# A Conceptual Model For Communications Research

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*Because it so clearly represents the role of the professional journalist in communicating the news, the* QUARTERLY *publishes herewith a revision of an article which has excited extensive comment since it first appeared. The authors are teachers of journalism who have had inter-disciplinary Ph.D. programs.*

COMMUNICATIONS RESEARCH AND theory have blossomed from a variety of disciplinary sources in recent years. People probing the communications area have here focused on theoretical issues and there on "practical" concerns. Thus, one finds today a jungle of unrelated concepts and systems of concepts on the one hand and a mass of undigested, often sterile empirical data on the other.

In this paper, we are trying to develop a single communications model which may help to order existing findings. It also may provide a system of concepts which will evoke new and interrelated research directions, compose old theoretical and disciplinary differences, and in general bring some order out of a chaotic situation. Clearly, we do not propose here a full-blown theory of mass communications, but rather a paradigm or model as a preliminary orientation to a theoretical system.

Can a simple, parsimonious model be built capable of drawing together many of the existing approaches to mass communications without serious loss in utility?

## FROM FACE-TO-FACE TO MASS

First, let us look at a simple act of communication. Person *A* transmits something about an object *X* to person *B*. Newcomb [1] has found this simple model of interpersonal communications useful in the study of roles and norms. He says that, when *A* communicates to *B* about *X*, (other things being equal) systematic changes in the condition of the system can be predicted. For example, if *B* likes *A* (or, at least, does not dislike him), *B*'s perception of *X* will be more similar to *A*'s after than before the communicative act.

This model frees one from the limi-

*This article is drawn from two published by these authors in another journal and has been revised for republication here at the request of the editor. See Bruce H. Westley and Malcolm S. MacLean, Jr., "A Conceptual Model for Communications Research," *Audio-Visual Communications Review*, 3:3-12 (Winter 1955), MacLean and Westley, "Research on 'Fortuitous' Communication: A Review," same journal, 3:119-137 (Spring 1955). Mr. Westley is associate professor of journalism at the University of Wisconsin; Dr. MacLean is associate professor of journalism at Michigan State University.

[1] See Theodore M. Newcomb, "An Approach to the Study of Communicative Acts," *Psychological Review*, 60:393-404 (Nov. 1953).

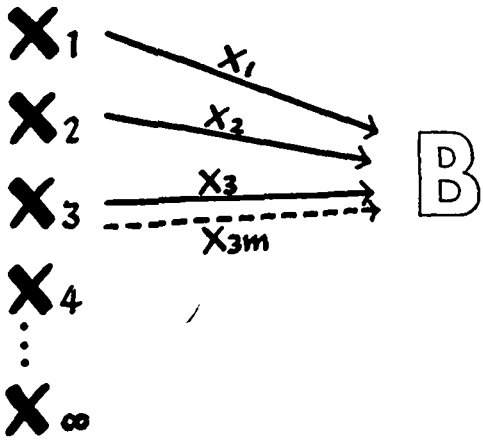


FIGURE 1

Objects of orientation ($X_1$ . . . $X_\infty$) in the sensory field of the receiver (B) are transmitted directly to him in abstracted form ($X_1$ . . . $X_3$) after a process of selection from among all Xs, such selection being based at least in part on the needs and problems of B. Some or all are transmitted in more than one sense ($X_{3m}$, for example).

tations of either the personality or social systems as such. Can it serve as a guide to both face-to-face and mass communications? Need the extension from the simple communicative act to the mass communicative act destroy its system character?

Two basic distinctions between face-to-face and mass communications are suggested: Face-to-face communication involves more sense modalities. It also provides immediate "feedback"—that is, information from *B* back to *A* about the changed condition of *B*. In other words, more senses (and kinds of stimuli) can come into play in the person-person act than in any other situation. Thus, *B* has a "cross-modality" check. He can clear impressions he gets through one sense with those he gets through another. And *A* has the advantage of learning *B*'s response almost immediately — for instance, "message received."

Mass communications, then, differ from face-to-face communications to the extent that (a) the number of modalities tends to be minimized and (b) "orientative" feedback is minimized or delayed.

