

Communications Technology and Social Policy

UNDERSTANDING THE NEW "CULTURAL REVOLUTION"

Edited by

GEORGE GERBNER
LARRY P. GROSS
WILLIAM H. MELODY

A WILEY-INTERSCIENCE PUBLICATION

JOHN WILEY & SONS, New York • London • Sydney • Toronto

CONTENTS

PART I WHAT CAN THE NEW TECHNOLOGY DO? THE DIMENSIONS OF CHANGE

INTRODUCTION BY ARTHUR D. HALL, III,	3
Chapter 1 Communication and Computers, JAMES T. MARTIN	7
References,	11
Chapter 2 Trends in Switched Services, ARTHUR D. HALL, III	13
Telephone Services,	14
<i>Pushbutton Dialing (or Touchtone®),</i>	15
<i>Call Transfer,</i>	15
<i>Add-On,</i>	15
<i>Call Waiting,</i>	15
<i>Speed (or Abbreviated) Addressing,</i>	15
<i>Wake Up (or Alarm Clock Service),</i>	15
Switched-Data Services,	16
<i>Rate of Transmission,</i>	16
<i>Speed of Connection (Set-Up Time),</i>	17
<i>Error Rate,</i>	17
<i>Cost and Price,</i>	17
Switched Videotelephone Service,	18
The Relation of Picturephone to CATV,	21
References,	22
Chapter 3 Broadcasting Technologies, JOHN W. WENTWORTH	23
Radio Broadcasting and Audio Recording,	23
<i>Tutorial Comments on "High-Fidelity" Concepts,</i>	24
<i>Standard Broadcasting,</i>	25

	<i>Frequency-Modulation Broadcasting,</i>	26
	<i>Stereophonic Broadcasting,</i>	27
	<i>Audio Recording,</i>	27
	Television Broadcasting and Video Recording,	29
	<i>Color Television,</i>	29
	<i>Video Recording,</i>	30
	Cable Television Systems,	31
	Possible Future Developments,	32
	<i>Quadrasonic Recording and Broadcasting,</i>	32
	<i>Audio Cassettes as a "Broadcasting" Medium,</i>	32
	<i>Video Cassettes or Discs,</i>	33
	<i>Communications Satellites for Broadcasting,</i>	33
	<i>Interactive CATV Systems,</i>	34
	<i>Facsimile Services,</i>	35
	<i>Broadcasting to Local Recorders,</i>	35
Chapter 4	Communicating with the Man on the Move,	37
	JONA COHN	
	Major Technical Developments,	37
	Framework for Discussion,	38
	Categories of Needs,	39
	<i>Safety,</i>	39
	<i>Efficiency,</i>	39
	<i>Convenience,</i>	39
	Example Application,	40
	Future Mobile Communications,	41
	<i>Some Possible New Services,</i>	41
	Spectrum Availability,	45
	References,	48
Chapter 5	Graphics Systems,	49
	GEORGE R. WHITE	
	Information Expansion,	49
	Structure of Information Systems,	52
	Function of Information Systems,	53
	Graphics Systems Essentials,	56

CONTENTS

xvii

	Conclusion, 60	
	References, 60	
Chapter 6	Communications Satellites, W. L. PRITCHARD AND P. L. BARGELLINI	61
	Commercial Communications Satellites, 61	
	<i>The Experimental Era,</i> 62	
	<i>The Commercial Era,</i> 62	
	<i>Future Trends,</i> 65	
	<i>Orbit Utilization,</i> 72	
	<i>Earth Stations,</i> 73	
	Broadcast Satellites, 74	
	<i>Preliminary Remarks,</i> 74	
	<i>Possible Forms of Satellite Broadcasting,</i> 75	
	<i>Forthcoming Experiments,</i> 80	
	Future of Satellite Broadcasting in the United States, 80	
	Conclusions, 81	
	References, 82	
Chapter 7	Social Control Through Communications, DENNIS GABOR	83
	Can Communications Contribute to World Peace? 84	
	Can Communications Help in Countering the Danger of Overpopulation? 85	
	Can Communications Arrest the Dangerous Tendency Towards Over-Urbanization? 86	
	What Can Communications Do Against Crime and Drug Addiction? 88	
	What Can We Do Against the Bottleneck that Is Developing Between the Almost Unlimited Information Capacity of Modern Communication Systems and the Limited Reception and Assimilation Rate of the Individual? 89	
	What Can We Do Against "Information Pollution"? 90	
	What Can We Do to Educate Children, Adolescents, and Adults to Be Fit Citizens for a Materially Stationary Civilization on a High Culture Level? 91	

**PART II INSTITUTIONAL POWERS AND CONTROLS:
THE DIRECTION OF CHANGE**

INTRODUCTION BY WILLIAM H. MELODY, 97

Chapter 8	Telecommunications Interconnection: Wherefrom and Whitherto?	101
	RICHARD GABEL	
	Interconnection Restrictions Affecting Independent Telephone Companies, 1893 to 1920, 102	
	<i>Problems After Interconnection With Independents,</i> 105	
	Interconnection Restrictions Barring Customer Attachments—State Regulatory Activity, 108	
	Interconnection Restrictions—Pre-Carterfone Cases on Federal Level, 108	
	<i>Service Quality,</i> 109	
	<i>The Need for Integration,</i> 110	
	<i>Quality of Maintenance,</i> 110	
	<i>Equipment Obsolescence,</i> 110	
	<i>Company Responsibility,</i> 111	
	<i>Effect on Charges to the Public,</i> 111	
	The Carterfone Decision, 111	
	Implementation of Carterfone, 113	
	<i>The NAS Panel,</i> 113	
	Interconnection—Whitherto? 115	
	<i>The PBX Advisory Committee,</i> 115	
	<i>The Opportunities Ahead,</i> 116	
	References, 117	
Chapter 9	CATV: FCC Rules and the Public Interest,	121
	RALPH LEE SMITH	
	Characteristics of the Cable, 122	
	Conflict of Technologies, 124	
	Cable and the FCC, 125	
	The New Cable Rules, 126	
	The Exclusivity Problem, 127	
	Exclusivity and the New Rules, 128	

CONTENTS

xix

	Cable, The Government, and the Public Interest, 130	
	References, 131	
/Chapter 10	Institutional Pressures and Response at the FCC: Cable and the Fairness Doctrine as a Case Study, NICHOLAS JOHNSON	133
	References, 144	
Chapter 11	An Assessment of the Computer-Telecommunica- tions Complex in Europe, Japan, and North America, DIETER KIMBEL	147
	A Managerial Opportunity, 150	
	The Interdependence of Computers and Telecommunications, 151	
	<i>The Technical Interdependence,</i> 151	
	<i>The Economic Interdependence,</i> 152	
	<i>Institutional Interdependence,</i> 154	
	The Wired City Concept, 155	
	State-of-the-Art and Planned Activities, 157	
	A National Program, 159	
	References, 162	
/Chapter 12	The Role of Advocacy in Public Policy Planning, WILLIAM H. MELODY	165
	Technological Determinism and Institutional Structure, 166	
	<i>The Heritage of Business Affected with a Public Interest,</i> 167	
	<i>The Technologically Based Rationale,</i> 168	
	Implications for the Approach to Regulation, 170	
	Public Policy Response to Changing Market Circumstances, 171	
	<i>Television Transmission Service,</i> 171	
	<i>Satellite Technology,</i> 172	
	<i>Data Communications and Teleprocessing,</i> 175	
	<i>Cable Television,</i> 176	
	Public Policy: Planning and Advocacy, 177	
	References, 180	

