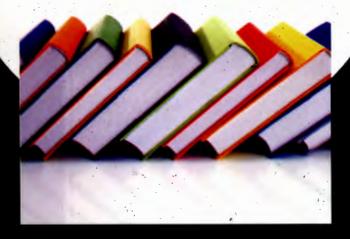


**A Book of Readings** 



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# **CHAPTER TWO**

# From 'One-To-One' To 'Many-To-Many': A New Model Of Communication

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#### Introduction

model is a simplified description in graphic form of some aspect of reality (Donsbach 2008). It is a symbolic representation designed to help us visualize the relationships among various elements of a structure, system or process (Folarin 2005). Models are useful in helping us to visualise, analyse and discuss complex processes, which would otherwise be difficult o explain. A model is a theoretical and simplified representation of the real word. A model, by itself, is not an explanatory device but it does an important and directly suggestive role in the formulation of theory (Severin and Tankard 1992). Models however, have the weakness that they are highly selective and do not present a holistic picture of reality. A model of communication seeks to show the main elements of any structure or process of human social action and the relations between these elements, plus any flow or exchange that takes place. The main benefits are to organize disparate elements and observations and to give a simplified picture of the underlying dynamics. The purpose of such models is thus primarily heuristic - an aid to the description and explanation of communication. To a lesser extent, they can help in predicting the outcomes of certain communication processes and situations by drawing attention to factors to take into account and forces at work.

We thus set out in this paper to present the trend of development of model of communication with a formulation of a new model that explains the nature of communication via the internet medium. While the models presented show how various scholars have come to understand what communication is, we present our own understanding of how internet has affected communication and the change it has brought to the model of communication.

#### Aristotle Model

Aristotle, writing 300 years before the birth of Christ, provided an explanation of oral communication that is still worthy of attention. He called the study of communication "rhetoric" and spoke of three elements within the process (Mortensen 1972). He provided us with this insight: Rhetoric falls into three divisions, determined by the three classes of listeners to speeches. Of the three elements in speech-making — speaker, subject, and person addressed — it is the last one, the hearer or listener, that determines the speech's end and object. Here, Aristotle speaks of a communication process composed of a speaker, a message and a listener. He points out that the person at the end of the communication process holds the key to whether or not communication takes place.

#### Lasswell's Model

Harold Lasswell, a political scientist, developed a much-quoted formulation of the main elements of communication. Lasswell proposed a verbal model to describe the process through which communication works. The model requires answer to the following questions:

- · Who
- Says what
- In which channel
- · To whom
- · With what effect?

The point in Lasswell's comment is that there must be an "effect" if communication takes place. If we have communicated, we have "motivated" or produced an effect. It is also interesting to note that Lasswell's version of

the communication process mentions four parts — who, what, channel, whom. Three of the four parallel parts mentioned by Aristotle — speaker (who), subject (what), person addressed (whom). Only channel has been added.

Shannon and Weaver's Model

Claude Shannon developed this model while trying to know what happens to "information bits" as they travel form the source to the receiver in telephone communication. In the process, he isolated the key elements of the Communication process, but missed out feedback which was later added by his colleague, Warren Weaver.

#### The elements include:

- a) The Communication: All communication is composed of chains or systems; and a system or chain is no stronger than its weakest link.
- b) The information and communication source: The entity (individual, group or organisation) that originates the message.
- c) The Message: The information itself, which may be verbal or non-verbal, visual, auditory, tactual or olfactory.
- d) The Transmitter: The person, establishment (or equipment) that encodes and transmits the message on behalf of the source; the transmitter may be the source.
- e) The Channel: the Avenue through which the message is transmitted to the receiver.
- f) The Destination: the central nervous system (e.g. the human brain) where the message is processed.
- g) Noise: This is anything added to the information signal but not intended by the information source, and therefore causing distortion in the message.

# Other concepts later added are:

- h) Feedback
- i) Channel Capacity
- j) Redundancy
- k) The Idea of Correspondency

Shannon and Weaver attempted to do two things: 1) reduce the communication process to a set of mathematical formulas and 2) discuss problems that could be handled with the model.

Shannon and Weaver were not particularly interested in the sociological or psychological aspects of communication. Instead, they wanted to devise a communication system with as close to 100 percent efficiency as possible. The "noise" concept introduced by Shannon and Weaver can be used to illustrate "semantic noise" that interferes with communication. You will note that the Shannon and Weaver diagram has essentially the same parts as the one formulated by Aristotle. It is true the parts have different names, and a fourth component — in this case the transmitter — is included.