Now for a look at *X*, which may be taken as an "object of orientation." From the standpoint of *B*, the world consists of a confusion of *X*s. And these *X*s may include *A*s. *B* has within his sensory field an infinity of potential *X*s. He has learned that in order to maximize satisfactions and solve security problems he must orient toward *X*s selectively. But the mature *B*, Newcomb emphasizes, does not orient toward *X* alone, but tends, in the presence of an *A*, to orient simultaneously toward both *A* and *X*. This means that he comes to orient toward an *X* not alone on the basis of its intrinsic capacity to provide satisfactions and help solve problems but also with respect to the relationship between *A* and *X*. This also means that *A* and *X* relate systematically to *B*.

Let us assume that an *X* is any object (or event) that has characteristics capable of being transmitted in some

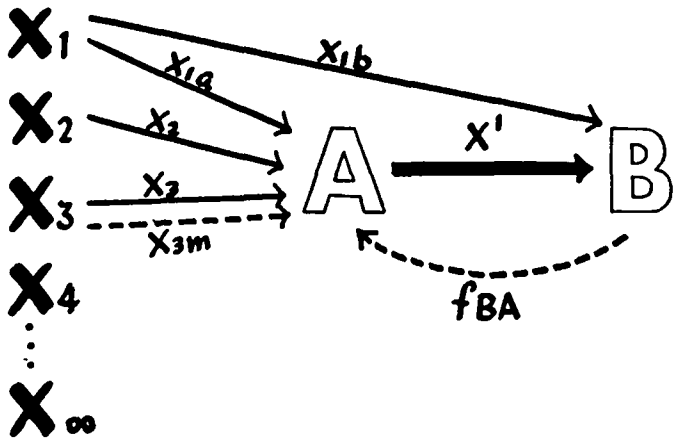


FIGURE 2

The same Xs are selected and abstracted by communicator (A) and transmitted as a message (X') to B, who may or may not have part or all of the Xs in his own sensory field ($X_{1b}$). Either purposively or non-purposively B transmits feedback ($f_{BA}$) to A.

abstracted form.[2] Let us assume further that a system[3] has a need for transmissible messages as a means of orienting itself in its environment and as a means of securing problem solutions and need satisfactions. The significant thing is that *X*s have stimulus characteristics that can be responded to in the absence of an *A*.

For instance, *B* looks out his window and sees flames in the house of his neighbor. This event as surely transmits information to him as would the shouts of his neighbor *about* the fire.

With respect to the *A*s and *X*s in his own immediate sensory field, *B* is capable of receiving and acting upon information thus transmitted to him and must do so if he is to maintain an adequate orientation to his immediate environment. But what of *A*s and *X*s relevant to such orientation but lying outside his immediate reach? If these are to impinge on him, there is need for another role, which we will call *C*.

*C* is conceived of as one who can (a) select the abstractions of object *X* appropriate to *B*'s need satisfactions or problem solutions, (b) transform them into some form of symbol containing meanings shared[4] with *B*, and finally (c) transmit such symbols by means of some channel or medium to *B*.

The added element *C* will be recognized as the "gatekeeper" of Lewin[5] as adapted to mass communications by

[2] It need hardly be said that what is transmitted is not the event but an abstraction from it converted in some way to transmissible form. We are indebted to the semanticists for their emphasis on this point, particularly Wendell Johnson. See especially his "The Communication Process and General Semantic Principles," in Lyman Bryson (ed.), *The Communication of Ideas* (New York: Harper & Bros., 1948).

[3] We here choose the general term "system" because we mean that the *B*, or "behavioral system" in this paradigm, sometimes called the "receiver," may be an individual (personality system) or a group, large or small (social system). The assumption is that any system in this sense is motivated to seek information about its surroundings.

[4] We are once again indebted to Newcomb for his emphasis on the *shared* symbol system. It is an advantage of a paradigm based on his *ABX* system this this concept is derivable from the system itself without additional assumptions: communication about an *X* leads to shared perceptions of it and attaches shared meanings to it.