**PART III COMMUNICATION AND EDUCATION FOR THE FULL
EMPLOYMENT OF HUMAN POTENTIAL**

INTRODUCTION BY LARRY P. GROSS, 185

References, 188

**Chapter 13 Modes of Communication and the Acquisition of
Symbolic Competence, LARRY P. GROSS 189**

The Multimodal Nature of Symbolic Thought
and Action, 191

Modes, Codes, and Media, 192

Primary, Derived, and Technical Modes, 193

The Tacitness of Skill and Competence, 194

Varieties of the Symbolic Experience, 197

The Social-Gestural Mode, 197

The Iconic Mode, 198

The Logico-Mathematical Mode, 199

The Musical Mode, 199

The Acquisition of Skills and Competencies, 201

Competence Is Its Own Reward, 201

Learning Through Action, 201

The Verbal Fallacy, 202

The Seductiveness of the Visual, 204

Educational Policies and Technological Imperatives, 206

References, 207

**Chapter 14 Learning Through Experience and Learning
Through Media, JEROME S. BRUNER AND DAVID R. OLSON 209**

Direct Experience, 211

Mediate Experience, 213

On the Acquisition of Knowledge, 214

Reinforcement, 217

Modeling, 217

Verbal Instruction, 218

On the Acquisition of Skills and Abilities, 221

Technological Realizations, 224

References, 226

CONTENTS

xxi

Chapter 15	Formative Research in the Production of Television for Children, EDWARD L. PALMER	229
	The CTW Operational Model, 232	
	<i>Curriculum Planning</i> , 232	
	<i>Behavioral Goals</i> , 233	
	<i>Existing Competence of Target Audience</i> , 234	
	<i>Appeal of Existing Materials</i> , 234	
	<i>Experimental Production</i> , 234	
	<i>Production, Airing, and Progress Testing of the Broadcast Series</i> , 235	
	<i>Summative Evaluation</i> , 236	
	<i>Writer's Manual</i> , 236	
	Formative Research Methods 237	
	<i>Formative Research on Program Appeal</i> , 237	
	<i>Formative Research on Program Comprehensibility</i> , 238	
	<i>Internal Compatibility</i> , 240	
	<i>Activity Eliciting Potential</i> , 241	
	Organizational and Interpersonal Factors, 242	
	The Distinctive Role and Functions of Formative Research, 243	
	References, 245	
Chapter 16	The Magic Lantern: Metaphor for Humanistic Education, BRUCE R. JOYCE	247
	Why Is the School Changing, and Why Should It Change? 247	
	The Focus of Reform, 252	
	<i>Multimedia Support System</i> , 252	
	<i>Functions of Media Forms in Storage and Instructional Systems</i> , 253	
	<i>The Array of Media Possibilities</i> , 254	
	Models of Learning and Teaching, 255	
	<i>The Personalist Model</i> , 256	
	<i>The Synergistic Model</i> , 256	
	<i>The Information-Processing Model</i> , 256	
	<i>The Cybernetic and Behavior Modification Models</i> , 256	
	The Design of Learning Centers, 257	

	<i>Idiosyncratic Centers,</i>	257
	<i>The Human Ecology Centers,</i>	259
	<i>The Skills Center,</i>	260
	<i>Academic Centers,</i>	261
	<i>The Performing Arts Center,</i>	262
	Conclusions,	263
	References,	264
Chapter 17	Teacher Image in Mass Culture; Symbolic Functions of the "Hidden Curriculum,"	265
	GEORGE GERBNER	
	Symbolic Functions,	267
	The "Hidden Curriculum" and Its Effects,	269
	Historical Images,	271
	Teacher and School in United States Media,	273
	<i>Love and the Teacher,</i>	274
	<i>Poverty of the Schools,</i>	275
	<i>The School Sports Story,</i>	275
	<i>Community and Power,</i>	277
	<i>Publish and Perish,</i>	278
	Images Across Cultures,	279
	<i>Teacher Goals and Fates,</i>	280
	<i>The Role of Students,</i>	281
	Knowledge and its Control,	283
	References,	285
PART IV THE NEW FIELD OF URBAN COMMUNICATIONS		
	INTRODUCTION BY BERTRAM M. GROSS,	289
Chapter 18	Urbanization and Communications,	293
	MELVIN M. WEBBER	
Chapter 19	Wiring Megalopolis: Two Scenarios,	305
	MARK L. HINSHAW	
	Two Possible Futures,	307
	<i>Scenario I,</i>	308
	<i>Scenario II,</i>	312

CONTENTS

xxiii

	Conclusions, 316	
	References, 317	
/Chapter 20	Minorities and the New Media: Exclusion and Access, OLIVER GRAY	319
	Looking Backward, 320	
	Cable: The New Technological Elitism, 322	
	Toward the Future, 324	
	References, 325	
/Chapter 21	The Open Door Policy on Television, THEODORA SKLOVER	327
	Public Access, 328	
	Government Regulation on Public Access, 330	
	Pioneering at Open Channel, 332	
	<i>Examples of the Application of Public Access, 334</i>	
	Conclusions, 336	
	References, 337	
/Chapter 22	Moving Information Instead of Mass; Transportation versus Communication, PETER COWAN	339
	The Views We Hold Now, 340	
	The Propensity to Consume Transportation and Communications, 342	
	Transportation versus Communications? 346	
	Conclusions, 351	
	References, 352	
/Chapter 23	Urban Ecostructures in a Cybernetic Age: Responses to Communications Stress, RICHARD L. MEIER	353
	Who Are the Hurt? 354	
	Where is the Action? 355	
	Why is Stress Increasing? 357	
	When Will the Limit Be Reached? 359	
	Stress Releases for Cities of the Future, 360	
	References, 362	

PART V GLOBAL COMMUNICATIONS: CULTURAL
EXPLOSION OR INVASION?

INTRODUCTION BY HERBERT I. SCHILLER, 365

Chapter 24	Space Communications and the Developing Countries, ARNOLD W. FRUTKIN	369
	INTELSAT, 370	
	<i>Organizational Considerations,</i> 370	
	<i>Communications Considerations,</i> 371	
	<i>Participation and Growth,</i> 371	
	<i>Costs of Participation in INTELSAT,</i> 372	
	<i>Types of Use,</i> 373	
	 The India-United States Satellite Broadcasting Experiment, 374	
	<i>Genesis of the Experiment,</i> 375	
	<i>Joint Study,</i> 376	
	<i>The NASA-DAE Experiment,</i> 377	
	<i>Programming,</i> 378	
	<i>Responsibility and Stimulus,</i> 378	
	<i>Costs, Benefits, and Follow-On,</i> 379	
	<i>In Sum,</i> 379	
	References, 380	
Chapter 25	Television as a Horseless Carriage, ELIHU KATZ	381
	The Heritage of Radio, 382	
	<i>Nonstop Broadcasting,</i> 383	
	<i>The Everybody Audience,</i> 384	
	<i>Up-to-the-Minute News,</i> 385	
	 Consequences for Broadcasting in New Nations, 385	
	<i>Too Much: The Key Problem of Television in Small Nations,</i> 386	
	<i>The Everybody Audience in New Nations,</i> 388	
	<i>The Problem of Homogenized News,</i> 389	
	 Summary and Conclusions, 390	
	References, 391	

