A study was undertaken to develop a body of knowledge which might bridge the communications gap between the more formal communications establishment and the eclectic alternative television movement. Information was gathered mainly through personal experience, and by survey and interviews. The analysis was carried out during the period from late 1972 to early 1974. This M.A. thesis offers five conclusions and recommendations: first, Federal funds should be made available to community groups to develop programs and stimulate public access to, and utilization of, media. Second, cable television should not be viewed as the only means of distributing local programming. Third, cable television should continue to be considered as a major means of distributing alternative television. Fourth, video is not the only tool for alternative television, Super-8 and various other inexpensive film formats should be more fully explored for television program production and usage. Finally, it is the software produced, not the tools used, which is the major reason for community alternative television innovative approaches. (WCM)
WASHTON UNIVERSITY

ALTERNATIVE TELEVISION:
STATUS, TRENDS AND ISSUES

NEIL W. GOLDSTEIN

MAY, 1974
ALTERNATIVE TELEVISION:
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NEIL W. GOLDSTEIN

This report was taken from a thesis prepared for the Master of Arts degree in Technology and Human Affairs. The views expressed in this report are those of the author and do not necessarily represent those of the Center for Development Technology or the Program in Technology and Human Affairs of Washington University.
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This report represents an attempt to define, document, analyze and assess the "alternative television" movement in the United States. Information was gathered and analysis carried out during the period from late, 1972 to early, 1974. The research report fulfills the Master of Arts thesis requirement in the Washington University Program in Technology and Human Affairs.

Much of the information available on alternative television is of a local or informal nature. A major reason for undertaking this study was to develop a body of knowledge which might bridge the communications gap between the more formal communications establishment and the eclectic alternative television movement. Information was gathered through personal experience, by survey and interviews, and by collecting print materials of various kinds.

In Chapter 2, alternative television is defined relative to the answers to the following set of questions: 1) Who runs the equipment? 2) How is the equipment accessed?, 3) Who decides what programs are to be shown at what time?, and 4) Who controls the distribution system? Although it is often difficult to provide a clear-cut definition as to what does and what does not constitute an alternative television group, the report suggests that part of what makes alternative television "alternative" is that it usually involves the people that it affects, and affects the people it involves. This means essentially
that a larger share of the public has access to the equipment, produces programs, airs points of view, makes media related decisions and thus controls the medium more than in conventional broadcast television. There is also a strong orientation towards community service and problem solving.

Chapter 3 contains a discussion of equipment available for use by alternative television groups. Emphasis is placed upon low-cost, accessible, easy-to-use equipment. The advantages and disadvantages of various video tape formats (1/4"., 1/2", 3/4", 1", and 2") are described along with costs of specific production equipment and studio facilities. Portable 1/2" videotape recorders have, since their introduction in 1968, been a principal tool of alternative television. New super-8 sound film systems are also discussed as having the potential to play a greater role in alternative television production.

Chapter 4 presents the results of a survey of alternative television groups, and describes the objectives and operations of a number of alternative media centers. A variety of programs and experiences are described, ranging from those undertaken by well established entities like the Alternative Media Center in New York, the Washington Community Video Center and the L.A. Public Access Project to those of smaller groups and individuals throughout the United States. Canadian video groups and the status of Alternative Television in Canada are examined in Chapter 5.

Chapters 6 through 8 are primarily concerned with cable television as a delivery system for alternative television. Particular attention is paid, with the aid of a 1973 National Cable Television Survey and additional information obtained by the author,
to the extent to which local origination facilities and public access channels are being utilized by or are available to alternative television groups.

In Chapter 9 Broadcast Television is looked at as a potential means of distributing alternatively produced television. This possibility is discussed in light of the recent development of the Time Base Corrector, a machine that corrects 1/2" format video to broadcast standards.

The principal conclusions and recommendations of this study are:

1) Federal funds should be made available to community groups to develop programs and stimulate public access to and utilization of media. These funds should be allocated so that the majority of them are available prior to the end of the FCC's cable "public access experiment" in 1977. Based on the Canadian experience, a level of $10 million per year for four years is suggested.

2) Cable Television should not be viewed as the only means of distributing local programming. Presently, too much energy is expended on cable television, particularly in major urban areas where cable systems have not yet been installed and where alternative television groups are present and active. Many U.H.F. airwaves are still available from the F.C.C. Running a TV station is not as complex or expensive as broadcasters would have us believe. A recent technological innovation (the time base corrector) can interface 1/2 and 3/4 inch video directly with the transmitter. Getting locally produced programming onto broadcast TV should become a priority. Local groups
now applying for community TV stations should be received sympatheti-
cally by the F.C.C., thus promoting diversity of television programming. The F.C.C. should also investigate the possibility of requiring commer-
cial stations to air community produced programming.

However, a word of caution concerning this recommendation is in order. The recent history of commercial UHF broadcast stations has been one of frequent station financial failure. Careful studies should be undertaken to explore the short-term capital requirements and long-
term viability of non-commercial "alternative" UHF broadcast stations.

3) Cable television should continue to be considered as a major means of distributing alternative television, particularly in view of three factors: 1) its initial success in many communities; 2) the forthcoming end of the experimental period of five years free access to the designated channels and 3) the recent report of a cabinet-level committee calling for the elimination of free public access channels and for common carrier status for cable. Should this latter recommen-
dation be adopted and should common carrier charges be high, or even for some alternative television groups minimal, such a development might well hurt access. Therefore, it is possibly in the best interests of alternative television to make the current public access rules work. The implications of the proposed change should be carefully examined.

4) Video is not the only tool for alternative television. Super-8 and various other inexpensive film formats should be more fully explored for television program production and usage.
5) The software produced, and not the tools used, is the major reason for community alternative television innovative approaches. Various processes of developing effective software should not only be explored and shared, but should fully utilize and adapt television technology for use by the public at large.
Chapter 1

INTRODUCTION

Philosophical Boundaries: Scope and Point of View

Recent history of the television industry has been filled with accusations declaring television a 'boob tube', a 'vast wasteland', a bastion of liberalism, and most recently, a medium regulated by commissioners whose major interest is in protecting the profits of the broadcast industry they are supposed to regulate rather than the rights of the viewing public. Much has been written and said about the various effects of mass media, radio and television on our society, and culture. Much has been written in defense of, or in criticism of broadcast television, which along with radio, has historically been the technology that is the vehicle of mass communication.

The quality of programming that the broadcasting industry provides has been criticized by former F.C.C. Commissioner Nicholas Johnson as follows:

By and large broadcasting today is run by corporations which have a virtual lease in perpetuity on the right to broadcast. These corporations are like all other businesses, they are interested in maximizing their profits. The market value of their business including the right to broadcast, is directly related to the profits the business returns...But we must examine the economic incentives as well. Broadcasters act to gain as large an audience as possible - and the audience is attracted by the broadcasters programming. Programming is chosen for the number of people it can deliver. Its selection need not reflect the intensity of the audience's approval, or what the audience would be willing to pay for
the programming. In fact, the incentive to get the largest audience regardless of good taste has driven the networks to arrogant indifference to "what the public wants."1

During the early 1950's, coaxial cable began to supplement over the air broadcast as a means of television signal distribution to the public. By the middle sixties, and early seventies, this means of distributing television signals began to be heralded by some as a potential cure for the various ills of broadcast television. Because of its increased channel capacity, and broadband services cable television was believed to have great potential as a public service utility. However, as we move into the middle seventies, cable television's role in the "fourth revolution," the information explosion has become tangled in a mire of financial difficulties, and questionable social acceptance. Gerald M. Walker, Consumer Editor for Electronics magazine states that:

The key to providing such new services (such) as a choice of first-run movies, customized college courses, shopping services, and fire and burglar protection, is two-way television capability. But adding a return channel for bidirectional communication requires much more than plugging in two-way amplifiers and some crossover filters. ...It cost more than the relatively small CATV manufacturers have been able to raise in the past....The problems involve system design, hardware and cable reliability, software development, marketing new services and of course, financing the investment. Put it all together and you've got trouble on the way to the wired city. 2

The wired city, and wired nation dreamed about: the broadband communications network outlined by President Johnson's Task

1Nicholas Johnson, How to Talk Back to Your Television Set, p. 20.

2Walker, Gerald M., "Special report: Cable's path to the wired city is tangled," Electronics, May 8, 1972, p. 91.
Force on Telecommunications in 1968 is well behind schedule.

While all the projections, speculations, and commentary about television, and its cabled potential were being expressed, some things did happen in the television world that have neither been well documented nor analyzed or even acknowledged. With the advent of half inch, and similar format low cost television production equipment, the "mass" usually associated with television along with the myth of its associated high production expense has been shattered. Low cost television production groups sprang up all over this country and Canada, and later in Europe, the rest of the western world and Japan soon after portable, battery operated units became available in 1968. The programs that were produced were brand by these groups as alternatives to the slick productions of over-the-air broadcast television. These rough programs, initially about local issues, and concerns, or artistic statements about television's unrealized potential could not be broadcast. This situation was usually due to scarcity of time available on broadcast channels, technical problems until recently associated with 1/2" EIAJ-1 standard video recorders, and political or union considerations based on a broadcast stations written or unwritten policies. Non distribution of alternatively produced programs by broadcast stations helped create a need to discover another means to distribute the programs, and secure some sort of audience.

Alternative Television is a television baby brought up in a different environment than the adolescent cable television industry, and the more middle aged-parent, broadcast television. Born out of different concerns, it is the present status, and future trends now prevalent in this relatively ignored area of television that this
thesis is concerned with; the internal interactions, problems, tools, production techniques, growth, and future of Alternative Television; its interactions with broadcast television, cable interests, regulatory bodies, and the communities and areas in which alternative television groups operate.

The Alternative Television Movement has adopted a wide variety of non-broadcast distribution techniques to deliver their programming to usually small-sized, intimate audiences. Using much the same technique Alan Lomax used when he went into the back country of America with an audio tape recorder taping the songs of individuals unknown to the then growing record industry, one aspect of the Alternative Television Movement can be seen as using video tape as an intimate audio and visual record that both documents and stimulates local traditions of both urban and rural America.

Viewed by individuals, or groups in small video theaters, television takes on unusual dimensions. No longer is a mass audience of millions necessary for justifying the airing of a program. From the individual artist with a porta-pac and monitor to video theaters; Alternative television concerns itself with a directed programming, local audience and a wider choice of both video producers and materials suitable for television.

As the guerilla television of the late 60's began to expand into the art museums and universities, it began to pound on the doors of the more traditional means of program distribution i.e. cable television, and over-the-air broadcast television. Cable television along with its blue sky hopes for public services brought with it a legal means whereby the public could have access to television.
Cable systems have aired alternatively produced programs but, until recently, with a skepticism that manifested itself with minor engineering arguments about quality, stability, and compatibility of the programs produced. The results of this sometimes justified skepticism was bad reception and non-airing, sometimes resulting from minor technical problems that some company engineers did not wish to solve. The non availability of compatible playback equipment was an additional obstacle. As public access is beginning to become a reality with some cable companies, in some communities, low cost television technology has become sophisticated enough to be aired by a mass distribution system - i.e. broadcast television. The small format video usually used by alternative television groups was electronically incompatible with broadcast signals. The only way in the past to broadcast small format video signals was to point a broadcast television camera at a monitor that was playing the small format video signal.

Two companies now market a machine that changes the small format video signal into a broadcast quality signal without loss of signal resolution. This machine, a time base corrector, has presented alternative television groups with two options. The first is the seeking out of broadcast stations that will present alternative television program over the air, (even though the broadcast industry has shown repeated reluctance to air alternatively produced programs). The second option involves the acquiring of a license to broadcast by alternative television groups.
Thesis Objectives

The primary objectives of this thesis are:

1) To define 'Alternative Television'. Many different types of television activity have been listed under the catch all category of Alternative Television. The author asks a series of questions to aid in defining criteria for identifying Alternative Television.

2) To document, and analyze the tools, production techniques and problems of the Alternative Television Movement. The author conducted a survey of alternative television groups. The results of the survey are discussed, along with information about a variety of alternative television groups discussed in the literature and received during personal interviews. The Alternative Television movement itself has produced a wide variety of hand written, mimeographed, blueprinted, video, and magazine information about itself that is by nature hard to get, dated, or of local significance. This information, along with the survey results, personal interviews, and the established print media are used as resources for the sections of the thesis concerning the tools, production techniques, and problems within the Alternative Television movement.

3) To examine Alternative Television's relationship with broadcast and cable television. Cable television is considered as a major means of distribution for alternatively produced television. The public access provisions of the FCC cable regulations provide for mandatory channel space. The interactions of alternative television individuals and groups with the cable industry are examined, along with pertinent FCC regulations. Various aspects of using CATV as a means of distributing alternative television are discussed and summarized.
Broadcast Television as a means for distributing alternatively produced television programming is examined.

4) To summarize and make recommendations based on the research findings. The future of Alternative Television and its various modes of distribution are assessed in light of the research findings. A set of recommendations are presented and are discussed.

Thesis Methodology

The author has employed three basic modes of obtaining the information contained in this thesis. They are:

1. Personal experience
2. Survey and interview
3. Printed literature.

Personal experience. The author has been an active member of alternative television activities in St. Louis since 1972 and is in contact with similar activities in the U.S. and Canada. He is an active member of Community Media, Incorporated, a not-for-profit organization composed of a group of area persons involved in media related projects throughout the St. Louis metropolitan area. One major concern of ComMedia is the establishment of a community video access center in St. Louis.

Two other local St. Louis groups, Cable Concern, and the Arts and Education Council Committee on Cable Television are ad hoc committees representing the interests of the public, (Cable Concern) and the educators (Arts and Education Council Committee). They formed in 1973 in response to the granting of a 1969 cable television franchise by the City of St. Louis. The author was involved in the initial
stages of formation of both these groups, and has subsequently maintained contact with their operations.

To gain some first-hand knowledge about the production of television programming using low cost video equipment, the author participated as a co-director of the Young Person's Television Workshop held from June 1972 through August 1972. Sponsored by the St. Louis Mayor's Council on Youth, this television workshop transported a 1/2" videotape studio to various community centers in the city twice a week, held workshops, and produced closed circuit television programs on center activities. From October of 1972 until January 1974, the author taught a video class at the Clayton Alternative High School.

In September 1973 Washington University established a video center using 1/2 inch EIAJ-1 standard equipment in the dormitory area. The author has helped establish programs and workshops with this program (Studio-40 Video) since its inception. He has taught various workshops for students, faculty, and staff, has maintained the studio, made various instructional video tapes, and developed the workshop curriculum.

For a short time, the author helped with the reorganization of video activities at the Judevine Center for Autistic Children.

Survey and interview. The author was able to attend the Matrix International Video Conference in Vancouver Canada. During the summer of 1972, the author attended both the National Public Access Conference in Fullerton California, and the National Cable Television Association Convention in Anaheim, California.
During both conferences, and the N.C.T.A. convention, the author surveyed by printed questionnaire and interview alternative television groups for specific information concerning groups formulation software production, hardware and distribution techniques. Interviews were conducted with persons involved in both federal government regulation and policy formulation as well as Cable television operators and owners, and other persons involved with Alternative Television. Conversations were held with various N.C.T.A. officials, and selected cable companies were surveyed by letter about Public Access and other local originators use patterns and projects. These letters and the Alternative Television questionnaire can be found in Appendix A and F.

**Literature.** Published and non published material were extensively sought. Much material from alternative television groups from the U.S. and Canada was collected. Various reports from cable companies on operations, and plans for public access or local origination facilities were gathered in addition to information gathered in the surveys conducted by the author.

**Thesis Organization**

The thesis is divided into four major areas. The first area includes chapters two and three and is concerned with defining alternative television and the alternative television movement. Chapter two asks questions, and sets criteria for a definition of alternative television, while Chapter three discusses the various hardware available for use by alternative television groups and individuals.
The second area (Chapter four and Chapter five) looks at the activities of various alternative television centers and individuals in the United States and Canada. The third area includes Chapter six through nine and is concerned with cable television, and broadcast television as a means of distribution for alternatively produced programming. Chapter ten assesses and summarizes trends, forecasts possible developments and presents recommendations concerning alternative television.
Chapter 2

WHAT IS ALTERNATIVE TELEVISION?

Introduction

To define Alternative Television is not an easy task. In a simplistic way, Alternative Television might be thought of as an alternative to broadcast or commercial television. But Alternative television seems to connote a broader social use of television as well as imply an alternative distribution system.

Distribution is only one criteria for Alternative Television. It is probably the least important. Possibly the most important handle on Alternative Television is to grasp the process involved in its program production techniques, and philosophical approach to the television medium of communications.

In beginning to get a hold on the conceptual definition of Alternative Television, four questions should be asked. The answers to these questions I feel should be criteria for understanding, or defining the Alternative Television Movement. These four questions are:

1) Who runs the equipment?
2) How is the equipment to be accessed?
3) Who decides what and when the programs are to be shown?
4) Who controls the distribution system?
Who Runs the Equipment?

It's not so much what type of hardware is used, though that is part of it, but who is behind the hardware, pointing it, editing, choosing. Is it company personnel, or interested citizens. Skilled operators, or volunteers? The type of hardware does make a difference - the difference between using a portable inexpensive battery operated VTR (parta-pac) to shoot a town meeting, or a larger one inch, and other less mobile television units. Are there social, or cultural expectations assumed when different sorts of television equipment are placed on the scene? The point of view of the person running the equipment could have as much to do with what is captured on the tape as the adaptability of the equipment to changing situations. Michael Shamberg stated during the recent National Cable Television Convention that a major difference between network reporting of the national political conventions and that of Top Value Television (T.V.T.V.)\(^1\) was mobility of equipment used, the adaptability of the tools to a changing center of activity, and the different political philosophical points of view of the many operators.\(^2\)

Taking Top Value Television as one model of an approach to Alternative Television, many differences are evident from commercial broadcast television including equipment and choice of personnel.