[5] Kurt Lewin, "Psychological Ecology," in Dorwin Cartwright (ed.), *Field Theory in Social Science* (New York: Harper & Bros., 1951).

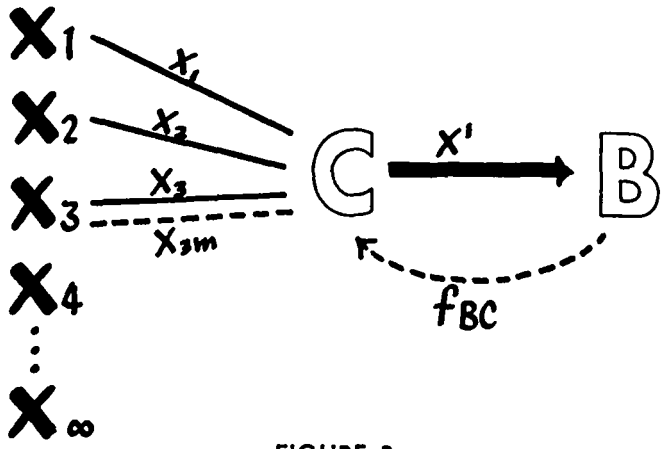


FIGURE 3

What Xs B receives may be owing to selected abstractions transmitted by a non-purposive encoder (C), acting for B and thus extending B's environment. C's selections are necessarily based in part on feedback ($f_{BC}$) from B.

White.[6] It is also recognizable as the "encoder" suggested by Bush[7] as an adaptation of the encoding process in information theory.

It may be asked why *C* would choose *X*s "appropriate" to the requirements of *B*. The answer would appear to be that the *C* role can survive only to the extent that this is true. For *B* is still a selector among the offerings of various *C*s and this means that *C*s are in effect competitors for the attention of *B*s (and for that matter competitors with *A*s and *X*s in *B*'s immediate field). *C*s therefore survive as *C*s to the extent that they satisfy needs for *B*s. And *B*s, on the basis of the most obvious propositions of learning theory, will tend to return to those *C*s which have provided past need satisfactions and problem solutions.

*C*, then, is capable of serving as an agent for *B* in selecting and transmitting information about an *X* (or an *A-X* relationship[8]). He does so by means of symbols expressing shared meanings about *X*s through channels that provide connection between *X* and *B*. And he does so in circumstances where such a connection is otherwise impossible for *B*. Thus *B* has a basis for increasing his security in the larger environment and for gaining increased need satisfactions. In other words, *the effect of the addition of the C role is to provide B with a more extended environment.*

For Newcomb, *A* and *B* can only be persons. While we have tended to imply persons in these roles, it should now be made clear that we do not intend to confine the model to the level of the individual personality. The role of *B*, for instance, may be that of a person, or a primary group, or a total social system.

In stating that any "system" has need for transmissible messages as a means of orienting itself in its environment, it is

[6] David M. White, "The 'Gate-keeper': A Study in the Selection of News," JOURNALISM QUARTERLY, 27: 283-90 (Fall 1950).

[7] Chilton R. Bush, *The Art of News Communication* (New York: Appleton-Century-Crofts, 1954), pp. 1-3.

[8] Following Newcomb, *op. cit.*, we treat an "opinion statement" as an *A-X* relationship on the assumption that the *A* and the *X* are systematically related: the opinion attains full meaning only in the light of who expresses it and the image of the speaker is influenced by the nature of the opinion.

