong System

Meanwhile, CBS EVR says its plant in Rockleigh, N.J. is beginning to turn out cartridges. CBS took a full page ad in Business Week and five other publications to say it had made "quantity shipments" to at least four customers. One customer named Equitable Life told KIR "we haven't seen them yet," but CBS insisted the cartridges had indeed gone out, and said it had shipped between 2,000 and 3,000 by mid-March.

As for RCA, reports circulate that RCA has put off development of its SelectaVision System using holography (KIR, Sept. 30,'69) and will produce a video tape system in the interim. A spokesman for RCA said it wasn't true but confirmed that RCA "has been talking to other people" about their magnetic tape systems.

Still the reports give credence to a widely held view that SelectaVision is a name used by signify RCA's commitment to the home video record market, rather than a system which anyone is going to be able to touch in the next five years

SERIES SET FOR

TWO MAJOR AGREEMEN

Finian's Rainbow" (1947): "When I'm
High Button Shoes" (1948): "Papa, W
Kiss Me, Kate" (1949): "Where Is th
South Paci[fic]" (1950): "There Is Not
Guys and
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Hello, Dolly!" (1964): "Before the
Fiddler on the Roof" (1965):
Mame" (1966): "Open
Man of La Man
Cabaret"

VIDEOFILM

by JOHN REILLY

The following material is taken from a work in progress on Bernadette Devlin, that I am making in cooperation with Ralph Diamant of the American Documentary Film Group.

The final version will be a *Videofilm*, that is a film based on the video image as the prime source of image information, distributed by American Documentary Films.

edhead" (1959): "Look
orello!" (1960):
ie Sound

.....Ray Walston
Blaine, Sam Levene
Patricia Morison
..Edie Adams
.Alfred Drake

(7) (8) LOVE, AMERICAN STYLE (C)
1. A tender reunion involving a burglar (John Astin) who was the first husband of his victim (Abby Dalton). Phil: George Furth. 2. How does one psychiatrist (Larry Hagman) tell another (Jerry Paris) that he's planning to run away with his wife (Corinne Camacho)? 3. A sprightly widow (Irene Ryan) runs bogus lost-dog ads to meet men. Stanton: Alvy Moore. Admiral: Edward Andrews. 4. A bridegroom (Rich

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an attractive schoolte
scar for his supportin
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Wyler ("Ben-Hur")
ie evocativ
McKay:
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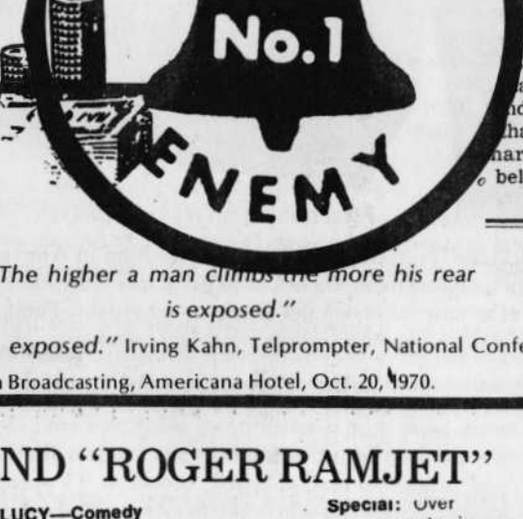
rill

Dear GOD, President Nixon, Me,
(Circle one of the above—only one!) min
I've been watching commercial Broadcast Television on and off now for the last _____ years and I finally figured out what's missing from it . . . and the horrible thing is—it's ME and people like me . . . @†+%?/! . . . I've spent years flipping channels looking for the "least objectionable program" (L.O.P.—TV GUIDE) laying comatose in a couch watching stuff that meant little or nothing to me. Sure I got the news a coupla times a day but was always talking about what the president or some big shot was doing . . . . It was always the scores from someone else's ballgame. I'm fed up with it. I want a change. I want to know something that means something. I want something better this time.

Signed _____

SIX GOLF LESSONS



"The higher a man climbs the more his rear is exposed." Irving Kahn, Telprompter, National Conference on Citizens' Rights in Broadcasting, Americana Hotel, Oct. 20, 1970.

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AND "ROGER RAMJET"

(8) I LOVE LUCY—Comedy
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ammunition,
find

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lanta (Ga.).
(11) MOVIE—D
Expect

This Week:
Garbage
with
Jerome Kretchmer
and other guests
9:00 am / Weekdays
WNBC TV 4

Sony Says It Developed Color Television Camera For Home Videotaping

By a WALL STREET JOURNAL *Staff Reporter*

TOKYO — Sony Corp. announced development of a compact, low-priced color-television camera for home video-tape recording and other nonprofessional uses.

The manufacturer said it expects to market the camera later this year. "Large-scale production" could lower the retail price in Japan to as low as $833, or one-tenth the price of the least-expensive camera in Sony's current line, Sony declared.

Sony called its prototype "the first realisti- priced color-TV camera, with excellent ality, for consumers throughout the camera also could be used in TV systems.

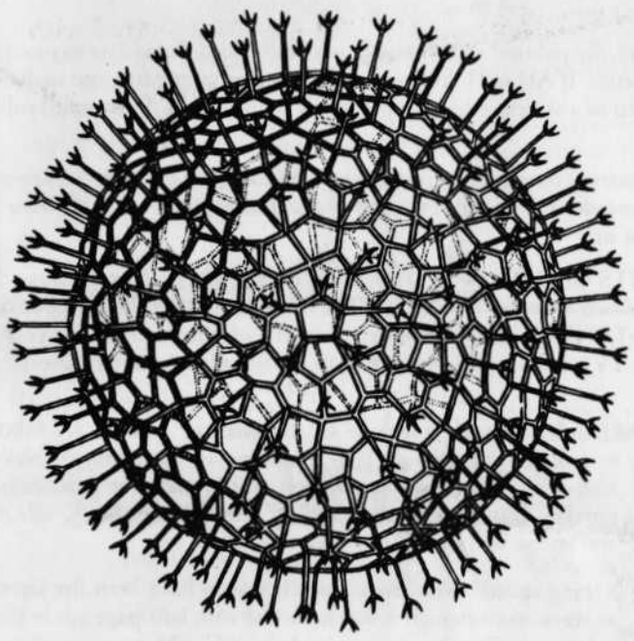
is built with tiny integrated Sony said it "functions on a r-image responsive element nciple of the company's in- ra weighs just under 14½ s on household electrical

era will enhance the poten- a consumer product, Sony ape can be used for home nd instant playback.

hat new 13-inch, color-TV re- marketed in April would be below comparable older mod-

RAINDANCE 24 EAST 22ND STREET NEW YORK CITY 10010 212·982·5566

NOW ABOUT 9 PEOPLE WORKING IN A LOFT IN N.Y.C. PUTTING OUT **RADICAL SOFTWARE**, MAKING TAPES, TEACHING KIDS, SHOWING TAPES TO MAKE BREAD TO DO MORE.



COSTS

One hour tapes will sell for $55, or $30 more than the cost of raw tape (assuming we can purchase it at $25 an hour. We have been paying $30 an hour). Half-hour tapes will sell for $28, or $15 more than the cost of raw tape.

As to the **basic costs** we figure it will cost about $12 per hour to duplicate an assembled tape, pack it, mail it, and keep records of it. Our initial figures break down this way:

Equipment & repair (new heads, etc.) $3 hr
Labor in duping, packaging & mailing $4 hr
Contribution to overhead & record keeping $3 hr
Packaging, mailing & labeling $2

These costs are "fixed" costs. That is, for each tape we send out (exchange or sale) it costs this much plus the cost of the tape. In addition, there is a cost involved in assembling the master from which copies are made. This cost should be defrayed across the total number of dupes made. We're estimating this at $3 per copy for labor, equipment, and repair, subject to revision as the feedback comes in regarding volume in the exchange and sales. The rest of the money represents the information charge to the people who recorded the original information included in the exchange tape.

As we have stated above: the income for the included information is proportionate to the number of minutes on the assembled tape (hour or ½ hour) multiplied by the total sales and rentals of that tape.

If the video information which you've sent us is included in the assembled information tape which we sell (or rent) you will receive payment in proportion to the amount of your video information (minutes) included in the tape. (If you only want to exchange between "us" and "you" please specify, or if we don't feel your information tape needs to be passed on urgently then the first tape you get back from us will be recorded over the information you've sent.)

Return to Contributors: The charge for video information (software) is equal to the Selling Price minus the cost of the tape (where blank tape isn't sent), minus the costs of assembling, duplication, packing, mailing, & record keeping, or roughly from $10 to $15 for one hour. **More simply, if 5 minutes of the material which you have sent is included you will receive one twelfth (5:60) of the "info charge" of from approximately 80 cents to $1.25 (or if it's 20 minutes then 20:60 equals 1:3 or $3 to $5).** This may not sound like much (well it isn't) but from what I understand it is somewhat better than the % return to the originator in the information book industry. **If 50 tapes are sold or rented you would receive from $40 to $65 for a 5 minute segment of from $150 to $300 for 20 minutes or if 100 are sold or rented $80 to $130 for a five minute segment and from $330 to $500 for a 20 minute segment.**

Volume: Based on about $1,000 start up money, if we sell no tape packages and have to buy tape to send out our exchanges, then we could only send out 20-25 hours of tape. Or, if we took the tape you sent us and mailed our copy back on it we could afford to process about 50-55 exchange tapes.

