

CHAPTER II

COMMUNICATION - A THEORETICAL FRAMEWORK

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CHAPTER II

COMMUNICATION - A THEORETICAL FRAMEWORK

The act of communication symbolises the need of the human subject to maintain contact with his environment and for this reason alone, can be seen as supplying one of psychology's central themes. Communication has only come into its own, as ^a Psychological concept, in recent years. The variety of human communications have excited very different degrees of interest. To communicate is to transmit a message but messages are not all of the same type. Three types are postulated, namely signs, meanings and effective experiences.

Communication is one of the most complex of human themes, so complex that upto 30 years ago, there was very little reference to it in the literature of Psychology. Probably Shannon's (1948) paper was the first publication on information theory. Earlier work had often implications for the themes; but implication and formulation are not the same thing.

The impetus to the systematic inquiry came in the end from disciplines other than psychology, from the efforts of engineers to construct artificial systems and from the supporting theory supplied by mathematicians. Wiener's and Shannon's writings excited enormous interest among psychologists in Britain and America. Since 1950 psychologists have touched communication problems at a number of points but few, if any, attempts have been made to set them in relation to one another. But contributions from other fields are considerable.

In an era when almost every discipline is interested in its reciprocal relationship with the area labelled communication, there has been, every widening usage of the term 'communication' and a concurrent broadening and dissipation of that term's referants and understanding. A few such definitions are given below.

2.1 Definitions of Communication:

"The oldest meaning of the word communication in English can be summarised as passing of ideas or information and attitudes from person to person"(Raymond, 1966). "Communication in its broadest interpretation may be defined as the eliciting of a response" (Dance, 1967). "Communication comes from the latin communis, common. When we communicate, we are trying to establish a commonness with someone. That is, we are trying to share an information, an idea or an attitude. The receiver and the sender are tuned together for particular message"(Schramm, 1963).

Weaver(1949) includes under communication all the procedures by which one mind can affect another. Noel Gist writes "when social interaction involves transmission of meanings through the use of symbols, it is known as communication". He defines social interaction as the reciprocal influences that human beings exert on each other through inter stimulation and response.

Gerbner(1964) defines communication as "Social interaction through messages". Messages are formally coded symbolic or representational events, of some shared significance in a culture, produced for the purpose of evoking significance.

Hovland (1970) defines communication "as the process by which an individual-the Communicator - transmits stimuli to modify the behaviour of other individuals - communicatees".

The dictionary of sociology gives the following definition: "The process of making common or exchanging subjectives studies such as ideas, sentiments, beliefs usually by means of language". It is further added that "communication in human groups becomes the chief factor in their unity and continuity and is the vehicle of culture. Good communication is the very basis of human society".

Saxon (1975) defines communication as the sharing of ideas and feelings in a mood of mutuality. Communication involves interaction, that provides the feedback to persons involved in exchanging ideas.

In this world of technology, communication came also to mean a line or channel from place to place. Since the industrial revolution, there has been so much of improvement in this kind of communication - through railways, steamships, cars, aircraft that often when we say communications we mean these ways of travelling and carrying. The press, the camera, the phone, the radio the television etc., are all classified as communication media.

For the purpose of this study, communication is defined as the process of transmission and reception of ideas and information leading to change.

2.2 The Theoretical aspects of the process of Communication:

^{To}
The communicate is to transmit a message, but a message unlike a physical entity cannot travel in its initial form. Transmission calls for a medium in which selected elements correspond to selected features of the original. In human communication a great deal of failure comes about, ^{not} but because the sender is unable to express what he has to say or because the receiver is unable to interpret the message in the way that is intended. The reasons for these failures often have a semantic flavour, but frequently their roots lie in the psychological make up and condition of one or both parties.

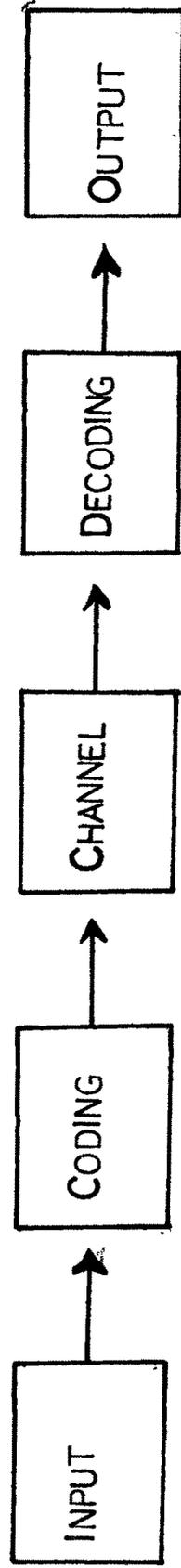
a. Learning Theory

The Psychology of learning offers a number of versions of the mechanisms and processes of human learning and in doing so provides one basic form of a theory of communication. Despite the differences of approach, and especially the varying emphasis as between cognitive and behavioural elements, virtually all theory in the psychology of learning gives an important place to association as the underlying

principle of effective communication. Briefly, the relationship between stimulus and response is seen to provide the key to both learning and communication (in the sense of teaching). Different theorists have emphasized different elements in the learning process; for instance, Hull (1943) stresses drives, Thorndike (1932) reward, Tolman (1932) the cognitive element, Skinner (1957) reinforcement, but all seem to share a general framework of concepts, which is also a framework for understanding how communication works. Every action may be conceived of, as a response, which presumes a preceding stimulus. The response behaviour 'triggered off' or otherwise caused by any stimulus, has consequences which are ultimately accountable in terms of a reduction of tension, a return to equilibrium or stasis which is the 'normal' state of the organism and of the larger system of which it forms part.

