*Reprinted from*

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Communication
Review

Volume 17, Number 2, Summer 1969

# TOWARD "CULTURAL INDICATORS": THE ANALYSIS OF MASS MEDIATED MESSAGE SYSTEMS

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The systematic analysis of message content is a traditional area of study in communication research and related fields. Recent developments[1] led to a revival of interest in the area. But none of the new frameworks and approaches presented consider the analysis of message systems addressed to heterogeneous and anonymous publics, such as mass communications, a source of theoretical development not necessarily generated in other areas of interest. The purpose of this paper is to suggest an approach that justifies such development and can also lead to results of practical policy significance, such as a scheme of social accounting for trends in the composition and structure of mass-mediated public message systems. The approach is based on a con-

[1] Most of these are reflected in the forthcoming volume by George Gerbner, Ole R. Holsti, Klaus Krippendorff, William J. Paisley, and Philip J. Stone, *The Analysis of Communication Content; Developments in Scientific Theories and Computer Techniques*, (New York: John Wiley & Sons, in press), from which this paper has been adapted with minor modifications. For other developments see Robert C. North, Ole R. Holsti, M. George Zaninovich, and Dina A. Zinnes, *Content Analysis: A Handbook with Applications for the Study of International Crisis*, (Evanston: Northwestern University Press, 1963); Philip J. Stone, Dexter C. Dunphy, Marshall S. Smith, Daniel M. Ogilvie, *The General Inquirer: A Computer Approach to Content Analysis*, (Cambridge: The M.I.T. Press, 1966); and Richard W. Budd, Robert K. Thorp, and Lewis Donohew, *Content Analysis of Communications*, (New York: Macmillan, 1967).

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ception of these message systems as the common culture through which communities cultivate shared and public notions about facts, values, and contingencies of human existence.

CHANGE IN THE SYMBOLIC ENVIRONMENT

The "Cultural Revolution" is not only a Chinese slogan. It is also a fact of social life whenever a particular political-industrial order permeates the sphere of public message production. A change in the social bases and economic goals of message mass-production leads, sooner or later, to a transformation of the common symbolic environment that gives public meaning and sense of direction to human activity. The need is for a theory that can lead to the development of "cultural indicators" taking the pulse of the nature and tempo of that transformation.

Our theoretical point of departure, then, is that changes in the mass production and rapid distribution of messages across previous barriers of time, space, and social grouping bring about systematic variations in public message content whose full significance rests in the cultivation of collective consciousness about elements of existence. (It should be noted at the outset that the terms *common, shared, public,* or *collective* cultivation do not necessarily mean consensus. On the contrary, the public recognition of subcultural, class, generational, and ideological differences and even conflicts among scattered groups of people requires some common awareness and cultivation of the issues, styles, and points of divergence that make public contention and contest possible. The struggles for power and privilege, for participation in the conduct of affairs, for the redistribution of resources, and for all forms of social recognition and justice, are increasingly shifting from the older arenas to the newer spheres of public attention and control in mass-produced communications.)

Selective habits of participation in one's cultural environment limit each of us to risky, and often faulty, extrapolation about the cultural experience of heterogeneous communities. Informed policy making and the valid interpretation of social response increasingly require general and comparative indicators of the prevailing climate of the man-made symbolic environment. But knowledge of a message system, over and above that which we select for our own information or entertainment, and which has significance for a collectivity such as an entire cultural community, cannot be given in the lifetime experience of any single person.

What *can* be given is a representative abstraction from the collectively experienced total texture of messages, relevant to certain investigative purposes. Sampling is not the major problem, and neither is the efficient processing of large quantities of data, although these are important procedural considerations. Nor is great theoretical challenge involved in the analysis of mass media messages for specific critical, control, evaluative, or policy purposes. The outstanding problems are the development of a generalized scheme applicable to the investigation of the broadest terms of collective cultivation in different cultural communities, and making these terms salient to elements of existence represented in public message systems. Philosophers, historians, anthropologists, and others have, of course, addressed themselves to such problems before. But the rise of the institutionalized and corporately managed cultivation of collective consciousness by mass media has given a new urgency and social policy significance to the inquiry.