CONTENTS

xxv

- Chapter 26 The Nonhomogeneity of the National State and the International Flow of Communication,** 393
 KAARLE NORDENSTRENG AND TAPIO VARIS
- Historical Development of Communication in Society, 394
 The Role of Consciousness, 399
 World in Transition, 402
 References, 412
- Chapter 27 Inequalities in Access to Communication Facilities for Working-Class Organizations,** 413
 STEFAN NEDZYNSKI
- Unions and Society, 413
 The Media Problem, 415
- The Press,* 416
Radio and Television, 416
- Factors that Result in Poor Access to the Media by Unions and Other Subgroups, 417
- Ownership and Control of the Media,* 417
Pressure from Advertisers, 418
Governmental Pressures, 418
- Balancing Forces and Possibilities Open to Worker's Organizations, 420
 References, 423
- Chapter 28 Mass Media and the Socialist Revolution: The Experience of Chile,** 425
 ARMAND MATTELART
- Legacy of a Power Structure: Panorama of Concentration of Ownership of Mass Media and External Dependency, 426
- The Functionality of the Dependent Culture,* 428
- Coexistence, 429
- An Untouched Power,* 429
The Dialectic Response of the Bourgeois and Imperialist Media, 430
- Contradictions Between Class Struggle and Mercantile Competition: The Impasses, 431
- The Genres,* 431
Implicit Contents, 433

- The Democratization of Distribution*, 437
The Participation of the Masses, 439
 References, 440
- ✓ **Chapter 29 Mass Communications and Cultural Revolution: 441**
The Experience of China, DALLAS W. SMYTHE
 The Context of the Cultural Revolution, 442
 The Cultural Revolution, 446
 "Mass Communications" Before and After, 448
Policy on Service or Product, 448
Policy on Organization and Control, 455
Innovation Policy, 457
Policy on Availability, 459
 Conclusions, 460
 References, 464
- ✓ **Chapter 30 Authentic National Development versus the Free 467**
Flow of Information and the New Communications
Technology, HERBERT I. SCHILLER
 The New Awareness, 471
Ferment in the Underdeveloped World, 476
Prospects, 477
 References, 480

PART VI TRACKING THE FUTURE

INTRODUCTION BY GEORGE GERBNER, 483

- Chapter 31 The History of the Future**, JAMES W. CAREY 485
 AND JOHN J. QUIRK
 The Future as Exhortation, 486
 The Future as a Literary Prophecy, 490
 The Future as a Participation Ritual, 497
 References, 503

CONTENTS

xxvii

- Chapter 32 Communication Technologies and the Future of the Broadcasting Professions, MICHAEL GUREVITCH AND PHILIP ELLIOTT 505**
- Broadcasting as a Profession, 506
 Professional Ideologies and Professional Situations, 509
Recruitment and Socialization, 510
 The Technological Innovations, 511
 The Consequences of Technological Change, 512
Contents, 512
Political Control, 513
Finance, 513
Recruitment and Ideology, 514
Change in the Professional Situation, 515
Conclusion, 517
 References, 518
- Chapter 33 Politics and the New Mass Communications, FORREST P. CHISMAN 521**
- References, 530
- Chapter 34 Technology Assessment or Institutional Change? EDWIN B. PARKER 533**
- New Communication Technology, 534
 Inevitability of Technology Development? 539
 Institutional Change, 541
Strategies for Institutional Change, 542
 References, 545
- Chapter 35 Research in Forbidden Territory, JAMES D. HALLORAN 547**
- References, 553
- Chapter 36 Cultural Indicators: The Third Voice, GEORGE GERBNER 555**
- Stock-Taking in a Changing World, 556
 Areas and Terms of Analysis, 558
 Institutional Process Analysis, 559

<i>Decision Making,</i>	559
<i>The Exercise of Power,</i>	561
Message System Analysis,	563
<i>The Systems,</i>	563
<i>The Analysis,</i>	564
<i>Dimensions and Measures,</i>	564
Cultivation Analysis,	567
<i>The Problem of Effects,</i>	568
<i>The Question of Change,</i>	568
<i>Symbolic Functions,</i>	570
<i>The Cultivation Process and Its Analysis,</i>	571
References,	572

Cultural Indicators: The Third Voice

GEORGE GERBNER

Private and governmental commissions, congressional committees, and foundation-supported studies since the early 1930s have called for some surveillance of media performance and effects. But none of these proposals spelled out how that might be done or limited the scope to manageable proportions relevant to scientific purpose and public policy. Consequently, there is probably no area of significant social policy in which far-reaching decisions are made with as little reliable, systematic, cumulative, and comparative information about the actual trends and state of affairs as in the sphere of the mass production and distribution of the most broadly shared messages of our culture.

We are only vaguely aware of the fact that decisive policy making is going on, and that cultural politics is as much a part of the fabric of modern life as economic, welfare, or military politics. Abstract conceptions of "censorship" obscure the realities of direction, constraints, and controls in any mass production. Formal aesthetic categories derived from other times and places ignore social functions, relationships, and power, which lie at the heart of the cultural policy process.

We know very little about trends in the composition and structure of the mass-produced systems of messages that define life in urbanized societies. We know no more about the institutional processes that compose and structure those systems. Much of our research on how people respond and behave in specific situations lacks insight into the dynamics of the common cultural context in which and to which they respond.

Economists, anthropologists, and other social scientists have long been searching for measures of cultural differentiation and diversity. Citizens concerned with public issues such as health, education, delinquency, aging, generational conflict, group relations, drugs, and violence point to cultural "trends" to support their case. But there is no convincing evidence to support any case.

Educators increasingly wonder about the consequences inherent in the compulsion to present life in salable packages. We harness the process of acculturation to consumer markets of instant gratification. Is "Enjoy now, pay later" the prescription for healthy impatience with empty promises or for selfishness and irresponsibility?

Claims come from every vested interest in society. They generally fall into two categories. One is the voice of the political agent or agency staking a claim to "issues" dear to the heart of a political clientele. The other consists of media voices speaking for industrial and business clients. Lacking is a "third voice" of independent research building a continuing and cumulative factual basis for judgment and policy. That is what a scheme of cultural indicators is designed to do.

Cultural indicators will not resolve the issues. Policy making is the task of citizen judgment and responsible authority. However, cultural indicators can illuminate the aspects that relate more to institutional policy than to personal choice or taste, more to general trends and configurations than to specific items, works, and qualities. In so doing, cultural indicators can assist those responsible for making and implementing policy, as well as the general public, in arriving at sounder judgments concerning the role of mass communications in the cultivation of public policy alternatives.

Cultural indicators will help close the "intelligence gaps" created by historic changes in institutionalized public acculturation. These are changes in the technologically based and collectively managed production of messages. To go McLuhan's half-truth one better, society is the message. Corporate, technological, and other collective processes of message production short-circuit former networks of social communication and superimpose their own forms of collective consciousness—their own publics—on other social relationships. The purpose of a scheme of cultural indicators is to monitor the aspects of our system of generating and using bodies of broadly shared messages that are most relevant to social issues and public policy decisions.