## Schramm's Model

Wilbur Schramm, a well-known communications theorist, developed a straightforward communication model. In Schramm's model he notes, as did Aristotle, that communication always requires three elements — the source, the message and the destination. Ideally, the source encodes a message and transmits it to its destination via some channel, where the message is received and decoded.

However, taking the sociological aspects involved in communication into consideration, Schramm points out that for understanding to take place between the source and the destination, they must have something in common. If the source's and destination's fields of experience overlap, communication can take place. If there is no overlap, or only a small area in common, communication is difficult, if not impossible. Schramm also formulated a model that explains the process involved in mass communication.

# The Rileys' Model

John W. and Matilda White Riley, a husband and wife team of sociologists, point out the importance of the sociological view in communication in another way. The two sociologists say such a view would fit together the many messages and individual reactions to them within an integrated social structure and process. The Rileys developed a model to illustrate these sociological implications in communication.

The model indicates the communicator (C) emerges as part of a larger pattern, sending messages in accordance with the expectations and actions of other persons and groups within the same social structure. This also is true of the receiver (R) in the communications process.

In addition, both the communicator and receiver are part of an overall social system. Within such an all-embracing system, the communication process is seen as a part of a larger social process, both affecting it and being in turn affected by it. The model clearly illustrates that communication is a two-way proposition.

The important point that the Rileys' model makes for us is that we send messages as members of certain primary groups and that our *receivers receive our messages as members of primary groups*. As you likely can visualize, group references may be a positive reinforcement of our messages; at other times they may create a negative force.

### Berlo's Model

David K. Berlo, a communications theorist and consultant points out the importance of the psychological view in his communication model. The four parts of Berlo's SMCR model are source, message, channel, and receiver. The first part of this communication model is the source. All communication must come from some source. The source might be one person, a group of people, or a company, organization, or institution. Several things determine how a source will operate in the communication process. They include the

source's communication skills — abilities to think, write, draw, speak. They also include attitudes toward audience, the subject matter, you, or toward any other factor pertinent to the situation. Knowledge of the subject, the audience, the situation and other background also influences the way the source operates. So will social background, education, friends, salary, culture — all sometimes called the sociocultural context in which the source lives.

Message has to do with the package to be sent by the source. Within the message, select content and organize it to meet acceptable treatment for the given audience or specific channel. If the source makes a poor choice, the message will likely fail.

Channel can be thought of as a sense — smelling, tasting, feeling, hearing, and seeing. Sometimes it is preferable to think of the channel as the method over which the message will be transmitted: telegraph, newspaper, radio, letter, poster or other media.

Receiver becomes the final link in the communication process. The receiver is the person or persons who make up the audience of your message. All of the factors that determine how a source will operate apply to the receiver. Think of communication skills in terms of how well a receiver can hear, read, or use his or her other senses. Attitudes relate to how a receiver thinks of the source, of himself or herself, of the message, and so on. The receiver may have more or less knowledge than the source. Sociocultural context could be different in many ways from that of the source, but social background, education, friends, salary, culture would still be involved. Each will affect the receiver's understanding of the message.

Berlo's approach is rather different from what seems to be suggested by the more straightforward transmission models in that he places great emphasis on dyadic communication, therefore stressing the role of the *relationship* between the source and the receiver as an important variable in the communication process.

# Osgood's Circular Model

The Osgood and Schramm circular model is an attempt to remedy that deficiency: The model emphasizes the circular nature of communication. The participants swap between the roles of source/encoder and receiver/decoder. The model is particularly helpful in reminding us of the process of *interpretation* which takes place whenever a message is decoded.

The more mechanical models, particularly those concerned primarily with machine communication, tend to suggest that fidelity will be high as long as physical noise is reduced to a minimum or strategies (such as increasing channel redundancy) are adopted to counter the noise. This circular model reminds us that receiving a message is not simply a matter of decoding, but also of *interpreting* the message.

Whenever we receive data from the world around us, even in, say, the apparently very simple act of seeing what's in front of us, we are engaged in an active process of interpretation, not simply taking in information, but actively making sense of it. An important question is what criteria are we using to make sense of what we are receiving? Since the criteria we use will inevitably differ from one person to another, there will always be semantic noise. If we can answer that question about our audience, then we stand a chance of communicating successfully.

# Westley-Mclean's Model

Westley-McLean model makes a distinction between interpersonal communication and mass communication (Westley and MacLean 1957). In interpersonal communication, as the receiver gets the message from the source, it sends the feedback immediately. Therefore, the feedback is direct. However, in mass communication, there is an intervening element, the gatekeeper who modifies the message so that the message sent to the receiver may not be exactly as originated by the source. Besides, the feedback is also indirect and complex.

