

T H E F U T U R E O F T E L E V I S I O N

A PRESCRIPTIVE CONFERENCE

FRIDAY, MARCH 4 THROUGH SUNDAY, MARCH 6

AT

THE ANNENBERG SCHOOL OF COMMUNICATIONS
UNIVERSITY OF SOUTHERN CALIFORNIA

SPONSORED BY

THE FILM & TELEVISION STUDY CENTER
THE ANNENBERG SCHOOL OF COMMUNICATIONS

SUPPORTED WITH GRANTS FROM

THE NATIONAL ENDOWMENT FOR THE ARTS
THE CALIFORNIA ARTS COUNCIL

THE FUTURE OF TELEVISION:
SOME BASIC PREMISES

During the two weekend sessions of "The Future of Television," experts from a broad spectrum of academic and professional disciplines shall attempt to identify constraints on, and specify values for, the future development of the single most powerful force in industrial civilization.

It is apparent that we cannot deal meaningfully with the future of television as an isolated phenomenon. Nor is it sufficient to focus on the purely technical and esthetic possibilities of the medium without paying attention to its larger philosophical and political implications. Television is a meta-cultural medium which overlaps and interpenetrates the total spectrum of technocultural systems in our society.

Neither may we assume that the present nature of the television industry holds the key to an understanding of its future -- for the future of television lies within an ongoing revolution in electronic information processing and telecommunications systems which transcends the phenomenology of the industry as we know it.

Indeed, our conference is founded on the premise that the potential now exists for an historically unprecedented revolution in the structure and function of mass communication systems. This potential appears to be embodied in six tool systems which currently are evolving as separate industries. They are:

1. Cable communication networks
2. Portable video recording equipment
3. Video disc and video cassette technologies
4. Time-shared computer utilities
5. Domestic communication satellites
6. New Information display devices for the home

The potential of these tools for precipitating an historically unprecedented revolution in mass communication systems becomes clear if we consider them not as independent entities but as components of a single, integrated, nationwide telecommunication system which would subsume, invert, supplement and, in some instances, replace the functions now performed by the present mass media -- television, radio, newspapers, theatrical cinema.

For the purposes of our conference, the notion of a "communications revolution" shall be understood to indicate that it's theoretically possible to integrate and organize this set of tools in such a manner that the new structure thus realized would implement a radical inversion of the structure and function of the existing mass media. In other words, it would amount to inversion of the "industrial organizing principle" that is the source of the structural and functional identity of our society in general, and of the mass communication subsystems of our society in particular.

The word "principle" is derived from the Latin principium meaning beginning or source. An organizing principle, then, may be defined as the root or source or law which determines the nature or identity of a system; it's the ultimate basis on which the existence of something depends; it is "cause" in the widest sense -- it embodies the logic or system of organization that makes a structure what it is.

Looking at human societies in the twentieth century we may say that their identity derives from what may be called the industrial organizing principle. Simply defined, this is the principle of centralized mass production and mass distribution. This principle is manifest in, and implemented through, the functional organization of any technocultural system which serves that purpose, and that includes almost all tools and institutions in an industrial society

The industrial organizing principle becomes translated uniquely through the particular social subsystem under analysis. The mass communication subsystems of society, being the cultural arm of the industrial order that makes their operations both possible and necessary, are, like all other social subsystems, a special case of the industrial organizing principle: implemented through their functional organization it becomes the principle of centralized, one-way, mass audience, nonadaptive distribution of messages. Accordingly, the chief functional characteristic of the mass media, that is, the primary purpose of their existence, is that of processing centralized output -- the centralized mass production and one-way mass distribution of symbolic messages to a captive mass audience.

Now if we define "revolution" as a radical inversion of the identity of a system -- our word radical being derived from the Latin radix meaning root -- we must conclude that there never has been a true revolution in the structure and function of mass communication systems. Although many developments in the history of the mass media have been characterized as revolutionary, in fact the differences have been of degree rather than kind.

There have been changes in the way messages are encoded for mass distribution (print, movies, radio, television), and there have been changes in the numbers of persons simultaneously addressed by these messages (always larger captive audiences); but throughout all these "revolutions" there's been no change in the industrial organizing principle of centralized, one-way, mass audience, nonadaptive message distribution which has been the root or source of identity for virtually all mass communication systems since the invention of moveable type.