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\(^1\)Top Value Television is a quasi-commercial group of individuals based near San Francisco and headed by Michael Shamberg. Originally organized to cover the National Political Convention in 1972 they have since been producing programming sold commercially that expresses an alternative political and social point of view.

\(^2\)Michael Shamberg, Member, Top Value Television and past editor of Radical Software; Workshop on Public Access, N.C.T.A. Convention, Anaheim, California, June 1973.
Top Value Television advertised in media directed towards persons and groups involved with community or local television projects. The persons who responded usually had not been involved with standard communications industry jobs; i.e. broadcasting stations or cable companies. They came from community media groups from all over the country and participated in the production in a variety of ways.

The Top Value T.V. coverage of the Democratic and Republican convention was handled in a similar fashion to the Pacifica Radio Networks coverage of the same event. There was no anchorman, and no single news voice. The news reporters were as varied as personalities heard over community radio stations. Instead of reporting from their "home towns," they were now reporting from Miami. The convention in this way became local news, of local, and personal import. Just as Pacifica Radio affiliates called into their home station, TVTV affiliates sent tapes back to their home distribution center. Simultaneously these tapes were edited into a series of final programs produced for national distribution through commercial channels. The programs produced are different in nature than network news coverage of the same events. Though much depends on personal choice, both Top Value TV and Broadcast Television presented seemingly objective news coverage, and ended up with two totally different views of the same 'news'.

3Westinghouse bought some of the final programs to be aired by their affiliates.
How is The Equipment to be Accessed?

The usual access to television media is by way of commercial broadcast stations. Who can access the broadcast equipment is a rhetorical question that union and management negotiate about at infrequent intervals. A requirement for alternative television is that anybody who wants to, and is willing to learn how should be able to access production equipment, and thereby produce his or her own program. Many different alternative television groups have many different procedures to ensure availability of equipment to those who wish access. These problems and concerns will be discussed more thoroughly in Chapter 4.

Who Decided What and When Programs are to be Shown?

What time slot, and what type of policy, or censorship is there in these decisions? Nielsen ratings, and network competition are not necessarily the concern when delegating a time to air an alternatively produced program. Showing them after twelve midnight, or early Sunday mornings is not necessarily the best time to air locally produced programs. Channel space, network programs, and paying through sponsors for time are more in the realm of broadcast, and cable companies. Depending on the distribution system it could be a decision of those who produce an alternative produced program when, to whom and in what way a program is shown.

Who Controls the Distribution Systems?

Both a political, economic, and social question, control of the media has been a concern since media began. There are no networks, and the resultant problem of centralization of media ownership are not
problems in the Alternative Television Movement. Most productions are made 'at home', concerning local responses to a variety of issues. These productions are local talent, or national talent in a local surrounding about local issues. These programs are produced and directed by 'in house', sometimes novice, producers. Part of what makes alternative television alternative is that it could involve, and usually does involve the people that it affects, and affects the people it involves. This means essentially, that a larger share of the public produces programs, airs opinions and points of view, and makes media related decisions. Therefore, they control the alternative media. No single person, or station manager controls the information. No union-management agreement controls access to the equipment. The medium of alternative television must be controlled by the people if it is to be alternative. If this criteria is not met, then the medium has but shifted power to a different media elite. How these questions are answered by various alternative media projects and their results in terms of software, distribution, and access guidelines constitute a major concern of this thesis.
Chapter 3

THE TOOLS OF ALTERNATIVE TELEVISION

Much of the problem faced by non-professionals using television equipment in the past has been due to extreme sophistication and complexity of studio oriented equipment. Broadcast television has traditionally used complex, large-studio electronic video recording devices. Film is used for a majority of on-the-spot news recording. Prior to the development of video tape, most studio work was broadcast live. All of this has lead to what I would call a "black box" mystique about television production.

Just as the advent of consumer audio tape transformed the radio industry into the radio that we are familiar with today, low cost consumer video products are nearly on the market. Equipment now available is within the price range of institutions, and individuals in the upper middle class. From radio sprang a large consumer market for records, recording devices, players, and recently electronic musical instruments including the electronic sound synthesizer. Records, and audio tape can be said to have helped formed much of the musical culture that now surrounds us. Electronic musical instruments, local bands, and even the home electronic recording studio are all consumer items available over a wide price range. With this, comes the tacit assumption that what is heard over the radio can be recreated in the home audio studio. Nearly everyone
has heard their voice played on audio tape. Nearly everyone has sung into a tape recorder. Some people have seen the possibility that they or their group can have a record cut, with the hope of leading to the glory of mass stardom. All of this is possible because the technology of audio recording is accessible by the consumer and is within the financial capability of most individuals.

Similarly, television recording technology also has the potential of becoming a consumer item. Unlike radio, which preceded television by thirty years, this technology has been relatively recently developed. Institutions can afford simple black and white television studios at the relatively inexpensive price of about five thousand dollars. Color television is becoming available to institutional consumers at somewhat higher prices but at prices which are low, compared to the tens of thousands spent for one broadcast recorder, not to mention the hundreds of thousands necessary for a studio. The technological development that has been one of the greatest boosts to a consumer based television is battery operated video recording and playback decks, along with a camera with built in microphones that can be carried on one’s shoulder. These self contained black and white studios called porta pacs cost about $1,525\textsuperscript{1} for the machine, and necessary accessories.

Video is not the only tool of alternative television. Super-eight\textsuperscript{R} film systems have recently developed a level of sophistication similar to sixteen millimeter film. New super-eight systems include

\textsuperscript{1}For Sony porta-pac. Quoted by Raymer-Anderson Inc., a St. Louis distributor, September 1973.
an M.I.T. developed camera, and editing ensemble using crystal sound synchronization which costs approximately $7,000\textsuperscript{2}. This system has been used successfully on broadcast television.\textsuperscript{3}

Fujica, and now Kodak have come out with cameras, projectors, and film that record and playback sound simultaneously. The Fujica system is optical, with a light emitting diode, while the Kodak system records the sound on a magnetic stripe film.

One way in which television film and still photography have always interfaced is through a film chain. Good film chains, although expensive, are tools that are necessary if the public is to be given access to media. Kodak and Fujica both have developed similar systems for the home transfer of Super-eight or "Single-eight\textsuperscript{R}4 film onto television sets. In effect these systems are inexpensive mini film chains. Film and still photography have been available to the consumer for some time.

The purpose of mentioning television interface with film and still photography is not to bring up or get into the merits of video versus film, but to point out that video recording is not the only means to make programs for television. Super-eight and stills are already accessible to everyone. They can play a role in bringing


\textsuperscript{3}The Leacock Hamilton System used to film various segments of "The American Family" that were later aired by many NET affiliates. Filmakers Newsletters, Vol. 6, #6, March, 1973, p. 22.

\textsuperscript{4}Single-eight\textsuperscript{R} is the registered trade mark held by Fuji Photo Film Company for an 8mm film exactly the same format as "Super-eight" (registered trade mark of Kodak Inc.), but housed in a cartridge compatible with Fuji Cameras.
the production of television programming and access to the visual media within the reach of citizens.

Table 1 shows a comparative abridged list of the video tools that are presently available on the consumer market. As can be seen, Panasonic markets a compatible half inch cartridge machine, and a four thousand dollar color studio camera. Two comparable, color cameras are the Akai portable and the Magnovox portable. Panasonic has recently introduced a half-inch color editing deck that does insert edits. An insert edit allows one to edit short sequences in succession without loss of sync, (picture stability), or picture quality. This compares with assembly or mechanical edits that need time to regain proper synchronization to insure a stable edit. Three-quarter inch machines are all color, and all U-type cassettes. The ordinary broadcast standard (high band quadruplex) is included in the table for the purpose of comparison. The portable Norelco broadcast unit mentioned (Table 1) costs upwards of $50,000.

One Quarter Inch Video

Currently made only by Akai of Japan, one quarter inch video units include portable color and black and white units and 'studio' editing decks. These machines are less expensive to run than larger format video due to the cost of the video tape (interchangeable with professional 1/4" audio tape). It is rumored that Akai will soon drop all black and white video machinery in favor of low cost 1/4" color equipment which they have recently developed. The first step in this direction came about in late 1973 when they introduced a
### TABLE 1
SELECTED TOOLS OF ALTERNATIVE TELEVISION

<table>
<thead>
<tr>
<th>Tape size</th>
<th>Company</th>
<th>Format</th>
<th>Cartridge</th>
<th>Cost for portable unit</th>
<th>Edit</th>
<th>Insert</th>
<th>Color</th>
<th>Camera</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>Aki</td>
<td>own</td>
<td>no (soon)</td>
<td>$1,400/6,000</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>Panasonic/Concord</td>
<td>EIAJ-1</td>
<td>yes</td>
<td>$1,700/1st</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>studio</td>
<td>$4,500</td>
</tr>
<tr>
<td>1/2</td>
<td>Sony</td>
<td>EIAJ-1</td>
<td>no</td>
<td>B&amp;W $1,525/Col. $1,500</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>B&amp;W</td>
<td>$500 up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Magnavox</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/4</td>
<td>J.V.C</td>
<td>U-type</td>
<td>only</td>
<td>-- still frame</td>
<td>no</td>
<td>yes</td>
<td></td>
<td></td>
<td>$1,100-</td>
</tr>
<tr>
<td>3/4</td>
<td>Panasonic/Concord</td>
<td>U-type</td>
<td>only</td>
<td>-- no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td></td>
<td>$1,100-</td>
</tr>
<tr>
<td>3/4</td>
<td>Sony</td>
<td>U-type</td>
<td>only</td>
<td>-- still frame</td>
<td>no</td>
<td>yes</td>
<td></td>
<td></td>
<td>$1,100-</td>
</tr>
<tr>
<td>3/4</td>
<td>Wollensak</td>
<td>U-type</td>
<td>only</td>
<td>-- no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td></td>
<td>$1,100-</td>
</tr>
<tr>
<td>1</td>
<td>Ampex</td>
<td>no</td>
<td>--</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
<td>$4,000 up</td>
</tr>
<tr>
<td>1</td>
<td>I.V.C.</td>
<td>yes</td>
<td></td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
<td>$4,000 up</td>
</tr>
<tr>
<td>1</td>
<td>Sony</td>
<td>no</td>
<td>--</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
<td>$4,000 up</td>
</tr>
<tr>
<td>Broadcast:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ampex</td>
<td>yes</td>
<td>(yes -)</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
<td>$25,000 up</td>
</tr>
<tr>
<td>2</td>
<td>R.C.A.</td>
<td>yes</td>
<td>Norelco)</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
<td>$25,000 up</td>
</tr>
</tbody>
</table>

5Compiled from manufacturer's literature.

6Estimate from list price and quoted from area distributors. Costs of equipment often change rapidly. These costs reflect the time period 1972-1973.
portable hand held color camera that cost approximately four thousand dollars\textsuperscript{7}. Previously, color cameras cost well over ten thousand dollars, and were nowhere near portable.

**Half Inch Video**

By far the largest selling technology for non-broadcast studio oriented and alternatively used television, half inch video was plagued with a compatibility problem, as is still the case with one inch format machine. Prior to 1968, all half inch video could only be played back on machines of a similar brand name. The Electronic Industry Association of Japan set production standards so that all machines made prior to 1968 complying with the EIAJ standard could play back tapes made on a competitor’s machine\textsuperscript{8}. Now, tapes made on a machine of one company can be played on a machine made by a competing company. The Japanese are by far the major producer of half inch video equipment, and the EIAJ standard has been adopted all over North America.

There is a wide variety of compatible 1/2” video equipment available for groups involved in television production. Of course,

\textsuperscript{7}Sales Dynamics, St. Louis Akai Distributor, November 20, 1973.

\textsuperscript{8}Electronic Industries Association of Japan (EIAJ) set tape speed, head spin rate, tape path angle, and distance between various recording components (all dissimilar prior to 1968). Various other electrical specifications were set. These standards are adhered to voluntarily by most manufacturers in Japan, and 1/2 video tape machine manufacturers elsewhere. Adherence to these standards insures that a program recorded on one brand EIAJ machine will play back on another brand EIAJ machine. The EIAJ has begun to set standards for plug, and cable configuration that would allow compatibility between machines without the wiring of special plugs. There are 2 EIAJ standards: EIAJ-1 for 1/2” machines, and EIAJ-2 for 1/4” machines. The U-matic
the type of studio planned depends on the projected use. One porta-pac might be sufficient. Community Media of St. Louis estimates that to run a community oriented video access center serving many of the communities in St. Louis the capital cost would be close to $150,000 for the first year of operation. The hardware budget alone is estimated to be over $50,000. Staff budget, office rental, publicity and mobility amount to close to $80,000. Table two shows an amended version of a first rough budget for a projected video access center in St. Louis.

Small black and white half inch studios cost about $5,000 to $6,000 and consist of a 1/2" editing deck, two studio cameras, one portable unit, two small monitors, one large monitor, one switcher fader, and various assorted inexpensive lights, microphones, and cables. If run on student or volunteer labor, with in house repair and service, a $6,000 studio like the one mentioned above could cost as little as two thousand dollars a year to run, and upkeep. One of the largest problems with this type of studio is that it is presently considered unreliable in terms of editing.

3/4 inch video cassettes is a Sony Corporation 3/4" cassette adopted by all 3/4" video cassette machine and tape manufacturers.


10Ibid.

### TABLE 2

**EQUIPMENT BUDGET FOR A 1/2" STUDIO**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1&quot; Editing deck (Sony EV 320)</td>
<td>$ 5,000</td>
</tr>
<tr>
<td>2 Studio Cameras</td>
<td>2,000</td>
</tr>
<tr>
<td>1 1/2&quot; Editing deck (Panasonic NV 3130)</td>
<td>1,500</td>
</tr>
<tr>
<td>1 1/2&quot; Recorder (Sony AV 3600 or AV 3650)</td>
<td>1,200</td>
</tr>
<tr>
<td>4 Portable 1/2&quot; units</td>
<td>6,500</td>
</tr>
<tr>
<td>4 Camera adaptors of portable units</td>
<td>500</td>
</tr>
<tr>
<td>5 Small V.T.R. Monitors</td>
<td>1,000</td>
</tr>
<tr>
<td>4 Large V.T.R. Monitors</td>
<td>1,500</td>
</tr>
<tr>
<td>1 Video switcher with genlock, and two tape source inputs</td>
<td>1,000</td>
</tr>
<tr>
<td>assorted lighting equipment</td>
<td>750</td>
</tr>
<tr>
<td>assorted television lenses</td>
<td>750</td>
</tr>
<tr>
<td>equipment cases</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Audio Equipment</strong></td>
<td></td>
</tr>
<tr>
<td>2 shotgun mics</td>
<td>750</td>
</tr>
<tr>
<td>6 directional mics</td>
<td>300</td>
</tr>
<tr>
<td>4 other mics</td>
<td>120</td>
</tr>
<tr>
<td>1 mic mixer</td>
<td>250</td>
</tr>
<tr>
<td>1 intercom system</td>
<td>200</td>
</tr>
<tr>
<td>1 audio tape recorder</td>
<td>600</td>
</tr>
<tr>
<td>1 sound amp and speaker monitors</td>
<td>600</td>
</tr>
<tr>
<td><strong>Consumables</strong></td>
<td></td>
</tr>
<tr>
<td>Service contract</td>
<td>2,500</td>
</tr>
<tr>
<td>Insurance</td>
<td>4,000</td>
</tr>
<tr>
<td>Video Tape 1&quot;</td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>5,500</td>
</tr>
<tr>
<td>Video Tape 1/2&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>1 Time base Corrector</strong></td>
<td>9,000</td>
</tr>
<tr>
<td>1 Video Projector</td>
<td>3,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$55,520</td>
</tr>
</tbody>
</table>

---

12Amended by the author from ComMedia Inc. budget for a year round projected Video Access Center.
capability and signal stability. Until approximately a year ago, one could only assemble edit 1/2 inch programs. Assemble editing is a mechanical edit with a sound drop out and a sync problem that causes varying degrees of edit signal instability depending on (among other factors) adequate warm up time prior to editing. New equipment available within the last year in half-inch technology has insert edit capability. There is sound delay, no sync loss, and picture stabilization is not a problem.

The largest technical problem with half-inch video is that its picture signal is electronically incompatible with broadcast signals. Though one can always 'dub-down' from broadcast quality (2" tape) to any smaller format, the reverse is not true. You cannot electronically dub up the line to high band quad. This has meant that the only way a half-inch video tape could be played back over the air was for it first to be played back over any monitor, and recorded, or sent out live via a studio camera pointed at the monitor. Though one station in St. Louis does just this, the resulting picture quality is worse than the original. In June 1973 two manufacturers developed a machine that corrects the electronic problem associated with any of the smaller formats, thereby making the signal compatible with broadcast equipment. Half inch, and other non-broadcast formats can now be interfaced directly with a broadcast over-the-air system. The machine, a Time Base Corrector costs $5,000 for the black and white model and $9,000 for the model that corrects color signals. As of January 1974, there was a six month back order of the color capable $9,000 model.
Three Quarter Inch Video Cassettes

Developed and marketed by Sony of Japan in 1972, 3/4 inch U-type cassettes have been the long awaited simple, and reliable video machine that some major consumers have been waiting for. All 3/4 inch cassette machines marketed to date are compatible with each other. They are all color capable, with built in R.F. converters to play back over any television set. They are extremely easy to operate. They can record, and assemble edit. Weighing forty to seventy pounds, they are not shoulder portable. Attached to inexpensive or expensive color or black-and-white cameras, they can perform as inexpensive production units. These machines have the capability of attaching themselves to any tape size studio with minimal problems, and are designed for industrial, educational, and marketing uses performed by even less trained personnel than 1/2 inch equipment requires. Very little maintenance is required. Options in this type of color system include a relatively low cost television projector and screen. The 3/4" cassette machines range in cost from under $1000 for playback units to close to $2000 for editors.