If, however, we can sell as many as 75-85 tapes a month, we can afford to exchange as many as 40-50 additional tapes and still return about $1,000 total to the original producers of the video information.

These volume figures are based on a maximum of 125 hours of tape which we believe we can turn out per month without having to get additional equipment and space, but does include an allowance for repairs and depreciation.

In other words, if we sell less then we can't afford to offer as many straight exchanges. If we sell more, then we will have to borrow or buy more equipment and perhaps find more people to do the dubbing. As we're working in New York, where expenses are high, this plan may be possible elsewhere more cheaply. On the other hand, New York is a center for a lot of video activity which minimizes communications costs and delays.

Our Return: Obviously if we're just meeting expenses but receiving nothing ourselves then the plan is a burden to us. On the other hand you need protection against our profiteering.

What we want out of this is the same thing we're offering others: distribution for our tapes. We have made and want to make tapes and we want to be supported. Unless there's an equitable system for that we can't do it. Because no one else is now setting one up, we've decided to initiate it. The safeguard, we feel, is that our tapes will have no value unless other people's do.

We at Raindance expect to include some (but not too much) of the material we have videorecorded and cash in on a bit of the "information charge." Videofreex, People's Video Theater, and Media Access (Portola Institute) also have agreed to let us include some of their tapes into the video information tape exchange packages. (The early packages will necessarily include more local contributions than when the exchange really gets rolling.)

THE FUTURE

The logical future of a tape exchange/sales network is in videocassettes and/or cable television. If we have demonstrated a sensible, working model for video information exchange then we can help those media develop sensibly.

Right now, mostly money people are at the switches in cable and cassettes. And they seem to have no sense of how to enhance indigenous video production.

On the other hand, if we're (Raindance) the only ones in distribution then we run the risk of being just another hard-edged structure.

So we don't know precisely what the future will be. We don't think we want to do it forever, much less a few years. We have thought of setting a self-destruct limit like the **Whole Earth Catalog** but we feel that's premature, partly because it would limit our flexibility. Right now though we certainly can't see ourselves administering distribution more than a year. We've got other things to do. Like make tape.

POTENTIAL RIP-OFFS & SAFEGUARDS

1. Too much control resides with the people who administer the distribution, i.e. us.

Somebody has to start this thing. We have tried to design it so as much control as possible remains with the individual producers. Inherent in the plan is:

a. You retain control of your master tapes;
b. **The Process Print-Out** lets you in on the details;
c. You receive the service of a print listing so that people can contact you directly; and
d. We publish a list of where the package tapes have gone so that if your material is included you can follow up directly.

2. Your tapes go out without your knowledge, or a third party gets ahold of your software and sells it or shows it in a theater without informing you.

This is partly contingent on the honesty of our accounting system. The major safeguard is that you hold your masters so whoever wants to use them has to get in touch with you. The compiled copies we send out will be third generation which is generally unsuitable for commercial viability. The scrutiny on us is that we have no control over feedback as video people are in touch with each other independent of us.

3. Your tape ends up with an intelligence agency like local police or the FBI.

We will not be selling to these people directly. On the other hand, it wouldn't take much for them to get a copy. We will have to assume therefore that any tape which is passed on to us has been cleared by you. Of all the tape that we ourselves have made (approximately 175 hours) there is nothing that would get anyone in trouble, and a lot that would teach them something.

4. Your production costs (not all tapes cost the same to make, or are worth the same) or what you feel is the value of your tape is not reflected in the returns you get.

Remember, we are only paying a standard return on the compiled tapes. For your tape specifically people must contact you or deal with us, both for whatever value you place on the tape. The advantage to pricing inputs to the package tape evenly is we all help support each other.

5. The system becomes a scouting service for commercial people who then single out certain producers and give them lots of money while others stay poor.

That is a real danger because it will generate an economic structure which will only support a low variety of material. On the other hand, the inherent structure of decentralized TV is towards financial support for a high variety of information.

What we hope is that the alternate network will make us aware of who we are and that rather than be cannibalized (like the old media game) we will assert ourselves as a sort of software lobby by making demands on other structures.

This is a sample of the filing cards we will be using for the videotape exchange. For now please supply the following information with the tapes you send us. We will include cards with the tapes we return to you.

1. Title & Description of Tape (Subject matter).
2. Recorded by Sent by Address and Phone
3. Length of tape 1/2 hour, or 1 hour, or more?
4. Video system on which tape was made?
5. Can your playback equipment accept 1 hour tapes?

Description or Title				Recorded by	No.
length of tape 1/2 hour		1 hour	more?	sent by if different from above	
Video System Sony AV		other			
Subject matter			Address		
				zip	
Playback maximum 1/2		or 1 hr.		Phone	
Portion used	$		video exchange tape no.		

Place	Date	Sale or Rental		out	in

THIS CASSETTE THING

Except for broadcast television, every major information medium in America had its genesis in men who started out because they felt they had something important to get across. Sure, they wanted to make money, but that was almost as a by-product of unique (although not always sane) visions. Think of the early days of any medium and there's a name associated with it, not an anonymous corporate structure.

Only broadcast TV began exclusively as a marketing proposition, carefully creating psychic wants instead of servicing genuine need.

Videocassettes are probably the most hybrid medium of the century. Because they have a little in common with books, long-playing records, magazines and, of course, broadcast TV, people from each of those old media are swarming over cassettes trying to figure out where the money is. All see the new medium as the next great ship to come in, and this time *they're* not going to miss the boat.

At Raindance we sporadically are gotten in touch with people who tell us: "I want to get in on this cassette *thing*." When they extend that as their only understanding of portable video, we tell them to fuck-off, in so many words.

It's practically impossible to find anyone who is concerned about cassettes as a money proposition who also has any particular passion about the medium. Of course they see it as fulfilling a need for people who are pissed off at broadcast TV, but they see that need only as another lucrative market. While it's also their cant to say: "we know videocassettes are going to require a different kind of information (from film or broadcast TV)," not a one I've talked to knows what.

The following is a compilation of interviews in person with Jeff Reiss, program director of Avco's Cartrivision cassette system; Irv Stimler, President of Optronics Library, a software house; some phone raps with P.R. men at other companies; and information I've gleaned from other print publications.

Most of the above are playing a game of roulette (potential high return gambling), but they're betting all the numbers. Thus, they have huge catalogs which cater to every imaginable taste, or they're into marketing surveys where money, not survival information, comes first.

Why this is all important to anyone in alternate television is that we've all seized upon new media tools because we're pissed off at the way the old ones are being used. So if it looks like the new cassette tools are being co-opted, then we've got to be very careful how we cooperate.

Of course we all need money to stay alive (until we find a way to do it without money). That's not the issue. What is the point is whether or not we might be trading off short term gains for long term debilitation.

There are a few bucks around from Avco and maybe Optronics for production. Yet any of our stuff would be part of a voluminous catalog sandwiched in with all sorts of bullshit. So what the packagers get for the few bucks they're willing to pay is practically all of our legitimacy, *but as fuel for their context.*

Moreover, when videocassetes catch on, its going to be clear that the people producing especially for the medium, as all of us in videotape inherently are, are going to be the major sources of the best material; just as the LP first imitated the concert hall and then became fabulously lucrative with a true electronic form: rock music.

The hipper cassette packagers are keeping their lines open to some alternate TV people, *but why should they reap future benefits if they're unwilling to underwrite what we're doing now, which is essentially their R&D?*

On the other hand, if we can get together a tape network of people making television for survival ends, if it also becomes a financial success will it pose a threat to interests like Avco or CBS who are pumping millions into what they hope will be a proprietary medium? They are already fanatic about how they will *control* their own distribution.

So here is the scan:

CARTRIVISION is a hardware system made by Avco, a conglomerate which, as I understand it, does some defense work along with conventional films and other things. The system has been licensed to Emerson for production, but from what we've seen it's not the best piece of hardware around. Avco plans to sell the deck in a package with a TV set and later a separate playback unit, but both configurations are particularly cumbersome. Moreover, Avco has its own standard which will be incompatible with Sony and the Europeans.

To push their hardware Avco is very heavy into programming and has compiled an enormous list of non-exclusive rights to practically every piece of old *film* around.

Jeff Reiss of Avco, their programming director, is a nice, honest guy who combines a genuine sympathy for alternate television with a sense that he's buying futures: someday it will be good business. But remember that most of Reiss' time is taken up hassling the rights to old cartoons and NFL football games, etc.

Reiss has offered contracts to three groups: People's Video Theater, Media Access Center, and The Ultimate Mirror. The PVT tape will be a compilation from their archive called "Liberation 70." Media Access has offered a tape about inflatables and domes. And Richard Rubenstein of The Ultimate Mirror is giving a lovely tape of an impromptu outdoor percussion and guitar concert on the island of Ibiza.

According to each, Avco has offered about $200 as production expenses towards finishing Porta-Pak tape onto a one-inch master. As even $200 is a lot of money these days, they've each accepted.

