

COMMUNICATION*

Communication as an art has had a very long history. The writer, the orator, the public relations counsellor, and the advertiser have been leading practitioners of this art. Communication as a field of scientific inquiry, on the other hand, has been of fairly recent origin. Within the last decade or so, however, there has developed the promise of a genuine science of communication—a systematic attempt to formulate in rigorous fashion the principles by which information is transmitted and opinions and attitudes formed.

The problem of communications is made more challenging by the fact that it is not an area for an isolated specialist. Adequate understanding of the problems of this field depends on a wider variety of talent and range of specialization than almost any other problem in the social sciences. A real science of communication will require the cooperation of both the practitioner and the scientist. Thus the newspaper editor, the radio broadcaster, the movie producer, as well as the psychologist, the sociologist, the anthropologist, and the political scientist have important roles to perform.¹

Objective:

Communication is the basis of understanding and cooperation between individuals, between groups and between nations. A better knowledge of the processes and control of communication should provide opportunities for narrowing the gap between workers and management, for decreasing minority tensions, for better integration of government and citizens, and for improved international relations. The tremendous growth of mass media in our times has not solved but merely intensified the need for better understanding and control of communication.

*Based in large part on a paper prepared by Carl Hovland, Yale University

¹This is well illustrated in the diversity of contributors to the recent symposium: Communication and social action, Yeager, W. H., and W. E. Utterback ed. *Annals Amer. Acad. Pol. and Soc. Sci.* 250, 1947.

Recognition of the Problem:

Certain aspects of the problem of communication are more clearly recognized than others. Where commercial gains are involved, as in advertising, radio, etc. there has been considerable work which, however, does not have great general value. Appropriate control of mass media has received attention from government (FCC), from the industries themselves (NAB, "Hays Office"), and from independent agencies (Commission on the Freedom of the Press). But there is only a beginning of recognition of the interdisciplinary study of communication as a social process.

Current Progress:

Numerous definitions of the term "communication" have been given but for purposes of the present discussion we may define communication as the process by which an individual (the communicator) transmits stimuli (usually verbal symbols) to modify the behavior of other individuals (communicatees).

This definition thus defines the research task as being the analysis of four factors: (1) the communicator who transmits the communication; (2) the stimuli transmitted by the communicator; (3) the individuals who respond to the communication; (4) the responses made to the communication by the communicatee. In addition, we must analyze the laws and principles relating the above elements.

Numerous studies have been made of the communicator and how his characteristics affect the response of those receiving the communication.² In this category belong such important problems as the effect of communications in which the true communicator is not revealed, and the effectiveness of appeals made by

²Cf. e.g., Smith, B.L., The political communication specialist of our times, pp. 31-73, in Smith, B. L., H.D. Lasswell, and R.D. Casey, Propaganda, communication, and public opinion, Princeton Univ. Press, 1946.

the communicator in person compared with those in which the message is transmitted through radio, motion pictures or other media.

Analysis of the second factor, the stimuli, has been the most thoroughly studied. In fact when mention is made of communication analysis, or of institutes of communication, which are springing up on all sides, this is the aspect usually meant. With the growing complexity of our civilization just knowing what material is being transmitted is a gigantic and important task. Analysis of the material transmitted through the various channels of communication has required the development of precise quantitative techniques. The study of the stimuli transmitted by the communicator employs the familiar technique of content analysis. Just before the war and during the war work on this problem made rapid strides. The studies of Lasswell, Kris, and Speier on analysis of enemy propaganda through newspapers, radio, and movies constitute good examples of the developments of the last few years in this area. These methods provide analysis in terms of the subject matter of a communication, its thematic content, type of symbolization, kinds of rhetorical devices used, syntactical characteristics, etc.³ Without the thorough description made possible by these new and more precise methods of describing the content aspect of the stimuli the task of formulating principles and generalizations would be most difficult.

Because the stimuli used in communication are primarily verbal symbols it is important to understand the role of language in communication. Recent developments in the analysis of language and the field of semantics promise important application to the science of communication.⁴ The analysis of this problem requires

³Lasswell, H.D. Describing the contents of communications, pp. 74-94, in Smith, B.L., H. D. Lasswell, and R. D. Casey, op. cit.

⁴Cf. e.g. Johnson, W., People in quandaries; the semantics of personal adjustment, N.Y., Harper, 1946

taking into account not only the differences in languages of different nations but the equally critical problem the differences in language between groups within our own society -- e.g., between the scientist and layman or between labor and management.