One Inch Video Systems

Another non broadcast format widely used is the one inch tape format. The stability and durability of one inch television signals was a large selling point for groups and institutions that needed video hardware before 3/4 inch cassettes existed, or 1/2 inch systems increased in sophistication. Good editors and one inch broadcast quality recorders are available. In this tape size,
each manufacturer usually has his own recording format. This causes a compatibility problem. When playing a tape made on a 1" machine, a similar 1" brand machine usually is necessary for proper play back. One inch machines also cost well over thrice as much as half inch machinery.

Two Inch Broadcast

Two inch broadcast systems use a different method for laying the information on the tape than smaller tape size equipment. Smaller format machines use a pair of spinning recording heads. These heads lay down a series of slanted horizontal lines of information on the tape. This system of video information storage is called Helical Scan. Commercial broadcast systems have a series of four heads that spin in a circular fashion. This type of system is called a Quadraplex, or Quad system. Costs for Quad systems can range upwards of $25,000 and are well beyond all but broadcast station needs. Recently, Phillips/Norelco developed a 'portable' color 2" recorder, camera ensemble. These recorder units have been used at political conventions, and during the President's trip to China.

Other Video System

There are a variety of other systems now available for the home consumer. Different types of cassette recorders, and playback units that can be attached to a home T.V. set are on, or soon to be on, the department store market. Some systems do not allow the consumer to record. All cost under $2,000. One interesting unit costing around $400 is a video disc player soon to be marketed by Phillips. Using a laser as a needle, the information stored on the
disc is converted to video without any physical contact. Another system that failed to penetrate the consumer market is the now discontinued Carta-Vision. Using its own format cassette, the video cartridge machine is housed in a large T.V. console and does not allow you to record. Software available includes movies, sports, and entertainment specials.

The Alternative Television movement has depended very heavily upon the reliability and low cost of portable half inch video machinery. Over the past few years, this machinery has gotten lighter, more reliable, more sophisticated, and is adaptable to nearly any type of contemplated television use. The porta-pac is the center of an alternative television studio. It allows for mobility and is easy to operate. It is quiet, non imposing, and it can go where studio cameras can not and record with little interference in situations in which a 16 mm movie camera would be a bulky and noisy addition. It is extremely easy to use. This low cost, portable unit is limited. There is no way to make a edited program without rudimentary studio facilities. For some types of programs 1/2" studios are sometimes inadequate.
Chapter 4

ALTERNATIVE TELEVISION GROUPS

Introduction

From Appalachia, to Zion, New York to Los Angeles, alternative video centers and video projects that involve individual community persons are in operation, or the seed for their operation have been planted. Health care, local news, local sports, and politics, community awareness and individual art, crafts, history and culture are a part of these projects. Somehow, the society supports these endeavors, and the question appears: How are groups organized to produce software and how is that software distributed?

This chapter of the thesis is divided into two major sections. The first discusses a survey of alternative television groups that the author performed at two alternate media conferences. The second section of the chapter is an attempt to catalogue alternative television groups and describe their operation, and major modes of software distribution.

The Survey and Conference

At the National Public Access Conference in Los Angeles, citizen access and software production groups were surveyed, using a questionnaire written and distributed by the author. (See Appendix E). This Conference was held concurrently with the National Cable Television Association (N.C.T.A.) convention. Eighteen of the sixty or
so groups participating responded to the questionnaire. Though over half of the respondents were from California the remainder seem to be a somewhat random selection of groups from all over the U.S. (See Figure 1)

The survey was designed to find out specifically the type of groups that were involved with alternative programming now and to what effect they operated. Questions were asked concerning the type of equipment that they had available, group membership and policies, program content, and distribution techniques. The author was specifically interested in finding out the various different modes of distribution and specific opinions on their effectiveness, along with techniques, problems and suggestions concerning alternative television. (See Appendix A for a copy of the questionnaire).

Figure 1 shows a breakdown of the respondents by general affiliation and geographic location. One third of the groups were based in rural areas. Only two of the 18 groups were commercial in nature. Two of the respondents were affiliated with church groups. Two projects were minority directed. A Chicano group was directing a rural access project while a black group was organizing an access project in their urban community.

There were mixed feelings about the use of cable TV as a distribution system for alternative TV. Many of the respondents were in areas without CATV. In some situations the nearest cable system was as far as 25 miles away. Tapes were aired over these systems but were "not seen in our local area." For some groups cable did not

---

1 From the author's survey results, June 1973. These surveys are
FIGURE 1
GEOGRAPHICAL DISTRIBUTION AND AFFILIATION OF SURVEYED VIDEO GROUPS

KEY:
C Church  M Minority
Com Commercial b Black
F Film Group c Chicano
I Individual R Rural
S School
have enough penetration. Cablecasting was defined by one respondent as a "narrowcast - directional medium" only suited to alternative television if the program reflected a need of the systems subscribers. There seemed to have been numerous problems with "program promotion and publicity scheduling." Yet, sometimes there was a public access director who was an aid to the groups requesting access. Cable was in some cases the only and best means to reach an audience. One group was to air tapes over UHF broadcast through a time base corrector. Two other groups had access to 2" broadcast equipment. One was a commercial group, and the other was the Chicano respondent. Many of the respondents showed tapes in the streets or in closed circuit video theatres.

Most of the respondents used video as a means for community development. Many respondents felt that the initial video experience along with active community involvement with the project was a key to a successful project. One respondent defined three separate areas of service that a video center "must be prepared to offer." They are: 1) "access to equipment" including training; 2) a "direct production service" for and about various community groups and 3) an "independant tape production" capability by the center staff.

\[\text{on file at the Center for Development Technology, Washington University, St. Louis, Missouri.} \]

\[\text{\textsuperscript{2} Ibid.}\]

\[\text{\textsuperscript{3} Ibid.}\]

\[\text{\textsuperscript{4} Ibid.}\]
Eighteen observations is an incomplete sample of groups, individuals and institutions doing alternative television in the United States. Along with the survey the author has made personal observations of many groups, their literature and their tapes. He has been in conversations with active individuals and has attended two major conferences devoted specifically to community access to the television spectrum here and in Canada. These conferences were specific to the problems related to the use of portable and not so portable video hardware, and the establishment of viable alternative television.

The Matrix International Video Festival in Vancouver, British Columbia (the other conference the author attended) was a large get-together of groups from all over the world. Non U.S. groups were not surveyed (primarily because of a feeling on the part of Canadian attitudes and the author that a Canadian survey should be conducted by Canadians. This feeling comes from across the border and is well respected by the author.) The Matrix Conference was a live video group cataloging attempt sponsored by various Canadian West Coast video and art groups along with the Department of State in Ottawa.

The National Public Access Conference was held in Fullerton, California concurrent with the N.C.T.A. Convention in neighboring Anaheim. One reason for calling this conference was to establish a national organization that would facilitate citizen-video groups in various parts of the nation by exchanging information and ideas amongst each other. A national organization was preliminarily set up (N.A.M.A.; National Association for Media Action) and a position paper was drafted and accepted by those in attendance at the conference. Time has yet to
tell if the organization will be an effective national arm for access
groups throughout the country. (Appendix B contains the N.A.M.A.
position paper).

Alternative Media Centers

The Alternate Media Center, New York City. The Alternate
Media Center is located in Lower Manhattan, New York, and is in the
Sterling Cablevision franchise area of the city's Manhattan Island
cable television franchising district. Funded in 1971 by the John
and Mary R. Markle Foundation "...to create working models for
citizens, and community participation in cable television," the
Alternate Media Center has its home in the Greenwich Village campus
of New York University. It is a project oriented center. One of
the first projects undertaken by the center was called the Greenwich
Village Charrette. A charrette is defined as "an accelerated social
planning process designed to encourage the widest possible community
participation." This first charrette involved planning for a new
public school, to thereby relieve an already overcrowded school
situation. Some twelve half-inch half-hour tapes were produced about
the school prior to the three day planning session with the community
about the new school. The thirty tapes that resulted during the
weekend planning session were made by the staff of the Alternate
Media Center. The original twelve tapes about the overcrowded schools
were made by trained community members. Though these tapes were viewed

6Ibid, p. 5.
over the cable by trained community members of the community who could subscribe, few of the P.S. 41 school district members were cable subscribers. The media center set up auxiliary viewing stations and set up monitors outside the school on top of a truck. Over forty tapes were viewed, this way. Though the Media Center said the response to these tapes was "consistently enthusiastic" no other information seems to be available beside that supplied by the Alternate Media Center catalogue. One of the most important documents that these tapes provided was a "unique record of the process whereby a community pulls itself together, and acts decisively." The tapes were stated to be proof that such a record can be made without expensive film equipment or the experiences of a professional T.V. crew that people often believe you need in order to pull off such a production.

Similar types of projects have been conducted by a media center in Charleston, West Virginia dealing with all sorts of Appalachian community problems. In Tennessee there was a project concerned with a T.V.A. proposal for a dam on the Upper Dick River which contained elements of community participation and education about the dam project. In Cape May, New Jersey, the Alternate Media Center helped to set up a video access center, and developed community participation projects. Similar projects were set up in Reading, Pennsylvania, Bakersfield, California, and Vermont. The Alternate Media Center has aided various projects in Manhattan (in both franchise

7Ibid.
8Ibid.
areas) and set up the Video Access Center in the Sterling district. At least two of these projects are now completely independent of the Alternate Media Center. The Reading, Pennsylvania Video Access Center and the Bakersfield Video Access Center are two community centers involved in stimulating the use of public access channels on the cable and interacting with video in the community as a tool in problem identification and a facilitator for change.

Reading, Pennsylvania. Late in 1971, American Television and Communication Corporation invited the Alternate Media Center to their cable company in Reading, Pennsylvania to set up a community video workshop. The workshop was to "make cable television facilities available to any individual or organization in Berks County." Berks County and Reading, Pennsylvania are within the franchise area of Berks Cable Co., an A.T.C. affiliate.9 This training would consist of:

1) training "community members to use portable video equipment";
2) schooling them "in program development," and 3) the production of a "weekly hour of community produced television programs to be shown on Berks Cable Company's local origination channel."10 By advertising in the Reading community newspaper and setting up a regularly scheduled viewing time, Video Tapestry, the hour show produced by the Community Video Workshop drew over fifty participants by its third month of operation. Over two hundred completed tapes were produced and most of them have been aired over the cable system.

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10 Ibid.
All of this was done with two porta-pacs and one editing deck. Originally the A.M.C. in New York lent the Reading Project all the needed hardware. Presently Berks Cable Company has bought its own hardware and has returned the original equipment to the A.M.C.

The project is still going. People interested in making programs must first go through a short course explaining the use of the equipment. The course is two to three hours long. There is no censorship, but the group involved in the workshop has the power to ask that sections of a program be deleted. This procedure was established after great publicity was given to Anton Perich, a New York City avant-guard video artist. Some consider Anton Perich's work pornographic. Video Tapestry is shown four times a week.

Bakersfield, California. In mid-1972, the Alternate Media Center was asked by another M.S.O., Warner Communications to assist in setting up a public access program in Bakersfield, California. The result was that in October an A.M.C. member was sent there to open a center. On October 18 the center began operation. Managed in the style of both the A.M.C. and the Reading Center, Bakersfield Community Video Center allows anyone access to producing programs and to air time on the cable station after participation in a short course. Four porta-pacs are available; two editing decks, microphones, lights, tripods, extension cable, and monitors are provided for by the Community Video Center. The center is separate from the cable origination studios. There are meetings twice a month to decide policy procedure and if needed, suggest changes in tapes that would raise community objections over moral issues. A schedule of the tapes
to be shown is published in the local newspaper. Over one hundred different tapes were produced by the Bakersfield center by June of 1973. Warner Communications footed the bill. Warner, as of March 1974 has withdrawn support from the Bakersfield Center, and two other Warner companies in Dekalb, Illinois and Pittsfield, Massachusetts have stopped funding their Public Access, local origination channels.11

**New York Video Access Center.** In September of 1972 the Alternate Media Center along with Sterling Cable Television and the Fund for the City of New York set up the Video Access Center in Lower Manhattan. The sole purpose of the center is to promote the use of public access by citizen of lower Manhattan. Fifteen volunteers formed the original group. This number has grown to equal close to fifty. Over eight thousand hours of volunteer time have been put into the center, and this during the first six months of operation. With a hardware grant of fifteen thousand dollars from Sterling, and twenty thousand dollars from the Fund for the City of New York, the video access center began operation. Sterling, after having paid for the equipment and half the cost of the insurance, has since contributed nothing. The next years budget is projected to be close to one half-million dollars.

The access center distributes a program guide for the public access channel (channel C) and is a viewing center for the cable in the Village - a relatively unwired part of the Sterling franchise area. (Appendix C is a weekly program guide for Channel C). They not only

train people in the use of video for cable, but invite groups to use video for their own purposes. In response, Village Neighborhood Television, a group of village residents not necessarily a part of the Access Center, are committed to using television in Greenwich Village.

**Washington, D. C.** A project conceptually similar to the New York Video Access Center exists in Washington, D. C. The Washington Community Video Center was established to develop "ways to use media for community development, information, and education."\(^{12}\) Located in a storefront in the Adams-Morgan area of Northwest Washington, it is based in an integrated, Puerto Rican community that finds itself shadowed by a main throughfare that is a relatively wealthy shopping and business district. The Washington Community Video Center is funded by a local Washington-based foundation. There is no cable in Washington, and none is projected for the near future. The possibilities of a cable franchise are now under study by the D.C. Commissioner's Office.

One major area of concern for the video center is in helping to insure that the people and communities in the District of Columbia have adequate access to a projected cable distribution system, not only as consumers, but as active participants. Other projects of the center include health care delivery (tapes concerning general health information played in various clinics throughout Washington), community awareness, and a monitoring of the government, both local

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and national; housing issues, survival information, access to broadcast television, and community neighborhood events. Neighborhood culture and news have been the subject of tapes, and articles produced by the video center. The W.C.V.C. has a limited amount of equipment. Training community members to use half-inch video and porta-pacs is not yet a paramount concern of the center. Most of the tapes produced are made by the center's own personnel, or well trained volunteers. Distribution of the programs is a major problem and even with a storefront studio equipped with a viewing space, a large community viewing audience is not always found. The storefront and the one large monitor does not allow a large audience. There are weekly showings, and at times there are shows in various other Washington communities. The Community Video Report, a twelve page newsletter, appears periodically and helps disseminate information about center activities to all areas of D.C. There is a speaker's bureau at the W.C.V.C., and many members of the collective have travelled throughout the U.S. speaking about center activities.

Wisconsin. There are a lot of small cable companies in Wisconsin. These companies are owned by both local business and the large Multiple System Owners (M.S.O's). There are two video centers: People's Video is located in Madison, and Input Community Video Center is in Milwaukee, on the near southside.

Partially funded by a foundation grant, Input developed out of the Milwaukee Independent Learning Center, (I.L.C.) an alternative high school program. Presently two former I.L.C. members and several students now coordinated the video center's activities. Using
standard half-inch equipment, the Input staff has made many tapes about the community's problems. These tapes range from documentaries about free clinics, and day care facilities in Milwaukee, to the reactions of women at a previously all boys school, Boys Tech. There is no cable in Milwaukee. Many of the tapes produced seem to be shown at the storefront center and at various locations throughout the city. The center has produced a handbook on cable distributed in all of Wisconsin. Input Community Video is dedicated to "providing video communications equipment and training to community organizations and agencies which are committed to solving social problems in the area."¹³ The Center and its staff have been active in producing recommendations concerning cable television in Wisconsin, and presenting these to the appropriate state and local officials.

People's Video in Madison is organized in a different way. There is cable in Madison, but until February of 1973 none of People's Video programming was offered over the Monona Cable Public Access channel. People's Video is a non-profit group that tries to produce a different viewpoint on the information which broadcast television either omits or edits out. Presently People's Video is seeking funds to set up a storefront center which would allow for citizen access to television production. People's Video is somewhat outspoken about cable ownership, community access and other Wisconsin cable issues. Many of their tapes reflect their political outlook. It is for this

reason they consider themselves to be the true alternative television — one that actively seeks citizen access and control of the electronic media.

St. Louis, Missouri. St. Louis is a large metropolitan area without cable or a community video center. The city has let a cable franchise, but no action towards construction has taken place. In January 1972 a group called Community Media, along with local persons involved with media in St. Louis helped organize a group of concerned citizens that began to ask relevant questions concerning cable and public availability to both control and program productions. For the past two summers ComMedia has run video projects at various community, and H.D.C. (Human Development Corporation) centers for the Mayor's Council on Youth. This wandering workshop is now being developed into a series of eight programs that will be produced on half inch video, and broadcast over the educational VHF broadcast station through a time based corrector. By approaching the issue of community television distribution without cable, ComMedia hopes to prepare the community that it reaches for access to cable, and request funding for a multi-purpose video center.

Other Groups. The video center concept is not just limited to community groups or community interest groups. Concilium Productions, a church group from San Bernadino, California has produced programs exclusively for cable television distribution. Now seeking funds for mobile units, Concilium Productions uses both leased cable lines and I.T.F.S. to distribute programs to the general community and local parochial schools. They also propose to lease channel space on a
proposed ecumenical communications satellite, Ecumensat, and communicate between many dioceses throughout the country.\textsuperscript{14} (See Appendix D).