STOCK-TAKING IN A CHANGING WORLD

"Our progress as a nation depends today, as it has in the past, on meeting our national challenges with knowledge and reason," wrote the Secretary of Commerce in sending Americans their first census form by mail in 1970. "To do so, we must constantly take stock of ourselves."

But the ways in which "we must constantly take stock of ourselves" change as society changes. Article 1, Section 2 of the U.S. Constitution directed that "Representatives and direct Taxes shall be apportioned among the several States . . . according to their respective Numbers, which shall be determined by

adding to the whole Number of free persons . . . three-fifths of all other Persons." It took the Constitution 100 years to recognize each and every person as a "whole Number," and the Census another 100 years to publish, in collaboration with the Social Science Research Council, the first *Historical Statistics of the U.S.* In the meantime, the census went far beyond head counting. It became a chief source of regular, periodic, and cumulative demographic information essential to government, schools, business, and industry.

Economic accounting has also become a national responsibility. The President's Council of Economic Advisers prepares an annual report on the nation's economic health. The social and cultural transformations of our society have made economic and labor statistics and census information less than adequate to "meeting our national challenges with knowledge and reason." "Indeed," comments *Toward a Social Report* (1969), "economic indicators have become so much a part of our thinking that we have tended to equate a rising National Income with national well-being. Many are surprised to find unrest and discontent growing at a time when National Income is rising so rapidly . . . Why have income and disaffection increased at the same time?"

Research that might shed light on such problems has been piecemeal, sporadic, uncoordinated, and rarely comparable over time and across cultures. Much of it has been conducted in response to "crises" and forgotten when interest (and funds) declined. Rarely have such studies made contributions to policy. Seldom did they continue long enough or in a broad enough framework to add much to the orderly accumulation of social intelligence.

The recognition of such deficiencies and waste has led social scientists and government officials to propose various remedies. Proposals call for a Council of Social Advisers, an annual Social Report, a National Institute for the Social Sciences, and other forms of "social accounting" or "social indicators." A review by Land (1971) argued for going beyond the accumulation of output data to gather intelligence about some "conceptualization of a social process."

President Johnson directed the Secretary of Health, Education, and Welfare "to search for ways to improve the Nation's ability to chart its social progress." The Department's response in 1969 illustrated the "intelligence gap" in health, mobility, public order and safety, learning, science, art, and in "information not only on objective conditions, but also on how different groups of Americans perceive the conditions in which they find themselves" (*Toward a Social Report*, 1969).

President Nixon set up a National Goals Research Staff charged with developing "indicators that can reflect the present and future quality of American life, and the direction and rate of its change." Although the group was disbanded without fulfilling its charge, another commission was appointed to review the information needs of government, and the National Science Foun-

dation launched its problem-oriented program of Research Applied to National Needs (RANN). In 1972, the National Institute of Mental Health awarded the first research grant to Dr. Larry P. Gross and myself to conduct a pilot study leading to a full-fledged Cultural Indicators project. This chapter is largely a discussion of assumptions and concepts underlying that project. It draws from and develops previous statements on that subject (Gerbner, 1966a, 1969a, 1969b, 1970).

AREAS AND TERMS OF ANALYSIS

The reliable observation of regularities in the production, composition, structure, and image-cultivation characteristics of large message systems is a specialized research enterprise. Selective habits of personal participation limit even the sophisticated practitioner to risky extrapolation about the cultural experience of different or heterogeneous communities.

The areas and terms of analysis leading to cultural indicators stem from a conception of communication and its institutionalized role in society. They were developed through prior studies (most of which are listed under my name in the bibliography). The studies demonstrated that the mass cultural presentations of many aspects of life and types of action teach lessons that serve institutional purposes. People do not have to accept these lessons but cannot escape having to deal with the social norms, the agenda of issues, and the calculus of life's chances implicit in them.

I have defined communication as interaction through messages bearing man's notion of existence, priorities, values, and relationships. Codes of symbolic significance conveyed through modes of expression form the currency of social relations. Institutions package, media compose, and technologies release message systems into the mainstream of common consciousness.

How is this massive flow managed? How does it fit into or alter the existing cultural context? What perspectives on life and the world does it express and cultivate? How does it vary across time, societies, and cultures? Finally, how does the cultivation of collective assumptions relate to the conduct of public affairs, and vice versa?

The questions designate three areas of analysis: how mass media relate to other institutions, make decisions, compose message systems, and perform their functions in society are questions for *institutional process analysis*; how large bodies of messages can be observed as dynamic systems with symbolic functions that have social consequences is the question of *message system analysis*; and what common assumptions, points of view, images, and associations do the message systems tend to cultivate in large and heterogeneous communities, and with what public policy implications, are problems for *cultivation analysis*.

INSTITUTIONAL PROCESS ANALYSIS

How do media managers determine and perform the functions their institutions, clients, and the social order require? What is the overall effect of corporate controls on the basic terms of symbolic output? What policy changes do, in fact, alter those terms and how?

Mass media policies reflect not only a stage in industrial development and the general structure of social relations but also particular types of institutional and industrial powers and pressures. Mass communicators everywhere occupy sensitive and central positions in the social network. They have suppliers, distributors, and critics. Other organizations claim their attention or protection. They have associations of their own. They have laws, codes, and policies that channel and constrain them. And they have patrons who, as in any industrial production, supply the capital, the facilities, and the authority (or at least opportunity) to address mass publics.

Decision Making

Any enterprise may appear free to those who run it. But in a more objective sense, all mass production, including that of messages, is managed. Only a small portion of all potential messages can be formulated and even fewer can be selected for mass distribution. Therefore, research cannot realistically focus on whether or not there is "suppression"; selective suppression is simply the other side of the mass communication coin. The analysis must consider all major powers, roles, and relationships that have a systematic and generalized influence on how messages will be selected, formulated, and transmitted.

Some studies (e.g., Gerbner, 1961b, 1964) suggest that systems of messages produced by any institutional source, commercial as well as overtly partisan, have some ideological orientation implicit in selection, emphasis, treatment. Other research, such as that by Warren Breed (1960), Pool and Shulman (1964), David Manning White (1964), and Walter Geiber (1960, 1964), show that most newsmen respond more to the pressures and expectations of the newsroom than to any generalized concept of audience or public interest. A study of newsroom decisions (Bowers, 1967) found that three out of four publishers are active in directing news decisions, with their influence greatest in news of the immediate market area, and in subjects that affect the revenue of the paper.