All the so-called revolutions up to now have resulted only in changes in the way the industrial organizing principle is implemented; they haven't inverted the principle itself. In other words, there have been technical innovations but no structural transformations. Indeed, each

successive innovation in the technology of mass communication systems not only has embodied and implemented the industrial organizing principle but actually has reinforced it and extended its range of influence, making possible ever more centralized control over the means of mass producing and mass distributing symbolic messages to ever larger captive audiences.

Only today, and only through electronic information processing and telecommunication systems, is a truly radical revolution possible for the first time. Unlike all previous transformations in the technology of mass communication systems, the revolution that could theoretically be realized through proper integration and organization of these tools would represent a difference of both degree and kind. Such a revolution would be far more profound than a mere shift in ownership or power; it would mean not only a retooling but a radical inversion of the basic principles served by tools. In other words, the new structure would implement a principle of organization exactly inverse of that which is the source of the mass media's structural and functional identity. We may characterize this inverse principle as the cybernetic organizing principle.

COMMUNICATIONS REVOLUTION

INDUSTRIAL ORGANIZING PRINCIPLE

- * Centralized
- * One-Way
- * Mass Audience
- * Nonadaptive
- * Message Distribution

CYBERNETIC ORGANIZING PRINCIPLE

- * Decentralized
- * Two-Way
- * Special Audience
- * User Controlled
- * Feedback Communication

Implementing this inverse principle of organization would have several profound consequences, not only for the mass media but for our society as a whole. Operationally, it would mean replacing the processing of centralized output with the processing of decentralized input as the

chief functional characteristic of the mass media, that is, the primary purpose of their existence. This in turn would make possible public access to information specified by the user and public access to communications channels controlled by the user. The important words here are "specified by the user" and "controlled by the user." Those criteria make the premise significantly different from traditional notions about "public access" which don't assume structural inversion. According to our definition, however, these criteria would have to be satisfied for any changes in the function of the media to qualify as revolutionary; and that's why it's possible to say that a communications revolution is a cultural revolution or it's no revolution at all.

PROCESSES AND PURPOSES OF THE CONFERENCE

This conference shall take a prescriptive rather than predictive approach to the potential communications revolution. It shall be our purpose to prescribe what should be the impact of new technologies on the mass media rather than trying to predict what will be.

Of course, some notion of probable developments during the next five to ten years is necessary for any such prescriptive activity; this technical overview will be provided during the conference by means of six panel discussions, conceived as "plenary sessions," each addressing the state of the art and probable developments in the six industries with which we are concerned.

Superimposed over this technical foundation will be a series of small discussion groups, each with its own unique point of view and academic-professional orientation. Anthropologists, sociologists, cyberneticians, political theorists, artists, critics, and professionals from the television industry will interact with small "participating audiences" selected from the Southern California academic and professional communities.

Their purpose will be to specify a "preferred state" for the structure and function of the mass media from their own point of view, and to identify probable constraints -- political, economic, technical -- on the realization of their prescribed goal. It is in this sense that the overall purpose of the conference may be seen as a political one.

-- Gene Youngblood
Conference Producer

PARTICIPANTS:

I. TECHNOLOGY PANEL:
CABLE COMMUNICATION NETWORKS

1. Burt I. Harris, Chairman, National Cable Television Assn.
2. Walter S. Baer, cable consultant, The Rand Corporation
3. Herbert Dordick, cable consultant, Annenberg School
4. Gerry Parrick, AT&T/CATV consultant, Annenberg School*

II. TECHNOLOGY PANEL:
VIDEO DISC AND VIDEO CASSETTE SYSTEMS

1. John Findlater, President, MCA DiscoVision
2. Martin Roberts, Publisher, "Videocassette & CATV Newsletter"
3. Tom McDermott, former V.P. of Programming, RCA SelectaVision
4. Kent Broadbent, Director of R&D, MCA DiscoVision

III. TECHNOLOGY PANEL:
TIME-SHARED COMPUTER UTILITIES

1. Dr. Edwin Parker, Stanford University
2. Dr. David Farber, University of California at Irvine
3. Dr. Harold Sackman, author, "Mass Information Utilities"
4. Dr. Tom Martin, The Annenberg School of Communication

IV. TECHNOLOGY PANEL:DOMESTIC COMMUNICATION SATELLITES

1. Phillip Rubin, Director of Technology, C.P.B.
2. Paul Visher, Hughes Aircraft Company, Space Division
3. John Witherspoon, Public Service Satellite Consortium