Human communication, in this view, is, that process which links individuals to each other and to their environment. Communication whether as transmission or reception originates in an experience of tension and should be explained in terms of its function, actual or anticipated, in reducing the state of tension. People enter into communication relationships, as a result of an experience

FIGURE - I
FLOW OF MESSAGE ACCORDING TO
INFORMATION THEORY



of tension, within a shared environment; some prior stimulus exerts pressure on them to transmit information or to respond to information, which comes to their attention. The communication situation is interpreted as one where the needs of the participants are satisfied in a calculable way. The relationship between participants is a functional and mechanistic one, either useful or unavoidable. The sender relates to the receiver either instrumentally to achieve some planned and predictable response and effect, or out of necessity. Similarly the receiver attends, because it is useful or because he is conditioned to do so.

b) Information Theory

Information theory is a formal mathematical theory based on probability and without any value for empirical prediction, or need for empirical validation (Frick, 1959). In many man-made systems, the transmission medium consists of electrical impulses the basic elements being few and simple. Now-a-days the basis of most long range communication systems is the conversion of language into an agreed electrical or typographical code.

During the second world war designs of many communication systems were put forward. Shannon's problem was to decide, what sort of signal to send, so as best to convey messages of a given type? How could such messages

be coded so as to secure the fastest, error-free transmission, over a given circuit? This is the central problem of information theory and to answer it with precision, it is necessary to find mathematical expression for the characteristics in terms of which different systems can be compared. For example if two systems for the transmission of English text have been advanced, one would be based on the idea of coding each word by letter, the second on that of assigning a symbol to each word and coding it directly. Information theory enables comparison of the two systems.

The broad purpose of information theory, is to supply a mathematical technique, which help the designer of a system to strike an acceptable balance between the demands of the message source, the capacity of the channel and the expectation of noise. A successful system is one, where the differences between signals sent and signals received is very small. The flow of a message through a communication channel is expressed in diagram No. 1.

Information theory implies that the relationship between sender and receiver is essentially an instrumental one and is consistent with, although distinct from, that which is implicit in the perspective of behavioural learning.

e) Congruence Theory:

The basic premises of congruence or balance theory are simple enough. Among the several variants, all stemming originally from Gestalt psychology, the earliest form of the theory relevant to communication is that of Heider (1946). This holds that in the case of two people who have an attitude of like or dislike to each other and to an external object, some pattern of relationship will be balanced and some will be unbalanced. The theory proposes that where there is balance, the participants will resist change and where there is not, attempts will be made to restore 'cognitive' balance. The principle of consistency is described by Zajonc (1960) as holding "that behaviour and attitudes are not only consistent to the objective observer but that individuals also try to be consistent to themselves". The striving for internal consistency is a major factor which shapes the pattern of receiving and interpreting communication content.

d) Festinger's theory of Cognitive Dissonance (1957) is the most developed version of balance theory and its main elements are summarised in the following way by Zajonc (1960)

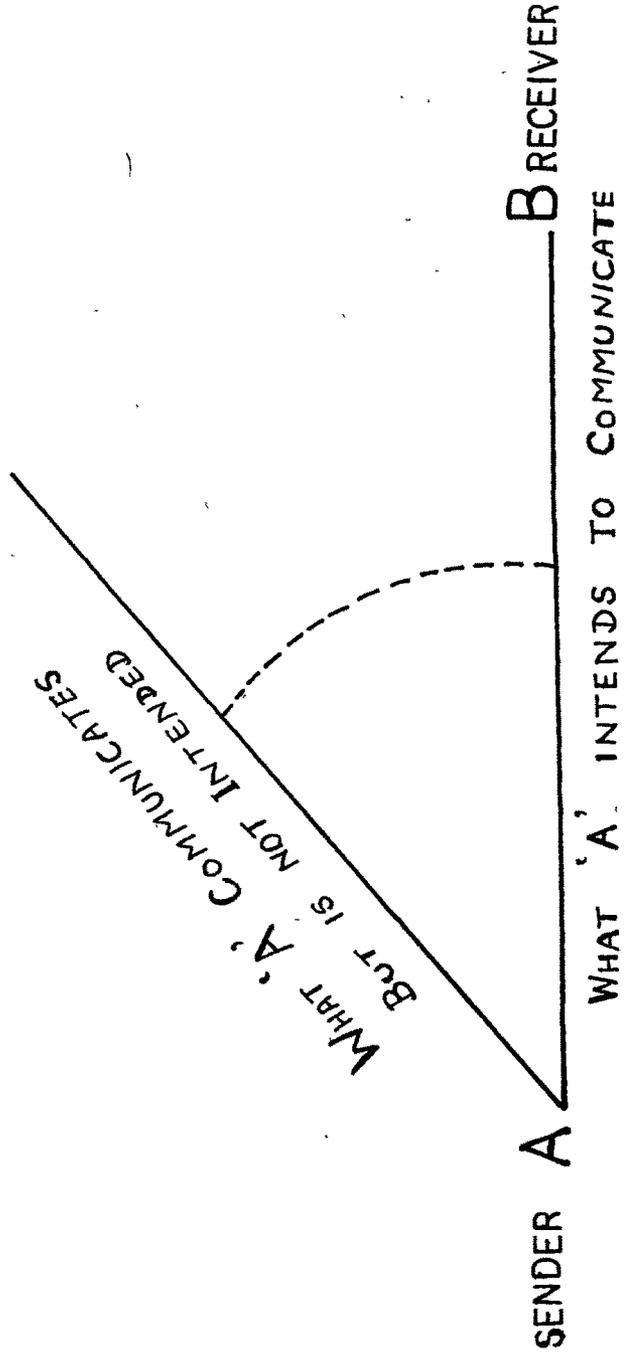
- i) two elements of knowledge are 'in dissonant relation if, considering these two alone, the obverse of one element would follow from the other'

- ii) dissonance 'being psychologically uncomfortable, will motivate the person, to try to reduce dissonance and achieve consonance.
- and iii) '.....in addition to trying to reduce it the person will actively avoid situations and informations which would be likely to increase the dissonance'.

The theory has a number of implications for the communication process. Since communication is the main way in which balance in this context is maintained, sought or restored, the theory states a number of conditions relating to motives for the sending or receiving of messages and the pattern which shapes communicative behaviour. It predicts that people will seek out information which confirms their existing attitudes and view of the world or reinforces other aspects of their behaviour. Similarly it predicts that people will avoid information which is likely to increase dissonance. They will selectively perceive and interpret the information they receive in accordance with the existing structure of their view, organising new information accordingly. They will be more open to receive communication from those sources to which they are favourably disposed.