The systematic exercise of powers resides in institutional roles and in relationships to centers of power. A scheme designed to analyze this process needs to identify the power roles, suggest some sources of their powers, and specify those functions that affect what the media communicate. Power and its application become relevant to this scheme as they affect what is being communicated to mass media publics. Figure 1 outlines nine types of power roles or

Power Roles (Groups)	Types of Leverage	Typical Functions
1. AUTHORITIES. Make and enforce legally binding decisions	Political and military	Arbitrate, regulate, legitimize power relations; demand service
2. PATRONS. Invest, subsidize	Control over resources	Set conditions for the supply of capital and operating funds
3. MANAGEMENT	Control over personnel	Set and supervise policies; public relations
4. AUXILIARIES. Supplement and support management	Access to specialized services	Provide supplies, services
5. COLLEAGUES	Solidarity	Set standards; protection
6. COMPETITORS	Scarcity	Set standards; vigilance
7. EXPERTS. Talent, technicians, critics, subject specialists	Skill, knowledge, popularity, prestige	Provide personal creative, performing, technical services, advice
8. ORGANIZATIONS	Pressure through representation, boycott, appeal to authorities	Demand favorable attention, portrayal, policy support
9. PUBLICS. Groups created or cultivated (or both) by media	Individual patronage	Attend to messages; buy products

Figure 1 Major power roles, types of leverage, and typical functions directing the formation of mass-produced message systems.

groups, and briefly notes the types of leverage and typical functions attached to each role.

1. *Authorities* possess legal powers to enact and enforce demands or impose sanctions on communicators. Legislative, executive, judicial bodies, regulatory commissions, public administrators, the police, and the military may have such authority. Authorities may assume rights patrons ordinarily have, and may impose sanctions (such as for seditious or criminal acts) that patrons cannot. Authorities may also depend on the support of communicators for much of their authority; the "regulated" have been known to regulate the regulators.

2. *Patrons* are those who directly invest in or subsidize media operations in exchange for economic, political, or cultural benefits. Their clients are the media that provide such benefits in exchange for discretionary patronage. Media patrons may be banks, advertisers, other corporate or civic organizations, religious or military bodies, or governments. The principal types of patrons and the major client relationships determine the role of media management in the power scheme of every society. The client relationship also affects the institution's approach to most issues and problems, and permeates the climate of communicator decision making.

3. *Management* consists of executives and administrators who make up the chain of command in the organization. They formulate and supervise the implementation of policies intended to fulfill the terms of patron and other power group support. They engage and control all personnel. Management's chief functions are (a) to cultivate client relations and (b) to conduct public relations. From the management's point of view, the messages that the institution produces must serve these two functions.

4. *Auxiliaries* provide supplies and services necessary to management's ability to perform its tasks. They are distributing organizations, networks, agencies, and syndicates; suppliers of raw materials, talent, artistic properties, and logistical services; wholesale and retail outlets; related manufacturing and trade concerns, associations, unions; and the holders of patents, copyrights, or other property rights.

5. *Colleagues* are communicators whose status, sense of direction or standards, and solidarity with one another can exert leverage on the formation and selection of messages.

6. *Competitors* are other professionals or media whose claims on scarce resources or ability to innovate can force the institution to exercise vigilance and either innovate or emulate in order to maintain its relationships with patrons and publics.

7. *Experts* possess needed personal skills, knowledge, critical abilities, or other gifts. They are writers, editors, creative talent, technicians, critics, researchers, subject matter specialists, consultants, and others who can give (or withhold) personal services necessary for communication.

8. *Organizations* are other formally structured or corporate groups that may claim attention, protection, or services. They may be business, political, religious, civic, fraternal, or professional associations. Inasmuch as some sort of public visibility has become a virtual requirement for organizational viability and support, the competition for attention is intense. Large organizational investments in public relations through the media exert pressure on media content and make media dependent on freely available (and self-serving) organizational resources.

9. *Publics*, finally, are the products of media output—groups created and cultivated through the messages. They are loose aggregations of people who may have little in common. But the symbols they share cultivate a community of meaning and perspective despite other differences. Management's task of "public relations" is to develop this sense of community into material value for the institution and its patrons.

The Exercise of Power

Institutional power is exerted through the leverage built into power roles. Authorities can apply political or policy pressure; patrons can provide or

withdraw subsidy; managements can hire and fire; auxiliaries can work overtime or quit servicing; colleagues can strike; competitors can raid, scoop, or corner the market; experts can refuse to serve; organizations can support, protest, or boycott; and publics can patronize or stop reading, viewing, buying, or voting.

These are forms of leverage rooted in the structure of institutional roles and relations. Power applied to communications usually involves the demands that such and such be (or not be) communicated or altered in certain ways.

The demand may be ad hoc, that is, pertaining to a particular message, subject, or policy. When a system of "do's" and "don'ts" is to be regularly applied, it is usually *codified* (as in codes, regulations, and laws). The force or weight behind the leverage is a measure of institutional power. The test is what happens if the demand is not obeyed or the code not observed. That test is applied in what I call a critical incident.

If nothing happens, there has been no power, or at least no display of force to indicate power. (The ability and willingness to display force by applying sanctions is taken as an indication of institutional power.) Sanctions are *substantive* if they pertain to the substance or content of the communication itself, as in the order to revise or omit (or print) a story, add or delete a scene, withhold necessary information, or jam a broadcast. The force behind a substantive demand or sanction is procedural. Sanctions are *procedural* if they pertain to the procedure by which communication is created. Revoking a license, firing or blacklisting, denying equipment or raw materials, discriminatory taxation or rates, strikes, boycotts, and imprisonment are procedural sanctions.

While analytically distinct, neither power roles nor types of leverage are in reality separate and isolated. On the contrary, they often combine, overlap, and telescope in different configurations. The accumulation of power roles and possibilities of leverage give certain institutions dominant positions in the mass communication of their societies.

Institutional process analysis seeks, through interviews, participant observation, and the study of records, to amplify this scheme of power roles, functions, and leverage, and to apply it to the investigation of decision making in communications. (Gerbner, 1958a, 1958b, 1959, 1969a, 1972b.) Critical incidents (a clash of powers, when things "go wrong") may set the lines of powers and influence for more routine control of media content. The investigation contributes to cultural indicators in account of the interplay of roles and powers that direct the formation of mass-produced message systems. These directions can then be related to the analysis of the message systems and to their cultivation functions. For example, how does management respond to the pressure of authorities or organizations concerning some sensitive aspects of content, and how does that response affect the frequency and symbolic functions of that particular content configuration across media and over time?

MESSAGE SYSTEM ANALYSIS

The material for analysis is taken from the massive flow of symbols produced by mass media for large and heterogeneous (usually national) audiences. Unlike most social science data, these are not symbols used to make inferences about largely hidden processes. They are visible and manifest sources of public acculturation. They provide direct access to the specific imagery, context, and content of a relatively centralized and institutionally managed release of symbolic materials into the common cultural environment.

The Systems

The most popular products of mass-produced culture provide special opportunities for the study of socially potent message systems. In these systems—popular fiction, drama, and news—aspects of life are recreated in significant associations with total human situations. An area of knowledge or the operation of a social enterprise would appear only when dramatic or news values—that is, social symbolic functions—demand it.

Dramatic and fictional entertainment especially exhibit ritualistically repetitive social symbolic mechanisms that reveal conventionally cultivated approaches toward people and life. Unlike life, the bulk of popular fiction and drama is an “open book.” Facts do not get in the way of its reality, which is the reality of values. Characterizations are usually apt, motivations are transparent, problems and conflicts are explicit, and the interplay of forces that determines the outcome, and outcome itself, are usually clear. Of all the products of mass-produced culture, these appeal to the widest and most heterogeneous publics. Most people, especially the young and the less educated, encounter most subjects and ideas in the form of “incidental” treatment in the course of their relatively nonselective leisure time entertainment. In that way, “entertainment” can force attention to what most people would never seek out as “information.”