Jeff Reiss says that those three offers constitute almost all of Avco's production budget (remember they're buying pre-produced stuff) and he's certainly willing to consider other stuff. According to Ken Marsh of PVT, the contract calls for sales price as royalties.

The problem with Avco is that they're into a heavy public relations game and one day soon each of the above tapemakers is going to find himself on a press release along with old Super Bowl games. Even though people like Ken Marsh are particularly adamant that they will be returning fair money to the subjects of their tape, somehow combining the genuine legitimacy of the disenfranchised (e.g. PVT has done a lot of work with the Young Lords) with old movies and the like is more a reaffirmation of old media style than a creation of a new one.

OPTRONICS LIBRARY is a software house which has no particular system to hype although they reportedly are going to go with Philips.

The president, Irv Stimler, is former executive from MGM records. His catalog will contain software that only Optronics has rights to. Their most notable catch seems to be the movie, ***Battle of Algiers,*** which Optronics never ceases to publicize their rights to.

Stimler operates out of offices on 57th Street in New York and seems more in tune with how to make money out of cassettes than any particular sympathy for people who might genuinely want to get it off through video. He's not dishonest, and certainly likeable. Just business shrewd as its own end. In talking to him and scanning his company (there are only several employees including his college age son) and its board of directors (full of "names" like Clive Barnes), you get the feeling he wants nothing more than to keep his shit together to get bought out, soon.

Stimler was absolutely non-committal about front-ending any money to alternate TV producers except to say that he is willing to listen to any proposal and might ante up some money for tape. *After* a tape's made, of course, he says he would be interested.

Optronics has contracted with Global Village to produce a twelve issue video magazine, the first of which is supposed to be done in July and will be about using portable video.

VIDEORECORD CORPORATION OR AMERICA is a company up in Stamford, Connecticut around where CBS labs is located. The company's president, Dr. Stafford L. Hopwood Jr., used to work at CBS labs. Not unsurprisingly, Videorecord has selected the CBS-EVR system which is easily the worst idea in videocassette hardware (see Hardware Section).

This more or less reflects Videorecord's big name board of directors which, according to Sam Gale, the company's director of communications, "is full of men who have been involved with television for years." It includes William Bernbach, co-founder of the ad agency which bears half his name, and Eugene Rostow, now a law professor at Yale but once a member of the Johnson administration.

Gale concludes that Videorecord certainly understands that the cassette medium will demand its own software, but admits he sees no problems with using the EVR system, and absolutely finds it irrelevant whether or not production is done on film or videotape (of course, the EVR system doesn't care either).

Gale was scarcely aware of any alternate TV activity in the country, but interested, and certainly friendly to *Radical Software* on the phone, although a little paranoid about being quoted by us.

The spectacle seems to be a lot of men who grew up in radio and if they ever had any notion of the potential of TV never quite got it together to do anything to change broadcast. Primarily, Videorecord is interested in the so-called "institutional" market which means businesses and schools.

To hell with businesses, but if Videorecord tries to move material into schools then they're to be resisted because the EVR system is just too much of a rip-off to force on our kids. Videorecord is just another company, perhaps a little more competent, which thinks the way to develop the medium is to do marketing surveys.

While I'm on the EVR system, there is a group up in Boston called the American Program Bureau which is selling a package of ten one-hour shows and an EVR unit to colleges for $3,000. APB, as it's known, handles radical speakers like Abbie Hoffman and Dick Gregory and sure enough that's what the package is all about. According to someone who's seen some of the shows: "they're like regular TV except they say 'shit' and 'fuck' and don't bleep it out."

Aside from the alleged quality of the programming, the political superstar trip is awfully dead dada/data to pump through a new medium with the potential of cassettes. If Abbie Hoffman is really into everything free and understanding media then why has he lent (sold) himself to a system which is specifically designed not to be copied (although you can get around that too)?

What's worse is the thought of some university student group putting out three grand when for the same money it could acquire a Porta-Pak, editing deck and a semester's supply of tape and begin putting out its own information instead of laying back and moaning "entertain us ."

A similar potential rip-off is a company called NTS which is in New York City. They're the agents for *Channel One* and not surprisingly their package consists of two *Channel One* tapes. (The first of the two is called "Groove Tube," a raunchy, very funny satire on broacast TV. *Channel One* has been around with that stuff for five years now and it is to what's now going on in alternate TV what say Jack Kerouac is to the so-called "counter culture": a forerunner, but also a relic).

NTS will put equipment out into colleges which includes true videotape in the form of a Sony AV3600 deck for playback, but the design is pure hype to fool the uninitiated. It is a column or monolith of monitors with the actual deck resting on the floor with a six inch clearance on top which makes it practically inaccessible. Moreover, it's hardwired-in which makes you wonder about NTS' claim that they'll solicit student tapes for what they have been hyping as their own "underground television network (UTV)."

The other part of the two show package will be a thing called "New York" which was to have been the latest *Channel One* show but reportedly folded after a few weeks even though it was launched with half-page ads in the *Village Voice* (about $670 worth of advertising each time). The show's one accolade: "The Masterpiece of the New Video" was credited to none other than NTS. In other words, the show's own agent was telling people how good it was.

Well it was shit. It amounted to a kind of "Channel One Discovers the Porta-Pak" and consisted of two guys driving around New York and shooting a lot of tape from their micro bus. Occasionally they'd talk to someone and absolutely rip-off their information without telling what the tape was for, why they were being taped, or letting the subject see the camera.

Probably the height of the insensitivity was some interplay with winos. One asked for a quarter and Ken Shapiro of *Channel One* said he wouldn't give him the money because "I don't like you." Another piece of tape had Shapiro hassling a drunk by taking off his glasses and mimicking him. It's a long, tedious, boring self-indulgent piece of tape by a couple of guys who used to be the only game in town (with two-inch equipment) but got left behind when the Portables came out. So beware of NTS, especially if they're hustling your school. It's more of the "counter-culture" in drag. Strictly for the money.

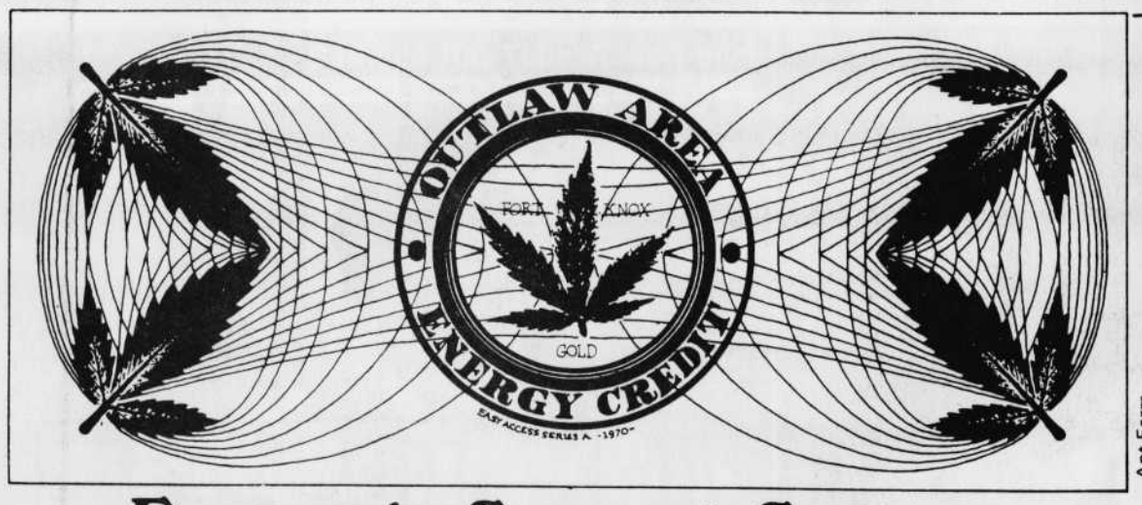
What does that leave?

There are other companies of course, but if any of them have a genuine interest in an alternate television they haven't emerged. It's just another marketing medium to them. This was really brought home at a videocassette "conference" we attended last November.

What happened was a few hundred executives who claimed to know that cassettes will provide kinetic information, anything you want, when and where you want it; these guys in their coats-and-ties all drove fifty miles out of New York City (to Tarrytown, New York) sat in a deadly dull motel ballroom, and listened to people talk for eight hours.

So it looks like we're going to have to try and do it ourselves and not as a hard-assed marketing plan, but in a lot of different ways. And we don't have to wait for cassettes. The information is here now on reel-to-reel configurations and tape exchange and some sales even are going on now, without the videocassette "industry."
And when the cassette machines do get here *we* can do our own copying and distribution because that's what videotape and decentralized media are all about.

Michael Shamberg



Ant Farm

Economic Support Systems

This is the linear version of a series of raps. Credit to participants later. The hope is that you will read, think, rewind a segment or two, and then read again. The subject (global) is attitudes with respect to economic support systems for video groups and alternative networks. The aim is to ask some of the right questions, lay down explicitly some assumptions while clearing up misconceptions: common sense and equipment glamour versus economic policy. The need is to experiment with economics *and* video information exchange simultaneously.