Acorn Community Television in West Oakland, California is housed in an Oakland redevelopment center. One of the major concerns of Acorn is the lack of an established community in the redeveloped area. Incorporated as a non-profit educational corporation, Acorn Community Television "is established to utilize television for the good of (the) community." They use television to "focus on the existing resources within (the) community and (deal) positively with the numerous factors affecting (the) community. Television is being utilized as both the means for dissemination and the instrument of unification."\textsuperscript{15} Acorn Community Television (ACTV) does this in conjunction with Laney College and the local cable operator. Courses concerning all aspects of television production fundamentals, operation and maintenance, television electronics, video art and graphics, and cable operation are taught. ACTV also gives informal workshops in drama set and costume design, photography, lighting and other related areas of communication skills. They are presently negotiating with the cable operator for a leased city wide channel.

Also located in the Bay Area, and dealing with a broad range of television issues that relate to minority rights and community access is the Berkeley Community Coalition for Media Change, headed by

\textsuperscript{14} Concilium Productions, Information Brochure, 1973, p. 3.
\textsuperscript{15} Acorn Community Television, Information Letter, Xerox, June, 1973.
Marcus Garvey Wilcher and a community coalition. Berkeley Cable Access, another bay area group is interested in "securing public access, and eventually community control and ownership of the (cable) system." Both groups do not presently have video equipment that they can access. Moreover, the Berkeley Community Coalition for Media Change is not only interested in cable access, but in a wide variety of issues that relate to citizen access and control of television. They have opposed the license renewal request of many television stations on the grounds that the stations do not meet community needs. Marcus Garvey Wilcher describes his group as a "Media Watchdog." The Berkeley Cable Access Group has presented proposals to the Berkeley City Council concerning the granting of the cable franchise to a community run cable system. Presently there is no cable in Berkeley.

In Memphis, Tennessee, a new corporation, Women in Cable was incorporated for the sole purpose of leasing a channel for the yet unbuilt cable system. Nearly seventy groups are interested and have joined the Women in Cable, giving the groups a combined membership of close to 18,000 persons. The women hope to work out some sort of trainee and production internship with Memphis State University, and plan to begin cablecasting in June of 1974. Originally, they were

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16 Ira Kurzban; Member, Berkeley Cable Access; Personal Correspondence; June, 1973.
18 Cable Television Information Center; Memorandum; May 30, 1973; "Women's Channel, Memphis, Tennessee."
to lease channel space for $1.00 per year, but with a court ruling against that, the economics of the leased channel remains unsure.

The Alternate Media Center in New York has been running a pilot project in Orlando, Florida with a projected two way cable system, in conjunction with the American Television Corporation (ATC), a large M.S.O. The AMC runs a closed circuit system interconnecting major teaching hospitals in Orlando. They have set up public access workshops; over four thousand people have been trained and are using the public access channel. ATC foots the bill for this, while the Florida Department of Health Education and Welfare pays for the telemedicine project.19

Other groups and individuals doing alternative television, and groups found in the literature published by these groups include Peter Berg, and the Home Skin Video based in San Francisco. Peter, and the other four people in Homeskin travel in an International Harvester truck "all over North America, from British Columbia throughout the Pacific Northwest to Nevada, Colorado, New England, Nova Scotia, the Appalachians, through the Southwest, then back to San Francisco."20 They have been doing this for two and a half years, making tapes of "land based commune people, cooperative schools, and the North American Indian tribes." These tapes are used as "video letters, which


(are) use(d) to introduce land based people to each other on a horizontal basis without reference to super medias." Though most of the tapes have been reused, Homeskin still keeps some. All of this is done with the truck and one porta-pac.

"Over twenty per cent of Los Angeles is presently wired for cable television" says Jake Jacobsen, of the L.A. and Orange County Public Access Projects. The Los Angeles and Orange County Public Access Projects are "trying to get Public Access open in any way that will facilitate people making tapes, getting them on the cable, and enabling them to put on whatever types of programs are relevant for their particular needs." Community workshops are held concerning public access and resources; the project does own half inch equipment. Last year it was funded by an eleven thousand dollar grant from the Episcopalian Church, and Panasonic gave the Access Project various half inch equipment as a small grant. Though there is extensive use of volunteers in manning the center, all people who use the access equipment are asked to work with specific communities, or areas of central concern; i.e. maintenance, theatre, and scheduling. KVST-TV, a viewer sponsored UHF station in Los Angeles was trying to aid the project and to broadcast some of the tapes produced. At the time that this information was obtained, the time base corrector had not yet been made public, so KVST-TV and the L.A. Public Access Project were trying to develop ways to broadcast half inch tape.

Media Rites, from San Francisco, is a group of ten people based in both San Francisco and Los Angeles. Rather than concerning

21 Ibid.
themselves with the many social issues that are relevant to the use of half inch video, they work with color synthesis, and maintain a small multimedia display theatre. Working with film, video and audio, Media Rites mixed media together to try to "deal with the healing aspects of technology rather than the flash attractions."22

In the summer of 1970 a group called Raindance Corporation in New York City put out the first issue of a magazine called Radical Software. Eight groups and at least that many individuals were listed in this first edition. Radical Software immediately became, at least for a while, the organizational stimulus for video activity and television access by individuals and groups who had usually been denied access to the technology. Ten issues of Radical Software have since been published. From the midwest a different magazine, of different content but similar tabloid format has just recently been introduced, TUBE. Community Access from California, another recent addition to the periodicals devoted to alternative access to television is as of March 1974 soon to be going into press with its fifth bimonthly issue. Metro-Media in Vancouver, Canada began printing a yearly list of alternative, non-commercial video people soon after Radical Software hit the newsstands. Dumping Place is now in its second edition and is a similar type of listing. It was put together by a collective outside of New York City. Like the Whole Earth Catalogue, now defunct, Dumping Place, and Radical Software are based on a changing editorialship, and are open to new editors. Recent issues of Radical Software have each

22Ibid.
been edited by a different video person or groups. Dumping Place is looking for a similar type of rotating editor arrangement. Dumping Place, and Radical Software are both major sources of tape distribution, and alternative television information.

Video Freex, April Video, Media Bus, Amazing Grace Media are all New York people who have been doing video throughout the state from many years. With an extensive library of tapes they have been publishers, and the sustainers of the magazine People Vision, Dumping Place, distributed as eclectic contact and information folder about the alternative television movement. Dumping Place is now in its third year. Though mostly an East Coast based information booklet, and then mostly the New York Metro area, Dumping Place lists nearly four hundred individuals and groups throughout North America and around the world involved in producing alternative television. To be listed, groups should be non-commercial in nature.

Various other groups mentioned in Radical Software and their projects include Top Value Television whose porta-pac coverage of the most recent political conventions in Miami has been aired over broadcast and cable television, and at various video centers around the continent. Telethon, a group of Los Angeles artists keep visual documents of images, including Los Angeles coffee shops, ice cream parlors, the highlights of commercial T.V. in 1972 and the "Television Environment," a series of slides, tapes, and kinescopes of broadcast television. They were billed by Time Magazine as doing "for TV what Andy Warhol did for Campbell's Soup."23

23 Radical Software; Vol. 2, No. 2, p. 2.
The regular contributors to alternative television software include: Woodstock Community Video (Channel 6 on the Woodstock Cable); Minneapolis Cable Coalition, and Public Interest Cable, both from Minnesota; Ghost Dance from Boston, The Kitchen, a video theater, an artist space in New York City, Antioch's various Media Extensions, Video Chinatown, a coalition of progressive filmmakers, video artists and community people in the Asian communities of San Francisco, Optic Nerve, in San Francisco, Video Free America, The National Center for Experiments in Television, Video Ball, and Johnny Videotape. The uses of video in their various projects range from art, and community development to cable, access and opening up broadcast television for public access along with various projects in health and psychological sciences.

With these publications available in Canada, our neighbors to the north could see the activity of alternative video in the U.S. It took awhile for the U.S. video people to see that what they were talking about doing with video had already had its beginnings in Canada with the National Film Board, and the Challenge for Change Program. Established in 1968 with the aid of George Stoney and T. Connant, the Challenge for Change Program put film into a position of defining and opening up new avenues for social change. This program aided filmmakers, and sometimes stationed them in 'depressed communities', supplied them with equipment and film, and let them do as they saw fit. One result, a process called Fogo, named after the first project in the Fogo Islands, was so successful in aiding the community in focusing problems so that they could be met, that the Challenge for Change Program is still around today. It is funded by
the Canadian Government to the tune of over one million dollars annually. George Stoney, a New York documentary filmmaker again with the help of T. Connant tried to do a similar thing in the U.S. Without government help, but with foundation monies, he set up the New York University based Alternate Media Center. In many respects this center is a model for similar video centers throughout the nation. Its sole purpose is to train community members in the use of one-half inch video equipment, and aid the participating cable station by providing it with finished material to use over the cable on the public access channels. It is well recognized that these two activities are separate, but supportive of each other.

Alternative television is a diverse as Broadcast television is static. The tools of alternative television (low cost video systems) are basically always the same though brand names sometimes differ. The software products come from various projects and are different in individual nature and time. Whether or not groups are involved in cable, whether or not they feel they have a political function, all of them seem to base their existence on the simple belief that television effects our lives in a manipulative way, and that it can be controlled humanly by people who are supposed to be manipulated by it -- the mass audience. As the perspective on 'mass audience' loses its broadcast television base, and becomes a local, more personal community concern, then the individuals within the community will be involved in definite input - feedback television process of a truly local community alternative television.
One should not write about alternative television without at least mentioning what is happening in Canada. Not only did alternative television grow up simultaneously in Canada, but it grew up with a strong Canadian bent which should not be ignored. Some of the differences between Canadian and U.S. alternative television have created a fresh attitude and a new vocabulary when it comes to the uses of video and film in a community.

Canada has a Canadian Cable Television Association and a federal communications commission similar in nature to the N.C.T.A. or the F.C.C. However, unlike the U.S., there is a Department of Communications in Canada. Many of the Canadian groups must deal directly with the Government, or a government agency when obtaining funding, or permission to air programs. The National Film Board, and the Canada Council seem to be major government funding agencies for various types of alternative video and media projects. The National Film Board's major video related projects have been funded through their Challenge for Change/Société Nouvelle program.

Possibly the greatest difference between the Canadian alternative television movement and that of the U.S. is that there is a present acceptance that film and video in Canada can play an active role in helping a community decide its options for self-improvement. It is
this sort of acceptance that has allowed for a video and film activity
directly related to issues of community development. Much of the time
and energy spent is not for an outlet, for in Canada, cable companies
must have local originated programming, nor is it spent in seeking funds.
Time is spent at programming, and developing techniques that are uni-
versally useful to those interested in using video as a form of
expression.

The National Film Board

has been the National Film Board that has been the main
protagonist and pathfinder in stimulating and developing new techniques
for film, and video, in community development. In January of 1967, the
National Film Board undertook the Challenge for Change/Société Nouvelle
program (CC/SN), and began publishing a newsletter later to be called
Access. The objective of the new project was to "help eradicate the
causes for poverty by provoking basic social change." How could film
meet such an all encompassing challenge? Why would the N.F.B. propose
to use the film media?

The Film Board felt that the

eradication of poverty demands unorthodox ideas, and radical solu-
tions based on them require new concepts of communications. For
these purposes, film-used imaginatively, and unequivocally—is
the best medium. In the first place, unorthodox ideas are more
likely to be accepted if presented in emotional, as well as
intellectual terms, and film excels in communicating emotions;
second, many members of the audience to be reached are semi-
illiterate, but film communicates to them; third, participation
in film activities can generate group action. Participation on
local levels is a key element in these proposals. And finally,

1 Hugo McPhearson (Government Film Commissioner), "A Challenge for
NFB," Newsletter, Challenge for Change/Société Nouvelle, Vol. 1, No. 1
(Spring 1968), p. 2 (Reprint).
since its beginning --through its films... the board has been involved in social issues.  

Projects funded by the Challenge for Change program include a development program in the Fogo Island area of Newfoundland. Here, the project was aided by the Memorial University of Newfoundland under the University of Newfoundland Extension Project. The Fogo Project was the first regional film program funded by the then new Challenge for Change project. Though the original film crew came from the National Film Board, filming was soon turned over to a crew recruited at the University. The express intent of the entire Fogo film project was to have a "film unit in residence" and have them generate confidence in the inhabitants so they could formulate and express their problems as they see them--expression of problems being the first step towards solving them. This was recorded on film and later, in an unfinished form, screened by the islanders. It was hoped that the playback, in an impersonal fashion, of differences of opinion and contradictions in attitude would help the islanders clarify, in their own minds, their position. Divergent opinions could be objectively presented on film without incurring someone's undying enmity.  

From this project developed both the terms and process whereby video and film would be involved in the process of community development. The quoted definition is a working description of the N.F.B. developed Fogo Process.  

Another Newfoundland project developed out of a sole filmmaker's investigations into a changing community. St. Johns, at Blackhead Road was a Newfoundland community that was to be torn down and

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2 Ibid.  
3 Newsletter, Challenge for Change/Société Nouvelle, No. 1, p. 4 (Reprint).  
4 Ibid.
rehabilitated. What was to happen proved an earlier statement made by R. A. J. Phillips, Director of the Special Planning Secretariat in Ottawa, that "government ('s are too) accustomed to thinking of film as an instrument of their own particular information needs." The net result of the St. Johns Project (1972) was a video White Paper to the department in Ottawa in charge of the Blackhead Road rehabilitation project. This "film" resulted in financial aid, and grants to the community to improve social services, and build sanitation facilities instead of the wholesale bulldozing originally planned.

In the low income section of Montreal, the Challenge for Change/Société Nouvelle project put video equipment into the hands of a militant group of low-income French-Canadian citizens, the St. Jacques Citizens Committee. Drumheller Valley, a "disaffected mining area in Alberta" was the scene of another project that turned a small forgotten town, Rosedale, into an active outspoken community that not only began to express its desires, but fought to turn those desires into tangible reality. The project brought with it a park, and a series of community decisions that turned a deserted schoolhouse into a factory. Established in 1969, the Drumheller Video Project was still going on when last reported in the winter of 1971-1972 edition of Access. Thunder Bay and Normandin were both the scenes of similar film and video assaults on a variety of social problems.


In Northern Ontario, the Challenge for Change program helped develop an inexpensive method to broadcast information to two hundred small communities that were close neighbors, all of which were isolated from each other. This time using radio, and Canadian Radio and Television Commission (C.R.T.C.) licenses to broadcast, each of the participating communities provided programming.

The Vidéographe Project in Montreal is probably the best known and best funded, and most successful, of all the Challenge for Change/Société Novelle projects. Initially funded by the CC/SN program for close to $300,000, this large French Canadian half inch video studio opens video access to anyone willing to learn. More tapes and dramatic presentations have been made at this center than all the New York AMC affiliates combined. Tapes are produced at Vidéographe and are shown in their video theatre nightly. It is open all the time. Recently, as their center expanded, they produced a community access project called Selectavision. Residents of Point Gatineau, near Ottawa, Beloeil, near Montreal, and Mont Laurier, Quebec, could call in at any time and select programs to be cablecast over a designated channel. Between showings, there were discussions of the tapes, thus allowing the producers, and the communities to interact.

There are other film board video projects that do exist in Canada. These would include the Video Inn in Vancouver, B.C., where a library of community usable tapes are centered for open viewing, and access by the public. Connexions, a North Vancouver video group has a studio and uses video for various activities, including stimulating exchanges between area artists. The East City Video Project in Edmonton, Alberta works with various non-English speaking citizens,
and makes tapes in Chinese, Cree, Ukrainian, French, German, Hungarian and English.

The Canada Council

In the past, the Canada Council, a granting agency for the Canadian Arts, did not have a policy related to the funding of video activities. Video Ring, a group of fourteen persons (including Michael Snow, a well-known contemporary artist) and groups in two cities (London, Ontario, and Toronto, Ontario) was funded last year to set up a cooperative, mobile video center. The Canada Council funded Video Ring for the hardware, while the Ontario Council on the Arts supported the cooperative with an operating grant. The members of Video Ring have:

all had individual relationships with the Canada Council and most of them have done a fair bit of video work. . . . Suzanne Rivard-LeMoyne, who's the Visual Arts Officer at the Council knew that artists' involvement with video was becoming more intense and was in effect waiting for the day when artists would come to the Council asking for assistance. The Council had no policy to deal with video and I think they were a little scared of being approached because they knew it was such an expensive undertaking.7

The Canada Council distributed close to forty-five million dollars to Canadian art endeavors. Nearly one million dollars of that will go to film and video activities, double last year's allocation.8

Cable in Canada

Canada is one of the most wired nations in the world with over four million of its population of twenty-two million subscribing to over 300 Canadian owned and operated cable systems. A Canadian cable subscriber with receive the country's two broadcast stations (C.B.C. and C.T.V.), assorted U.S. stations, educational TV, and a community channel. The C.R.T.C. requires the cablecasting of a community channel prior to the importation of United States originated channels. It is the cities, rather than the rural areas of Canada that are heavily wired. In Saskatchewan the Provincial Government owns and operates all cable services and is trying to "ensure that the rural areas as well as the urban would benefit from cable services."
Chapter 6

CABLE TELEVISION: AS A DELIVERY SYSTEM FOR ALTERNATIVE TELEVISION

Cable Television in the past has been projected as being a major distribution system for Alternative Television. With the increase in availability of television channel space afforded by the cable, a variety of commercial programs, educational institutions, and the general public could for the first time access television time relatively inexpensively. Besides the variety of commercial programs, alternatively produced non-commercial programs could aid in providing social service information, could provide an outlet for public viewpoints, and thereby give at least a segment of the television media back to the public. These projections about CATV's potential are in some cases no longer just projections, but are working projects.