The symbolic composition and structure of the message system of a mass medium defines its own synthetic “world.” Only what is represented exists. All that exists in that “world” is represented in it. “Facts” reflect not opaque reality but palpable design. Focus directs attention, emphasis signifies importance, “typecasting” and fate accent value and power and the thread of action or other association ties things together into dynamic wholes. The “world” has its own time, space, geography, demography, and ethnography, bent to institutional purpose and rules of social morality. What policies populate, actions animate, fates govern, and themes dominate this “world”? How do things work in it, and why do they change from time to time?

The "system" in message systems is that of institutional design and purpose. The systematic functions of and trends in the composite "message" can be made visible through the "decomposition" of the presentations into units and categories relevant to investigative purpose, and their "recomposition" in the form of social symbolic functions.

The Analysis

The analysis is designed to investigate aggregate and collective premises presented in samples of material. It deals with the "facts of life" and dynamic qualities represented in the systems. Its purpose is to describe the symbolic "world," sense its climate, trace its currents, and identify its functions.

The results make no reference to single communications. They do not interpret selected units of symbolic material or draw conclusions about artistic style or merit. The findings represent what large and heterogeneous communities absorb; they do not necessarily resemble what specific individuals or groups select.

The premises defining life in the symbolic world provide common imagery and a basis for interaction among separate and disparate groups. That common basis forms the agenda of public discourse and a starting point for individual conclusions and interpretations. The analysis of message systems pivots on the determination of those common terms and is limited to clearly perceived and reliably coded items.

The reliability of the analysis is achieved by multiple codings and the measured agreement of trained analysts. If one were to substitute the perceptions and impressions of casual observers, no matter how sophisticated, the value of the investigation would be reduced, and its purpose confounded. Only an analysis of unambiguous message elements and their separation from personal impressions left by unidentified clues can provide a baseline for comparison with the intentions of policy makers and the perceptions or conceptions of audiences. No such relationships can be established as long as the actual common terms and their symbolic functions are unknown, are derived from unexamined assumptions, or are inferred from subjective verbalizations of uncertain and ambiguous origin.

Dimensions and Measures

The study of a system *as system* notes processes and relationships expressed in the whole, not in its parts. Unlike literary or dramatic criticism, or, in fact, most personal cultural participation and judgment, message system analysis observes the record of institutional behavior in message mass-production for large and heterogeneous communities. The reliable observation of that record

of institutional behavior reveals collective and common instead of individual and unique features of public image formation and cultivation. The scheme and methods of analysis are designed to inquire into selected dimensions of the process composing and structuring message systems.

These dimensions stem from aspects of communication that we have previously identified as the cultivation of assumptions about *existence*, *priorities*, *values*, and *relationships*. Figure 2 summarizes the questions, terms, and measures of analysis relevant to each dimension.

The dimension of assumptions about existence deals with the question "What is?", that is, what is available (referred to) in public message systems, how frequently, and in what proportions. The availability of shared messages defines the scope of public attention. The measure of attention, therefore, indicates the presence, frequency, rate, complexity, and varying distributions of items, topics, themes, and so on represented in message systems.

The dimension of priorities raises the question, "What is important?" We use measures of *emphasis* to study the context of relative prominence and the order or degrees of intensity, centrality, or importance. Measures of attention and emphasis may be combined to indicate not only the allocation but also the focusing of attention in a system.

The dimension of values inquires into the point of view from which things are presented. It rates certain evaluative and other qualitative characteristics, traits, or connotations attached to different items, actions, persons, groups,

<i>Dimensions:</i>	EXISTENCE	PRIORITIES	VALUES	RELATIONSHIPS
<i>Assumptions about:</i>	WHAT IS?	WHAT IS IMPORTANT?	WHAT IS RIGHT OR WRONG, GOOD OR BAD, ETC.?	WHAT IS RELATED TO WHAT, AND HOW?
<i>Questions:</i>	What is available for public attention? How much and how frequently?	In what context or order of importance?	In what light, from what point of view, with what associated judgments?	In what overall proximal, logical or casual structure?
<i>Terms and measures of analysis:</i>	ATTENTION Prevalence, rate, complexity, variations	EMPHASIS Ordering, ranking, scaling for prominence, centrality, or intensity	TENDENCY Measures of critical and differential tendency; qualities, traits	STRUCTURE Correlations, clustering; structure of action

Figure 2 Dimensions, questions, terms, and measures of message system analysis.

and so on. Measures of *tendency* are used to assess the direction of value judgments observed in messages.

The dimension of relationships focuses on the more complex associations within and among all measures. When we deal with patterns instead of only simple distributions, or when we relate the clustering of measures to one another, we illuminate the underlying *structure* of assumptions about existence, priorities, and values represented in message systems.

The four dimensions, then, yield measures of attention, emphasis, tendency, and structure. One or more of these measures can be applied to any unit of analysis. We have studied trends in the distribution of *attention* devoted to the subject of mental illness, of education, and of violence (Gerbner, 1961a, 1966b, 1972a). *Emphasis* was measured in the investigation of comparative press perspectives in world communication (Gerbner, 1961a). Research on political tendencies in news reporting and on the characterizations of violents and victims in television drama focused on measures of differential *tendency*. The study of the "film hero" utilized all dimensions of analysis (Gerbner, 1969c).

The analysis may record topics, themes, persons, and types of action represented in the material. It may touch on the history, geography, demography, and ethnography of the symbolic "world." The symbolic population and its interpersonal and group relationships may be observed. Themes of nature, science, politics, law, crime, business, education, art, illness and health, peace and war, sex, love, friendship, and violence may be coded. The roles, values, and goals of the characters who populate the symbolic "world" may be related to the issues with which they grapple and to the fates to which they are destined.

The scheme provides a conceptual framework and practical instrumentation for the systematic gathering and periodic reporting of comprehensive, cumulative, and comparative information about mass-mediated message systems. Content indicators can include measures specific to given issues, policies, or symbolic functions, such as the television "violence index" (Gerbner, 1972a). Or they can deal with general features of the symbolic world—census figures ranging over time, space, personality types, and social roles. Indicators can also trace the presentation of heroes and villains, victors and victims, fair means or foul, or the configuration of certain themes, actions, and values over time and across cultures.

Content indicators tell us not so much what individuals think or do as what most people think or do something *about* in *common*. They will tell us about the shared representations of life, the issues, and the prevailing points of view that capture public attention, occupy people's time, and animate their imagination. They will help us understand the impact of communication media development and social change on the symbolic climate that affects *all* we

think and do. We can then inquire into the institutional aspects and the cultural consequences in sharper awareness of the currents that tug and pull us all.

CULTIVATION ANALYSIS

The most distinctive characteristics of large groups of people are acquired in the process of growing up, learning, and living in one culture rather than in another. Individuals make their own selection of materials through which to cultivate personal images, tastes, views, and preferences, and they seek to influence those available to and chosen by their children. But they cannot cultivate that which is not available. They will rarely select what is scarcely available, seldom emphasized, or infrequently presented. A culture cultivates not only patterns of conformity but also patterns of alienation or rebellion after its own image. Its affirmations pose the issues most likely to be the targets of symbolic provocation or protest.