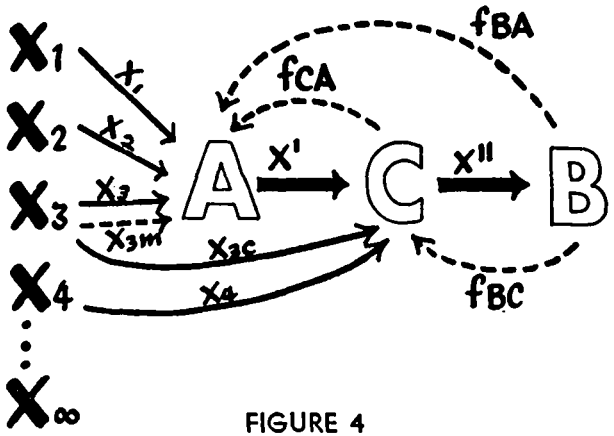


FIGURE 4

The messages C transmits to B (X″) represent his selections from both messages to him from As (X′) and C's selections and abstractions from Xs in his own sensory field ($X_{3c}$, $X_4$), which may or may not be Xs in A's field. Feedback not only moves from B to A ($f_{BA}$) and from B to C ($f_{BC}$) but also from C to A ($f_{CA}$). Clearly, in the mass communication situation, a large number of Cs receive from a very large number of As and transmit to a vastly larger number of Bs, who simultaneously receive from other Cs.

meant that this statement be applied to a person, a primary group, or even a social system. Any of these levels can be plugged into the role of *B*. At the personality level, *B* can be the housewife, too busy to rush around the neighborhood in order to observe the details of her surroundings; in such a case the *C* function can be attributed to the neighborhood gossip, who observes, selects, encodes, and transmits a limited portion of all possible messages supplying the information needs of *B*. At something like the primary group level, one can think of the relatively isolated frontier colony, which posted sentinels as *C*s to observe and report the condition of the environment by means of a special code such as a rifle shot and greeted eagerly another kind of *C*, the information-bearing circuit rider. At the social system level, a national state requires and maintains an elaborate network of *C*s performing such special information functions as that of the diplomatic service.

It might even be possible that the model holds for even "lower" levels than that of the personality. For instance, at the physiological level, it would appear that homeostasis[9] requires some sort of "transmission" of "information" with respect to states of parts of the body.

Not only is the model highly general with respect to levels, it is highly general with respect to kinds of messages. Messages can be seen as either *purposive* or *non-purposive*.[10] Other models have tended to obscure one or the other.

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[9] See W. B. Cannon, *The Wisdom of the Body* (New York: Norton, 1932).

[10] The original articles referred to "purposive" and "fortuitous" messages (and feedback). Perhaps the latter term was unfortunate, for it appears to have been generally misunderstood. Of course we do not mean to say "chance" messages, for messages are *selected* (by *A*s, *B*s, and *C*s) on the basis of their utility in providing need satisfactions and problem solutions. It is the occurrence of the events (*X*s) that is "fortuitous." We also wish to emphasize that it is in the "role prescriptions," not in the actual performance, that the distinction is made between the purposive or "advocacy" characteristic of the *A* role and the non-purposive or "gate-keeper" characteristic of the *C* role. A reporter may consciously or unconsciously be an advocate in his gate-keeper job; we treat this situation as a discrepancy between his "role prescriptions" and his

"PURPOSIVE" OR "NON-PURPOSIVE"?

A purpose message is one *A* originates for the purpose of modifying *B*'s perception of an *X*. A non-purposive message is one which is transmitted to *B* directly or by means of a *C* and in the absence of any communicator's intent to influence him. The absence of a communicator's intent to influence *B* transforms his act into an *X*. When a person says something he hopes will reach another person's ears, he is an *A*; but if he says it without such intent and it nevertheless is transmitted to *B*, his act must be conceived of as an *X*, the selection and transmission having been performed by a *C*. The reasons we consider this distinction to be crucial for mass communications theory will be discussed below.

Messages are transmitted in codes (symbol systems). But this model is by no means limited to the most obvious ones—linguistic systems. In fact, as Newcomb has already emphasized, the crucial characteristic is the shared meanings associated with symbols. Such symbols can take virtually any form, so long as and to the extent that there exist shared meanings and that they are transmissible. Such shared meanings surrounding symbols can be either *affective* or *cognitive*. Language has both affective and cognitive elements. Poetry, for instance, emphasizes the former. This emphasis is, of course, characteristic of all the arts. For instance, modern artist *A* in communicating with a series of *B*s casts his message in a symbol system which is shared, even though with only a few of them; those *B*s who share it or part of it will attain satisfaction from the communication of an affective state; those who cannot decode the message but attempt to do so will probably be frustrated in the attempt and express hostility toward the message,[11] or the communicator, or conceivably even the gatekeeper.