To be able to more fully understand the interaction Alternative Television Movement, and the Cable Television Industry, the author feels that one must first understand the technology of cable television, the industry's present social context, and its historical interactions with the various groups and bodies that it serves, and

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that regulate its growth. Therefore, this and the next two chapters provide essential information and analyses pertinent to the use of cable as a distribution mechanism for alternative television.

What did your television set cost? A hundred dollars? Three hundred? A thousand? And how many channels does it receive - clearly, consistently, and without ghosts, snow, or distortion? Whatever the cost, its value to you diminishes proportionately with the number of channels you are UNABLE to receive satisfactorily. Put that way, the chances are you're harboring a pretty wasteful gadget in your home -- unless 3

... You are in one of the 5,500 communities served by 2,900 cable television systems. 4 In that case, you would be among the 10.2% of television owners anywhere in the United States and the Virgin Islands who are served by cable systems. 5 An industry that is estimated to take in $400 million dollars annually has 'quietly' grown up, or possibly reached adolescence since its shaky beginnings in 1949 deep in the hills of Pennsylvania.

What is Community Antenna Television (C.A.T.V.) or put another way, Cable Television? Originally, large television antennas were set up on high places overlooking small, remote or geographically isolated communities. These antennas were large enough to draw distant city television signals that the small home owner antennas were unable to draw in, or could draw in, but with a very unclear picture. The television signal was received over a large antenna

3From: Tune in on the Wonderful, Colorful World of Cable T.V.; National Cable Television Association, Inc. Inside Cover; 1972.


5Ibid.
and amplified. Then it was transmitted usually by coaxial cable to each individual home whose owner bought from the cable operator a television set, paid a fee, or bought the cable service with some form of other exchange, such as a service contract. It wasn't until March of 1952 that the emerging cable industry incorporated into the National Cable Television Association. The N.C.T.A. now has a membership of 1,127 C.A.T.V. systems, and 239 associate members. Part of the reason for the growth in the Cable industry during the early years, 1949 to 1952 was a series of Federal Communications Commission regulations which did not allow any new T.V. stations to be set up. This effectively froze any new entry into broadcast television. To break into a closed television market, one had to go 'on the cable'. This is not the case today. As of 1970, nearly half of the commercial U.H.F. and V.H.F. television channels were still unallocated, or had been allocated, but remained unbuilt.

1952 was the first year that the Television Factbook, a bible of the television industry, mentioned C.A.T.V. systems. In that year, there were seventy operating systems serving about 14,000 subscribers. (See Table 3). By October 1972, there were 2900 operating C.A.T.V. systems plus 1740 systems with permission to build, 

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6N.C.T.A. Public Information Kit; "News Release; Background on the Cable Television Industry and the National Cable Television Association", April, 1972; N.C.T.A. Associate Members are members not cable operators.


8Television Factbook; Vol. 39; p. 79-a.
and another 2,825 systems where federal permission to build had yet to be granted. In 1971 Cable Television systems served well over 5,000,000 subscribers. (See Table 3).

It should be noted that a majority of the C.A.T.V. systems in operation are owned by multiple systems owners. TelePrompTer, the largest C.A.T.V. system owner has over 685,000 subscribers on both coasts, and points in between. (See Table 4).

Over the air broadcast T.V. is an open ended broadcast of electro-magnetic waves into the surrounding environment. The signal becomes weaker, as a function of distance and time. The distance that the signal can travel is limited by, among other things, the curvature of the earth. Cable, or coaxial cable, can be thought of as a pipe through which broadcast waves are channeled. The earth's curvature does not affect the distance the wave can travel.

Theoretically, cable signals with proper amplification can travel many times around the earth. As can be imagined, money, terrestrial topography, and human population distribution are factors that limit the stringing, or laying of cable. To lay cable in the ground in rural areas costs about $4,000 per mile of cable, compared to an estimated $75,000 per mile of cable in an urban area. If

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9N.C.T.A. Public Information Kit; "News Release: Cable Television Fact Sheet"; November, 1972; N.C.T.A.

10Ibid.

11Ibid.
Table 3

CABLE TELEVISION GROWTH 1952-1970\(^{12}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating System</th>
<th>Total Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>70</td>
<td>14,000</td>
</tr>
<tr>
<td>1953</td>
<td>150</td>
<td>30,000</td>
</tr>
<tr>
<td>1954</td>
<td>300</td>
<td>65,000</td>
</tr>
<tr>
<td>1955</td>
<td>400</td>
<td>150,000</td>
</tr>
<tr>
<td>1956</td>
<td>450</td>
<td>300,000</td>
</tr>
<tr>
<td>1957</td>
<td>500</td>
<td>350,000</td>
</tr>
<tr>
<td>1958</td>
<td>525</td>
<td>450,000</td>
</tr>
<tr>
<td>1959</td>
<td>560</td>
<td>550,000</td>
</tr>
<tr>
<td>1960</td>
<td>640</td>
<td>650,000</td>
</tr>
<tr>
<td>1961</td>
<td>700</td>
<td>725,000</td>
</tr>
<tr>
<td>1962</td>
<td>800</td>
<td>850,000</td>
</tr>
<tr>
<td>1963</td>
<td>1,000</td>
<td>950,000</td>
</tr>
<tr>
<td>1964</td>
<td>1,200</td>
<td>1,085,000</td>
</tr>
<tr>
<td>1965</td>
<td>1,325</td>
<td>1,275,000</td>
</tr>
<tr>
<td>1966</td>
<td>1,570</td>
<td>1,575,000</td>
</tr>
<tr>
<td>1967</td>
<td>1,770</td>
<td>2,100,000</td>
</tr>
<tr>
<td>1968</td>
<td>2,000</td>
<td>2,800,000</td>
</tr>
<tr>
<td>1969</td>
<td>2,260</td>
<td>3,600,000</td>
</tr>
<tr>
<td>1970</td>
<td>2,350</td>
<td>4,500,000</td>
</tr>
</tbody>
</table>

\(^{12}\)Adapted from N.C.T.A. November, 1972 Statistics.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Number of Subscribers</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>740,000</td>
<td>Teleprompter</td>
</tr>
<tr>
<td>2</td>
<td>400,000</td>
<td>TeleVision Communications Corporation</td>
</tr>
<tr>
<td>3</td>
<td>326,000</td>
<td>Telecommunications, Inc.</td>
</tr>
<tr>
<td>4</td>
<td>300,000</td>
<td>American Television and Communications Corp.</td>
</tr>
<tr>
<td>5</td>
<td>230,000</td>
<td>Cox Cable</td>
</tr>
<tr>
<td>6</td>
<td>228,000</td>
<td>Viacom</td>
</tr>
<tr>
<td>7</td>
<td>221,000</td>
<td>Sammons Communication</td>
</tr>
<tr>
<td>8</td>
<td>182,000</td>
<td>Communications Properties</td>
</tr>
<tr>
<td>9</td>
<td>178,000</td>
<td>CableCom General</td>
</tr>
<tr>
<td>10</td>
<td>145,000</td>
<td>United Artists-Columbia Cablevision</td>
</tr>
</tbody>
</table>

Adapted from N.T.C.A., February, 1973, Statistics (includes projected mergers at that time).
strung, cable system operators may still have to pay a pole rental fee, or get city or state permission to build their own pole system. Cable Television is a "Big Business" with relatively high initial investment, and low upkeep cost with a high potential return. Bell Telephone tried to enter into, or expand into the Cable T.V. world by charging high pole rental fees, and buying systems. Phone concerns in 1970 owned 5.8% of the cable industry.\textsuperscript{14} By 1972, nearly 47% of the cable industry was owned by other various media concerns, broadcasters owned 38%, newspapers 6%, and publishers 3%.\textsuperscript{15} (See Table 5).

The channel carrying capacity for coaxial cable started off at about six TV channels. Through technological advances in the electronics of signal amplification, cable systems carrying twelve television channels are now prevalent. Cables with larger carrying capacity have been developed.

The F.C.C. requires that new systems have a capacity of 20 different channels. Systems could eventually carry nearly one hundred different television channels, although a system like this would require more than one cable.

The total initial investment in a cable system ranges between two and four million dollars for equipment and operators, in a medium sized town with a population of between fifty and seventy-five thousand individuals. Cost increases substantially for rural areas due to the distances covered. Cost increases in highly urban areas

\textsuperscript{14} Television Factbook; Vol. 40; p. 66-a; 1971.

\textsuperscript{15} N.C.T.A. Public Information Kit; op. cit.
### TABLE 5

FINANCIAL DATA ON CABLE COMPANIES\(^\text{16}\)

<table>
<thead>
<tr>
<th>Company</th>
<th>Revenues in Millions of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1971</td>
</tr>
<tr>
<td>TelePrompTer</td>
<td>43.0</td>
</tr>
<tr>
<td>Cox Cable</td>
<td>13.1</td>
</tr>
<tr>
<td>American T.V.</td>
<td>11.0</td>
</tr>
<tr>
<td>TeleVision</td>
<td>8.8</td>
</tr>
<tr>
<td>Tele-Comm</td>
<td>13.3</td>
</tr>
<tr>
<td>Cypress Comm</td>
<td>8.7</td>
</tr>
<tr>
<td>Cablecom - Gen.</td>
<td>17.0</td>
</tr>
<tr>
<td>Viacom</td>
<td>19.0</td>
</tr>
<tr>
<td>L.V.O. Cable</td>
<td>5.4</td>
</tr>
<tr>
<td>Communication Prop.</td>
<td>7.6</td>
</tr>
<tr>
<td>Columbia Cable</td>
<td>4.1</td>
</tr>
<tr>
<td>Cable Information</td>
<td>1.8</td>
</tr>
</tbody>
</table>

\(^{16}\)Adapted from Barrons, September 6, 1971, p. 5. It was pointed out at a cable conference in January, 1973, that since June, 1973 cable stocks have on the average fallen off drastically.
due to population density, and cable laying requirements within the city. The Cable Television Information Center estimates that cable installation costs between two, and fifty thousand dollars per mile depending on aerial or underground distribution. It is estimated by the Cable Television Information Center that after the initial investment of a cable company is paid off, and it has attained a saturation level of approximately 50% a company in a town of 20,000, after 10 years, could net close to fifty thousand dollars with a cash flow of over $200,000 a year.

In 1953, the F.C.C. granted a permit for a common carrier to transmit by microwave the signals of WMCT-TV of Memphis, Tennessee into the cable system of Popular Bluff, Missouri. WMCT-TV protested this decision. This first case of microwave relay of distant signals raised many issues including that of copyright. Only recently has the F.C.C. begun to adequately answer some of the signal importation questions. Questions of copyright have yet to be adequately answered, either by the F.C.C., or by Congressional, or court action.

Two way cable capability, and various other hardware and software development in communications have caused a series of questions to be raised. Some of these concerns focus upon social, 

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17 Cable Economics; Cable Television Information Center Notebook; 1972; p. 11.
18 Ibid, p. 15.
political, and psycho-cultural issues surrounding cable. Some writers have highlighted the potential of C.A.T.V. In 1968, H. J. Barnett and E. Greenberg coined the phrase 'wired city' to describe cable. As both the technology capability increased and public awareness grew, Ralph Lee Smith wrote in The Nation magazine of a "Wired Nation." Each article, in its way, expresses the growth of public concern, hope, and awareness of the potentials of C.A.T.V. and their matrix of consequences. Issues concerning ownership, community access, minority opinion, censorship, and monopoly capital still beset the young industry. Now with a besetting of financial and social problems, the growth of a wired nation has slowed to a near halt.
Chapter 7

THE F.C.C. AND CABLE

A Short Background

In future years, when students of law or government wish to study the decision-making process at its worst, when they look for examples of industrial domination of government, when they look for Presidential interference in the operation of an agency responsible to Congress, they will look to the F.C.C. handling of the never-ending saga of cable television as a classic study.¹

The Federal Communications Commission and its interaction with the cable industry is one changing priorities, and special interest battles. As late as 1958², the F.C.C. affirmed that it would not regulate cable. The F.C.C. stated in the Frontier Opinion that they "did not intend to regulate CATV systems in any way whatsoever."³ Even as it said this, more and more cable cases were brought before the commission. These forced individual decisions that were based on no overriding policy statement. In 1965, the Commission issued its First Report and Order about cable T.V. It was the "purpose of the


²Frontier Broadcasting Opinion of the F.C.C., 1958.

First Report and Order . . . to determine whether CATV's which relied on microwave service should be required to carry local television signals and to avoid duplicating programs of the local stations.\(^4\) The report concluded with the requirement that CATV systems carry local signals and blank out duplicated programs from the distant station carried.\(^5\) This protected the local broadcaster's right to program exclusivity. Along with the First Report and Order the Commission stressed that it did have regulatory jurisdiction over cable television and issued a Notice of Proposed Rule Making asking the parties concerned to comment on the extent of that jurisdiction, thereby helping to produce a more extensive set of regulations about CATV.

Less than one year later, the F.C.C. issued the Second Report and Order asserting that C.A.T.V. systems were competing unfairly with over-the-air broadcast systems. This order placed a virtual freeze on all importation of distant signals by C.A.T.V. systems in the top 100 T.V. sales markets. (Rated by television sets sold per unit of population within the broadcast area.) Later, in 1966, the question of copyright and payment of royalty fees was faced squarely by the courts when the case of United Artist vs the Fortnightly Corporation began its travel through the courts. The U.S. District Court in New York ruled and later the Court of Appeals affirmed that royalties should be payed.\(^6\) However, on June 17, 1968, the Supreme

\(^4\) Ibid, p. 64.

\(^5\) Ibid, p. 51.

Court revised this decision. This ruling precedent will probably stand until Congress rewrites the Copyright law.

By 1967, the F.C.C. reversed its stance about the unrestrained growth of the Cable Television Industry. Instead of continuing to regulate aspects of cable a process which was begun in 1965 with the micro-wave relay decision, the commission began to supress growth of the cable industry in favor of U.H.F. broadcast growth. Within that 1966 Report and Order stood regulations banning certain cable originated advertising and local programming. The cable was not a heavily restricted television carrier. [So regulated that by 1968 the Justice Department issued a memo to the F.C.C. urging the F.C.C. to change its position, remove restrictions and allow the cable television industry to compete in a 'free market'.] The cable freeze gave the major industries, including broadcasters time to buy their way into cable. Although A.T. and T. had at one time owned up to 6% of the growing industry, it has been regulated out of the cable business.

It became evident to the F.C.C. that freezing cable growth was not the regulatory answer to their industrial headaches. On November 18, 1968 a U.S. District Court ruled that states can set up regulatory boards overseeing cable in their state. This brought to light a whole new concern for franchising and cable regulation. By December of 1968 almost as a Christmas present to a young industry, the F.C.C. announced that they would make new rules for cable. At the same time, it increased its freeze, and began an experiment with
a then considered cable alternative, Pay T.V. In January of 1969 they required cable systems to obtain "retransmission consent." This consent is similar in nature to the consent for the use of material given in copyright. Retransmission consent was virtually unobtainable. Later, in 1969 the N.C.T.A. began to meet with the National Association of Broadcasters to iron out their differences on matters of retransmission. The meeting broke up with little tangible result.

The F.C.C. began to change its regulatory tone subsequent to the release of the final report of President Johnson's Task Force on Telecommunications in 1969. That report stressed local origination with increased capability of cable system technology to act as a common carrier to deliver various forms of broadband communication services. By October, 1970, it required all C.A.T.V. systems with more than 3,500 subscribers to produce their own local programming. Though brought into the Supreme Court by Midwest Video and upheld, a stay on the order has not yet been lifted. The F.C.C. still held firm in the area of not allowing micro-wave connections between cable systems, and thereby discouraged cable networking.

The Rand Corporation with a grant from the Markle Foundation prepared a series of reports dealing with the cable question. One, Cable Television and the Question of Protecting Local Broadcasting, by Leland Johnson, projected a hole in the F.C.C. argument about U.H.F. broadcasting, and cable systems. It showed that U.H.F. broadcasters rather than being hurt unfairly by cable operations could be helped.

__Notes from the Center, (Cable Television Information Center: Washington, D.C., 1974), Vol. 1, no. 1, p. 3._
This was seen by having U.H.F. signals carried to an increased viewing audience. By November of 1971, most of the broadcasting world saw preliminary editions of the new "short term" cable regulations spelled out by the F.C.C. Long awaited for, most of the issues raised in the past ten years were at least dealt with, if not temporarily answered. The copyright issue was deliberately ignored. The *Third Report and Order* lifted the freeze on the top 100 market areas, set maximum local franchise rates, and forced cable companies to have a total of at least three local origination stations: one each for Public Access, Educational Access, and Government Access. These would be provided free for five years, in hopes of stimulating a T.V. use by educators, and educational systems. The public access channel would be provided free for the first five minutes of live cable cast time. Live programming that was longer than that five minutes would cost some minimal amount for studio and engineering time. Taped programming longer than 5 minutes has usually been shown with no charge. To the Alternative Television Movement this means both a local (community) and mass viewing audience potential.

**Franchising**

The F.C.C. specifies that a local entity should be the franchising authority, not the federal government. Local is the important word. In 1963 Nevada amended its public utility law to include cable T.V. The right of the state to regulate cable television as a public utility was affirmed during litigations with T.V. Pix Inc. First the District Court, and later the United States
Supreme Court upheld that right. Is the State 'local' enough? Cities, villages, other small municipalities, and suburban communities continue to franchise C.A.T.V. systems that lie within their political boundaries. Many states are considering bills that will take some of the franchising rights away from the local authorities, and put them in the hands of a state regulatory commission. Many states, including New York and New Jersey, already have a cable regulatory agency, some regulate cable under already existing public service commissions.