FIGURE - II

ARC OF DISTORTION



e) Desai (1969) has spelt out the following points relating to communication behaviour. If the communication is to be effective,

- i) it must be clear in purpose and intention,
- ii) it must be lucid and should be based on felt need,
- iii) the communicator should build up proper rapport with the communicatee by accepting his feelings,
- iv) the communicator should help the communicatee to listen to participate and to co-operate and
- v) language must be understandable.

The communication behaviour of a farmer, a merchant, a doctor, a lawyer.....and a saint are different. Sensitivity comes only after awareness. Perception helps an individual towards effective communication.

A person at times wants to communicate one thing; but actually he communicates something else which he never intended. This type of event in the communication behaviour is known as 'The Arc of Distortion'.

One realistic way to reduce the arc of distortion on the part of both the sender and the receiver is to check up through 'feed back'.

Communication behaviour is classified as follows:

1. Help giving and help seeking communication
2. Cathartic communication event (e.g. talking out sarcasm humour, sadness, criticism etc.,)
3. Exciting or stimulating communication (e.g. Anthony's speech)
4. Persuasive communication
5. Entertaining communication
6. Informative communication
7. Consultative communication

Communication could be authoritative or democratic depending on the pattern being centralized or integrated.

f) Social System Theory

This offers a sociological perspective on communicative acts which is closest to the psychologistic and rather mechanistic accounts presented above. Parsons(1951) has been the main exponent of social system theory. One can extract from the body of his work, a consistent view of the communication process. He views social action in general, as being distinguished by a motivation to achieve some goal. It is related to attainment of gratification or avoidance of deprivation. In addition action occurs^s in a

situation to which the actor orients himself and in which he is guided by norms, values and other constraints of the particular social environment.

g) Symbolic interactionism

Another body of theory which takes us further along the continuum from the system perspective derives from the work of Mead (1934) and has come to be known as symbolic interactionism. As its name implies it is primarily concerned with the process of social interaction through symbols and it focuses quite directly on communication.

The essence of Mead's position lies in his conception of the individual as communicating with himself from the point of view of society.

"The human self arises through its ability to take the attitude of the groups to which he belongs - because he can talk to himself in terms of the community to which he belongs". It is this ability to 'enter into the attitude of others' which makes complex human society possible.

h) The Perspective Phenomenology

In phenomenology and particularly in the work of Alfred Schutz (1970) we can find an approach to communication which is consistent with symbolic interactionism and takes us nearer

to a view of the communicative act as spontaneous activity. Schutz's basic perspective has the following main elements. The individual experiences a 'life-world' which he takes for granted and seeks to make sense of, in terms of an acquired 'stock of knowledge' derived from experience. In interpreting and making sense of this world of experience, he acts upon it and to some extent constructs his own unique world. He selectively attends to the world of experience, according to what is of relevance to him, at the time when the world consists of receding 'Zones of relevance'.

A close analysis of the theories mentioned above will reveal that they offer alternative theoretical perspectives for three broad issues in communication. Why communicate? What is the meaning of a communication situation? and what is the relationship between participants? They form a continuum starting from the 'passive' psychological theories and extending upto the active sociological theories through social-psychological and social system theories. The following table summarises the positions they take in the continuum.

TABLE 1
SUMMARY OF THEORETICAL PERSPECTIVES WITH REFERENCE
TO THE THREE BROAD ISSUES IN COMMUNICATION

Psychological - - - - - Sociological

	1	2	3	4
	Extreme behaviour- ist posi- tion	Social Psychologi- cal position	Social system position	Interactionist phenomenologi- cal position
1. Why communicate?	Condition- ing; instinct	Reduce tension; orient to environment	Achieve approved goals by approved means	Express free choice; act on the environ- ment
2. What is the meaning of a communication situation?	Reaction as determined by the system	An experie- nce of ten- sion or dis- comfort	A situa- tion of choice among goals and means	An occasion for innovation and creation
3. What is the relationship between participants?	Partial; mechanis- tic	Functional; instrumen- tal; holistic	Institu- tionally defined comple- mentarity	Inter-subjective negotiable

2.4 Factors of communication

Researchers in communication have identified varying number of factors or elements in communication. The following table classifies the factors as expressed by different authors.

TABLE NO. 2

TABLE SHOWING THE FACTORS OF COMMUNICATION

<u>Factors</u> <u>Source</u> ↓	Communi cator	Communi cant	Content	effect	Channel	Message treat- ment	Feed- back
Steiberg	✓	✓	✓	✓	-	-	✓
Leagans and Loomes	✓	✓	✓	-	✓	✓	-
Denis	✓	✓	✓	-	✓	-	-
Berlo	✓	✓	✓	-	✓	-	-
Havelock	✓	✓	✓	✓	✓	-	✓
Rogers	✓	✓	✓	✓	✓	-	✓
Sampson	✓	✓	✓	-	✓	-	-

The Communicator:

The Communicator is the person or source that initiates the communication process. Sender (Denis, 1975) and source (Berlo, 1960; Rogers, 1973; Schramm, 1955; Sampson, 1971) are the other names the communicator is known by. Leagans and Loomes (1971) mention the following characteristics of the communicator that will determine the efficacy of the communication: credibility as perceived by the audience, prestige that he commands, the expertise that he possesses and the communication skill that he has developed. Rogers (1973) points out that communication becomes effective when the communicator and the communicant are homophilous. Homophily is the degree to which the source-receiver pair are similar in certain attributes like beliefs, education and social status.

The Communicant:

The communicant is the receiver of the message, sent by the communicator. He is known by other names as well: Communicatee (Desai, 1969) audience (Leagans and Loomes, 1971) receiver (Denis, 1975, Rogers, 1973) destination (Schramm, 1955) recipient (Havelock, 1969). Rogers and Shoemaker have abstracted the following receiver variables that are associated with effective communication:

1. Personality 2. Social status and 3. Perceived need.

Dennis(1975) draws our attention to the fact that the receiver is also an initiator in the sense that he chooses to attend to some sources and messages rather than others.

Content:

Content is the message or information a communicator wishes his communicant to receive, understand, accept and act upon. Messages when clear, significant to the needs and interests of the audience, specific, accurate, timely and manageable by the sender and the receiver, can be easily 'driven home' to the audience.