CULTIVATION OF PUBLIC CONSCIOUSNESS THROUGH MASS COMMUNICATION

A word on *cultivation.* I use the term to indicate that my primary concern in this discussion is not with information, education, persuasion, etc., or with any kind of direct communication "effects." I am concerned with the collective context within which, and in response to which, different individual and group selections and interpretations of messages take place. In that sense, a message (or message system) cultivates consciousness of the terms required for its meaningful perception. Whether I accept its "meaning" or not, like it or not, or agree or disagree, is another problem. First I must attend to and grasp what it is about. Just how that occurs, how items of information are integrated into given frameworks of cognition, is also another problem. My interest here centers on the fact that any attention and understanding cultivates the terms upon which it is achieved. And to the considerable extent to which these terms are common to large groups, the cultivation of shared terms provides the basis for public interaction.

*Public* is another word of special significance here. It means both a quality of information and "an amorphous social structure whose members share a community-of-interest which has been produced by impersonal communication and contact" (Gould & Kolb, 1964, p. 558). As a quality of information, the awareness that a certain item of knowledge is publicly held (i.e. not only known to many, but *commonly known that it is*

*known to many)* makes collective thought and action possible. Such knowledge gives individuals their awareness of collective strength (or weakness), and a feeling of social identification or alienation. As an "amorphous social structure, etc." a public is a basic unit of and requirement for self-government among diverse and scattered groups. The creation of both the consciousness and the social structure called public is the result of the "public-making" activity appropriately named publication. "Public opinion" is actually the outcome of some sort of eliciting and sharing private views through their publication—as in the publication of polls.

Publication as a general social process is the creation and cultivation of shared ways of selecting and viewing events and aspects of life. Mass production and distribution of message systems transforms selected private perspectives into broad public perspectives, and brings mass publics into existence. These publics are maintained through continued publication. They are supplied with selections of information and entertainment, fact and fiction, news and fantasy or "escape" materials which are considered important or interesting or entertaining and profitable (or all of these) in terms of the perspectives to be cultivated.

Publication is thus the basis of community consciousness and self-government among large groups of people too numerous or too dispersed to interact face to face or in any other personally mediated fashion. The truly revolutionary significance of modern mass communication is its "public-making" ability. That is the ability to form historically new bases for collective thought and action quickly, continuously, and pervasively across previous boundaries of time, space, and culture.

The terms of broadest social interaction are those available in the most widely shared message systems of a culture. Increasingly these are mass-produced message systems. That is why mass media have been called the "agenda-setters" of modern society. Whether one is widely conversant with or unaware of large portions of them, supportive or critical of them, or even alienated from or rebellious of them, the terms of the culture shape the course of the response.

The approach I am suggesting is, therefore, concerned with the overall patterns and boundary conditions within which the processes of individual cognition, message utilization, and

social interaction occur. The approach is directed toward answering the most general questions about the broadest terms of collective concept-formation given in mass-produced public message systems. What perspectives and what choices do they make available to entire communities over time, across cultures, and in different societies? With what kinds and proportions of properties and qualities are these choices weighted? What are the underlying structures of association in large message systems that are not apparent in their separate component units?

THE NEED FOR "CULTURAL INDICATORS"

We need to know what general terms of collective cultivation about existence, priorities, values, and relationships are given in collectively shared public message systems before we can reliably interpret facts of individual and social response. For example, it means little to know that "John believes in Santa Claus" until we also know in what culture, at what point in time, and in the context of what public message systems cultivating the reinforcement or inhibition of such beliefs. Similarly, interpretations of public opinion (i.e. responses to questions elicited in specific cultural contexts), and of many social and cultural policy matters, require the background knowledge of general "cultural indicators" similar to the economic indicators compiled to guide economic policy and the social indicators proposed to inform social policy making.

What distinguishes the analysis of public, mass-mediated message systems as a social scientific enterprise from other types of observation, commentary, or criticism is the attempt to deal comprehensively, systematically, and generally rather than specifically and selectively or ad hoc with problems of collective cultural life. This approach makes no prior assumptions about such conventionally demarcated functions as "information" and "entertainment," or "high culture" and "low culture." 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 selected communications may be irrelevant to general questions about the presentation of what *is*, what is *important*, what is *right*, and what is *related* to what in mass-produced composite message systems.

NON-RELEVANCE OF SOME CONVENTIONAL DISTINCTIONS

Just as we make no a priori assumptions about the significance of style, quality, and subjective experience associated with different types of message systems, we do not recognize the validity of conventional distinctions of function attached to nonfictional vs. fictional modes of presentation. "Fact" may be stranger than fiction, and the veracity of "fiction" greater than that of the presumably factual. Regardless of verisimilitude, credibility, or what is actually "believed" in a presentation, message systems cultivate the terms upon which they present subjects or aspects of life. There is no reason for assuming that the cultivation of these terms depends in any significant way upon the mode of presentation, upon agreement or disagreement with or belief or disbelief in the presentations involved, or upon 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. What it does mean is that in the general process of image-formation and cultivation, fact and fable play equally significant and interrelated roles.