How do video groups generate themselves? How can they plug into existing economic support systems while seeking alternative production, distribution, and resource generation schemes. (Oops, we have to watch out for the pathology of language. There is great danger in becoming ill from the disease we hope to cure. There are pervasive properties in the existing processes—the habits and styles of thinking that can infect even the *terms for a cure*) *What means are available for the early growth and survival of video groups or alternative networks? What can be done, resourcewise, to foster the growth of alternative networks? How can we establish a sub-economy for video groups, directly related to the big one at least in the short run, yet differently structured? How can we judge the success and balance of the new with the normal while gauging its wholesomeness and independence?*

Needed: Basic attitudes coupled with solid practical advice on how to do. Suppose there are five people sitting around saying, "Boy, I would sure like to get into video or community television, or television as a self-educational tool." How do they get started, how do they grow and survive while finding alternative ecosound ways within the system to generate resources?

Economic problems: the first is that there will be no economics for a video group unless they can in some way generate a response prior to the need for investment (money). So far, in today's world, there have been only three sources of start-up money: welfare capitalism sources (government, foundations, food stamps); rip-off (subtle theft, direct theft, drugs); or inheritance (wealthy parents, relatives or friends who leave it to or give). The need is for some new forms of what venture capitalists call "seed money." The price of existing means (loans, direct investment in the corporation or partnership) often carry the obligation to produce along guidelines enforced (often not so subtly) by the investor. Picture a Bank of America Loan to *Video Zombies*—restrictions: no burning banks or Panther meetings.

Even with a solution to the problem of start-up money, there still remains **problem number two:** how can a video group generate the resources necessary to survive, i.e. food, equipment, tape, transfer or information, transportation, etc. Again, the classic ways are simple: be a middleman (sell other people's things to others who in turn sell them to "retail" buyers) or develop a product or service so distinct and valuable that people or institutions (CATV?) will pay to have it.

There are several grounds for concern with traditional means: the Sears-Roebuck mass-marketing approach exploits man and nature. . .one quickly becomes over-capitalized, over-exposed and indentured to capital. At worst the new system should be ecohomeostatic, at best it might even shrink (as opposed to growing). The products or services must not have bad influences on the environment (information and physical), they must be sound socially and for the individual (of, by and for the people).

We need solid advice and practical recommendations. Drucker, Theobald and others talk about new economic policies, global shopping centers, the age of communication, and the age of knowledge. But it is not clear that all such thought would work when one is concerned with access to information or the restructuring of video technology.

We must watch out lest we develop a new industry with new technologies. They loom larger in Wall Street eyes than steel mills or automobile assembly plants. They capture the imagination of the money firsters. Media Access Center as a glamour stock? Exploitive speculation (making survival money the end) will result either in failure or in value-free millionnaires—and we will all suffer again.

Economic Support Systems Cont.

You picks your value and pays your money. The automobile, especially the Model T, represented a major value choice of modern man. It stood for mobility, freedom, and energized the knitting together of a nation. Men moved in autos from farm to industrial town. Only freaks are walking back. Most technology and industry is experience-based rather than information-based. Edison was an experienced craftsman ("Invention is 98% perspiration," he said). But computers and television (enormously successful generators of resources until the cancellation of cigarette commercials) are early examples of the resource possibilities inherent in information. "Information is capital."

There are opportunities for survival resources (things that we can control with respect to outcome, a moral commitment, based on participation in the network). You *can* rip off broadcast television, film, cassettes.

Your local cable system is going to want to put out bullshit programming and will pay a video group to do that, but only that. You can work for a university TV station, etc. The university, as bad as it is, has exploitable functions: a marketplace for ideas, a source of equipment, money to support people, a generation and inculcation point for people and ideas.

One scheme for developing resources: consulting for the normal system—re hip programming. The hip/alternative network/video group system needs information right now, even if it is delivered via traditional methods. At the same time the alternate methods need development. If a hip show, for instance the Bobby Seale rap out of KQED (called "Staggerlee") comes over TV, people with beer cans in their hands will sit in their normal mesmerized state. It is not information for them, they have no control over it. But getting Bobby Seale out is important. Producing and televising such programs (for a fee) is *not* just a rip-off, but is important to the subculture. If a commercial station can be convinced that a show with important content can and should be delivered, the value of the show (re info for the subculture) outweighs the harm done by the way it is delivered. The alternate system is living, once again, in the cracks of the majority culture. *The danger, of course, is that the alternate system will become so used to the normal system's way of delivery that they no longer search for alternative ways.* The search will continue so long as there is dislike for the existing delivery systems.

In short, the need for information (at the moment) outweighs the negative aspects of delivery schemes. Hopefully, the development of alternative distribution schemes will provide "better" information. In the meantime, resources flow to alternate video by consulting: "we will use your channel, but we want to open the locks at our will." But that may well only produce nickels and peanuts, while opening up a large opportunity for straight exploitation of the subculture. In Kesey's words, "Keep away from the media, man, cause that's what done it. . . I know because I've been on the end of it so much. The media does a thing, it's like this . . . " There is a need to be damned conscientious, to spend enormous amounts of time protecting your flanks, playing around with how to do while not being screwed. That may not be possible for video groups struggling to stay alive. Are there funds for survival or capital return in plugging into the existing system: Broadcast, Cable, Cassette and Film?

FEEDBACK INTO FUTURE ISSUES IDEAS ON HOW TO ESTABLISH THE STRUCTURE OF VIDEO GROUPS, SOCIAL ASPECTS, AND (NOT LEAST) THE ECONOMICS OF ALTERNATE MEDIA (VIDEO GROUPS, ALTERNATE NETWORKS, ACCESS TO SOFTWARE, EQUIPMENT INCLUDING NEW EQUIPMENT DESIGN). PART OF THE GROWTH OF ANY VIDEO THING MUST BE AN ACTIVE CONTRIBUTION TO THE WHOLE SYSTEM.

The issue: What system to set up, what goes across it (or how it is used) that makes it significantly different or worthy of resource support. Cable may be an output, a way for people, tape, and feedback to come together. Maybe regional centers where people watching video can come back to those making or distributing tape. One of the problems: inaccessibility of equipment. How many people in the movement have compatible portapaks? Maybe 200 providing 5,000 people access via the *Whole Earth Catalogue*. Everyone has a formula for the success of things. When the telephone first started, runs one such formula, it was used locally in towns, cities and communities. But they couldn't talk to another community. So Bell developed a long line service to link the cities together. The *Whole Earth Catalog* success, it seems, is that it performs a service; a direct, objective, touch-feel service. You read the Catalog, you mail in something, you receive and use it or read and imitate—it is possibility-expanding. It gives its readers an immediate vehicle for access and response. We all feel that about video tape, but we are yet to make it work.

Ira Schneider started this rap with Jerry Kindred and Les Rosen. Allen Rucker, Pat Crowley and Richard Raymond added most. Jerry Kindred did most of the writing.

In order to get video going on such a service, we must get the hardware to the people. Just viewing a television set and cassette playback is not enough—the need is for cameras, tape and knowledge of how to use—like learning to write. We need some hold on hardware design, a toehold into reproduction and distribution. But the alternate culture shies away from technology. Technology itself is so far a self-devouring thing. Something is designed and produced, it becomes the demand basis for something that is better. Everyone is waiting anxiously for the cassette, while buying soon to be obsolesent portapaks. Can video survive an exponential rate of obsolesence? Suppose the subculture developed its own gear, how would it avoid the cycle—clever design and distribution promotes stocks and conglomerates. Will some kind of sharing blunt the competitive edge and break the pattern? Henry Ford, Alex Bell, and James Hill had the advantage of a simpler time.

But maybe we are looking in the wrong direction for wisdom. There is recently a lot of speculation on new mediums of exchange (see the discussion of tokens in the January '71 *Supplement to Whole Earth*). Maybe "access" itself is a higher form of exchange. How does it work to get things done? My information favor to you today will be returned someday by you or someone else—the old blueblood trick.

Everyone is now talking about networks. It seems we need to avoid the "massive encompassing one" or "the one" that would destroy autonomy. If you begin at a particular point with an expertise (Lloyd Kahn and doming) you should work towards orienting your network around that existing interest. Avoid central systems and hierarchies. Networks are not imposed, they happen or grow. But we still need to invent or discover ways to generate the resources by which they can grow or survive. The connecting mechanism should be subtle, preserving the cells. The networks will be different and diverse-sharing, maybe, certain assumptions and says to develop, grow, have.

A recurring conviction. If it is not well done, it will fail. Things that are really good get picked up on. It is not going to happen without responsible competence. It just isn't possible to talk your way into a new kind of life that will allow everyone to be happy, a good attitude is not enough. It is necessary to run bookstores or printing presses, to work hard at generating things that are marketable and saleable if the money part of things go.