The example above leads into further illustration of how the model deals with "special publics." These are illustrated by the immense segment of the media consisting of trade publications, scholarly journals, hobby and craft media, house organs, and the like. These are often defined out of the area of mass communications, usually on the grounds of audience size; and this in spite of the fact that some of these special interest publications attain circulations in the millions. The fact would seem to be that these media shade off from the specificity of the *Turkey Grower's Gazette* to the generality of *Holiday*, suggesting that decisions as to what is "mass" and what is not mass must necessarily be arbitrary.

The present model requires no such distinction. Our *B*s vary in the degree to which they share common problems. Common problems imply the necessity of attaining communication with common *X*s. Media serving to bring such *X*s to such *B*s arise out of the perceptions by *C*s of the existence of just such a need. Special symbol systems are developed to maximize transmission.

It will be noted that we have consistently referred to both "need satisfactions" and "problem solutions." These concepts relate directly to the "immediate" and "delayed" rewards of

actual "role behaviors," and treat the size of this discrepancy as an empirical question. For a helpful discussion of these terms, see Theodore M. Newcomb, *Social Psychology*, especially Chapter 8, "Social Norms and Common Attitudes," pp. 264-97.

[11] This statement is of course not derivable from the paradigm (and the reader is reminded that this is a paradigm and not a full-blown theory). But because the *B* system is *seeking* problem solutions and need satisfactions there are grounds in the literature of psychology for assuming that when his search is frustrated, aggressive behavior may follow. See Neal E. Miller, *et al.*, "The Frustration-Aggression Hypothesis," *Psychological Review*, 48:337-42 (1941).

Schramm[12] which seem to us to be provocative and potentially fruitful. Building on the two-factor learning theory of Mowrer,[13] Schramm proposed a "reader reward" basis for characterizing the content of news stories. The correspondence is, of course, between his "immediate reward" and our "need satisfactions" and between his "delayed reward" and our "problem solutions."

FEEDBACK

Another concept crucial to the model is that of "feedback." In the first place it should be clear from the foregoing that it is feedback that assures the system character of the *ABX* (or *ABCX*) relationship. If *A* is to utilize his experience in influencing *B*, he must have information about any changes in the condition of *B* attributable to his communications. *C* is equally concerned with effects on *B* if he is to make realistic adjustments in his role as *B*'s "agent." Such *A*s as advertisers facilitate feedback by means of elaborate market research; public relations men obtain feedback by means of public-opinion polls and other devices for determining the effects of their messages. Such *C*s as newspaper publishers sponsor readership surveys and, more recently, reader motivation studies to estimate and predict reader response. Radio's concern with "fan mail" and popularity ratings is well known.

Although feedback originates with *B* under most circumstances, it need not be assumed that *B* is necessarily trying to communicate back to *C* or *A*. When he does try to do so, we may think of this as *purposive* feedback. This is the case when an angry reader writes a letter "straightening out" the editor on some favorite issue. But there are also many ways *B* can feed back without intending to. These we will call *non-purposive* feedback. When a television fan decides to try a well-advertised detergent, his purchase becomes part of the data of a market survey, even though he may not have intended to let the sponsor know he had won a convert.

OTHER MODELS

In the final analysis the worth of such a model as this lies in its heuristic value. In view of the fact that several other models already exist in this field, it is reasonable to ask why another is necessary. A brief look at some others may be in order.[14]

Perhaps the most pervasive of existing "models" is that of Lasswell: "*Who* says *what* through *what channels* to *whom* with *what effect*".[15] The difficulty here is that the model seems to demand the presence of a communicator—the *who*—and to imply that his communication is a purposive one. It is no accident that our model has included the non-purposive case, transmitting *X*s to *B*s by the way of *C*s in the total absence of *A*s. The fortuitous origination of a great deal of the news material transmitted in all media seems to demand a place in the model. There is also an unidirectional implication in the Lasswellian formulation that ignores feedback phenomena.

The information theory-cybernetics paradigm[16] has excited some interesting

[12] Wilbur Schramm, "The Nature of News," JOURNALISM QUARTERLY, 26:259-69 (September 1949).