No matter who regulates it, there still has to be a franchise. What are, and should be concerns for developing any C.A.T.V. franchise? How can local groups have their say in the decision making process? What is presently insured by the federal government? And what interaction is there between local franchising authorities and the federal regulatory commission? The local response to these four questions, sometimes limit, or expand a basic view of what cable can, and cannot do in the specific.

The F.C.C. requires the franchising process to be open to public hearing prior to its letting. C.A.T.V. is a new business, with potential large investments, and financial return which could stay in the economics of the franchising area. Third, the F.C.C. presently set minimal guidelines, and franchising limits. Since they were revised in 1972, many cable systems are already past the franchising stage, and are considered grandfathered. This means that they have until 1977 to meet the standards. Most of the requirements are

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minimum standards that protect the cable operator. These include a ceiling franchise fee, and set number of public, designated channels and various technical standards. The franchising authority must show cause and petition the F.C.C. to set rates higher than the F.C.C. ceiling or increase the amount of public channel space.

There has been much hope put into preparing for cable television on the part of various minority groups. Black and Chicano groups on both coasts have been opting for minority access, control and ownership of various C.A.T.V. systems. The Black Panther Party of California, and the La Raza Unida announced their compromise with Cox Cablevision, and the then proposed merger partner, American Television and Communications of a lease arrangement at the rate of $1.00 per year per channel. The company would provide up to three "cable T.V. channels to minority organizations and provide free of cost the video equipment ... to operate these channels."9 These channels were to be leased to a coalition of "eight statewide organizations, and eight local ones."10 The courts have recently declared this type of agreement discriminatory, and therefore void. The fate of $1.00 per year rental fees, now illegal has yet to be determined.

St. Louis is an example of a city whose major concern in letting a franchise was that of protecting itself economically. By viewing cable with guarded economic optimism, it chose to assess the cable owner 6% of all the "annual gross operating revenues taken

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10Ibid.
in and received by it on all sales of television signals within the
city.\footnote{11} St. Louis remains liable for any damage incurred during
the installation of the C.A.T.V. facilities, but places all further
burdens on the company. Being somewhat far sighted, the city spelled
out municipal use of the facilities, and showed concern for the sale
of the franchise as an investment by placing both a date for
implementation of construction, and an anti-sale clause that places
the franchise back in the hands of the city aldermen for
reconsideration. The implementation date has long past, and the
franchise, though not sold, has effectively changed hands from the
local Melhar Corporation to 51% controlled by the Atlanta based Cox
Cablevision.

Various other franchises that were let previous to Third
Report and Order showed the same concern for the city economic welfare,
but with a much greater concern for the welfare of its population.
The City of New York sponsored an early study on the application and
franchising of C.A.T.V. within its political boundaries. The final
franchises that were let are somewhat sensitive to voiced and unvoiced
community calling for access to and control of certain aspects of the
media. Increased channel capacity is called for when the technology
is sufficiently developed. Two way capability, and a time table for
increasing the number of Public Access and municipal channels are
spelled out in the franchise itself, or the subsequent regulations.

\footnote{11} Ordinance 55312, B.B. #208 as amended; April 10, 1969,
City of St. Louis.
The regulations spell out public access, and set up guidelines of community, i.e. public use. Time tables for wiring the city are also spelled out.

S.C.O.P.E., a now defunct education group interested in cable, helped pressure for increased educational use of cable particularly within Suffolk County, New York. Their franchise guidelines called for free equipment and personnel to be made available to schools after various time table requirements were met.

Instances of community planning are not specific to the New York area alone. Boulder, and Lakewood, Colorado have done massive studies on C.A.T.V. utilization, and franchise requirements. Orlando, Florida, and many other cities are looking at franchise regulations as a way to control a potentially important new technology.

Cities do not have to let a franchise to some outside company to build and operate their cable system. They may do all the work themselves, and own the system. This has been the case with numerous cities, and franchising districts. Columbia, Missouri, battling for municipal ownership on a bond issue was defeated twice on the ballot. The N.C.T.A. fought the city, and did not want Columbia, or any municipal government to own and operate a cable system. The N.C.T.A. maintains this position because they fear government encroachment in private lives. Possibly it is because they are protecting the private cable corporations that make up a large majority of the organization. Many cities don't have residents that have the same encroachment fear. Palo Alto, California a city that owns all utilities (including electric, and telephone) is in the process of building its own cable system.
A good franchise is developed with interaction between all parties concerned. Even after a franchise is let, petitions and public actions can force a change or revision through local, state, or F.C.C. and other legal channels. Financial backing, though not mandatory is a must when the courts are required. It should be remembered that no C.A.T.V. system can work, or make money without subscribers. Some groups have threatened to boycott cable if they are not given a fair hearing when the time comes to set up the system.
Chapter 8

CABLE TV: LOCAL ACCESS

Introduction

Since Ralph Lee Smith wrote "The Wired Nation" in the Nation in 1970, and helped redirect the cable television debate in the public arena toward user services, C.A.T.V. companies, trade journals, and the public media have been filled with current examples and potential television projects that could be branded as "alternative." Much has been written about the local, and community uses of cable, and its social benefits and value to educational systems. Industry has spent millions of dollars on video and closed circuit television production facilities to aid in training and marketing. Local community groups have formed to discover and ensure positive community benefits of cable television. At sometime or another, many television projects of diverse nature have been listed under the catch all heading of Alternative Television.

In March of 1971, the F.C.C. required all cable systems with greater than 3,500 subscribers to do non-automated local origination. In effect this new regulation required cable systems with greater than 3500 subscribers to become a local television station. This local television channel was to be cablecast only to subscribers and not broadcast over the air. By February, 1972 the F.C.C. issued the Third Report and Order which required all cable systems that were
to be built within the major markets to have three access channels:
All the existing C.A.T.V. companies were to comply with this new
ruling by 1977. Much concern, academic in nature early on, but
now a larger community concern, has been expressed about the use of
these channels. Some questions that were raised about the use of
these local access, or designated channels have remained unanswered.
These questions include:

1) How many cable systems really have local access channels?
2) What are the different types of programs that they air?
3) How is this programming solicited? From where is it
obtained? What is its point of view?
4) What is the listener, and larger community response to
local access channel use?
5) Does the channel programming fulfill a need of the
larger community? Does it have the potential for a
greater community participation? What steps are being
used to outreach into the community?
6) How much does this all cost?

To answer these questions adequately, much more information
than is presently available is needed. If the purpose of local
access is to breakdown the barriers between the people who make
television, and those who watch it; if the purpose of local access
is to allow citizen access and availability to produce their own
program, (by this I mean non-professional persons who have not been
trained for a day-to-day job of television production), then the
design of the 'studio', and the adaptability of the technology to
multiple situations is a crucial factor. Once the technology is designed for multiple use patterns, then access to the tools, and procedures for obtaining the necessary equipment become crucial factors in the success or failure of citizen access to television.

One can imagine how hard it is to promote use of television by members of a community when the tools available to them are static, stationary, complex, studio equipment. Only the professional can work it, and only the event that can be brought to the studio can be cablecast. By the nature of the equipment, this puts a damper on what the members of a community can expect from local access. A static studio covertly hides from public knowledge the fact that there are easy to use, adaptable, and portable video units which can be aired over cable, and cost much less than the static studio. Many members of any given community will possess, or have access to super-eight and still photography equipment. Many more possess rudimentary audio equipment. Any cable company doing local access television should not overlook this resource, and the local access channel should provide the outlet and vehicle of distribution. This cannot be done if the company does not have a slide projector, or filmchain. The proper tools for local access are a necessity. It is hard to trust the company that has the rhetoric of public, or local access, but does not have the tools that adapt their system to the needs of the citizen.

In many cases the community members, i.e. the public, have to be informed that the tools they need to do their specific programs are available. Many times the technology includes simple visual
aides. Other times the technology necessary for program production is more complex video recorders, lights, or filmchain. Often, the only means or route to discovery of the available tools is by way of the cable company, which may or may not furnish the tools fitted for the running, and production of a citizen produced television program. To suggest that the cable company be responsible for the acquisition and lending of this sort of equipment is, in many respects an expectation that is quite above the company's desires. Many times public education about access to television is left up to the company. This too seems beyond the expectation of what the social role of the cable company is, or should be.

Survey Results

In 1971, the N.C.T.A. ran a survey to discover how many of its members were involved in Local Origination. The Cable Television Information Center reports that "1,190 systems...(on the NCTA Local Origination survey of 1971)...offered subscribers some sort of local programming."¹ Most of these were automatic origination. "467 systems offered local live, taped or filmed programs,...(while),... 57 carried commercial advertising. 430 systems said they were to offer origination in the near future."²

The 1973 N.C.T.A. Local Origination Survey states that out of a sample of 1193 systems that were purported to be doing local

¹Cable Data (Washington, D. C.: Cable Television Information Center), p. 7.
²Ibid.
origination, 514 systems had non-automated facilities, 116 systems were planning to do origination, and 284 did not do non-automated origination, and were not planning any. The intent of this survey was to identify companies doing Local Origination, types of programming, the equipment used, and the cablecast times. (See Appendix A for sample questionnaire). Unfortunately, the sample was not of the entire N.C.T.A. membership, but a compilation of lists of companies that were reported already to be doing some sort of Local Origination. If the other 1,700 member companies of the N.C.T.A. are not doing local, (as suggested by the compilation of various Local Origination lists) non-automated origination, then only approximately 1/6th of all cable companies are doing origination.

There were 303 systems that answered the questions concerning program format; (see Figure 2) "about 30% of (the) systems did morning programs; 45% did afternoon shows, and 75% had programs after 6 p.m." Though weekly program time in different survey categories varied greatly, close to 350 systems (from a sample of 430) reported that they did Public Affairs programming. With a median of 3 hours a week, the range in this latter category was from 15 minutes to 41.5 hours. Sports programming ranged from 5 hours to 25 hours weekly with close to 325 systems originating. 3 hours per week was the median channel time devoted to sports. About 290 systems originated entertainment programs, with a range of .25 to 40 hours weekly. The median was 2.5 hours a week. News ranged .25 to 15 hours weekly.

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FIGURE 2
SAMPLE OF PROGRAMMING CABLECAST OF THE LOCAL ORIGINATION CHANNEL
(430 companies sampled)\(^5\)

<table>
<thead>
<tr>
<th>Program Type:</th>
<th>Median:</th>
<th>Weekly Range in Hours:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Affairs</td>
<td>3 hours/week</td>
<td>.25-41.5</td>
</tr>
<tr>
<td>Sports</td>
<td>3 hours/week</td>
<td>5-25</td>
</tr>
<tr>
<td>Entertainment</td>
<td>2.5 hours/week</td>
<td>.25-40</td>
</tr>
<tr>
<td>News</td>
<td>2.5 hours/week</td>
<td>.25-15</td>
</tr>
<tr>
<td>Education</td>
<td>2 hours/week</td>
<td>.25-35</td>
</tr>
<tr>
<td>Syndicated</td>
<td>4 hours/week</td>
<td>.5-98</td>
</tr>
<tr>
<td>Children</td>
<td>2 hrs/week</td>
<td>.25-24.5</td>
</tr>
</tbody>
</table>

\(^5\) Adapted from N.C.T.A. Local Origination Directory 1973, p. 87.
weekly, with about 250 systems. The median time was 2.5 hours a week. With about 225 companies programming educational material, the range was 2.5 hours a week. With about 225 companies programming educational material, the range was .25 hours a week to 35 hours a week, with a median of 2 hours a week. Syndicated programming was used by about 175 companies, ranging in use from .5 to 98 hours per week. The median was 4 hours a week. Childrens programs were aired over about 150 companies, with a range from .25 to 24.5 hours per week. The median was 2 hours per week.

The average cable company, from a sample of 340 systems employs 3.93 persons to work with local origination. Much of this work is done by part-time help, volunteers, or shared with other employees who have other tasks within the company. Though 100 systems said they were to hire more personnel, much of this is probably going to be part time help, or local individuals who have some earlier experience with the cable company. Forty per cent of the total number of companies that were surveyed and were doing Local Origination are systems with smaller than 3500 subscribers.6

In early October I sent out letters to 12 of the 18 companies reported in the NCTA Cablecasting Guidebook to be involved in Public Access projects. I also sent out 18 letters to companies selected from the Local Origination Directory, 1973 to supplement NCTA data on what type of Local Origination Services these companies were performing. Only seven companies total from both mailings responded (See Appendix C). National Cable Company of East Lansing, Michigan spends $35,000 on.

equipment for the access facilities. Jefferson Cable Corporation, in Charlottesville, Virginia spends $50,000 yearly, which includes 150 man hours per week. All of the companies mentioned that they worked with local schools, and sometimes shared facilities with those schools. In most cases, if a university, or college were nearby, the cable company was in negotiations, or involved in some sort of joint project.

Warner Cable of Kern County, Inc. was one of two companies surveyed that worked extensively with a public access center. The center, in Bakersfield, California, was set up with the help of the Alternate Media Center in New York. Cape Island Video is a three year old citizen access center in southern New Jersey. C.I.V. was also set up with aid from the Alternate Media Center. Serving in a TelePrompTer franchise area with over 90% saturation that is not required to have Local Origination or Public Access, C.I.V. was funded through the Cape May County Library for $5,000 in 1973. They cablecast a weekly one hour program entitled "Are You There?" C.I.V. is independent and not connected with TelePrompTer.

Five of the seven companies used half inch equipment for public access programming. One company has an access center. The public access coordinator at another company teaches the use of video

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8 Personal Correspondence, Mrs. Mia Daum, Program Director, Jefferson Cable Corporation, November 1, 1973.
9 Personal Correspondence, Keith Anderson, President Cape Island Video, December 29, 1973.
equipment at regular sessions. One company allows check out of the portable equipment when necessary. The fourth company charges $25.00 per hour for complete production including air time. Though all seven companies could conceivably charge for the use of their studios, most companies allowed reasonable time before a fee was imposed. Four of the five companies that had portable equipment allowed non-company personnel to use or access that equipment. All of the companies allowed only staff or trained volunteers to work their more sophisticated studio equipment.

Though there has been much talk about the compatibility of various different types of hardware, many of the cable companies have considerable investments in one inch color and various other equipment not yet compatible among manufacturers. A growing number of companies are using half inch decks, and more recently, three-quarter inch color cassettes. The Local Origination Directory, 1973 pointed out that some companies are still tied to non-compatible half inch standards - either old, or recently bought. Some companies have quarter inch Akai units.

Syndicated programming is used not only to fill time, but to up the standard of local origination channels to a competence level that can compete with network stations that are also carried on the cable. Many companies repeat programming anywhere from twice to, in Charlottesville, five times. Schools and local production centers seem to be growing centers for local origination production. As half inch, and three quarter inch equipment becomes more available, and more sophisticated, programming produced by non professionals might be
aired, and promoted with more security and less concern for financial or quality loss.

Local Access: Software and Production

Production Options. The cable operator has many choices or options to use in obtaining programming for the citizen access channels. He could produce his own software, and depend on a variety of outside production groups to supplement, or even produce all the programming for the local origination or citizen access channels. When an operator decides to use programming produced by outside groups, there are three major types of outside production groups that he can turn to.

First are companies that market their programming as a service, and are not grounded in any center or philosophical base except that of selling their service.

Second are video access centers, where the programming is produced by the public, as a public service, and is not necessarily financed by sales of programs but by private foundations or various means of public support.

A third type of video group is one whose original intent was to give the public a political means to control television content by program production and open access to half inch video tools. As time progressed, these political groups realized that there was a need for support from other than public sources for their survival. They began to sell their programming, as an alternatively produced television. By nature, this programming was produced with a distinctively different viewpoint than most other companies that would
sell their programs.

The first group of companies defined above, are companies that market their programming as a "service ... dedicated to helping cable companies develop their full potential... (towards) local origination." Such companies sell programming to the cable operator for some fee usually based on the number of subscribers that are on the system. They are private corporations which collect video tapes from contacts they may have, or tape the programs themselves. These groups are not necessarily such large conglomerates, like Time-Life, or Columbia, but small, local production, or marketing agencies like Red Eye Network, Work Video Corporation, L/G Productions, and Catalyst Cable Origination Network. Some cable companies are farming out their entire local origination channel to groups like these. Unlike leased channels, the C.A.T.V. company maintains ultimate say over content, or format.

The second category of producers are not-for-profit community groups that have set up access centers within their community. The Alternate Media Center in New York City, part of New York University's School of the Arts is probably the mother of many of the access centers that are presently springing up in the states. Bakersfield, California and Reading, Pennsylvania both have centers in the style of the Alternate Media Center's Video Access Center in New York City. In fact, both were set up with the help of the Video Access Center, and the Alternate Media Center. The Washington, D.C. Community Video Center, Woodstock Community Video, the L.A. and Orange County

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Public Access Project, and Austin Community Video are all locally managed and financed projects which are concerned with the production of community service television programming in preparation for cable television services, and community access channels.

There are many other groups that serve a similar purpose, but for a select audience. HumVideo, in Chicago, is a video project initiated specifically for the humanities students of the University of Chicago, but also involves itself with community preparation for cable and citizen access channels. A church video group in Santa Barbara, California does the same for church related concerns. Groups like these exist in every major cable market in this country. Some develop with their own funding sources, while others are presently looking for those funds to develop a useful community center. Many of these groups, and other groups more political in nature called The National Association for Media Action (N.A.M.A.) are founding members of a national organization created to help promote community access to the electronic highway now being built. (See Appendix B).