For video groups: Just because you've read *Radical Software* and are into the video thing, don't think people are going to hand you money out of good faith. Video groups must be other than aesthetic dandies. It is so easy to play with video, to make Dadaesque little things by intercutting off-air video with the man on the street. Video must somehow generate a new form of audio-visual information. Too many people are into turn-on television. There is so much that can be used for this purpose with no residual effect or worth. Maybe the difference is between outsider and insider—those who observe and report and those who participate in the process. Availability of easy rip-off mechanisms in video are everywhere. But to do so means selling soul, raping principles, and fouling up the energy balance.
The service of telling other people what you as a video group are doing is not that good. *Media to the people* and CATV raps are too often just hypes. Maybe the only service that a video group can perform on a non-personal level is to supply tapes, but then we run up against the inaccesibility of hardware problem.

It seems to come down to this: when a media or video group arises it must focus its service on its existing community, the local scene where it can actually perform a service within the limits of its energy.

What are the values and beliefs that are shared by video group and its community? In the process of creating networks, we must be very attentive to what the value is that we are sharing. Too many systems seem to have failed by attempting to match a wide variety of values to a large group. People seem differentiated in these matters—a large group of people will have only very few values in common. For most Americans to date, for instance, the value that they have held together is the need to survive economically. As we get beyond that point will social change, personal growth, learning how the orld works, and educational development compel people?

If you don't dig the thing that someone else is doing with video, that's cool. They'd like to hear your complaints and consider your proposals. If they don't dig your proposal, go off and do your thing. Especially during the formative phases outside comments have heavy impact, especially if you are willing to share in the creation. But don't pick up on the business of bad mouthing that someone; just begin in another direction if your disaffection is that great. A plurality of solutions appears more viable (and possibly more healthy) than a single all-encompassing one.

Don't feed on. Input into and then use with wise selfishness if you must.

Enough philosophy. Next we'd like to deal with concrete ideas on economics, distribution, and the like—or at least the ground rules for these. If you are really interested write to Media Access Center at Portola Institute, 1115 Merrill Street, Menlo Park, California 94025.

TOWARD AN INFORMATION ECONOMY

by Paul Ryan

> *"There is an internally recognized beauty of motion and balance on any man-healthy planet," Keynes said. "You see in this beauty a dynamic stabilizing effect essential to all life. Its aim is simple: to maintain and produce cordinated patterns of greater, and greater diversity. Life improves the closed system's capacity to sustain life. Life—all life—is in the service of life. Necessary nutrients are made available to life by life in greater and greater richness as the diversity of life increases. The entire landscape comes alive, filled with relationships and relationships within relationships."*
>
> *Dune* appendix on ecology

. . . Been struggling with the economics of alternate video for three years now. In that time I've been involved with one rich patron, a Ford Foundation project in Newburgh, New York, various independent consultancies, and the recent New York State Council on the Arts/Video Movement Game. In most every case financial decisions have been in the hands of people other than those involved in the actual processing of information. In most instances this control has worked against the people involved. Equipment gets shuttled in and out of situations arbitrarily. The glorious turn-on gets no follow through and hopes turn to bitterness. The "if only" syndrome of powerlessness takes over. When you get mixed up with a bureaucracy, the bureaucracy can be depended on to reduce everything to its safe and sorry time grain. If there are semi-creative bureaucrats who have pet projects it's worse. Sitting on fat salaries, they play a sloppy politics of attrition—helping divide up a scene, hitchiking on people who have been doing it without money. Because they ultimately determine where large sums of money go their ideas and say-so acquire a disproportionate weight. Among those struggling to survive in video the presence of a large sum of capital such as the original quarter million of the State Council brings out the worse of old style politics—non-cybernetic, crude and beyond repair. All this is compounded by the sheer fact of being in the city where it is near impossible to sustain networks of trust relationships. In short, the funding of video by grants thus far has been a bummer—high promise, low yield and all the time eating up people's budgets of flexibility. Nor is the grant scene self-sustaining. After a year you know your mistakes well enough to do it better and there is no bread. Newburgh left a lot of unhappy kids.
Meanwhile, back at the marketplace, Avco, EVR and friends are stockpiling information for home and cable along traditional marketing lines, treating information as capital, not understanding relevance. They continue to hype people to the glories of this bullshit so they will scream sock it to me on through the seventies and make their stockholders rich. By 1980 they will have enough audiences "pinpointed" (a term used in a Rand report on Cable) so that in effect we will move from the saturation bombing of American brain cells via broadcast television to pinpoint bombing via cable and cassette.

Where do you go? Capitalism itself is rightfully under onus with dissidents. Profit-making corporation is an instant turn-off for many of us, save those who have been "cleared" of their "money hang ups" by Scientology. Given the ecological situation, having a lot of money in a Swiss bank so you can buy the best anti-pollutant face mask just doesn't make it.

But then where do you go? As Frank Gillette, the original conceiver of Raindance would say—capitalism is like heating a house with coal. It's dirty, sooty, nobody likes it, it's a pain in the ass to manage, but it keeps the house warm until we find something better. One has only to read Norman O. Brown in *Life Against Death* on "Filthy Lucre" to realize the enormity of the money-dirt-excrement nexus that has been keeping our house warm. My sense of strategy as to how to move toward the polymorphously perverse resurrected body Brown calls for is by way of an information economy. The movement away from capitalism toward ecological narcissism is, at least in part, the embodying of mind infomorphs. By **infomorph, I mean an organism that relates to itself and its environment in a way that respects and optimizes all possible transforms of differences that make differences.** It does not identify one variable, such as profit, and attempt to maximize that variable at the expense of the whole.

Our capitalist economy renders life unidimensional—more and more the same; uniformity via homogenous quantification. By contrast an information economy thrives on variety and diversity, quality not quantity, differences that make differences. More simply stated the problem is one of how do you work in such a way that the flow of money follows the desired flow of information and not vice-versa? And how do you insure that there is enough money to do it?

There is a critical mass, a certain amount of machines and money necessary without which there is no way to manage transforms of differences. To cultivate a consciousness congruent with current complexity one must have enough quantifiable resources to pass critical thresholds and recycle what is relevant. Buddhism is beautiful but it is an oversimplification given the need for increasing the diversity of life. Spiritual riches via voluntary poverty may be a cop out. God is not transcendent, he is immanent in our experience, in this planet. We need embodiments of mind, not disembodiments. There is enough to go round. There are enough people interested in relevant communication so that we can begin to pay each other fairly for services rendered. Open accounting will help prevent some rip off. We cannot be giving it away all the time for free in dramatic gestures, while the capitalist economy packages the drama for its own development, giving not a shit for alternate culture. When someone suggested to Warner Brothers that they air Woodstock footage over network television as a serial in keeping with what would be proper eletric liturgy he was told, "ah—we're making over 50 million on the movie, don't bother us with that."

We need to think our way through the horns of the profit, non-profit dilemma into an information economy. Deliberate minimization of a variable such as profit (the non-profit ethic) is as dangerous cybernetically as maximizing profit or in the purity of non-profit, but distributed throughout the biosphere in accord with patterns of relevant information flow.

In our current situation there are a number of mechanisms that disenfranchise people from their own money: insurance companies, taxes and an unresponsive government, and educational institutions which thrive on real estate and the power to certify knowledge rather than the ability to process information for people. The great virtue of the *Whole Earth Catalog* has been no bullshit information based on use and consequence of use. Contrast this with TV advertising that manipulates mythologies up front to trigger consumer response in subliminal ways In the *Whole Earth Catalogue* the flow of money began to follow the flow of information.

InfomorphOne
Organization of Ignorance

Since only the user is in a position to know what is relevant for him and how he wants to access relevance and information exchange must include the user from the beginning. Much of this happens naturally in just watching different tape and becoming aware of wanting to see more of this and no more of that.

At another level it is necessary to deal with desired information in a more coherent way. A healthy relation to the unknown is critical. Otherwise we grow rigid and die the death of explicitness and repetition. "I love Abbie Hoffman" reruns become reactionary. A mind that concerns itself too much with what it knows cannot maintain a good guessing way. Openness to the unknown is part of having a feel for what is relevant as things develop, a sense of the significant differences while there is still time to make a difference. Such access to relevancy is part of the freedom to self-correct that information economy can supply. What we don't know is an infinite resource, inexhaustibly recyclable. It seems possible to develop out of our ignorance a culture with a fullness of feedback such that we would not be recurringly faced with the choice between cannibalizing the human relations we have or solo-tripping to regions where we cannot relate to those we love nor ask them to trust.

A coherent relation to the unknown is possible through an organization of ignorance. Organization of ignorance is a research technique Peter Drucker explains in *Landmarks of Tommorrow* by discussing Mendeleev's discovery of the periodic table of chemical elements. At the time Mendeleev was working only 60 odd elements were known. Rather than trying to puzzle together the known elements, Mendeleev began to ask himself what he had to know about what he did not know in order to make sense out of what he knew. He allowed the intervals, the gaps in his knowledge, to play a part in his conceptualization. In other words, he organized his ignorance.