Effect:

Effect or consequences are the changes that occur within a social system as a result of the adoption or rejection of an innovation. Functional, direct and manifest are the three types of consequences:

- i. functional or dysfunctional depending on whether the effect is desirable or undesirable;
- ii. direct or indirect depending on whether changes occur in immediate response to direct change effort;

- iii. manifest or latent depending on whether it is recognised and intended by the members of a social system or not.

Channels:

Senders and receivers of messages must be "tuned" to each other for effective communication. Channels provide the physical bridges between the sender and the receiver of messages - the avenues or media used, to transmit messages to and from an audience. A channel may be anything used by a sender of messages to and from an audience. A channel may be anything used by a sender of messages to connect him with the intended receivers - radio, books, bulletins, letters, newspapers, group meetings, personal contacts of many kinds, are the commonly used channels.

Message treatment

Treatment deals with, the way a message is handled to get the information across, to an audience. It relates to the technique - details of procedure or manner of performance essential to expert presentation. It includes the appeals which are used and the various techniques of writing, speaking, visualizing or acting. The purpose of good treatment is to make the message, clear, understandable

and realistic to the audience. Designing treatment requires knowledge of the matter, insight into the principle of human behaviour and skill in creating and using refined techniques of presentation. Fuzziness in treatment is sure death to a message. People respond to messages that are reliable, realistic, relevant and understandable.

Feedback:

The observation by the communicator, of the effect of the communication, is called the "feedback".

The 'feedback' is of critical importance in testing the success of any attempt at communication, for only by some such device, is it possible to observe its effect. If the communicator is face to face with the communicant, it is possible for him to judge the success of the communication by the latter's reaction.

When the communication gives directions or persuades to a line of conduct it is easier to gauge its success than when it involves the transmission of an experience or the sharing of an idea. In the first instance A can estimate whether he has 'put over' what he intended, by what he does. In the second instance however A has no way of knowing what he has conveyed to B unless B responds with

a communication of his own. It is not sufficient for 'A' to ask 'Do you understand' for an answer in the affirmative does not necessarily mean the desired effect has been achieved. An intelligent communicator has to improvise certain means by which he could evaluate the effect of the communication and supply the necessary feedback.

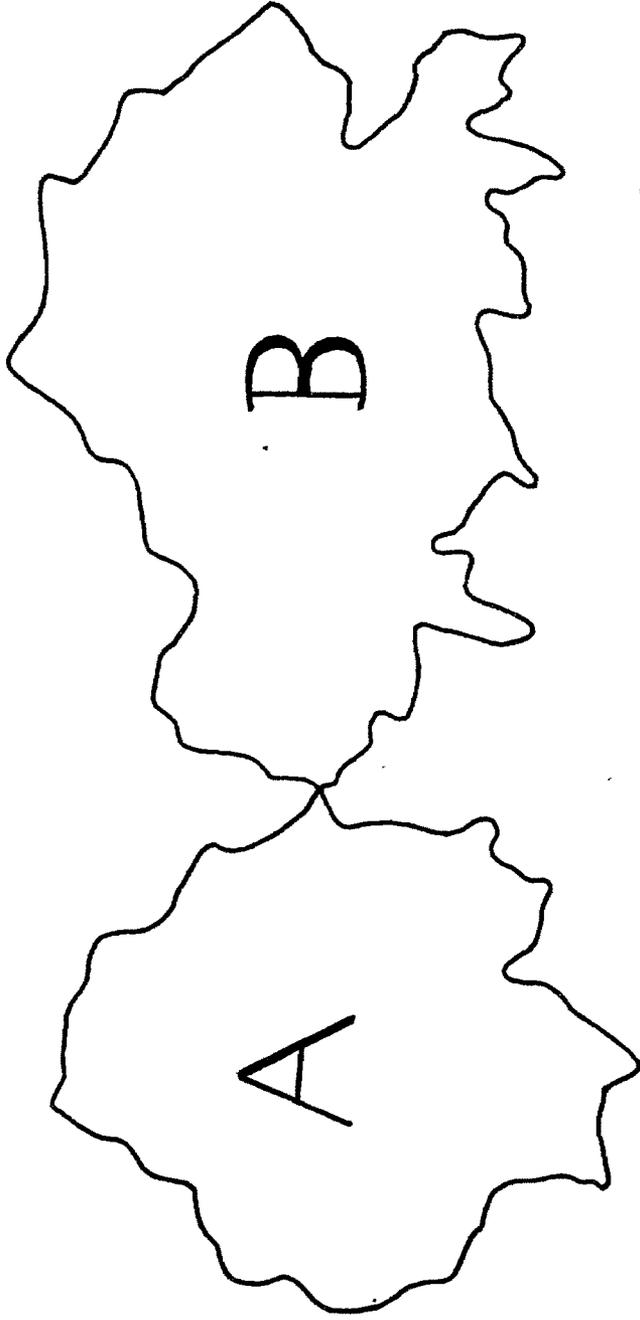
The four essential elements of most general communication models are the sender, the message, the channel and the receiver (SMCR). Researchers and theoreticians differ in their nomenclature but include them in their models or schemas. A few more elements are added to these four by some. Of the additional elements feedback and effect gain the support and acceptance of many.

2.5 Communication Models:

It is one thing to be able to list the main elements involved in communication but another to show how they are related to each other. The study of communication over two or three decades had produced a number of attempts to express the relationship between the elements just described, in the form of a model or physical representation. Those attempts indicate the dilemmas posed in the conceptualization of communication. It is a complex process open to

FIGURE - III

THE A-B MODEL OF COMMUNICATION



alternative philosophical interpretation and almost as variable as are the examples of communication phenomena is social life.

a. The A - B Model:

Perhaps the simplest communication model possible is what we might call the A-B Model - where two systems join - sharing an interface - so that changes in the status of one system influence the status of the other system (Joseph, 1971). This model, of course, could apply equally to a mechanical system, a hydraulic system etc. The communications theorist however is primarily interested in those systems where the flow across the interface is information not merely energy or matter.

b. Claude and Shannon Model:

The most influential model of communication is that of Claude and Shannon (1949), a model developed to assist in the construction of a mathematical theory of communication which would apply to any situation of information transfer, whether by men, machines or other systems. This model depicts a basic sequence which begins with a source, from which a message is passed to a transmitter where it is encoded into a signal which is subject to noise^s on its way

to a receiver where it is decoded and then passed to a destination.