The message systems of a culture not only inform but form common images. They not only entertain but create publics. They not only satisfy but shape a range of attitudes, tastes, and preferences. They provide the boundary conditions and overall patterns within which the processes of personal and group-mediated selection, interpretation, and image-formation go on.

Cultivation analysis begins with the insights of the study of institutions and the message systems they produce, and goes on to investigate the contributions that these systems and their symbolic functions make to the cultivation of assumptions about life and the world. Style of expression, quality of representation, artistic excellence, or the quality of individual experience associated with selective exposure to and participation in mass-cultural activity are not considered critical variables for this purpose. What is informative, entertaining (or both), good, bad, or indifferent by any standard of quality are selective judgments applied to messages quite independently from the social functions they actually perform in the context of large message systems touching the collective life of a whole community. Conventional and formal judgments applied to specific communications may be irrelevant to general questions about the cultivation of assumptions about what is, what is important, what is right, and what is related to what.

Message systems cultivate the terms on which they present subjects and aspects of life. There is no reason for assuming that the cultivation of these terms depends in any significant way on agreement or disagreement with or belief or disbelief in the presentations, or on whether these presentations are presumably factual or imaginary. This does not mean, of course, that we do not normally attach greater credibility to a news story, a presumably factual

report, a trusted source, a familiar account, than to a fairy tale or to what we regard as false or inimical. It does mean that in the general process of image formation and cultivation both "fact" and "fable" play significant and interrelated roles.

The Problem of Effects

The bulk of experimental and survey research on communications "effects" has contributed little to our understanding of the mass cultural process. The reason is that most of it stemmed from disciplinary and theoretical perspectives that did not consider that process the principal criterion of relevance.

Mass communications research should be concerned with mass communications and not with assorted tactics of manipulating behavior. The preoccupation with such tactics is itself a reflection of manipulative pressures in a culture in which the "behavior" that ultimately counts (and pays most of the research costs) is that at the cash register, box office, or ballot box. But the concern with tactics at the expense of strategy has been self-defeating. It has neglected the steady cultivation of issues, conceptions, and perspectives that gives meaning to all ideas and actions. All animals "behave" but only humans *act* in a symbolic context. The tactical preoccupation has generally ignored that context and obscured the basic functions of communications—to cultivate, conserve, support, and maintain. The "effects" of communications are not primarily what they make us "do" but what they contribute to the meaning of all that is done—a more fundamental and ultimately more decisive process. The consequences of mass communications should be sought in the relationships between mass-produced and technologically mediated message systems and the broad common terms of image cultivation in a culture. If the citizens of a self-governing community do not like those terms, they cannot satisfy themselves by injecting a few messages of a different sort. They must attend to the structures and policies that produce most messages in ways functional to their institutional purposes.

The Question of Change

The principal "effect" of mass communications is to be found in coming to terms with the fundamental assumptions and premises they contain, and not necessarily in agreeing or disagreeing with their conclusions or in acting on their specific propositions at any one time. Communication is the nutrient culture and not just the occasional medicine (or poison) of mental life. The most critical public consequences of mass communications are in defining and ordering issues, and not just in influencing who will buy what in the short run.

Change can be evaluated and even noticed best in light of the massive continuities that systems of communications typically cultivate. "No change" may be a startlingly effective result of communications sustaining a belief against the cultural current. One cannot really compare a person swimming upstream with another drifting downstream and yet others straining in other directions. To compare and measure their "progress," all speeds and directions must be related to the current itself. If that were to change, all directions and even the meaning of "progress" would change without any change in "behavior" on the part of the swimmers. Similarly, the meaning and measure of communication "effects" are relative to the general flow, composition, and direction of the message-production and image-cultivation processes. It means little to know that "John believes in Santa Claus" until we also know in what culture, at what time, and in the context of what message systems cultivating or inhibiting such beliefs.

A culture cultivates the images of a society. The dominant communication agencies produce the message systems that cultivate the dominant image patterns. They structure the public agenda of existence, priorities, values, and relationships. People use this agenda—some more selectively than others—to support their ideas, actions, or both, in ways that, on the whole, tend to match the general composition and structure of message systems (provided, of course, that there is also other environmental support for these choices and interpretations). There is significant change in the nature and functions of that process when there is change in the technology, ownership, clientele, and other institutional characteristics of dominant communication agencies. Decisive cultural change does not occur in the symbolic sphere alone. When it occurs, it stems from a change in social relations that makes the old patterns dysfunctional to the new order. Such a change changes the relative meanings and functions of the existing images and practices even before these are actually altered. When altered, the new cultural patterns restore to public communications their basic functions: the support and maintenance of the new order.

The strategic approach to mass communications research considers an understanding of the mass cultural process, instead of other aspects of human behavior, the principal criterion of relevance. Institutional process and message system analyses generate the framework of terms and functions for cultivation analysis. Short-terms or campaign-type "effects" studies, responses to messages elicited in unknown or uncertain symbolic contexts, or research concerned with "success" or "failure" of preconceived communication objectives are not adequate to the task. The dynamics of continuities, rather than only of change, need to be considered in the examination of mass-produced message systems and their symbolic functions. Such examination is necessarily longitudinal and comparative in its analysis of the processes and consequences of institutionalized public acculturation.

In a general sense there are no communication failures, only failures of intentions and campaigns. All systems of communications may cultivate terms and assumptions implicit in them whether or not those were intended or consciously recognized. We usually communicate more than we intend or know about, and often not what we wish. Many "communication failures" can be interpreted as the success of the receivers to understand the messages better than those who designed them, but in ways they did not intend. Message systems perform symbolic functions that may be apparent to *none* of the parties engaged in the communication. Communications research attempts to reconstruct these functions. Cultivation analysis seeks to discover their contributions to knowledge and meaning.

Symbolic Functions

Symbolic functions are intimately involved in and govern most human activity. The human meaning of an act stems from the symbolic context in which it is embedded. The significance of a person's life or death rests in some conception of role, personality, goals, and fate. When the symbolic context changes, the significance of acts changes. A structure may shift to accommodate the change and to preserve—or even enhance—the symbolic functions of the act. For example, in the TV violence study we found that as the proportion of violent characterizations was cut, the imbalance in the risks of victimization between groups of unequal social power increased, thereby strengthening the symbolic function of violence as a demonstration of relative social powers (Gerbner, 1972a). Such observations enable us to ask questions about *what that* message might cultivate in public conceptions and behavior. Thus we would relate the viewing of television violence to the cultivation of certain conceptions of goals, values, people, and power, instead of only to notions about "violent behavior."

In another study (Nunnally, 1960), the opinions of experts on 10 information questions concerning the mentally ill were compared with mass media (mostly fictional and dramatic) representations of mentally ill characters. The mass media image was found to diverge widely from the expert image. The "public image," as determined by an attitude survey along the same dimensions, fell between the expert and the media profiles. Thus, instead of "mediating" expert views, the media tended to cultivate conceptions far different from and in many ways opposed to those of the experts. What may be seen in isolation as "ineffective" communication was, on the contrary, powerful media cultivation "pulling" popular notions away from expert views. The reason is not necessarily ignorance or intentional obscurantism, but instead the difference between semantic labels for a certain type of behavior (such as "mental illness") and the symbolic functions of the dramatic representations of that behavior. The symbolic functions of mental illness in popular drama may be

primarily those of indicating a dramatically convenient resolution of certain problems or of designating a morally appropriate "punishment" for certain sins. The dramatic associations with the personality traits that define mental illness *in the plays* should provide a basis for the further investigation of what that implicit message might cultivate in viewer conceptions.