[13] O. H. Mowrer, *Learning Theory and Personality Dynamics* (New York: Ronald Press, 1950), pp. 222-317.

[14] Several other general models or partial theories of the total mass communication process have appeared recently. They include Franklin Fearing, "Toward a Psychology of Human Communication," *Journal of Personality*, 22:71-88 (September 1953); Wilbur Schramm, "How Communication Works," in Schramm (ed.), *The Process and Effects of Mass Communications*; and George Gerbner, "Toward a General Model of Communication," *Audio-Visual Communication Review*, 4:171-99 (Summer 1956).

[15] Harold D. Lasswell, "The Structure and Function of Communication in Society," in Bryson, *op. cit.*, pp. 37-51.

[16] See Claude E. Shannon and Warren Weaver, *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1949).

theoretical contributions[17] but would appear to have certain drawbacks. It, too, appears to require the presence of a communicator, although not necessarily a purposive one. In addition it poses all the problems of a "borrowed" model. Taylor's use of the redundancy concept[18] would appear to be an example of an exact mapping from mass communications phenomena to an element in the model. But such precise correspondences appear to be rare, and mappings become contrived and tenuous. The model strains common knowledge, for instance, in assuming perfect correspondence of symbol systems encoded and decoded.[19]

## SUMMARY

A conceptual model of the total communication process has been presented in the belief that such a model will prove useful in ordering existing data in mass communications research, point to areas of strength and weakness in our knowledge, and stimulate further efforts. The model is intended to be sufficiently general to treat all kinds of human communication from two-person face-to-face interaction to international and intercultural communications. It assumes that a minimum number of roles and processes are needed in any general theory of communications and attempts to isolate and tentatively define them. It must not be viewed as a theory but as a preliminary step to the construction of a general theory.

The principal elements in the model are these:

*A*s (Advocacy roles). This is what is usually meant by "the communicator"—a personality or social system engaged in selecting and transmitting messages *purposively*.

*B*s. (Behavioral system roles). This is what is usually meant by "the receiver," "the public," etc.—a personality or social system requiring and using communications about the condition of its environment for the satisfaction of its needs and solution of its problems.

*C*s. (Channel roles). Often confounded with *A*s, *C*s serve as the agents of *B*s in selecting and transmitting nonpurposively the information *B*s require, especially when the information is beyond the immediate reach of *B*.

*X*. The totality of objects and events "out there." $X^1$ is these objects and events as abstracted into transmissible form: "*messages*" about *X*s and *A-X* relationships (such as "opinions").

*Channels*. The means by which *X*s are moved by way of *A*s and/or *C*s to *B*s. Channels include "gates" manned by *C*s who in various ways alter messages.

*Encoding*. The process by which *A*s and *C*s transform *X*s into $X^1$s. *Decoding* is the process by which *B*s interiorize messages.

*Feedback*. The means by which *A*s and *C*s obtain information about the effects of messages on *B*s.

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[17] See especially Bush, *op. cit.*, and Wilbur Schramm, "Information Theory and Mass Communication," JOURNALISM QUARTERLY, 32:131-46 (Spring 1955).

[18] Wilson L. Taylor, "'Cloze Procedure': A New Tool for Measuring Readability," JOURNALISM QUARTERLY, 30:415-33 (Fall 1953).

[19] In information theory, the "ensembles" for purposes of encoding and decoding are equivalent. There is no provision for decoding errors as such; only "noise" in the channel can produce encoder-decoder disagreement. Noise is defined as random events. Various writers, including Bush, *op. cit.*, have suggested distinguishing "channel noise" from "semantic noise," the latter being defined more or less as decoding errors attributable to ensemble differences at the encoding and decoding stages. The distinction is important, of course, but this would appear to be a case of bending the model to satisfy common sense. It is not easy to see how the mathematical relations in information theory could survive the incorporation of this new concept; such noise must surely be systematic and not random, for instance. For a more technical treatment of essentially the same point, see Lee J. Cronbach, "On the Non-Rational Application of Information Measures in Psychology," in Henry Quastler (ed.), *Information Theory in Psychology: Problems and Methods*, pp. 14-25.