There is, however, an important difference between the ways fiction and nonfiction deal with life. Reportage, exposition, explanation, argument—whether based on fact, fancy, opinion, or all of these—ordinarily deal with specific aspects of life or thought extracted from total situations. What gives shape, focus, and purpose to the nonfictional mode of presentation is that it is analytical; it implicitly organizes the universe into classes of subjects and topics, and it devotes primary attention to one or more of these subjects and topics.

The usual purpose of the fictional and dramatic modes of presentation is to present situations rather than fragments of knowledge as such. The focus is on people in action; subjects and topics enter as they become significant to the situations.

From the point of view of the analysis of elements of existence, values, and relationships inherent in large message sys-

tems, fiction and drama thus offer special opportunities. Here an aspect of life, an area of knowledge, or the operation of a social enterprise appears imaginatively re-created in its significant associations with total human situations. The requirements that make the treatment of specific subjects secondary to the requirements of telling a "good story" might make the treatment of those subjects more revealing of the underlying assumptions cultivated in the story-telling process.

It should be stressed again that the characteristics of a message system are not necessarily the characteristics of individual units composing the system. The purpose of the study of a system *as system* is to reveal features, processes, and relationships expressed in the whole, not in its parts. Unlike most literary or dramatic criticism, or, in fact, most personal cultural participation and judgment, this approach to message system analysis focuses on the record of institutional behavior in the cultural field, and on the dynamics of message-production and image-cultivation in a community but not necessarily in selective personal experience and response.

The systems with which we deal contain images and motion as well as words. This places great demands on methods of recording and notation, and challenges the ingenuity of the scientific analyst. Because of the necessity to abstract propositional forms from statements made in a variety of modes, methods of analysis must rely on explicitly formulated rules and procedures. But there is no reason to assume that the system-theoretic notions developed by Rapoport (in press) are not as applicable to these as to other "large corpuses of verbal data." Rapoport's description of man's "ocean of words" provides a vivid rationale for the study of the process in which mass-produced messages play a key part:

> Just as all living organisms live in certain specialized environments to which they adapt and which completely determines their lives so do human beings live to a significant extent in an ocean of words. The difference lies in the fact that the human environment is to a large extent man made. We secrete words into the environment around us just as we secrete carbon dioxide and in doing so, we create an invisible semantic environment of words which is part of our existence in quite as important ways as the physical environment. The content of verbal output does not merely passively reflect the complex social, political, and economic reality of the human race; it interacts with it as well. As our semantic environment in-

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corporates the verbal outputs secreted into it, it becomes both enriched and polluted, and these changes are in large measure responsible for the course of human history. It behooves us to study this process.

## TERMS OF THE ANALYSIS

The approach needed is that capable of abstracting and analyzing the most general terms of cultivation given in mass produced public message systems. Generality is necessary to encompass many specific classes of statements and diverse investigative purposes within comparable terms of the same framework. But this kind of generality implies a high level of abstraction and selection which, in turn, arises from a conception of salience to some general investigative purpose. As I have already noted, the present purpose is not governed by direct interest in sources as senders or in interpreters as receivers of messages. It is, however, governed by interest in the cultivation of consciousness of elements of existence inferred from public message systems. Our task is to combine generality with salience to the composition and structure of knowledge given in large-scale message systems addressed to collective social entities.

We begin by defining such knowledge as propositions expressed in the images, actions, and language of the most widely shared (i.e. mass-produced and rapidly distributed) message systems of a culture. Elements of existence refer to the assumptions, contexts, points of view, and relationships represented in these message systems and made explicit in the analysis.

A summary of the questions, measures, and terms of general analysis of public message systems appears in Figure 1. The questions relate to the cultivation of collective notions about 1) "what is" (i.e. what exists as an item of public knowledge), 2) "what is important" (i.e. how the items are ordered), 3) "what is right" (or wrong, or endowed with any qualities, or presented from any point of view), and 4) "what is related to what" (by proximity or other connection). The corresponding terms of analytical measures are those of 1) attention, 2) emphasis, and 3) tendency (the first three describing the composition of the system—i.e. what elements compose it and how they are distributed in it) and 4) structure (i.e. how they are put together or related to one another). A brief discussion of each of these terms follows.