The final category of video groups are those whose original intent was to give the public and themselves the tools to make television software, by using low cost portable video tape recorders. In effect, these groups were the pathfinders for those now who try to set up video access centers. Raindance, along with Video Freex, Video Free America, Hog Farm, Ghost Dance, and other individuals helped formulate the magazine _Radical Software_. Many members of this early alternative T.V. movement are discovering that more is needed than just concept and public service. Grants alone cannot pay, or be a continual base for monetary operation. As a strange...
bedfellow, Clay Whitehead, Director of the Office of Telecommunications Policy said in a June, 1973 interview with public access groups at the N.C.T.A. convention that, small production groups must begin to sell their software on a free market.

Top Value T.V., an offshoot of Raindance Corporation has moved in this direction. With a massive reporting production crew at both political conventions in Miami, TVTV showed those who bought their programs that broadcast television does have a viable alternative. Multiple, on the spot low cost VTR recording teams produced a viable sellable alternative to commercial TV coverage of those events. New was not only floor coverage, but spontaneous and immediate reactions to happenings on the floor.

The difference between these groups, and the commercial groups first categorized is an out in the open belief on the part of the former that politics is inherent in news broadcasting. In one sense they bring a different politic than is usually seen in their programming. What separates them from a media access center is that they sell their services and their point of view. In this way, these groups represent a practical point on the triangle of groups described in this section. They approach both the market place and public service, community type programming from a strictly individualistic stance.

Software aired over the cable. During the past year, various cable companies throughout the United States have aired programs made specifically for local access channels. What type of software content is contained in these programs? During the past year, the
N.C.T.A. collected descriptions of local programming done in various communities. Many of the following briefs are from that collection.

Buckeye Cable Vision of Toledo, Ohio produced a sixteen part half hour series of programs entitled "Are You Listening?" In this series, citizens attack the problems of depersonalization and alienization. They explore issues such as Police, Women, Freaks, Prison Guards, Welfare, Prisoners, Drugs, Judges, and Abortion. Community listeners can call in questions, and discuss the show with studio participants. \(^1\)

"Community Hotline" from TelePrompTer of West Palm Beach, Florida, "Viewfinder" from General Electric Cable Vision Corporation of Watertown, New York, are similar type of studio programs produced locally by the cable company. \(^2\)

City Council Meetings have been "extremely popular" in Janesville, Wisconsin. They are produced live and in color. Coeur D'Alene Cablevision also cablecasts the meetings. There, ninety percent of the subscribers that responded to a company survey indicated that they watched the meetings.

"The People's Right," a program by governmental leaders of Battle Creek, Michigan is an open forum for discussion of various


\(^{12}\) Ibid. All program descriptions and quotes in this section are from the National Cable Television Association Cable Television Guidebook unless otherwise footnoted. The Guidebook is the most complete, and comprehensive description of local origination programming presently available.
political concerns of the area. People are "allowed" to come on the program to discuss how area government bodies are, or are not doing their job. "Person to Person" from Orange Cablevision, in Winterpark, Florida, focuses on "community leaders with a quickie documentary of them in action." TelePrompTer, of La Crosse, Wisconsin held a half hour special on the 1973 city budget. Questions from viewers were directed to a panel headed by the Mayor of La Crosse. Public hearings, bond issues, and various other similar types of programs related to local politics have been cablecast by systems around the country. In Tyler, Texas, L.V.O. Cable Incorporated doesn't attribute the passage of the bond issue to the special they produced, but in the words of the director, "it couldn't have hurt any."

Various programs on special issues that effect the local community have been aired on the cable. "Pueblo Insight," produced by Pueblo Cablevision in Pueblo, Colorado produced with the Jaycees, was a series of programs dealing with the topics of Drug Abuse, Air Pollution, and Gay Liberation. The "FCCYC" is a weekly service program produced by high school students in Fayetteville, North Carolina. They survey events in the city, and perform music programs. Such topics as Sickle Cell Anemia, Legal Problems, Marriage, and the problems associated with laws that effect marriage, such as credit, adoption, etc., War, Gay Liberation, the Women's Movement, Race Relations, V.D., Smoking and how to quit, Space Exploration, Prison problems, Community/Police Relations, Crime, Employment Problems, Day Care Centers, Consumer Education, Income Tax help and Family Budget Planning, Travelogues, Interesting Areas In and Around Town, and even shots of animals up for adoption in the local Humane Society,
have all been subject to investigation and programming on various cable origination stations around the country.

Approached from the local perspective, techniques for programming have ranged from slide and film presentations, and panel discussions to remote, live on the spot interviews. These programs have been produced by a variety of people ranging from the production crew of the cable station, to the inmates in prison. Local high school, and college students, community leaders, educators, and citizens, some of whom listen, or call in have been involved in Local Origination programming.

One of the most interesting projects that a cable company had undertaken to help promote this kind of television programming is the local origination project sponsored by Cablecasting Hawaii, Inc. Their objective is to test and develop an "appropriate role for cable television in strengthening a community in developing community enterprises, and in increasing the ability to deliver such important services as education, social services, and employment related services."13 Facilities that the Hawaii cable company wish to, and have partially been able to obtain include two mobile units in vans with camera cranes, many porta-pacs, and reliable editing equipment with a large variety of microphones, lights, and accessories. All of this is not only to be used by their production crew but by local, paid and volunteer citizens with production development interests, and a programming staff. In connection with the school and other

local agencies, this crew hopes to tape local news and events, and work with anyone in the community who is interested in developing a program. Basic auto mechanics, and community education about retarded children, children's shows, and a town happening, are produced for the purpose of making television a medium whose educational and community presence is understood by the public as a technology that they can use. Funds for the project are sought by the cable company.

With all the 'blue sky' services that cable can provide in education, it is of special interest to look at the services that are provided to schools and related institutions by cable companies. Many cable companies are presently working with, or in negotiations to work with local school districts and colleges to provide various sorts of programming assistance. Sometimes this type of connection with the schools has lead to exclusivity by the school districts of programming over the local origination channel. In fact, some cable companies when surveyed as to local origination stated that the "schools do origination." Many districts own their own studio facilities. Some of the colleges operate the local N.E.T. broadcast station, and compete with the cable company instead of working together. One cable operator, working in Lewiston, Maine near Bowdoin College considers his work with schools a minor coup. Bowdoin College, with production facilities and a N.E.T. station, did not allow enough flexibility for the students to obtain access, so

they and other educators were drawn to the cable local origination channel to produce their programming. With both local origination, and educational programming, cable operators find that working with schools can be an excellent "P.R. tool." It must be remembered that cable operators must sell their service. Sometimes it is hard to discern whether public relations is the motive, or if it is just general community interest.

Berks T.V. Cable Company in Reading, Pennsylvania wired the entire school district and their media center. This allowed the schools and their company to "better share audio visual equipment, eliminating the chores of film sharing and swapping, and further, allowing all schools to have access to information on any given subject at the same time."

National Cable Company Inc., in East Lansing, Michigan has set up origination studios in the Married Student Dorm of the State University. They are expanding to link the medical school with two way communications to the various East Lansing hospitals. TelePrompter, in New York City is planning to do the same with hospitals connected to New York University. In Orlando, Florida a similar project is soon to begin.

Children's programming, educational curriculum, campus news, high school television workshops, dramatic productions, school

15 Hal Oyler, Director, Cablecom-General, Denver, Colorado, "Introduction to Education Division," N.C.T.A. Cablecasting Guidebook.

16 Unless otherwise stated, all further examples from the N.C.T.A. Cablecasting Guidebook.
information, feedback to parents, and the planning of a school are all projects that cable has been involved with. A 'University of the Cable' in conjunction with McNeese State University in Louisiana offers college credit courses over cable. All of these projects are part of the cable industry's growing role in providing educational services to both schools, and the communities in which they operate. Many projects mixing education and cable are in progress. Many projects mixing medicine and television are just beginning. In all of these projects, the company serves as the conduit. Beyond that, many cable companies offer little help.

A large question for the educator is one of public, and/or user effect. Does service on cable television add to the present educational aims of the area in which the projects are developed? Or are they aids for the educator, and not the public? One of the early projects of the Alternate Media Center in New York was that of helping a community decide the services and location of a new school. Town meetings were cablecast and video taped to be shown at various locations throughout the location to be served by the new school. Thus, video and cable helped spawn citizen discussion and community involvement in the planning and building of a new school. But what about other cities and other projects? Who listens? Who responds? And what outreach is there for people not wired into cable? These are all valid questions that can not yet be adequately answered. There is just too little hard information available.

Television and cable can be tools that help define educational needs, the wants of a citizenry, and used as a two way, interactive communication service. Credit, and other means of one way education, and community certification processes are not the only way that television tied to education can go. Projects that use the television medium for education that are of an unstaged, or unstaid nature seem few and far between. Most seem to be mimics of various techniques that studio, broadcast T.V. fill up the Sunday morning airwaves with as a public service. Instead of finding new areas to communications use, I would fear that cable services could become a multiple channel entrenchment of techniques developed for a different, one way, channel scarce broadcast television.

Local Access and Alternative Television: An Assessment

Many of the cable projects and programs described have only just been started on local levels, with no means for wider distribution of the experience gained. Every project undertaken has a specific audience and intent. Sometimes it is only for administrators or for the patients. Sometimes it is dedicated only to give the listeners academic credit and confidence that they now have a specific college taught knowledge. The vast majority of cable companies don't seem to have ongoing non-automated community involving television programs of any nature. Even when the cable company does have these sorts of programming, rarely does it seem that the cable, or television plays an active role in the development of community priorities and resources, or help facilitate goals and objectives by seeking to define community, or citizen needs. The
Alternate Media Center has done this in specific areas in New York, thereby showing that a community forum of new and information transfer are not the only uses of television a cable company can provide. Community programming does not necessarily mean programs about the community (i.e. Talk Shows, City Council Meeting, or even 'hard hitting' documentaries). Community programming is necessarily more than but including local information. It is community information, plus involvement of local organization and local personalities, and it is the stimulation of local talents, and local creativity.

Cable can be used as an interactive distribution system for alternative community television. Community non-T.V.-professionals can operate some of the equipment at some cable companies. Community members can access some equipment for use outside the cable studio at some companies. Sometimes, they can help decide with the cable operator when the program is to be aired. Some community groups even control one access channel of the cable company. Alternative Television programming can be aired and produced by cable but is cable the best way to access and distribute alternative programming? A fear that community group members could rightfully have is that when cable companies begin to tighten their operation's belt due to economic problems, the community channel will be the first service of the company to be curtailed if not completely discontinued. Besides this well discussed question of channel control the larger question is that of the channel's penetration of the community. The community cable channel can only be listened to by those people who have cable subscriptions or those who wish to go to a friend's house who is on the cable, or to a cable viewing center (if there is one
available) for persons who don't want or can't afford cable T.V. It is quite possible for someone to be able to access equipment and cable channel space but be unable to view the program aired over the cable because he can't conveniently or freely access a cable T.V. set. Besides the latter scenario, in an urban situation cable T.V. has yet to cross all the social-economic and cultural barriers as effectively as broadcast television. Crossing these barriers is extremely important in developing a varied audience that would wish to access television and thereby produce their own varied programming.
Broadcast television is not to be written off as a distribution system for alternatively produced television programming. Recently, with the advent of the time base corrector, the electronic problems associated with attempting to broadcast community made programs have been solved. Porta-pac, cassette, and various other format video machines made for non-broadcast use can now be used for broadcast. To air a community developed program one does not have to go only to the cable operator, he can now go to the broadcast station. Theoretically, community groups don't have to wait for cable in non-wired cities to get their software on the air -- as of this writing, time base correctors have a six-month back order, and no one has yet broadcast a locally produced half-inch program by non-professionals over the air. Some stations do use porta-pacs for news coverage, and shoot the program off the monitor bringing it up to broadcast standard, but this technique leaves a lot to be desired in terms of the resultant picture quality.

Do-It-Yourself Broadcast

One way of trying to get locally produced software shown on broadcast television is to start your own television station. Much of the U.H.F. band is unoccupied and available. With a time base corrector and some other equipment, the studio could be in a
storefront, with major production facilities being porta-pacs and a half inch, or larger format studio. The cost for such a station could range as high as $90,000 for the first year of operation and $80,000 for each year thereafter. Other estimates have run as low as $30,000 for the initial equipment, with minimal subsistent salaries for personnel. The studio could be 1/2" or 3/4" format since there are base correctors that correct for color. This would solve the problem of cable distribution in that city. The new station would have to be carried on the cable.

There is a listener supported, community television station in Los Angeles. Similar to Pacifica Foundation radio stations, the station was supported initially by the Pacifica Foundation and works with some community video groups but is in fact a broadcast station complete with all the traditionally necessary broadcast equipment. A similar station is now being sought after by a group in Santa Cruz, California. This station would be located in a Santa Cruz storefront with a time base corrector, broadcasting equipment, and lots of porta-pacs. Whether or not the F.C.C. will grant the Santa Cruz group a license has still to be decided. One other U.S. group is presently seeking a broadcast license to air locally produced, alternative

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3 C.V.S. (Consolidated Video Systems) Color Capable Time Base Corrector. Manufacturer's suggested retail price, $9,000.
television. In St. Louis, a partner in a now defunct community radio station, K.D.N.A., is submitting a request for a television broadcast license to the F.C.C. This station would most likely use the time base corrector and portable video equipment.5

A recent Canadian Radio and Television Commission meeting was held in Vancouver, Canada to decide on the granting of a new television station for that city. Many local groups, including MetroMedia, and Connexions presented briefs at the commission hearing as to why a license should not be granted. In effect, the briefs stated that what Vancouver needs is a real community television station.6 Although I have not yet gotten any response to a letter inquiring if the Vancouver groups were interested in setting up their own station, all previous correspondence and communications with Michael Goldberg indicates that there might be interest in doing just that. The C.R.T.C. denied the license, thus giving others time to apply.

**Distribution on Already Existing Broadcast Channels**

Though an exciting idea, there are a variety of problems that could be encountered by persons wishing to air non-station produced programs on a local station.

1. They might not have a time base corrector. Of course, they could buy one for nine thousand dollars.

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5Kim Block, Community Media Trustee, Personal Interview, February 25, 1973.

2. There presently is a regulation requiring local origination on broadcast during prime time, and certain public service requirements. But due to time and channel scarcity, these public service and local origination requirements are usually the last programs to be produced and aired. One might be refused time due to lack of time, or prior fulfillment of local origination, or public service obligation. Whether or not this is true should be decided by the F.C.C. during the license renewal process. There could be a series of political, and social reasons why a station would not air locally produced tapes. Some of these reasons might be an orientation of the station towards mass consumption and a belief that locally produced programs do not have adequate mass appeal. This loss of mass appeal could mean a subsequent loss of viewers tuned into the station and thereby decreasing advertising rates. This year in California the Committee for Open Media has threatened to challenge license renewal requests by various broadcasters if they don't begin to air more locally produced programs.\(^7\) This might mean that the station could have to buy a time base corrector and air non-broadcast standard tapes to avert the Committee for Open Media's challenge.

3. Many television stations are union. Their station local origination (or news) crews are members of a union. Most alternative television groups are non-union. Sometimes, a station might be willing to air the program but cannot due to the union contract. If citizens are refused the right to air programs enough times for similar reasons,

\(^7\)Community Access TV, Vol. 1, No. 4 (February 1974).
there is a possibility that the union contract could be a denial of the freedom of speech amendment to the constitution. Only the courts can decide. There is only one situation that I know of where alternatively produced programming has been attempted to be aired over broadcast television. This is in St. Louis, where the NET station would broadcast 1/2"porta-pac programs that had been transferred to broadcast standard through a time base corrector. The funds for the project have not yet been acquired.

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8Kim Block and Eric von Schrader, Uptown T.V. Project, Draft of proposal for a series of eight community produced programs for broadcast over KETC Channel 9, St. Louis (St. Louis, Missouri: Community Media, 1973).
Chapter 10

ALTERNATIVE TV: ANALYSIS AND RECOMMENDATIONS

Introduction

In previous chapters, Alternative Television was defined, and alternative television programs and projects were described. Two possible delivery mechanisms, cable television and broadcast, were examined along with descriptions of various non-traditional modes of software distribution. In this chapter an attempt is made to analyze key elements in alternative TV which may promote or inhibit future growth. Considered are future financing of ATV and the extent to which cable TV and broadcast TV might be utilized in the future.

Analysis: Philosophy Behind Alternative Television

Glancing through the National Film Board's 'Challenge for Change' newsletter you catch a double refrain. People become real to bureaucrats only when they can document themselves within the conventions of television reality. And, even more basically, people, only take their own problems seriously and actively after they have been assured of their own reality by seeing themselves on television. Such image/reality inversions are not unique to video. What writer has not felt his self-image enhanced by seeing his work in print?

Most of the Alternative Television movement of today is a politically motivated movement whose activism is left over from the

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1Robert Arn; "The Form and Sense of Video"; ArtsCanada, Vol. 30, No. 4, p. 17.
late sixties. At best this politics is a Jeffersonian approach to media. At worst, it is an alienating rhetoric based on personalities and dogmatic political philosophies. An Alternative Television should be a conduit for varied viewpoints and opinions, thereby allowing the public to hear citizens with varied political viewpoints and create an informed electorate.

Public control of the air waves as envisioned by Congress when they established the F.C.C. was to some extent realized in CATV with the Public Access regulations. One of the biggest questions that has yet to be adequately answered is: is the public adequately prepared to use this medium which the government has opened up for it? From the point of view of Alternative Television, yes. The public is prepared, but most people don't know that they can access television.