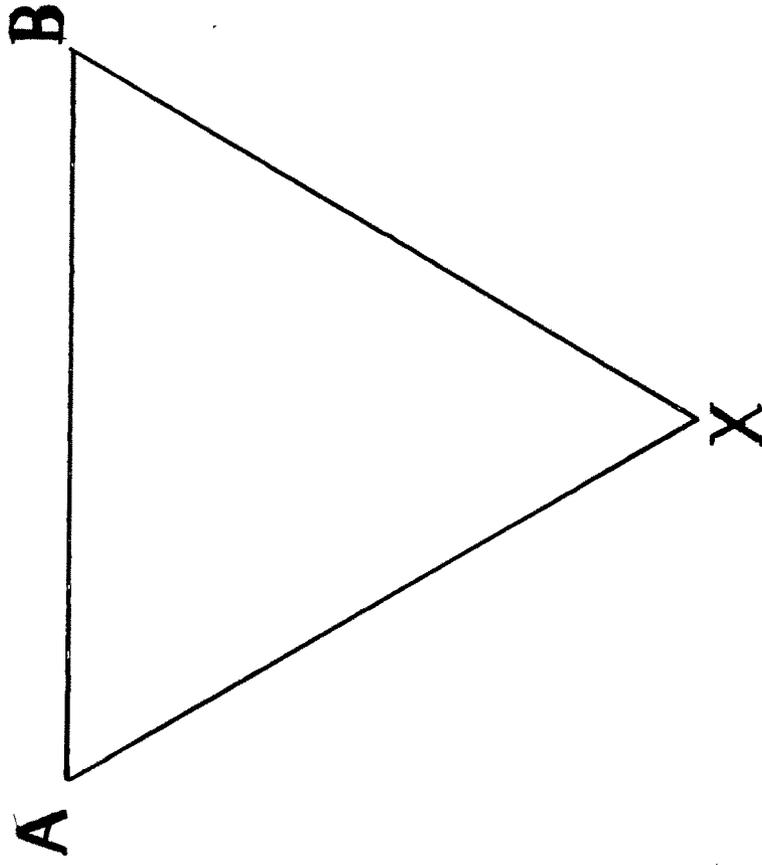
Shannon of course was particularly interested in channel capacity and the problems of communicating in the face of various noise levels.

c. Norbert Wiener Model:

More or less contemporaneously with this work another information theorist, Norbert Wiener (1950) proposed a general science of communication which would apply equally to men and machines to be called cybernetics, a word derived from the greek word, for 'steering'. In cybernetics the emphasis is on the feedback in a communication systems, the procedures for control which enable a system to adapt to changes in the environment. A communication source similarly can respond and adapt to information about the results of the messages it transmits. Feedback typically has a modifying and guiding effect on the encoding and transmitting activities of a 'communicator' and takes different forms depending on the type of communication event. It might for instance be the 'other half' of a conversation, the results of examinations in an educational system, the audience research statistics

FIGURE - IV

THE NEWCOMB MODEL OF COMMUNICATION



of a broadcasting organization, the review of a book, the facial expression of an interlocutor and so on. In discussing the nature of human communication, Schramm (1971) stresses the fact that feedback makes the process of communication, circular rather than linear and one-directional and no representation of the human communication process can omit this key element. All representation of communication in social system terms or social systems in communication terms, depend on the concept of feedback. When we include it in the basic model of information theory we have the essential components of a social organization which can survive change, adapt to an environment and be much more 'efficient' in its internal operation.

d. Newcomb Model:

A simple model of communication which illustrates the system approach is suggested by Newcomb (1950)

This is based on the 'initial assumption that communication among human beings performs the essential function of enabling two or more individuals to maintain simultaneous orientation to each other and towards objects of an external environment'. The model is a triangular one, the point of the triangle being taken up by two individuals A and B and an object in their common environment, X. Both individuals

are oriented to each other and to X and communication is conceived of as the process which supports this orientation structure, in the sense of maintaining the symmetry of the relationship between the three elements by transmitting information about any change and allowing adjustment to take place. The model assumes that at any given moment the ABX system is 'at rest' or balanced.

e. Westley and Maclean Model:

A more elaborate model in the same mode is the more complex geometric, diagrammatic scheme of Westley and Maclean. They attempt to deal with attitude formation from mass communication by relating an individual's (A's) concern about a subject (X, divided into sub-components representing variants of an object of orientation, that is different versions of the same idea) to a receiver B. In this respect Westley and Maclean's model is much like Newcomb's except a mediating source C, is introduced in it. "C in effect may be called many things, but turns out to be the 'channel' or communication technique or technology that gets the communication from A to B. What are produced from this three stage process are, therefore multiple X's - each a little different from the other - that are delivered, feed-back - distorted or mediated between A, B and C". The relevance to mass communication, in the