Scientific studies of the material transmitted try to be objective and uninterested in the values of the material transmitted. So it is at this point that research must be supplemented by studies of other groups--of the regulation of communication, the maintenance of a free press, and the variety of topics surveyed by the Commission on Freedom of the Press.⁵ Here the philosopher, the student of government, and the lawyer, all have a significant place. Research can provide them with objective data basic to their analysis particularly in connection with evaluating the effect of various communication policies.

The third of our problems is the analysis of the individual who receives the communication. Here we have the core of the problem of individual psychology. What are the motives of the individuals, what are their capacities, how do their predispositions influence the way in which they react to various stimuli presented? While psychology is most concerned with these problems, other adjacent disciplines have made significant contributions to our understanding. Psychiatry and psychoanalysis have contributed to the analysis of the complex motives of the individual. Anthropological research in our own culture has shown us how the dominant motives and patterns of an individual can be predicted from factors such as his occupation and social class. Thus important information about the individual to be affected by the communication is furnished by census-type data. Just knowing that an individual is twenty-one years of age, wealthy, and has a high intelligence test score permits us to make highly significant predictions of the individual's motives, habits, and capacity to learn, which are extremely relevant to the type of communication used. Procedures derived from clinical psychology and first-hand knowledge of the

⁵Chafee, Z., Government and mass communication, 2 v., University of Chicago Press, 1947.

individual permit still better prediction. This field appears very promising for future developments in our understanding of communication. Studies of other cultures and other national patterns is an integral part of this problem. Better understanding of the countries of Eastern Europe, for example, and consequent better communication with them requires extensive research on the predispositions of individual in various cultures of the world. Work on this problem is now being begun at a number of centers.

The fourth facet of analysis is that of responses to communication. Some aspects of this problem are much more developed than others. One of the simplest responses is that of attention to the communication. Studies of what readers have noticed in communication and what they have read, for example, in the daily newspapers, are relatively numerous. Within the last few years there have been increasingly frequent attempts to relate simple responses, like reading behavior, to the characteristics of the individual responding. Such studies relate readership to sex, educational level, age group, etc.

Similarly a great deal of research on the response side has been done in the field of radio. But here the primary emphasis has been on the responses of listening and enjoyment. Devices for recording of responses of like or dislike have been of some assistance in this phase of the problem.⁶ Only recently have there been corresponding studies of the effectiveness of radio in influencing opinion and in transmitting information.⁷ Much the same has been true of the large amount of research that has gone into the analysis of response to the movies. The emphasis has been on what do people like. This has been the aspect that has had the great commercial backing. The beginnings of interest in other directions were shown in the Payne Fund Studies on the effects of the movies on a wide variety of phases of

⁶Hallonquist, T., and E. A. Suchman, Listening to the listener, pp. 265-334, in Radio research, 1943-45, Lazarsfeld, P.F., and F.N. Stanton, ed., N.Y., Duell, Sloan, and Pearce, 1944.

social behavior.⁸ The work done during the war on the analysis of the effectiveness of the films prepared by the Army to give soldiers the background of the war and our participation in it may also be mentioned. Here the responses studied were in terms of the amount of information received, the opinions which were changed, and the effect of changes in information and opinion on motivation.

The analysis of response to communication has been enormously facilitated by recent improvements in technique. Public opinion methods have made rapid strides as will be seen from the papers presented this afternoon. But these methods do not suffice for the many aspects to be covered. Intensive interview methods are needed on many phases of the problem. For some phases of the problem adaptations of clinical procedures will probably prove essential to understand fully the total impact of communication. Another aspect of the problem requiring much further work is that of relating the different types of responses made to communication. This includes study of how changes in opinion and verbal statement are related to other phases of behavior like social action. This brings in the fascinating problem of how to change the way an individual perceives a problem and how changes in his perception affect his other actions.

We are, of course, benefited in the search for principles by the years of experience of practitioners of the communication art. Let us survey briefly these contributions.

The field of education has made significant contributions. On the problems of how to transmit factual information, for example, the work of the last twenty years has been very enlightening. But even more significant problems exist in the field of communication of values and attitudes. Here we are largely in unknown territory, with a strong realization on the part of educators of the magnitude of the problem and its importance but with little dependable information at hand.

⁸Charters, W.W., Motion pictures and youth: a summary, N.Y., Macmillan, 1933.

Another important source of hypotheses is the work which has been done on discussion groups. From wide practical experience a number of excellent books have been written on how to conduct discussion groups, strategic and tactical procedures, and the like.⁹ Few of these recommendations have been put to experimental test but there are contained in these books numerous important ideas which should be evaluated.