In the words of Buckminster Fuller:

> As we all get in on the information, then we don't need someone to tell us what to do . . . Since there is not enough to go around in the world, then you have to prove you're an exception in order to live: called 'earning a living,' . . . whoever has the news is the authority.

The 'news' about access to television, and television production is only had by those in authority, and not yet by the general public, or that ever referred to "man on the street." If alternative television is to mean it is produced by the (TV) non-professional public about their concerns (whatever they may be), then someone has to give the non-professionals the tools from which to start; sometimes a porta-pac, sometimes just the knowledge that a porta-pac exists

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2R. Buckminster Fuller; At Washington University; Quoted in St. Louis Today, December 1974, p. 11.
and that it can be used to help express, identify, pinpoint, define, and answer important questions that he or she may have. The process by which this tool could be used to perform these deeds involve him/her, and not a newscaster. Television can be referred to as a pen. It means little without a language - artistic, or written. The visual language that has been developed through film, and television usage, and has been fed us in movie theater, and in our living rooms is no longer an elite language of the professional 'movie maker' or 'television crew'. It can be an active language within any community that wishes to develop it. The tools are inexpensive, and available. They are immediate. The two-way visual immediate feedback language that they use are effective community development tools. But public access over cable television is not an adequate medium for community expression of visual shared or private observations. Most communities in the United States don't have cable television. Very few of those people who do have access to this new public channel are not necessarily aware that you can talk back to, and be on television simultaneously. The large success of radio talk show has not yet made the audio to visual transition to television. Calling in to a television panel is not the same as appearing on television. No blue sky is needed. Only an easily accessible porta-pac.

There is a large proliferation of video groups in North America that deal with mutual survival problems, create similar programs, use the same equipment and are involved in similar social, or personal projects. Television technology, though around for nearly thirty years, is now only beginning to go through a self discovery process and re-evaluation. The development of compatible low cost television
recorders is relatively new (1967). Low-cost video has helped enable the "non-professional" to partake in the process, but in turn that non-professional has become a professional video pioneer, actively seeking out new ways to use, modify, and apply video techniques for both societal use, and personal statement. Immediate feedback of image is unique to video, but the self discovery, and legitimacy one can attain after being involved in a media is a technique not given to video alone. The use of this technique on video is somewhat of a novelty, and an inexpensive film possibility.

The Fogo process, (a Canadian given name to the technique of involving the community in the film/video process) was originally used with film. Video began to be used because it became available, was inexpensive, and easy to operate. These factors, plus the immediacy of the medium do not better the process, or even change it. Film can be developed within 24 hours, and thereby become immediate enough for community use. With the advent of professional super 8 film systems (by this I mean the Leacock/Hamilton system) within a similar price range of video, color is again accessible to those wishing to involve media in community. Film color is much simpler to maintain than video color, and film now becomes the easier, less expensive system. Kodak has recently come out with an office film processor - making development of color super 8 film an inhouse affair. I am sure that sync sound film with similar ease as Ektasound™ will soon be available on other, more professional systems. Four hundred foot (25 min.) super eight cartridges will also soon be available, and I am sure that more professional systems will soon accept this innovation. As has
been previously pointed out, super 8 film has successfully been broadcast over nationwide television.

Video has not yet broken loose from film technology to the extent that the machinery of film can still be adapted to effectively mimic some of the technical achievements of video. This implies that video is not the only tool for visual media reinforcement within a community. Film, particularly super-8 could easily be a more accepted and a simpler-to-handle medium. However, the novelty of immediately seeing oneself on television is not so easily dismissed. Television will have that drawing card for a long time to come . . . until it too is so accessible, as to be an experience that anyone may have whenever they wish.

Yet knowledge of the tool, and its accessibility is only a start. Being the McLuhan cool medium, television beyond initial curiosity has proved to be a non-involving medium unless the content, the software, has meaning. That's where the alternative television movement has been at the vanguard of group discovery. What is it besides that initial curiosity about interactive television made by 'the public' that can be developed into a meaningful and effective community group or private tool; one that effects a commonly derived or private goal is an area open to discovery.

Many of the so-called alternative media groups are actively involved in developing effective processes whereby television can be used as an effective tool to define, and obtain commonly shared or private goals.
Analysis: Financing of Alternative Television Centers

Funding for Alternative Television centers in the past has come mainly from two sources: cable companies for the funding of their public access channels, and private foundations and sources including church groups. There are currently less than twenty public access projects in the entire country: Open Channel, from New York in the TelePrompTer franchise area, has petitioned the FCC to allow cities to tax CATV companies by placing a 2% surcharge above the franchise fee. The F.C.C. requires that franchise fees be no more than 5%. Public Access Director Barry Verdi from Gill Cable in San Jose speculated that this would "be fine for large urban areas with tremendous subscriber potential," but for smaller areas, such as San Jose or other more rural situations, a 2% tax equals about "$20,000 yearly, not nearly enough to salary the personnel, let alone buy equipment and support programming." Surcharging the subscriber revenues or net income does not generate enough money for public access. C.A.T.V. profit could be well over $50,000 in a small town of 20,000 persons. Yet Multiple System Owners (M.S.O.'s) who own all, or part of a large percentage of CATV companies do not pour this type of money back into community programming. The Community Ownership Project in Oakland, California, suggests that the public projects that M.S.O.'s do fund are funded as a tax loss. They write these projects off as 'losses against "taxable income earned elsewhere."'

3Personal correspondence, Barry Verdi; June, 1973.

4Brian Kirshner, Community Television, Community Ownership Project, Oakland, p. 18.
Sterling Manhattan Cable Vision funded the Alternate Media Center's Video Access Center for approximately fifteen thousand dollars (for equipment) and then did nothing else except cable cast various program-produced on the Public Access channel. TelePrompTer, the northern Manhattan franchise owner/operator, also cable casts Video Access Center programs. Most of the funding for the continuation of local video centers comes from outside sources or public support.

Not all video access centers that allow for citizen participation in media production are associated with cable distribution systems. The Washington Community Video Center funded with foundation support in 1973 is seeking similar support in 1974 for triple the sum. There is no cable in Washington, nor is there any projected for the next ten years. Access to broadcast television and access to community distribution through street and storefront studios are presently the only means of distribution of community produced programming. It has been estimated that to run a video center effectively in the St. Louis area, again an area with no cable foreseeable for some time, the support necessary could run upwards from three hundred thousand dollars for the initial hardware acquisition, salaries, and space during the first year. Cost for subsequent years would be close to half that per year, until more equipment is necessary for efficient operation.

All of this is a far cry from the initial investment of one porta-pac ($1,525) and one person (free) that could be the basis for community programming. Of course much time and equipment could be donated by institutions that either have the money, or the equipment somewhere being unused. But reliance on volunteer time and effort,
and donations of equipment of questionable quality (though a help) is a boost of programming potential for an ongoing or beginning project, but a questionable policy for longterm support of an ongoing center. There must be some paid personnel because the center is a full-time responsibility. There must be money available to pay for the upkeep on the equipment. Alternative television is not free. To insure properly trained personnel, and an adequately trained public user, some sort of public access workshops should be established.

The Canadian Government has handled the problem of public use of film and video in a different way. By establishing a National Film Board and various projects under its auspices, including the Challenge for Change program, the government has accepted at least some of the responsibility for paying the public citizen access bill. Well over one million dollars is spent each year funding media projects of individual filmmakers and video centers through the Canada Council and the National Film Board. One example is Vidéographe, a center in Montreal. Cable companies in Canada must have local origination channels before they can import U.S. channels. Film and Video facilitators, funded by grants from the Canada Council, and the National Film Board or other agencies are given monies and equipment to promote the use of both film and video tape as a tool for community change and development and various artistic endeavors. Though there is a certain unfairness in comparing situations, the U.S. has not promoted the distribution of community produced visual documentaries as has been the policy of our northern neighbor. It is the tax payer who pays for most of this service in Canada. Here similar projects that allow
citizen access to media tools have had to depend on foundation grants, companies, institutions or churches for funding.

Cable TV and Alternative TV

One of the biggest disappointments of recent television history in the U.S. has been the hope that cable television services would soon be available to a large percentage of the population, and that these services would be public service in nature. Spurred by the designated channels allocated by the F.C.C. (the Government, Education, and Public Access channels plus the leased access channels) and dreamed of large-scale two way video and audio capability, some aspects of the public still want from cable which is not now technologically possible, or economically viable. This has been one major disappointment. But in time, what is dreamed about now will probably be tomorrow's reality, so that this disappointment is only one of time expected vs time of arrival, so much like the expectation of a friend from out of town due in by train. The train, delayed due to heavy, unexpected snow, will be in, but not until tomorrow.

One disappointment that cannot be rectified by time alone is that of developing a community television over cable.

Too many cable and closed-circuit systems are unable to use their potential because they have no access to programming suited to their unique situation. Unfortunately, too much stress is being put on (syndicated programs)..."canned" cassettes of old movies, TV shows and current entertainers - simply a frozen rehash of the same media resources we've always had at the national level. Such (programs) are hardly a creative approach to "local origination and do little to explore the unique potential of local intimacy and a known audience that cable and closed circuit have.

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Yes, there is public access, but there are only 17 cable companies that have public access channels. Yes, there is local origination, but only fifteen percent of all cable companies are doing local origination. The N.C.T.A. survey indicates that many of this fifteen percent are airing between a minimum of four and a maximum of ninety-eight hours of "canned...frozen rehash of the same media resources we've always had at the national level"7 weekly, more hours weekly than all other types of programming. Putting all this aside, we still have a local origination channel that mostly mimics broadcast, and gives us more of the Sunday morning local access so familiar to us all on broadcast television. I wish only to point out that the majority of local origination over cable is not the community development, man on the street local programming that it could be. It is not usually the interactive television within a community that it has the potential of becoming. This potential can be realized even before the technology allows low cost video, and audio two way capability. Usually, even what is available and can be reasonably done, is not even attempted. Television, even cable television, remains a black box to the majority of the people that it effects.

Recommendations for the Future

1) Presently there are a diverse number of governmental agencies that give out monies to run or stimulate projects that use media. Each of the agencies (HEW, the National Endowments, the National Science...
Foundation and others) are concerned with media projects that are specific to their areas of concern. There is no single agency with a policy for media use and development in communities across the nation. Single example projects (such as the Alternate Media Centers Intern Program, funded by the National Endowment for the Arts) do not necessarily stimulate similar projects for media development in other cities. If local involvement in media is to be effective, what is needed is a large sum of federal monies available to community groups to set up community and regional video and film centers to promote developmental access projects.

One scenario describing the way the funding could be made available is through regional media access centers similar to the Videographe Center organization. However, more important than specifying the organization of these projects centers is the spelling out of guidelines that absolutely limit the control over center policies and programs by the government. It is imperative that the local community members be the organizers and policy makers for these centers, and that the government provide as a service both financial and organizations aid only when asked.

Canada spends well over one million dollars yearly for film and video projects. Most of that money goes to access projects similar to those I have discussed. Assuming that one million dollars is spent yearly for utilizing access projects on a population of one tenth the size of the U.S., a reasonable budget for the U.S. agency responsible for access funding might be about $10 million per year. If funding at this level were to commence in 1975, some $30,000,000 would become available during the remaining three years of the Cable TV Public
Access experiment. This author would suggest an added year of financing (until 1978) for reassessing the embryo projects.

2) Cable Television should not be looked at as the only means of distributing local programming. Presently, too much energy is expended on cable television, particularly in major urban areas where cable systems have not yet been installed and where alternative television groups are present and active. Many U.H.F. airwaves are still available from the F.C.C. Running a TV station is not as complex or expensive as broadcasters would have us believe. A recent technological innovation (the time base corrector) can interface 1/2 and 3/4 inch video directly with the transmitter. Getting locally produced programming onto broadcast TV should become a priority. Local groups now applying for community TV stations should be received sympathetically by the F.C.C., thus promoting diversity of television programming. The F.C.C. should also investigate the possibility of requiring commercial stations to air community produced programming.

However, a word of caution concerning this recommendation is in order. The recent history of commercial UHF broadcast stations has been one of frequent station financial failure. Careful studies should be undertaken to explore the short-term capital requirements and long-term viability of non-commercial "alternative" UHF broadcast stations.

3) Cable television should continue to be considered as a major means of distributing alternative television, particularly in view of three factors: 1) its initial success in many communities; 2) the forthcoming end of the experimental period of five years free access to the designated channels and 3) the recent report of a cabinet-level committee calling for the elimination of free public access channels and for
common carrier status for cable. Should common carrier charges be high, or even for some alternative television groups minimal, such a change might well hurt access. Therefore, it is possibly in the best interests of alternative television to make the current public access rules work. The implications of the proposed change should be carefully examined.

6) Video is not the only tool for alternative television. Super-8 and various other inexpensive film formats should be more fully explored for television usage.

5) The software produced, and not the tools used, is the major reason for community alternative television. Innovative approaches, and various processes of developing effective software should not only be explored and shared, but should fully utilize and adapt television technology for use by the public at large.

With true community-based alternative television, television can become an accessible tool for those who wish to use it, not just a tool of those with the money, connections, or the "talent" to be allowed in front of a camera. The black box mystique of television does not have to be around for much longer. With exposure, through writing, along with community involvement, the mystery of television will disappear. As it does, the hope is that individuals, whatever their concerns might be, will have the skills to utilize this visual tool, much as they now type or drive. If they err as to their use, let us recall a line from Thomas Jefferson:

"We have nothing to fear from error as long as reason is free to oppose it."8

8Access, No. 7, p. 11.
BIBLIOGRAPHY
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Books and Publications:


"Canada Council Aid Announced," The Canadian Film Digest. Toronto, Canada: The Canadian Film Digest, January/February 1974.


Toward an Economic Base for Community Originated Programming.

Community Film Workshop Council (Appalachia). APPAL SEED, No. 1, 1971.
Community Film Workshop of Appalachia, P. O. Box 332, Whitesburg, Kentucky.

Communications Programs. Statement of Charles W. Mathews before the
Subcommittee on Space Science and Applications Committee on Science

Communications Publishing Corporation. CATV Systems: Directory, Map

Conklin, Rev. George. Statements to the CATV Hearings California State

Cypress Communications Corporation. Plan for Minority Participation in
Cypress Cable System in Dayton, Ohio. February 23, 1972.

Detroit, Michigan. Cable Television in Detroit: A Study in Urban
Communications. Cable TV Study Committee for Common Council, 1972.

Dickopp, Gerhard. "Design Simplicity Cuts Costs for German Color-Video

Dordick, Herbert S., and Jack Lyle. Access by Local Political Candidates
to Cable Television: A Report of an Experiment. Santa Monica,

Drexel Library Quarterly. "Cable Television for Librarians," Vol. 9,
Nos. 1 and 2 (January - April 1973).

"Educational Programming on Cable TV: Nowhere Near Enough," Broadcast
Management/Engineering, October 1972.

Efrein, Joel Lawrence. Video Tape Production and Communication Techniques.

1972.

Electronic Industries Association. Ad Hoc Committee on FCC Docket

Evenson, Dudley, and Michael Shamberg (eds.). Radical Software.

Farquhar, John A. Entertainment and News Services for Community Informa-


Fogo Process in Communication: A Reflection on the Use of Film and Video-Tape in Community Development. St. John's, Newfoundland: Extension Service, Memorial University of Newfoundland, Canada, no date.


"Little Black Boxes and Self-Destructing Tickets," T.V. Guide. 

Lakewood Citizens Advisory Committee on C.A.T.V. Cable Communications for Lakewood. Lakewood, Colorado: City of Lakewood, 1972.

Law and Contemporary Problems: "Communications (Parts 1 and 2)." School of Law, Duke University. Vol. 34, Nos. 2 and 3 (Spring 1969).


Public Management. *July 1972.* (entire issue devoted to Cable Television, and related issues.)


San Francisco City and County. "Resolution to Establish a CATV Task Force to Explore, Advise and Recommend Policies, Procedures, and Practices Regarding the Programming of Cable and Pay Television Services Within the Boundaries of the City and the County of San Francisco." San Francisco, California: The City and County of San Francisco, 1973.


Periodicals:

Access/Challenge for Change. Montreal, Quebec: National Film Board of Canada. Four times yearly, since 1968.


Broadband Communications Report. New York: Broadband Information Services, Inc. 24 issues per year.


CATelevision. Columbus: The Ohio Communications Coalition. Monthly.


Community Access TV. Santa Cruz, California: H. Alan Frederiksen, Publisher. 10 issues per year.


TVBE. Madison, Wisconsin: TVBE Ltd. Occasional.


Newspapers:


St. Louis Globe Democrat: "Cable Television: It is Just Around the Corner and within Five Years will Make at Least Twenty-Six Channels." Marsha Canfield. June 16-17, 1973.


St. Louis Post-Dispatch: "FCC Adopts Compromise for Cable TV." February 3, 1972.


"Alderman to Inquire Into CATV Delay Here." November 12, 1972.

"Urban League to Study Cable TV Status Here." November 24, 1972.


APPENDICES

The appendices from the original thesis (as outlined below) have been omitted in this version of the report. For further information regarding material in the appendices, please write to:

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Outline of Material Contained in Appendices

Appendix A: Alternative Television Questionnaire
Appendix B: N.A.M.A. Position Paper
Appendix C: Alternative Media Center Program Guide
Appendix D: ECUMENSAT, COUNCILNET - Figures from Brochure for Concilium Productions
Appendix E: N.C.T.A. Local Origination Questionnaire from Local Origination Directory 1973
Appendix F: Local Origination and Public Access Letters and List of the Surveyed Companies
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