FIGURE - V
THE S-M-C-R MODEL OF COMMUNICATION

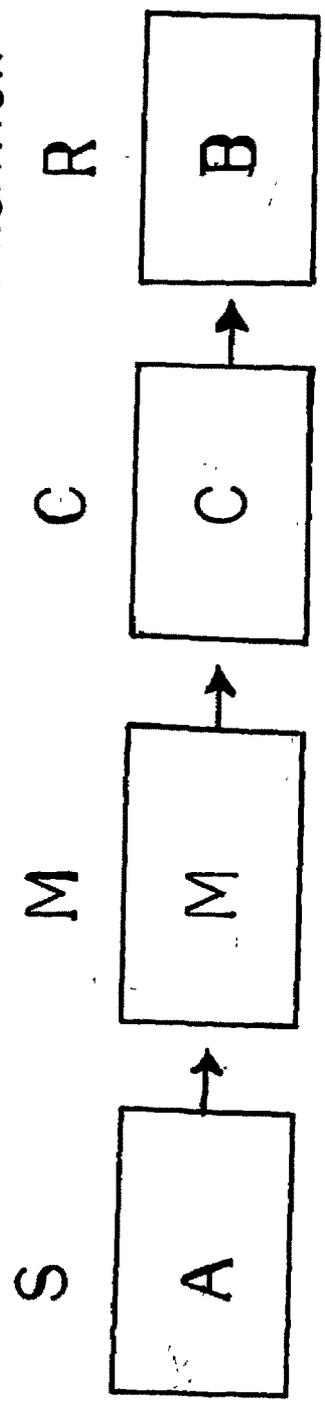
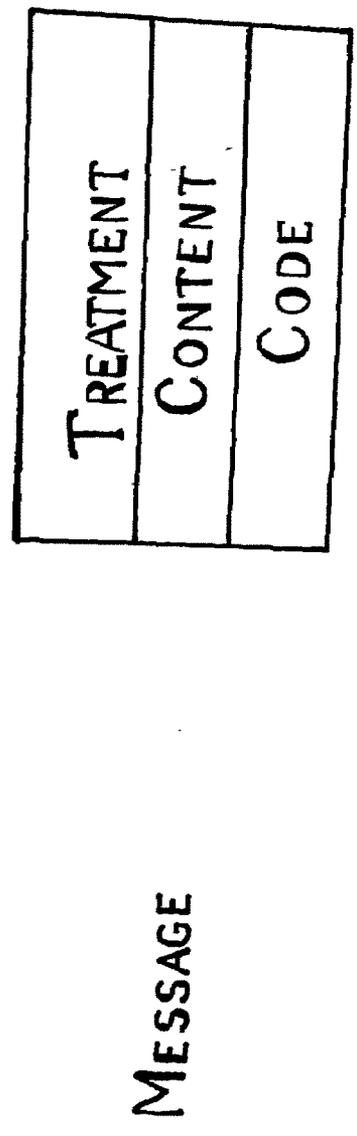


FIGURE - VI
MESSAGE COMPONENTS ACCORDING TO BERLO



author's words, depends upon "a large number of C's (who) receive from a large number of A's and transmit to a vastly larger number of B's who simultaneously receive from other C's".

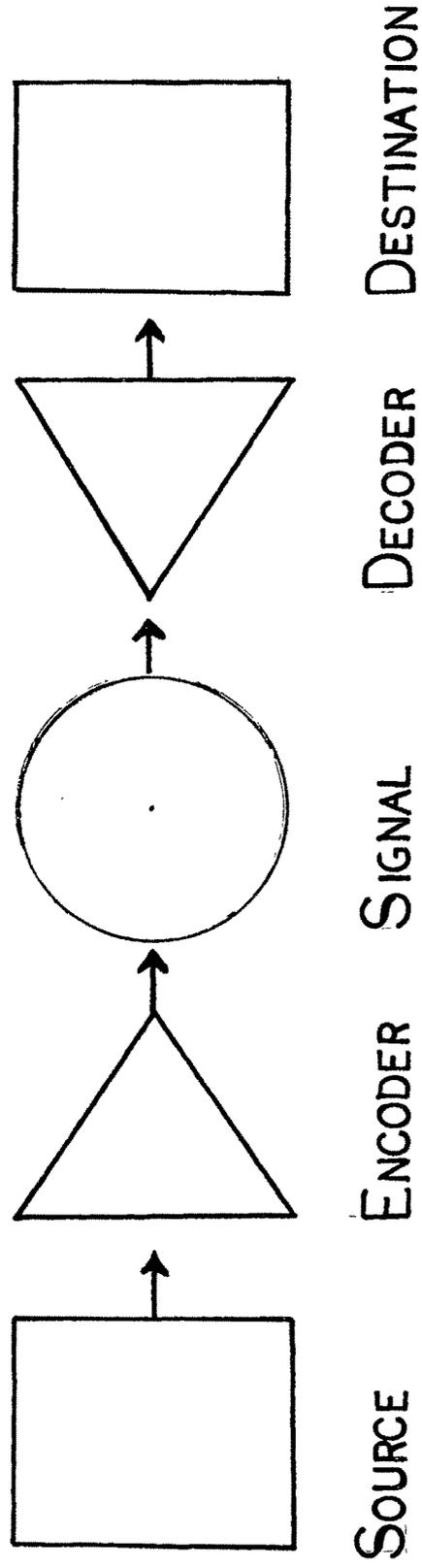
f. S.M.C.R. Model:

Berlo's (1960) S-M-C-R- Model might be called an A - B - C - M model - with M standing for 'message'. With the emergence of the M component we seem to be squarely in a communication framework - no longer in electrical engineering, in physical systems or even in traditional social psychology.

Berlo originally suggested that a message could be analyzed in terms of its code its content and its treatment. In human beings a message is the behaviour available in physical form - the translation of ideas, purposes and intentions into a code, a systematic set of symbols.

FIGURE - VII

WILBUR SEHRAMN MODEL OF COMMUNICATION



g. Wilbur Schramm Model:

The diagram represents, the process of communication and the factors involved as expounded by Schramm (1955)

A particular message when coded and sent, is quite free of its sender and what it does is beyond the power of the sender to change. In engineering terms, there may be filtering and distortion at any stage. In human terms if the source does not have adequate or clear information, if the message is not encoded fully, accurately, effectively in transmittable signs, if these are not transmitted fast enough and accurately enough despite interference and competition to the desired receiver; if the message is not decoded in a pattern that corresponds to the encoding and finally if the destination is unable to handle the decoded message so as to produce the desired response then obviously the system is working at less than top efficiency. When one realises that all these steps must be accomplished with relatively high efficiency, if any communication is to be successful, the everyday act of explaining something to a stranger or writing a letter seem a minor miracle.

h. The Information Theory Model

Information theory is replete with its own models of

communication, the most significant of which deals with the symbolizing process in a regular, mathematical manner, following the leads of the cybernetic model. This model posits that one may send over a channel of communication, finite jots of information according to the precise structures of formal logic. One is limited by the cleverness of the code (symbols) used, the capacities of the channels and the so-called logic of the system (often a computer) and the communication power of the coding process which limits the nature of information it accepts into its channels. It is sufficient to note here that the term 'communication of information' is for this model, a severely delimited one but a construction that produces no end of challenges for its analysts. It is as noted above but a complex elaboration of the original (now a generation old) cybernetic construction of the communication process once accepted as the model of all communication.