V. TECHNOLOGY PANEL:PORTABLE VIDEO RECORDING EQUIPMENT

1. Representative of Sony Corporation
2. Representative of Hitachi Corporation
3. Representative of 3M Corporation

VI. TECHNOLOGY PANEL:HOME INFORMATION DISPLAY SYSTEMS

1. Ben Kazan, Xerox Research Center, Palo Alto
2. Alex Jacobson, Hughes Aircraft Company, Carlsbad
3. Stuart Umpleby, former PLATO System, U. of Illinois*

VII. TELEVISION INDUSTRY PANEL"THE FUTURE OF THE MASS AUDIENCE"

1. Chloe Aaron, V.P. of Programming, Public Broadcasting Service
2. Norman Lear, Television Producer*
3. Michael Shamberg, Television Producer*
4. Charles Allen, Director of Programming, KCET, Los Angeles

VIII. LEGAL PANEL"CULTURE, POLITICS, LAW"

1. Tracy Weston, Chmn., Communications Law, UCLA*
2. Monroe Price, Prof. of Communications Law, UCLA*
3. Fred Nicholas, California Public Broadcasting Commission*

IX. FOUNDATIONS PANEL"PUBLIC MEDIA AND ELECTRONIC ARTS"

1. Howard Klein, Arts Program, The Rockefeller Foundation
2. Brian O'Dougherty, Public Media Program, N.E.A.*
3. Steve Benedict, National Council on Foundations*

X. ARTISTS AND CRITICS PANEL
"ART, MEDIA, CULTURE"

1. David Antin, critic-theorist, U.C. San Diego
2. Nam June Paik, video artist, New York City
3. David Ross, Associate Curator, Long Beach Art Museum
4. Woody Vasulka, video artist, SUNY, Buffalo

XI. SCIENCE & POLITICS SYMPOSIUM
"MASS CULTURE AND THE STRUCTURE OF REALITY"

1. Heinz Von Foerster, cyberneticist, Pescadero, Ca.
2. Gordon Pask, cyberneticist, Surrey, England
3. Humberto Maturana, neurophysiologist, M.I.T.
4. Sol Worth, anthropologist, Annenberg School, U. of Pennsylvania
5. Roderic Gorney, psychologist, UCLA
6. Herbert Schiller, political theorist, U.C. San Diego
7. Terry Winograd, Computer Scientist, Stanford University*
8. Allan Kay, Computer Scientist, Xerox Research Center*
9. Roland S. Homet, Aspen Institute, Communications & Society*

* Indicates tentative participation

THE FILM & TELEVISION STUDY CENTER is a consortium of academic and professional institutions in Southern California dedicated to the archiving, study, and appreciation of film and television. Member institutions include The University of California at Los Angeles (UCLA), The University of Southern California (USC), The California Institute of the Arts (Cal Arts), Loyola Marymount University, The American Film Institute, The Academy of Motion Picture Arts and Sciences, The Los Angeles County Museum of Art, and The Los Angeles International Film Exposition (Filmex).

THE ANNENBERG SCHOOL OF COMMUNICATIONS AT U.S.C. is perhaps the world's most advanced graduate institution seeking solutions to contemporary and future communications problems. Its select cadre of graduate students, drawn from around the world, are offered advanced training in four communication areas: theory, technology, practices, and research. The three-level building, designed by A. Quincy Jones, now Dean of the U.S.C. School of Architecture and Fine Arts, is regarded as a headquarters building rather than a classroom building. There are no customary classrooms; students and faculty work in clusters of offices and carrels, studios and control rooms, all serviced by ultra-sophisticated electronic equipment designed to facilitate the learning process. Vertical cores throughout the building provide an electronic nervous system capable of transforming all public spaces into television and radio studios by means of two-way communication with a master control area. The Annenberg School of Communications, Inc., was founded by Walter H. Annenberg, a leading American publisher and former Ambassador to Great Britain; it operates schools jointly but independently at The University of Pennsylvania and The University of Southern California.

GENE YOUNGBLOOD, conference producer, is a researcher, writer, and teacher specializing in the study of mass communications media, their social implications and uses. He is the author of Expanded Cinema (1970) and of the forthcoming The Videosphere (1977). Mr. Youngblood has received research grants from the National Endowment for the Arts, The Rockefeller Foundation, and The Rockefeller Brothers Fund. He is a Research Fellow of Buckminster Fuller's Design Science Institute in Washington, D.C., and of Media Study, Inc. in Buffalo, New York.