Work on psychotherapy is of value as a source of hypotheses. This represents an important form of communication—of the face-to-face variety. From the extensive work on this problem many hypotheses have developed which if confirmed should be applicable to mass communication as well. Consider a single example. It has long been a belief on the part of many psychotherapists that decisions reached independently by the client or patient are apt to be more influential and lasting than those suggested by the therapist. Some work has been done along this line for individual psychotherapy. How about this generalization at the mass communication level? Is it more effective to present evidence for the point being communicated without drawing the implied conclusion and letting the communicatee draw the conclusion? Or is it better to present the evidence and also draw the conclusion for the reader or hearer? Preliminary work seems to indicate that an important variable is the intelligence of the individual or group addressed. With the more intelligent members of the audience the effects may be more lasting when they participated in the decision process but with less intelligent members the correct conclusion may not always be seen and grasped without being made explicitly by the communication.

Advertising wisdom yields a number of important hypotheses. Where systematic results are available they have considerable significance because of the fact that the objective of the communication is usually clearly defined. This is in contrast

⁹Cf., e.g., Elliott, H.S. The process of group thinking, N.Y., Association Press, 1928

to certain other areas where people are eager to communicate but it is extremely difficult to define what they are trying to communicate so that one can make any adequate evaluation of the success of the effort.

There are a number of important limitations, however, to work in advertising as a source of principles of communication.

The first is the fact that many of the results are kept confidential because of their commercial value. A second difficulty is the complexity of the situation in which research is carried on. Organizations frequently have simultaneous radio, newspaper, magazine, and poster advertising with complex temporal relations which make it difficult to attribute results to specifiable causes. Thirdly, the research has been done primarily without reference to theoretical systematization so that it is difficult to generalize the results to new situations. Results are most frequently of the type that ad A produces more sales than ad B, but without any systematic account of the respects in which the two ads were the same and in which they were different.

Lastly, important ideas have come from analysis of problems of communication in industry. The importance of this problem was clearly shown by the early studies of Mayo¹⁰ and others. A book like that of Chester Barnard¹¹ on leadership has a large number of significant hypotheses as to the role of communications, the formal and informal channels which exist within an organization and the barriers to more effective communication up and down the lines of organization and across them. Systematic work is being begun on the problem of communication within management, between management and the worker, and between management and the public.

The problem confronting us currently is not then lack of ideas and hypotheses. These as we have seen are available on every side. What are primarily lacking are two things: (1) lack of a comprehensive theoretical structure to

¹⁰Mayo, E., The human problems of an industrial civilization, N.Y., Macmillan, 1933.

¹¹Barnard, C.I. The functions of the executive, Harvard Univ. Press, 1938.

embrace the diverse ideas and hunches from the various fields and (2) systematic experimental work to check and verify or refute the hypotheses obtaining.

Prospects for Further Progress:

The interdisciplinary nature of the study of communication creates definite barriers to rapid expansion of the field. Universities with limited funds usually yield their support to the traditional and pressing demands of the established departments and schools. As the result of the vision and energy of an individual there are rare instances of the development of Institutes of communication study such as that established by Schramm at the University of Illinois. Financial support from communications industries should be forthcoming but such support is apt to require emphasis on applied and practical work rather than theoretical and integrated study. No government agency has responsibility for furthering the study of communication, and any government department which undertook the task would find itself peculiarly vulnerable to public and congressional charges of "propaganda" (such as the recent Fulton Lewis blast against the Office of Naval Research).

It might be expected that Foundation support of communication study would establish a pattern which, if attractive, would be widely adopted by universities after a period of ten or fifteen years.

Methods:

The most effective methods for promoting the study of communication are restricted by the necessity for interdisciplinary attack. Fellowships in great number are not indicated because there are few centers at which such fellows could pursue their studies. Small research grants would only continue the present fragmentary and piece-meal approach to the problem.

It would seem most appropriate to contribute to the support of Institutes for communication study in universities where the desired arrangements for

interdisciplinary research and teaching could be made. The interested departments and schools might be any combination of the following: sociology, political science, psychology, linguistics, cultural anthropology, business administration, journalism, English, speech, radio, and, with a bow to Dr. Wiener, electrical engineering and neurophysiology.

Time:

No institutional rearrangement of the sort proposed should be encouraged by grants for a term of less than five years, with the possibility of renewal. It could be expected that after the successful demonstration of the value of communication study the universities themselves would assume an increasing share of the support.

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