#### De Fleur Model

This model seeks to explain various forms of communication in one graphic construct. It took some ideas from Cybernetics on self-generating and self-maintaining systems. De Fleur presents cyclical or helical nature of the communication process. This emphasizes the interchangeability of the source/encoder and receiver/decoder roles. De Fleur also recognizes that "noise" can emanate from any of the elements and not from the channel or the source.

#### The HBU Model

Hiebert, Ungurait and Bohn designed the model. It shows mass communication process as circular, dynamic and ongoing (Folarin 2005). It pictures communication as a process similar to the series of actions that take place when one drops a pebble into a pool. The pebble causes a ripple expands outward until they reach the shore and then bounces backward to the centre. The content of communication {an idea or event} is like a pebble dropped into the pool of human affairs. Therefore, many factors affect the message as it ripples out to its audience and bounces back.

The model pictures communication, codes, gatekeepers, media, regulators, filters and audiences as concentric through which the content {or message} must pass. Feedback is the echo that bounces back to communication while noise and amplification can both affect the message and the feedback as they travel these steps in the process.

# The Ecological Model

The ecological model of communication, asserts that communication occurs in the intersection of four fundamental constructs: communication between people (creators and consumers) is mediated by messages which are created using language within media; consumed from media and interpreted using language. This model is, in many ways, a more detailed elaboration of Lasswell's (1948) classic outline of the study of communication: "Who ... says what ... in which channel ... to whom ... with what effect". In the ecological model, the "who" are the creators of messages, the "says what" are the messages, the "in which channel" is elaborated into languages (which are the content of channels) and media (which channels are a component of), the "to whom" are the consumers of messages, and the effects are found in various relationships between the primitives, including relationships, perspectives, attributions, interpretations, and the continuing evolution of languages and media. A number of relationships are described in this model:

- 1. Messages are created and consumed using language
- 2. Language occurs within the context of media
- 3. Messages are constructed and consumed within the context of media
- 4. The roles of consumer and creator are reflexive. People become creators when they reply or supply feedback to other people. Creators become consumers when they make use of feedback to adapt their messages to message consumers. People learn how to create messages through the act of consuming other people's messages.
- 5. The roles of consumer and creator are introspective. Creators of messages create messages within the context of their perspectives of and relationships with anticipated consumers of messages. Creators optimize their messages to their target audiences. Consumers of messages interpret those messages within the context of their perspectives of, and relationships with, creators of messages. Consumers make attributions of meaning based on their opinion of the message creator. People form these perspectives and relationships as a function of their communication.
- 6. The creators of messages construct are necessarily imperfect representations of the meaning they imagine. Messages are created within the expressive limitations of the medium selected and the meaning representation space provided by the language used. The message created is usually a partial and imperfect representation of what the creator would like to say.

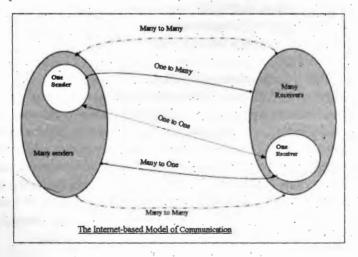
- 7. A consumer's interpretation of messages necessarily attributes meaning imperfectly. Consumers interpret messages within the limits of the languages used and the media in which the languages are used A consumer's interpretation of a message may be very different from what the creator of a message imagined.
- 8. People learn language by through the experience of encountering language being used within media. The languages they learn will almost always be the languages when communicating with people who already know and use those languages. That communication always occurs within a medium that enables those languages.
- 9. People learn media by using media. The media they learn will necessarily be the media used by the people they communicate with.
- 10. People invent and evolve languages. While some behaviour expressions (a baby's cry) occur naturally and some aspects of language structure may mirror the ways in which the brain structures ideas, language does not occur naturally. People invent new language when there is no language that they can be socialized into. People evolve language when they need to communicate ideas that existing language is not sufficient to.
- 11. People invent and evolve media while some of the modalities and channels associated with communication are naturally occurring, the media we use to communicate are not.

# The Internet-based Communication Model

The traditional mass media follows a "one-to-many" model of communication. In other words, one source speaks at one time to many people who constitute a homogeneous mass audience. Messages sent from these media are designed to appeal to and reach mass audience. Everyone who is tuned to a particular radio station will hear the same commercial and moviegoers see the same version of film. Generally, the mass media communicate with the public as a mass audience rather than an individual human being. This model is of course different from the interpersonal model, which is "one-to-one" model of communication.