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TECHNOLOGY PANEL:

CABLE COMMUNICATION NETWORKS

1. Burt Harris, Chairman, National Cable Television Association
2. Walter Baer, Communications Consultant, The Rand Corporation
3. Herbert Dordick, Policy Consultant, The Annenberg School
4. Representative of Pacific Telephone Company
5. Mitsuru Kataoka, Director, Dickson Video Lab, U.C.L.A.

TECHNOLOGY PANEL:

HOME COMPUTERS AND THE INFORMATION UTILITY

1. David Farber, Information & Computer Science, U.C. Irvine
2. Alan Kay, Xerox Palo Alto Research Center
3. Tom Martin, The Annenberg School of Communications

TECHNOLOGY PANEL:

VIDEO DISC AND VIDEOCASSETTE SYSTEMS

1. John Findlater, President, MCA Disco-Vision
2. Martin Roberts, Publisher, Videocassette & CATV Newsletter
3. Representative of 3M Company
4. Kent Broadbent, Director of R&D, MCA Disco-Vision
5. Norman Glenn, Marketing & Programming Director, MCA Disco-Vision

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DOMESTIC COMMUNICATION SATELLITES

1. Philip Rubin, Director of Technology, Corp. for Public Broadcasting
2. C. Richard Jones, Hughes Aircraft Company, Space Communications
3. John Witherspoon, Public Service Satellite Consortium

TECHNOLOGY PANEL:

PORTABLE VIDEO RECORDING EQUIPMENT

1. Joseph Roizen, international video consultant, Palo Alto
2. Joe Flaherty, Director of Technology, CBS Television Network
3. Peter Kirby, Director, Video Lab, Long Beach Art Museum

TECHNOLOGY PANEL:

HOME INFORMATION DISPLAY SYSTEMS

1. Ben Kazan, Xerox Palo Alto Research Center
2. Alex Jacobson, Liquid Crystal Program, Hughes Aircraft Company
3. Joseph Roizen, international video consultant, Palo Alto
4. Representative of Pacific Telephone Company

COMMUNICATIONS LAW AND NATIONAL POLICY

1. Tracy Weston, Communications Law, U.C.L.A.
2. Monroe Price, Communications Law, U.C.L.A.
3. Forrest Chisman, Aspen Institute on Communications & Society
4. Fred Nicholas, California Public Broadcasting Commission

VIDEO ARTISTS AND CRITICS PANEL

1. David Ross, Deputy Director, Long Beach Museum of Art
2. David Antin, poet, art critic & historian, U.C. San Diego
3. Eleanor Antin, video artist, U.C. San Diego
4. Woody Vasulka, video artist, S.U.N.Y. at Buffalo, New York
5. Ira Schneider, Publisher, "Radical Software;" editor, Video Art"

THE INTERDISCIPLINARY COUNCIL ON THE FUTURE OF TELEVISION

(TO INCLUDE THE VIDEO ART PANEL)

1. Heinz Von Foerster, physiologist, Pescadero, Ca.
2. Humberto Maturana, neurophysiologist, Santiago, Chile
3. Sol Worth, anthropologist, Annenberg School of Communications
4. Roderic Gorney, psychiatrist, author: "The Human Agenda"
5. David Loye, psychiatrist, author: "The Healing of a Nation"
6. Herbert Schiller, political theorist, author: "The Mind Managers"
7. H.M. Boettinger, Director of Corporate Planning, AT&T
8. Alan Kay, computer systems designer, Xerox Research Center
9. Barbara Schultz, Television Producer, KCET, Ch. 28, Los Angeles

THE FUTURE OF TELEVISION

MAR. 4
FRIDAY

MAR. 5
SATURDAY

MAR. 6
SUNDAY

9:00 am	DEMONSTRATION OF MCA DISCO-VISION PLAYER		
9:30 am			
10:00 am	VIDEO DISC & CASSETTE PANEL	COMPUTER PANEL	DOMESTIC SATELLITE PANEL
11:30 am	LUNCH	LUNCH	LUNCH
1:00 pm	CABLE TELEVISION PANEL	INFORMATION DISPLAY PANEL	PORTABLE VIDEO PANEL
3:00 pm	COFFEE	COFFEE	COFFEE
3:30 pm	VIDEO ART PANEL	CULTURAL ANTHROPOLOGY PANEL	COMMUNICATIONS POLITICS PANEL
5:30 pm	DINNER	DINNER	DINNER
7:30 pm	INTERDISCIPLINARY COUNCIL	INTERDISCIPLINARY COUNCIL	INTERDISCIPLINARY COUNCIL