i. Gerbner's Model

Perhaps the most comprehensive attempt yet to specify all the component stages and activities of communication is Gerbner's general model of communication. In its verbal form the model is expressed as follows: 'Someone perceives an event and reacts in a situation through some means to

make available materials in some form and context conveying content of some consequence: The aim is to specify and relate areas of study in the field of communication but a number of important points are stressed and have been taken up by the same author in subsequent work. Our attention is drawn in particular to the following points:

1) The great variability in the perception of an event by a communicating agent and also in the perception of a message about an event by a receiver. In general terms this variability can range from an extreme 'transactionist' position which stresses the structuring effects of the communicators to a nearly opposite or 'psychological' view which sees the world of material events, sounds, shapes, forms as in control. Gerbner's model does not assume either extreme view but does attempt to take account of the creative interactional nature of the perceptual process, avoiding any implication of either solipsism or mechanism.

2) The importance of the situation and the context in which the stimulus to communication and the actual process occurs in the sense both of physical as well as social circumstances.

3) In discussion Gerbner contrasts the open nature of human communication with the closed sequence of mechanical

or automatic communication system. Human communication is open in that, events and objects in the environment do not automatically generate signals or communicative reactions and the whole process of communication is open at many points to variable and unpredictable effects of perception and human choice. The analogy with a programmed device like a thermostat in a heat control system is misleading, human communication systems are not homeostatic and 'feedback' has a different connotation.

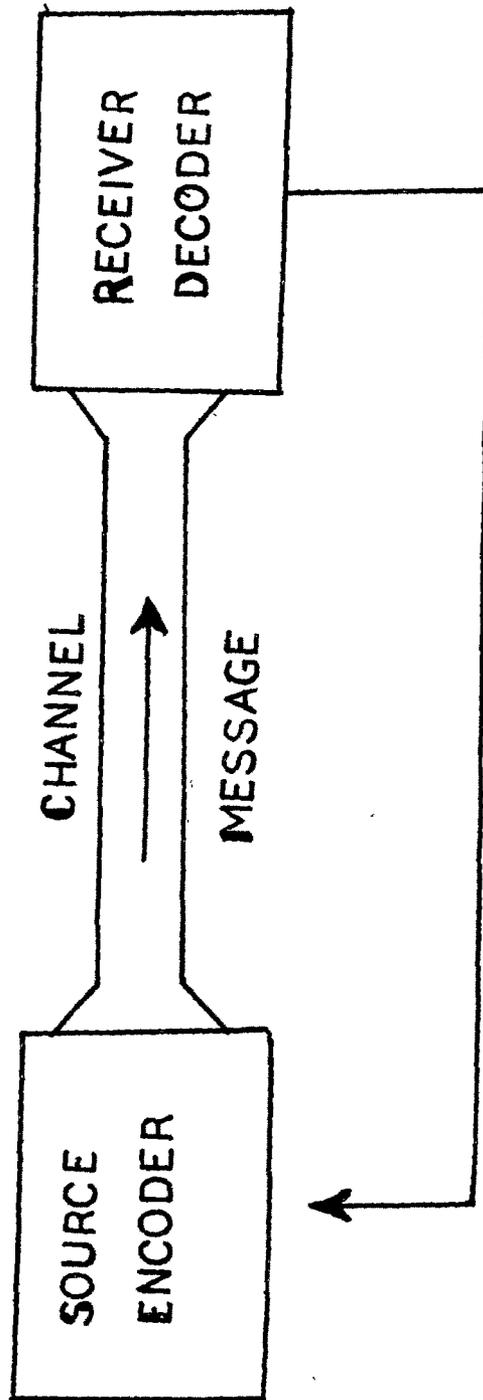
4) Content is always meaningful and the meaning of content cannot be derived solely from either the intentions of the transmitter or the perception of the receiver alone but is a 'relational pattern' to be interpreted in the light of the whole sequence of events in a particular case of communication. While the model is essentially descriptive and taxonomic, it does something more than provide a framework of comparative study and it opens the way to more focussed theoretical approaches and to a discussion of communication in normative terms.

j. Havelock's D and U Model:

The core of Havelock's (1969) D and U model consists of

FIGURE - VIII

ROGERS' MODEL OF COMMUNICATION



2 concepts; the knowledge transfer process and the knowledge flow system. The process is the interaction or linkage between the potential user and a potential resource . It can be analyzed into six categories or problem foci by the formula:-

Who says what to whom by what channel to what effect for what purpose? Thus the factors involved in this model are:

- (i) Communicator, (ii) Message, (iii) Recipient
- (iv) Channel, (v) Effect and (vi) Purpose achievement

k. Rogers Model:

Rogers' (1973) has evolved a model of the communication process which has six elements.

The six elements are as follows:

1. Source - originator of the message, may be an individual or many working together, an institution or organization.
2. Message - the stimulus the source transmits to the receiver
3. Channel - mass media or interpersonal; the means by which the message travels from source to a receiver.

4. Receiver - most important element in the communication process. Often there is a tendency to forget the receiver. A text book writer may write for his colleagues and miss the student readers. Here the source is source-oriented. It could also be message oriented or channel oriented depending on the importance given to message or channel. But, for successful communication the source has to be receiver oriented.
5. Effects - change in the receiver behaviour in knowledge, attitude and ~~in~~ overt behaviour is called the effect. These three changes often occur in sequence, that is knowledge leading to attitudinal change which in turn leads to overt behaviour. A one-sided message sets forth the sources claim on the receiver. A two sided message sets forth the sources claim but also recognizes opposing positions on the issue. A fear appeal message presents the harmful consequences when the receiver has an opposing tendency; useful, when the source has high credibility, when the message is well supported and when the source or channel is perceived as trustworthy and competent by the receiver.
6. Feed back - A response by the receiver to the sources