The marriage of computing systems and the Internet has given rise to a hybrid model of communication. A "many-to-one" model is a cross between mass broadcasting and interpersonal communication. With mainframe computers, local and wide area networks, and other databases, large amounts of information are entered by many different sources and are stored until retrieved by individuals who select only the information they want or need (Kaye & Medoff 2001).

Mass media grow from one-way communication to incorporate interactive communication. Since the Internet allows individuals to select information based on personal preferences, in this way, the Internet is not only a mass medium but a new interactive medium also. Thus, new media technology has changed the flow of communication from a linear to a three dimensional form of information: mass (one-to-many), interpersonal (one-to-one) and computing (many-to-one). But more significant is the emergence of the fourth mode of communication. Just as you have information being entered from many different sources, many individuals too are selecting this information as required or needed by them. So we have the "many-to-many" model of communication. The model below shows the web-based communication pattern.

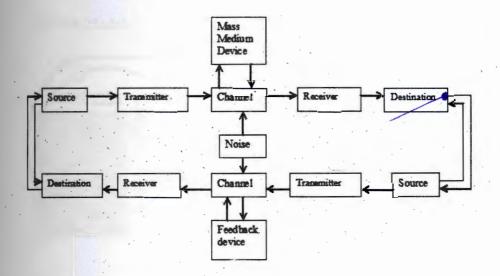


#### Conclusion

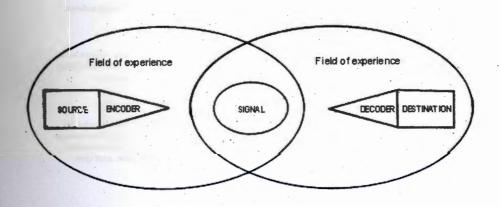
The model presented explains how the internet has affected the nature of communication. The greatest impact is the interactive dimension that the internet has brought to communication. Hence, the traditional media of mass communication have found it necessary to depend on the internet to further their own reach and win more market share. As technology progresses, it is likely that greater we would be talking of greater impact, not just on communication model alone, but on the field and practice of communication in general.

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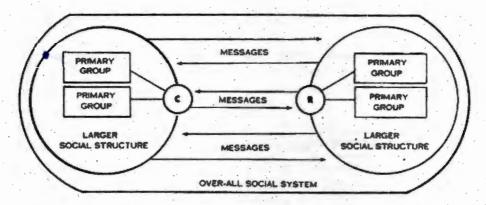
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- {1}Shannon and Weaver's Model



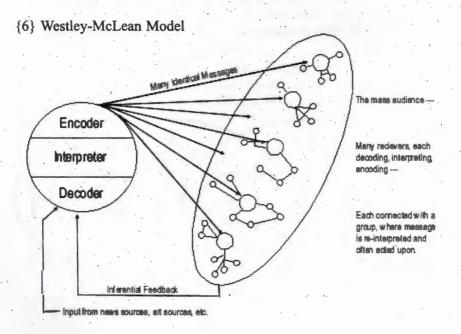
# {2} Schramm's Model



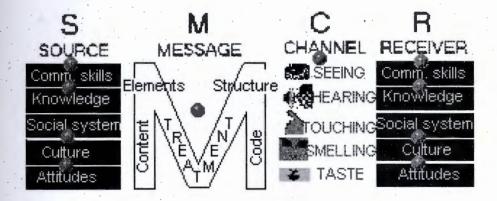
# 3. Riley's Model



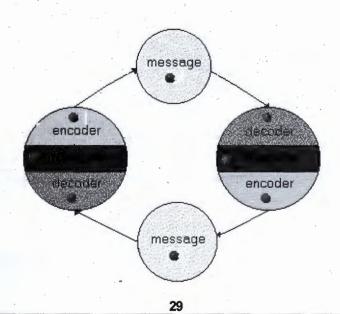
# Schramm's Mass Communication Model



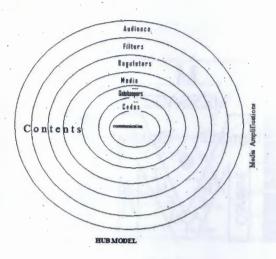
## Berlo's Model



# Osgood Model

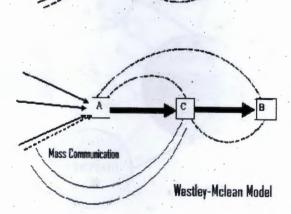


**HUB Model** 



Interpersonal Comm.

Westly-McLean Mode



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# Ecological model of communication