FIGURE 1
*Questions and Terms of Public Message System Analysis*

| *Questions* | *Definitions* | *Measures and Terms of Analysis* | *Brief Explanations of Questions* |
|---|---|---|---|
| 1. WHAT IS? | Public assumptions about existence | Distribution, frequency of *attention* | What things (or kinds of things) does this message system call to the attention of a community? |
| 2. WHAT IS IMPORTANT? | Context of priorities | Ordering, scaling, for *emphasis* | In what context or order of importance are these things arranged? |
| 3. WHAT IS RIGHT, ETC.? | Point of view, affective qualities | Measures of differential *tendency* | In what light or from what point of view are these things presented? |
| 4. WHAT IS RELATED TO WHAT? | Proximal or logical associations | Contingencies, clustering; *structure* | In what structure of associations with one another are these things presented? |

1. *Attention* is the result of selection of phenomena to be attended. A measure of attention is an indication of the presence and frequency of subject elements (topics, themes, etc.) in a message system. The significance of attention as an aspect of the process of message-production and image-formation is that it stems from, and, in turn cultivates, assumptions about existence; it provides common conceptions about what "is" (or at least what is sufficiently common and public knowledge to form a basis for social interaction).

2. *Emphasis* is that aspect of the composition of message systems which establishes a context of priorities of importance or relevance. The context of emphases sets us a field of differential appeal in which certain things stand out. Emphasis "structures the agenda" of public conception and discourse cultivated in message systems. Measures of emphasis may be based on such indications of size, intensity, or stress as the headlining of topics in news items or the featuring of certain topics or themes as the major points of stories.

3. *Tendency*. The position of a system (as of an individual) in time, space, and in the overall structure of social relations enters into the approach, point of view, or direction from which it deals with aspects of existence. The directionality of presentation, the explicit or contextual judgment of qualities of phenomena expressed in the presentation, is called tendency.

The broadest overall dimension of judgment is a summary evaluation of the goodness or badness, rightness or wrongness of things. A measure of the favorable-unfavorable associations expressed in the comparative study of message systems may be called *critical tendency;* it is based primarily on whether a subject or topic appears in a supportive or critical context.

But judgment is, of course, multidimensional. *Differential* tendency can be used to describe a measure indicating directionality of judgment in several different dimensions.

4. *Structure* is that aspect of context which reveals relationships among components. These may be simply proximal, which we may call *clustering,* or they may be causal or other logical relationships. In this approach we are primarily interested in explicating the "logic" implicit in the proximal structuring or clustering rather than in forms of reasoning; the former is more likely to be a property of large systems and thus not easily available to scrutiny. For example, the reasoning employed in the assertion that "John loves Mary and will marry her" (whether expressed in a sentence, a story, a series of visual images, etc.) is apparent in that single statement. But if we compare two large message systems and find that the proximal occurrences of the words or concepts of "love" and "marry" is significantly more frequent in one than in the other, we have discovered an element of comparative linkage or structure, and a kind of "logic," that would not be revealed by inspecting propositions separately.

The above terms of analysis are suggested as standard category *classes.* The specific categories, and other methods of analysis, require considerable elaboration which cannot be attempted here. This approach to message system analysis is itself a part of a larger framework for an institutional approach to mass communications research described elsewhere (Gerbner, 1966c, 1967a). And while many studies cited in this volume and in the literature fit one or more of the general terms sketched above, the only investigation using all of them has been limited to a comparative study of the portrayal of education in the press and mass fiction of ten countries (Gerbner, 1964b).

The reader interested in a specific example of attention analysis may find it in a study of convention press coverage (Gerbner, 1967b). Analyses of trends in attention may be found in a study of "Psychology, Psychiatry and Mental Illness in the

Mass Media: A Study of Trends, 1900-1959" (Gerbner, 1961b); or of "Education About Education by Mass Media" (Gerbner, 1966a). Studies focusing on emphasis include a comparative investigation of U.N. press coverage (Gerbner, 1961a). Differential tendencies were investigated in the study of ideological perspectives in the French press (Gerbner, 1964a), and in a comparative study of characterizations in mass fiction and drama (Gerbner, 1966b). The analysis of message system structure was attempted in the comparative portrayal of education study cited above.

I know of no comprehensive and comparative studies of the kind that might yield the cultural indicators needed for a realistic assessment of the much-debated condition of man in modern "mass cultures." One reason might be the paucity of explicit formulations of the theoretical significance and types of inference that might be derived from the analysis of mass-mediated public message systems. Another might be the lack of general terms salient to such analysis. The intention of this paper has been to try to narrow these gaps.

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