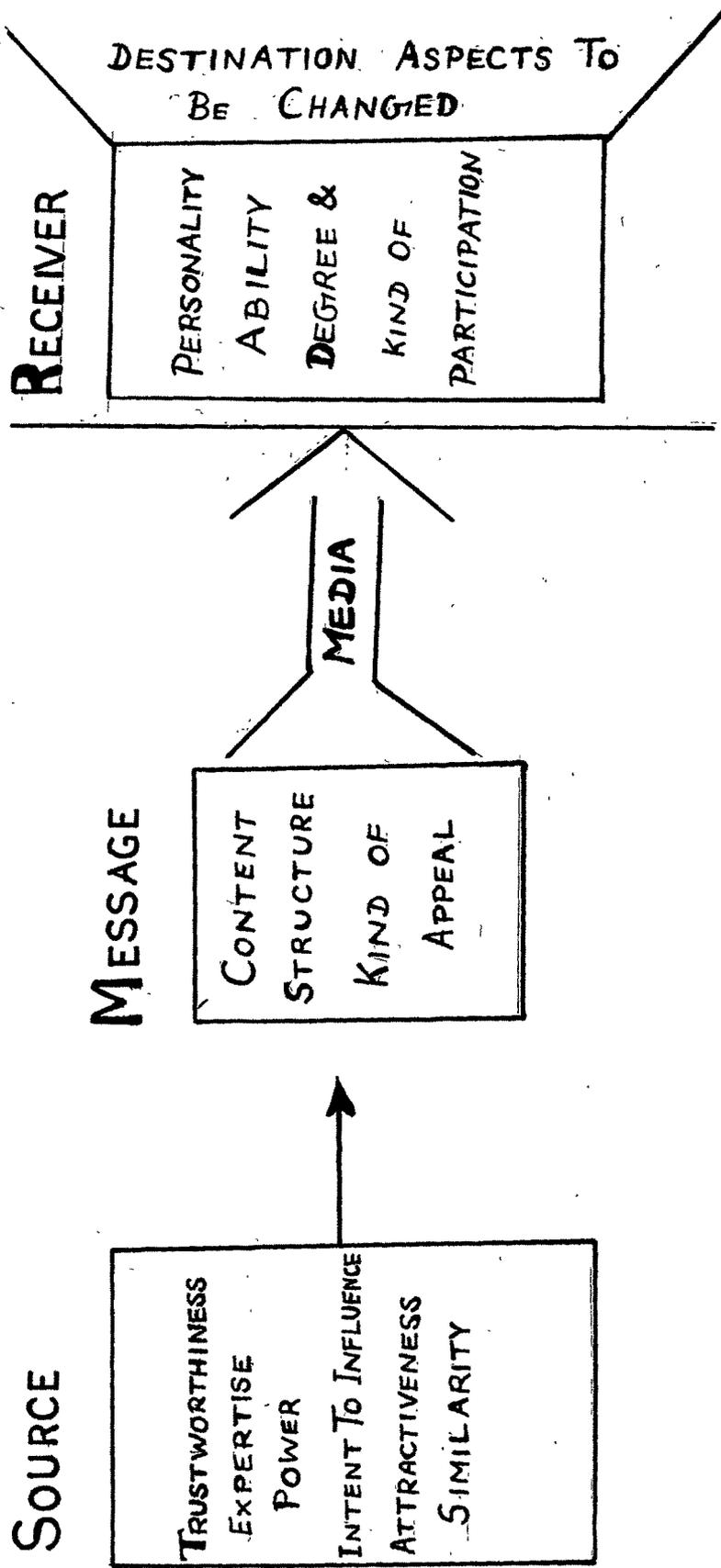
messages is feedback. From the sources perspective it is a message conveying 'knowledge of communication effectiveness'. It is one way of looking at the source as a receiver. Positive feedback confirms that the intended effect of the message is achieved. Negative feedback informs that the intended effect is not achieved.

Communication that is more feedback oriented is more effective. If there is feedback, there must also be feedforward, information about the receiver that is gained by the source prior to initiating communication with them and that is used to predict the effectiveness of the communication.

False assumptions are likely to result when the receiver and the source are dissimilar. When they are highly similar, the source has to know himself only in order to know his receiver. Homophily is the degree to which a source - receiver pair are similar in certain attributes like beliefs, education and social status etc. Hetrophily is the degree to which this pair are different in certain attributes. Communication between hetrophilous pairs is less effective and often leads to distortion, delayed transmission, restricted channels and cognitive dissonance.

FIGURE - IX

SAMPSON'S MODEL OF COMMUNICATION



One of the most distinctive problems that characterises the diffusion of innovation is that the source is usually heterophilous to the receiver. It is bound to be so, because the change agent is much more technically competent than his client. Otherwise no diffusion would occur if both are to be identical regarding the technical grasp of the innovation.

1. Sampson's Model:

Sampson(1971) suggests a communication model wherein he describes the interaction between the change agent and client system. The former system includes a source a message and a channel and the latter system includes the receiver and the destination. Destination is the kind of change sought in the receiver of the communication; what the communicator says is the message; the media employed is the channel.

The source has been examined in terms of its trustworthiness or credibility, its expertise, its power, its intent to influence, its attractiveness to the recipient and its similarity to the receiver. The message factor includes the content of what is said, its structure, the kind of appeal that is used, whether a conclusion is drawn and so forth. The channel or the medium may include any of the means chosen to communicate or to affect any

or a combination of senses. The receiver or the client system has been studied in terms of its personality, its ability, the degree and kind of participation in the process of change. The destination is the effect of the message on the receiver and concerns itself with that aspect the communication which seeks to change.

2.9 Conclusion:

Various models of communication have been put forward. They could mainly be classified as belonging to two types: Psychological models which examine the interaction between the learner and his environment and Engineering models which explain the process in terms of 'input', 'output', and message and use analogies to communication in electronic circuits. While the engineering kind of models use a complex mathematical theory of communication for explanation and simulation of human thought and processes, the psychological models concern more with the effect of the message, at the receiving end as well as its source. Leaning heavily on Sampson's model, while pooling the ideas from other psychological models, a model to serve as the criteria, to study the communication between Colleges of Education and their practising schools, has been evolved. The rationale behind the selection is discussed in Chapter IV.