Sample Organization of Ignorance Input

Hour of the ocean
Tape of CATV Projects
Rap with Stewart Brand on Economics
Rap with a drop out from Scientology
Interpersonal relations in Commune
Children in Commune
Raps for high school kids by college kids on college
Raps by dropout users about their experiences
Rap with veterans returning from Vietnam
Tape in South Vietnam
Tape from African student on life in Africa
Daily life tape of situationalits
Tape on abortion in NYC
Critiques of Bucky Fuller
Woman's Liberation Movement raps with women on where they feel its at directed toward men
Rap with Weathermen
Rap with people who have left the city living in country, how they are doing
Edited version of Keep by Frank Gillette
Raps with people on planting electrodes in brains
Documentation of Earth works by different artists
Check out *Whole Earth Catalogue* and inputs

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ARTISTS' NEEDS

by Eric Siegel

Up until now, the video scene in America has been centered in New York City and San Francisco. It has manifested itself in the form of various video groups or as individuals.
The groups have become somewhat like clans, and in my opinion are quite closed. If you make videotapes and wish to do a good editing job . . . where do you go? Or if you wish to show your work to the public in a theater . . . where do you go?

The existing video groups here (New York) are not into editing individuals' tapes or public showings. So you are forced to join one of the already existing groups or making your own. This is a ridiculous state of affairs to say the least. I now would like to suggest the way I think the video structure should be set up:

1. A special **editing lab** should be set up in every major city in the world. All equipment can be kept in excellent working condition by two well-qualified people, one an engineer, the other a technician. The lab should be open 24 hours a day. The fee should be low enough for everyone to afford. Something like $15-$20. American money per hour. People would be able to call up for an appointment, come down and work the machines themselves if they choose or be assisted by the 2 people present.

2. A **public video theater** where anyone could rent time to show their tapes to a special audience or party. The theater should be able to hold at least 200-300 people comfortably. It should have a thick rug on the floor and huge video screens on the walls with a stereo high fidelity sound system. Again, rental fees should be reasonable so an individual can afford it. About $75 per hour. The theater could be open every day. The theater would not have to worry about successful showings because its income would be from *the showing fee.*

This fee could vary according to the day and time. Saturday night would be the highest showing fee. Something like $150 per hour. The artist would have to advertise the showing himself and could charge any admission he thinks he's worth. The theater would not take any gate cut so that if the artist becomes successful the artist becomes rich.

This is a reinforcing system. And a profitable one for both parties involved. Advertising could be added with the consent of the showing artist to raise extra revenue. Public service commercials could also be run, again with the consent of the showing artist.

If no one sets this system up—I shall.

CITIZEN SAMPLING SIMULATIONS: A METHOD FOR INVOLVING THE PUBLIC IN SOCIAL PLANNING

by Stuart Umpleby

ABSTRACT

The growth of the planning function of government raises the question of how planning can be accomplished by democratic means. A new technological device—the teaching computer—seems to be ideally suited for discussions between "experts" and the public on issues of medium and long-range planning. The teaching computer can be thought of as a mass communications system with feedback.

The present PLATO III system consists of a Control Data Corporation 1604 computer and 70 graphic-pictorial terminals 20 of which can operate at one time.

POSSIBLY A NEW FUNCTION OF GOVERNMENT

In the past two to five years there has been a marked increase in long-range planning activity in the United States and many other nations. Several developments—the establishment of new institutes, the founding of new journals, and the sharp increase in the number of books concerned with the future—attest to the emergence of a new field of activity in many institutions and particularly in industry, government, and universities. (Better information about where we are now and how well our present programs are working would presumably help us in deciding where we want to go and what actions are required to get us there.)

Policy Principles Needed to Coordinate Programs

The demand for changes in existing administrative procedures is in part the result of a need to coordinate the large number of federal programs now on the books. Between 1960 and 1968 the number of federal domestic programs in the United States increased from 45 to 435, according to Daniel P. Moynihan, the President's adviser on urban affairs.

. . . Many people are becoming concerned that our efforts to build a better society do not seem to be producing desirable results. For example, Richard Goodwin [4] has said,

> *. . . Take New York City or any big city. If you ask who decided that this is the way people are supposed to live, the answer is, "Nobody." If you took the 200 most powerful people in New York or Boston and put them in a room and tried to find out if any of them had decided that this is the way people ought to live, you'd find that none of them had—or at least weren't aware they had. So where are the villains? The villain is the set of values and the structure.*

Moynihan has written, "The federal establishment must develop a much heightened sensitivity to its 'hidden' urban policies." He contends that few officials habitually display such sensitivity.

> *They are to their minds, simply building highways, guaranteeing mortgages, advancing agriculture or whatever. No one has made clear to them that they are simultaneously redistributing employment opportunities, segregating or desegregating neighborhoods, depopulating the countryside and filling up the slums, etc.: all these things as second and third order consequences of nominally unrelated programs.*

The effort to deal with interrelated problems is increasing the planning activity in the United States. If, indeed, a new function of government is emerging, the long-term survival of a national commitment to planning will require public support for this activity. A basic assumption of the American system of government is that the best means for achieving long-term public support for decision-making procedures is to involve the public in the decision-making process.

The preceding discussion raises at least two very important questions.

1. Does the growth in the planning activity of government require new forms of communication between the public and government planning personnel, if a democratic form of government is to be mantained?
2. Through what communications media and institutional structures can the members of a community or a nation discuss and decide how they want to live, assuming that it is not possible to get everyone together in a single room at the same time?

How Things Are Done Now

A review of the existing methodologies for public discussion would seem to be instructive.

1. The essay methodology is used by professors and government officials for communicating with each other. The essays may be published in journals or government reports, but they rarely reach a large part of the population.
2. The committee as a means of communication involves much redundancy and frequently more emotion than information . . . . The committee, however useful for purposes such as face to face confrontation, is not well suited to exchanging the greatest amount of somewhat abstract information in the shortest amount of time for each person involved.
3. Mass rallies are important for offering the opportunity to express or renew an emotional commitment. Very little information is exchanged. The rally is better suited to solidify attitudes than to change them.
4. Radio talk shows seem to be most useful immediately after a domestic disturbance such as a city-wide strike. In times of relative domestic tranquility, they tend to be banal and irrelevant to the concerns of the majority of listeners.
5. Town meetings with questions from the floor have frequently been praised as the ideal form of government, though an impractical one in a mass society. Town meetings have other disadvantages, however. They are frequently boring and time consuming and are subject to disruption. The level of discussion tends to be geared low, and visual aids are rarely used.
6. Administrative action tempered by lobbyists such as Ralph Nader permits some but not very extensive public participation. . .
7. In regard to mass media news reports, television and radio are evanescent. The viewer or listener has no opportunity to go back and examine the logical argument or to check a point he missed while his mind was diverted by an earlier remark. Newspapers, particularly in the United States, concentrate on day-to-day events rather than on analysis and criticism of performance over time.
8 Congress is well suited to legislating programs, but it does not at present systematically review the success or failure of the programs which it enacts. Also, Congress in its current form is not organized to coordinate federal programs. The vast majority of Congressional activity takes place in committees which have specialized interests.
9. Films and phonograph records are usually thought of as cultural or entertainment media. But their use as vehicles for political messages has been growing, not incidentally because they are the media most accessible to young people.

Moynihan has noted that efforts to involve citizens in the planning process at the local level have not had the measure of success which was hoped for. One reason might be that there has been no way both to inform and to poll the public at a reasonable cost in terms of the time required from administrative personnel.

Additional criteria for a good communications system for discussing ideas are that it should be free of boredom, transmit information with little distortion, provide the opportunity to ask questions, and require that background information is understood before an opinion is given.

A NEW MEDIUM FOR COMMUNICATION

. . . I will now try to show how a new medium in mass communications offers the possiblity of increasing the level of citizen information and participation in the formulation of long-range public policy.

The Metamorphosis of the "Teaching Computer"

This new medium for communication has existed in rudimentary form for about ten years. However, the realization of the full range of its implications as a possible tool of the democratic process has been limited by its semantic coding. We have been calling it a "teaching computer". Computer-based education equipment has been compared to their printing press in terms of its importance for education. However, the teaching computer might also be useful compared to radio and television. Radio and television are technologies for communicating transient verbal and visual information from a central source out to a large population. *A teaching computer not only sends information from the center to the periphery, it also brings information back from the individual user to the central source. Thus the teaching computer is a communications system with feedback.* Graphic and pictorial information (and in the near future prestored audio messages) are presented to the individual user at a rate which he controls with his keyset.

In addition to its use in conventional education situations the teaching computer could be used by planning personnel to present policy alternatives, as they see them, to the public. Background information would be available upon the request of the person using the "computer-based exploration of alternative futures." The probable consequences of each alternative could also be a part of the programmed material. During the course of the exploration each individual would indicate his opinion of the desirability of each alternative or could be asked to rank them in order of preference. As he explored the alternatives, background information, and probable consequences, the "explorer" would be able to use a "comment mode" to suggest (a) additional alternatives, (b) inadequacies in the background information provided, or (c) his own judgments about the probable consequences of an alternative action.

Preliminary Work is Now Underway

An elementary version of a "computer-based exploration of alternative futures" is already in operation at the Computer-based Education Research Laboratory on the University of Illinois campus. . . This "exploration" was originally proposed . . . as a device for education and social research. It is now regarded as the forerunner of "citizen sampling simulations," which would use the physical equipment of the teaching computer to exchange information and opinions between experts and a cross-section of the public. The medium and long-range consequences of alternative courses of action would be "simulated" and responses obtained from a "sample" of the population. The results, which would indicate what the public considers to be desirable or undesirable policies, would then be submitted to planning personnel for their consideration . . .