The study of specific message structures and symbolic functions reveals how these communications help define, characterize, and decide the course of life, the fate of people, and the nature of society in a symbolic world. The symbolic world is often very different from the "real" world. Symbolic behavior usually bears little resemblance to everyday actions. The power and significance of symbolic functions rests in the *differences*. Fiction, drama, and news depict situations and present action in those realistic, fantastic, tragic, or comic ways that provide the most appropriate symbolic context for the emergence of some human, moral, and social significance that could not be presented or would not be accepted (let alone enjoyed) in other ways. (For a further discussion of symbolic functions, see Chapter 17.

The Cultivation Process and Its Analysis

Symbolic structures may cultivate certain premises about the world and its people and about the rules of the game of life. These premises are not necessarily embodied in overt prescriptions (which may, in fact, be quite different), but are implicit in the way things are presented, and in the way they function in the symbolic context. The same premises may lend themselves to a range of conclusions, depending on who draws them, why, when, and how. But the range of conclusions is held together by the definitions implicit in the premises. Should the premises change, the range and complexion of conclusions might also shift.

The cultivating effects of common communications patterns are typically those of selective maintenance on a certain level. General cultural patterns do not "cause" but support or weight or skew tendencies also functional to other (but not necessarily all) aspects of the social and institutional order.

Cultivation analysis starts with the patterns found in the "world" of public message systems. The common structures composing that world present images of life and society. How are these reflected in the expectations, definitions, interpretations, and values held by their "consumers"? How are the "lessons" of symbolic behavior derived from other times and places, and presented in synthetic contexts, applied to assumptions about life? In order to investigate the relationship between message systems and the views and expectations of audiences it is necessary to evolve and adapt a set of measures and investigative techniques.

The principal approaches employed in the cultivation analysis are projective techniques, depth interviews, and periodic questions on sample surveys. Adult and child panels provide subjects for projective and interview work. Projective techniques can structure situations in which respondents tend to reveal views, expectations and values of which they may not be consciously aware, or which they would not verbalize if asked directly. Techniques of depth interviewing can isolate and highlight views, expectations, and values, and relate these to media exposure patterns and to demographic and other characteristics. Questions selected from the projective tests and interviews and others designed especially for survey use are to be submitted periodically to a national adult probability sample of respondents.

The impact of television and of its further development by cable and other technologies is of special concern, as is the cultivation of social concepts among children. For most people television is popular culture. Social symbolic patterns established in childhood are the most easily cultivated throughout life. Longitudinal and cross-cultural research is needed to follow the lead of message analysis into the living laboratory of popular cultures.

We need to know general trends in the cultivation of assumptions about problems of existence, priorities, values, and relationships before we can validly interpret specific relevant facts of individual and social response. The interpretation of public opinion (i.e., published responses to questions elicited in specific cultural contexts), and of many media and other cultural policy matters, require cultural indicators similar to the accounts compiled to guide economic decisions and to other indicators proposed to inform social policy making.

Technological developments in communications hold out the possibility of greatly enhancing culture-power on behalf of existing social patterns—or of their transformation. A modern Socrates might say, “know thy communications to know thyself.” He would probably add that under conditions of symbolic mass production, the unexamined culture may not be fit to live in.

REFERENCES

- Bowers, David R. “A Report on Activity by Publishers in Directing Newsroom Decisions,” *Journalism Quarterly* (Spring 1967).
- Breed, W. “Social Control in the News Room,” in *Mass Communications*, Wilbur Schramm (ed.), Urbana, Ill.: The University of Illinois Press, 1960.
- Gerbner, George. “The Social Role of the Confession Magazine,” *Social Problems* (Summer, 1958a).
- . “The Social Anatomy of the Romance-Confession Cover Girl,” *Journalism Quarterly* (Summer 1958b).
- . “Mental Illness on Television: A Study of Censorship,” *Journal of Broadcasting* (Fall 1959).

- . "Psychology, Psychiatry and Mental Illness in the Mass Media: A Study of Trends, 1900-1959," *Mental Hygiene* (January 1961a).
- . "Press Perspectives in World Communications: A Pilot Study," *Journalism Quarterly* (Summer 1961b).
- . "Regulation of Mental Illness Content in Motion Pictures and Television," (with Percy H. Fannenbaum). *Gazette*, 6 (1961c).
- . "Ideological Perspectives and Political Tendencies in News Reporting," *Journalism Quarterly* (Autumn 1964).
- . "An Institutional Approach to Mass Communications Research," in *Communication: Theory and Research*, Lee Thayer (ed.), Springfield, Ill.: Charles C. Thomas, 1966a.
- . "Education About Education by Mass Media," *The Educational Forum* (November 1966b).
- . "Institutional Pressures Upon Mass Communicators," in *The Sociology of Mass Media Communicators*, Paul Halmos (ed.), *The Sociological Review Monograph* No. 13, pp. 205-248. University of Keele, England, 1969a.
- . "Toward 'Cultural Indicators'; The Analysis of Mass Mediated Systems," *AV Communication Review* (Summer 1969b).
- . "The Film Hero: A Cross-Cultural Study," *Journalism Monograph* No. 13, 1969c.
- . "Cultural Indicators: The Case of Violence in Television Drama." *The Annals of the American Academy of Political and Social Science*, March, 1970.
- . "Violence in Television Drama: Trends and Symbolic Functions," in *Television and Social Behavior*, G. S. Comstock and E. A. Rubinstein (eds.), Vol. 1. *Content and Control*. Washington: Government Printing Office, 1972a.
- . "The Structure and Process of Television Program Content Regulation in the U.S." in *Television and Social Behavior*, G. S. Comstock and E. A. Rubinstein (eds.), Vol. 1. *Content and Control*. Washington: Government Printing Office, 1972b.
- Gieber, Walter. "Two Communicators of the News: A Study of the Roles of Sources and Reporters," *Social Forces* (October 1960).
- . "News is What Newspaper Men Make It," in *People, Society, and Mass Communications*, Lewis A. Dexter and David M. White (eds.), New York: The Free Press, 1964.
- Land, Denneth C. "On the Definition of Social Indicators," *The American Sociologist* (November 1971).
- Nunally, Jum C., Jr. *Popular Conceptions of Mental Health; Their Development and Change*. New York: Holt, Rinehart and Winston, 1960.
- Pool, Ithiel De Sola, and Irwin Shulman. "Newsmen's Fantasies, Audiences, and Newswriting," in *People, Society and Mass Communications*, Lewis A. Dexter and David M. White. (eds.), New York: The Free Press, 1964.
- Toward a Social Report*, U.S. Department of Health, Education and Welfare, Washington: Government Printing Office, 1969.
- White, David M., "The Gatekeeper: A Case Study in the Selection of News," in *People, Society and Mass Communications*, L. A. Dexter and D. M. White (eds.), New York: The Free Press, 1964.