The disruption of computer-based education equipment to grade-schools, high schools, and colleges will probably become widespread during the next two decades. The existence of this equipment will bring about the possibility of conducting citizen sampling simulations on the same equipment. *Facilities which are used by children during the day for education could be used by the parents in the evenings both to learn about existing social conditions and future possibilities and to indicate to planning groups their views on goals and priorities.* Computer-based citizen participation in planning will, therefore, be possible even before home computer terminals become widely available.

However, there is no reason why these simulations should follow computer-based education. Public participation in the formation of local or national policy could in a few years come to be considered very desirable. It is also possible that resistance to computer-based education will delay its widespread implementation. If these situations were to develop, the necessary physical equipment could be constructed for purposes of public discussion of policy alternatives. Regardless of which comes first on a large scale or which is considered most important, a discussion of the economic viability of either computer-based education or citizen sampling simulations is incomplete unless all possible uses of the equipment are considered.

A Comparison with Other Proposals

. . . There are two principal advantages to having computer-based citizen sampling simulations in addition to debates or testimony on television. First, the point was made earlier that television is by nature evanescent. A more general statement is that each communications system lends itself to the transmission of a particular type of information. *With a teaching computer the student or citizen controls the rate at which information is presented to him.* He need never be either bored or lost. If he is familiar with the information being presented, he can jump ahead. If he does not understand a particular point, he can ask for additional information. Thus the teaching computer is very well suited for presenting logically complex material to people at different stages of familiarity with the issues.

Second, a citizen sampling simulation requires a model of the social processes involved in the situation being discussed in order to be able to predict the consequences of alternative actions. The need for an operating model requires experts to state explicitly their notions about how the world works. The ideas held by different people about the probable consequences of actions can then be compared.

POSSIBLE LONG-RANGE SOCIAL CONSEQUENCES

The remainder of my remarks will focus on a few of the consequences which might result if citizen sampling simulations become widespread in the next twenty to fifty years. All the consequences taken together would constitute a social transformation of major proportions. However, considering the many communications media now available, society is not likely to rearrange itself around a single newcomer, at least not over night. Therefore, the following possible consequences should be regarded as indications of the direction in which society may be changed rather than as descriptions of a social system not too far off.

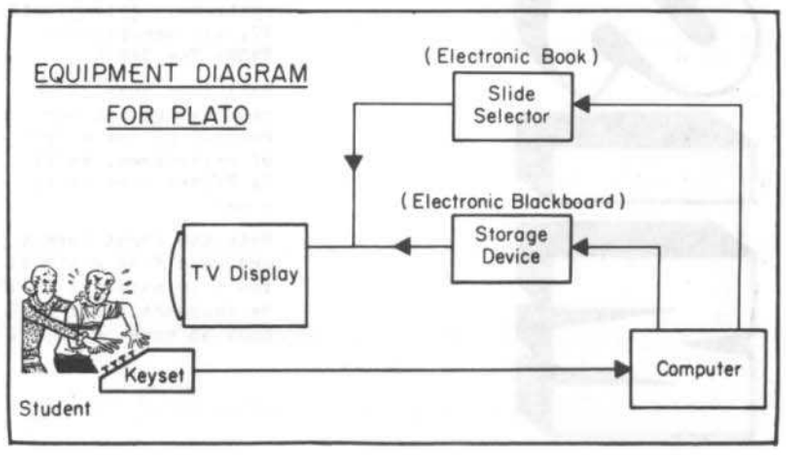
The "National Classroom"—A Conception of Government

The fact that both education and government would be using the same physical equipment suggests that these two social activities would be brought Universities might devote less time to teaching professional skills and more time to developing the skills of defining alternatives and recognizing relevant supporting information. In addition, universities might become more concerned with providing general as opposed to specialized instruction about the physical and social environment, thus enabling citizens to more accurately estimate the probably consequences of alternative courses of action. If universities were to change in this way, they would certainly become more relevant to social problems.

Charles Frankel has suggested that democratic government and education have a lot in common. He believes that democracy is the best form of government because it is the most educational. In this case "best" can be interpreted to mean the most stable and just in the long run. The primary difficulty with the "philosopher-king" approach to government is, what happens when the philosopher-king dies before a new philosopher-king comes along? It is useful to recall that "information" is stored in only one way—in individual human brains in the form of specific skills or social norms. Libraries and data banks contain only symbols which must be interpreted by people. A society run by a brilliant and benevolent elite can be irrevocably set back if the elite is displaced from power without a similarly skilled decision-making group taking over. Another important consideration in maintaining a viable society is that people are more likely to behave in a cooperative manner if they feel that they have been consulted in determining social policies.

During a lifetime an individual's experiences increase his store of knowledge. The same process occurs in a society. The fact that nations learn by their successes and failures is indicated by slogans such as, "Another 1929," "Another Munich," and "No more Viet Nam's." Of course the lessons of history are subject to varying interpretation. Nevertheless, it would seem that a society should be able to learn from its experiences and to improve its decision-making procedures, just as the procedures used by individuals have been improved by techniques such as linear programming, game theory, simulation, and systems analysis. One way of improving the learning and decision-making processes of a society would seem to be to acquaint more people more thoroughly with the alternatives which the decision makers are considering and why they choose the alternatives they do. In order to accomplish this *it might be helpful to begin thinking of government as an educational activity on a national scale.*

Television has already created the "nationl classroom." The teaching computer offers the possibility of "government seminars" for those who are interested. The United States of America could be thought of as a course in cooperative living with the government, the media, and the universities operating as a sort of aggregate professor to the rest of the population. Of course the "students" frequently talk back to the "instructor," but then, seminars (democracies) tend to be more interesting than lectures (dictatorships). And of course every four years the "students" have the opportunity to become the "professors," which may be a suggestion for the university.



Coercion vs. Persuasion

Every organization uses some combination of coercion and persuasion to enforce group norms. The United States is now employing coercion on a very broad range of problems. Overt force is being used in Southeast Asia far more than diplomacy; coercion is being used to enforce integration in the South; and even the universities feel driven to resort to force in order to continue functioning. All this is occurring in one of the world's most literate nations, a nation having the most advanced communications technologies. Perhaps it would be useful to think of persuasion as an alternative to coercion. *Technology continues to lower the cost of producing social change by means of persuasion rather than coercion.* Yet there has still not been a widespread recognition of the fact that our strategies for bringing about social change could be substantially altered by making use of communications equipment now available and additional equipment which will become available in the next few decades.

Electronic Town Meetings

The impact which computer-based exploration of alternative policies will have on the distribution of public concern with federal, state, and local governments will be partly determined by the scale of the networks built. A national computer-based communications system would most likely consist of a network linking "teaching computers" in local communities. Each local computer would have its numerous remote terminals. Local computer-terminal systems will be available in some communities before a national network of "teaching computers" is operating. Consequently it seems probable that this new communications medium will have a noticeable effect on local government before it begins to affect national government. By providing a means for citizens to become involved in urban planning and policy formation at the local level, these simulations might well increase interest and involvement in local government.

NECESSARY CONSIDERATIONS DURING PRELIMINARY TESTING

Regardless of the *need* for more deliverate long-range policy-making, a careful look at the *feasibility* of citizen sampling simulations is required. In addition, research projects with probable large-scale social consequences must include some consideration of regulation in the public interest.

Economic, Social, and Political Feasibility

1. Some idea of the economic feasibility of citizen sampling simulations can be obtained from estimates of the cost of a large-scale computer-based education system.... The cost of instruction on PLATO IV will be less than fifty cents per hour per student. This figure should apply to either educational or governmental use.

2. The social feasibility of the idea could be tested in a small city such as Champaign-Urbana, or perhaps an even smaller community such as the University of Illinois. Questions that would have to be answered include the following: Will people turn out to "play the game"? How much difficulty will they have understanding and dealing with the rather complex issues? How quickly will they be able to adapt to using the teaching computer? What problems are encountered in trying to obtain a representative sample of the population?

Do planners find the data collected to be useful? Are the problems chosen for presentation redefined as the result of feedback from the public?

Are the attitudes of the public on matters of policy changed as the result of exploring alternatives? Do participants change their opinions about the community, local government, planning, and the judgment of their fellow citizens? Do people feel that the decisions which are made after the data from the exploration has been considered, are more in keeping with their own desires?

Do people get information through citizen sampling simulations which they would not see otherwise? How much information do people generally look at before making a decision? Is the information presented in more understandable or more useful form than through existing media of communication? Is information presented in a more interesting and enjoyable form than is possible at present? Do other forms of political participation increase as a result of citizen sampling simulations?

3. Citizen sampling simulations will also have to be accepted by present-day decision-makers. Their response will be influenced by how they believe it will affect the conduct of their jobs, how they believe the public will react to it, and whether they think it would be in the public interest.

There is reason to doubt that some existing institutions are really interested in eliciting public desires. Some political leaders are more concerned with conducting public relations with the masses. However, there are two reasons why political leaders may not actively oppose this new medium. First, introduction of the equipment will take place over a period of several years. Second, the idea of a communications system which permits the easy flow of information and opinions in both directions has an appearance of lack of bias which makes it difficult to argue against in abstract form. Nevertheless, arguments about control of the medium and the wording of specific programs could become agitated.

Public acceptance of this new social technology may depend initially on whether it is regarded as a new step toward the "computerization of our lives" or as a way of "using technology to control technology." Preliminary research and testing could be conducted like any other research project, and distribution of equipment to communities could be gradual. However, it is also possible that the United States could adopt cheap education for everyone or citizen participation in policy formation as a national goal comparable to landing a man on the moon or building a supersonic transport. Such a national commitment could be stimulated by the occurrence of one or more of at least three developments.

a. International competition, for example from Japan, could drive the United States to attempt to establish preeminence in a new technology which could have an impact on foreign exchange and the balance of payments. For instance, the balance of payments consideration was a major factor in the debate over whether to proceed with the development of the supersonic transport.
b. If a negative public reaction develops to the formulation of policy by "experts" and "bureaucrats" or by the "more important people" of a city, citizen sampling simulations could become a response to this criticism.
c. Further increases in the complexity and urgency of domestic problems could convince the government that improved communication within society is needed. John Platt has vividly described the "crisis of multiple crises" which mankind is now encountering.

Question of Regulation and Control

If the idea of citizen sampling simulations seems workable after preliminary testing, some thought sould be given to the following questions before widespread implementation goes very far.

1. Should the physical equipment for these simulations be publicly or privately owned or some combination of the two?
2. Should the institutions which write the programs and collect the responses be governmental agencies, universities, private corporations, or some new kind of institution?
3. How should this new communications system be regulated—by the Federal Communications Commission, by a new regulatory agency, by Congress, or by direct public criticism and the normal legal process as newspapers now are?
4. The approval of only two more state legislatures is required before a second national constitutional convention is called. If a constitutional convention is called, should citizen sampling simulations be made a part of a new kind of governmental process and thereby become a means not only for discussing goals but also for authoritatively setting goals? The use of computer-based education equipment as a technology for the formal governmental process is not likely to happen until the public is very familiar with the equipment and what can be done with it and is convinced of its usefulness.

The University as a Stage for Political Conflict

Any major social innovation will produce a shift in the relative importance of existing social and political institutions. If the computer-based communications centers, which write the programs and channel responses to the government, are located at universities, the role of the university in society would grow. Also, the function of the university as a platform for social controversy would doubtless increase due to disagreements over what alternatives should be presented and what the probable consequences of actions actually are. The public, when disagreeing with the programmed relationships between developments, should be presented with an argument supported by observations made in a similar situation. The relationships between developments would probably represent the judgment of a group of experts, at least initially, and they would be expected to justify their decisions about probable secondary effects.

The Federation of Feudal Disciplines

Dealing with complex, real-world problems will require using the knowledge of many disciplines and corrdingating specialized knowledge, not only for presentation to the public, but also in building the models used in the programs. Thus, there would be a tendency toward the amalgamation of social theory and indeed toward the building of a model, and presumably in time, a theory describing the relationships between all parts of the physical, biological, and social environment. The present trend toward interdisciplinary research would certainly be accelerated. The expanded use of computer simulations would increase interest within the social sciences for building mathematical models.

Collective Bargaining and "Industrial Democracy"

If industrial corporations were to use "employee sampling simulations" the union-management dichotomy could become less pronounced. Collective bargaining might have to be rethought. Workers and managers could explore the consequences of higher wages and prices, such as higher consumer prices and lower real income. They could consider together issues such as whether to manufacture napalm and what percentage of black employees would be socially just and in the best interests of the present employees. Greater information about the social context and experience in playing the role of the opposing party, might help to reduce conflict. However, it is possible that differences of opinion would only be made more clear and that nothing would be resolved.

Social Indicators Will Have an Impact on Lobbies

Inequalities among different groups in the population would be repeatedly pointed out by citizen sampling simulations using social indicators. Consequently, the bringing of group grievances to public attention could become a function of government or the universities just as the resolving of conflicts is now a function of government. "Interest articulation" could become an activity of professionally trained people and therefore less of an additional burden on the individuals to whom injustice is being done. The "comment mode" used in these explorations could help to restore the right of the individual to "petition the king." People who read the comments could be charged to act as ombudsmen.

Social indicators should also help to locate emerging social problems before they reach the critical stage. It is not likely, however, that muckrakers using present media would be put out of business. They will have a whole new social activity to criticize.

Increased use of social indicators for articulating group demands could help to keep lobbyists honest. Indicators of the existing situation would probably hurt well mobilized minorities such as the American Medical Association and help poorly mobilized minorities such as Mexican-Americans and migrant workers.

Political Parties May Become Less Important

If one assumes that political parties are a social technology for aggregating interests, which is required by the fact that there are a large number of interests and a small number of candidates, then the importance of political parties could be reduced by a technology which would allow people to register their opinions on separate issues. With citizen sampling simulations, a substantial part of a citizen's time spent on political questions would be devoted to specifying his hierarchy of priorities or indicating which alternative policies he regards as most important and desirable.

Other Media Might be Reexamined

The concern with public policy fostered by citizen sampling simulations might carry over to the other media. Simply the discussion of computer-based citizen sampling simulations, even prior to widespread implementation, could increase the growing interest in reexamining the educational, political, and cultural functions of existing mass communications media and their regulatory agencies. It is useful to point out again that an implicit national policy regarding the existing media of mass communications already exists, even though it may never have been debated and consciously decided upon.

For example television could be thought of as an instrument for education rather than for entertainment. A device which brings the patent remedy man directly into the living room could be thought incongruous in a society where many communities prohibit door to door selling. Also, the existing media could be used by each of the many "silent minorities" to make its case to the rest of the public. Mexican-Americans, students, and American Indians are just a few of the groups whose views could be better understood by the public at large.

How Communications Media Affect the Temper of the Times

The present domestic instability and sense of foreboding in the United States may not be due entirely to a combination of very important social conflicts. Each communications medium existing at any particular moment influences the temper of the times by selecting out the kind of information most suited to it. *Television tends to select events which are dramatic as opposed to events which are representative of the total set of events. This situation produces numerous consequences. For example, if a person wants to be heard, he tries to make his comments as dramatic as possible, short of what can be prosecuted for inciting violence. A very large number of dramatic events bombarding the senses tends to create a feeling of catastrophic upheaval when in fact the daily lives of most people remain largely unaffected.*

Computer-based explorations of future alternatives, in a constant attempt to be accurate, would try to present both dangers and opportunities. Discussions about probably secondary effects would tend to select out the most persuasive arguments as opposed to those most flamboyantly presented.

Will Anxiety be Produced or Reduced?

The very major change in social communication and decision-making procedures which would accompany the introduction of citizen sampling simulations could cause great anxiety in the beginning. However, increased information and public involvement in decision-making would, in time, probably reduce anxiety due to unanticipated or unexpected social and technological developments. By looking ahead the public could better anticipate the new technologies and thus have time to create institutions to regulate or eliminate undesireable secondary affects. Greater confidence in society's ability to control the consequences of social and technological developments could lead to more open acceptance of experimentation and alternative life-styles.

Enhancing Self-Esteem

Greater involvement of the individual in social planning could contribute to self-esteem. Assuming that societies change in a non-random way—that is, that some "progress" can be discerned, that the store of knowledge grows, and that societies tend to become more organized in terms of an increase in information flow—then one might say that each individual, simply because he is alive and contributing to social choice, is a factor in social evolution, if he participates.

A Technology for Democracy—As Foreign Aid

In addition to the considerable impact which citizen sampling simulations could have on government within the United States and other industrially for accelerating the process of political development in the newer nations. If the people of a nation request it, computer-based education equipment could be given as aid instead of tanks and guns. The device could then be used both for education and for informing people about the operation of their government. It might be desirable to have some means of regulation by the United Nations to insure that the equipment is not used for propaganda or for inciting hostilities between nations.

Governance by "Those Who Care"

It has been suggested that a representative sample of the population might not be desirable, that a "constituency of the concerned" might be better than pure democracy. Teaching computers raise the possibility of granting citizenship in proportion to involvement. Perhaps there is some merit in this proposal, but care would have to be exercised to insure that citizenship was not granted in proportion to involvement *through a particular medium.* Participating in a citizen sampling simulation might be as uncomfortable for some people as marching in a demonstration is for others.

A Shift from Special Interests to Common Interests

People seem to be becoming aware of the fact that the physical world is not "without end" but in fact is very limited. This realization has very important consequences for political theory. Much of the present theory of coalitions is based on the assumption that some conflicts are of almost no concern to a third party. The idea of log-rolling—support my bill and I'll support yours—assumes that each partner has no interest in the other person's bill. However, in an intellectual climate in which everything is viewed as having some impact sooner or later on everything else, the idea of logrolling, at least in its pure form, breaks down. One is forced then to take into consideration, more than before, which side of the issue will produce the most desirable long-range consequences for the population as a whole.

Citizen sampling simulations make feasible the detailed consideration of secondary effects both by planners and by the public at large and thereby could assist in arriving at decisions which serve long-range as well as short-range interests.

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