

Development of **the Integrated Communication Model**

Hua-Kuo Ho

Nanhua University, Taiwan

Department of Early Childhood Education

College of Humanities

Nanhua University

Dalin, Chiayi 622

Taiwan

e-mail: hkh@mail.nhu.edu.tw

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Abstract

Human communication is a critical issue in personal life. It also should be the indispensable core element of general education curriculum in universities and colleges. Based on literature analysis and the author's clinical observation, the importance of human communication, functions of model, and often seen human communication models were firstly discussed, then the Integrated Communication Model (ICM) was finally developed by integrating the important human communication factors. While illustrating the ICM, the meanings of important communication factors, relationships among these factors, functions of the model, as well as the future research questions were also discussed, respectively. In this developed initial model of human communication, the communicator should be the controller of the whole communication process. If we could consider the human relationship, time and situation factors, then adequately employ our own verbal and nonverbal endeavors, it is possible to create favorable momentum to influence the atmosphere and outcomes of communication.

Introduction

Human communication is a fundamental issue in life. It is very closely associated with a great many human problems. The concept of human communication is broadly defined as intrapersonal and interpersonal communication in this article (Ho, 2007).

According to Samovar, Brooks, & Porter (1969), more than 50% of our waking time is used for communication activities. Since human communication occurs so frequently, it seems easy to imagine that our emotion, daily living, and destiny are greatly affected by communication. Effective human communication should help to lead these effects to positive development. In order to achieve effective human communication, it is important to understand and take on those factors affecting communication and their relationships. Based on the critical status of communication in human life, the author intends to construct the Integrated Communication Model (ICM) to provide a clear and systematic framework for understanding the factors and their relationships in human communication.

For developing the ICM, coupled with the author's clinical observations, the related literature was analyzed in this article. Firstly, the functions a model should have were investigated in order to provide the reference of framework for constructing the ICM. Then, from the existing human communication models found, the important communication factors were identified. Finally, those important communication factors were incorporated into the ICM.

Functions of models

We usually employ some simple words, pictorial representations, formulae and so on to suggest or specify the relationships among those components involved in a problem on which is investigated. These words, pictorial representations, or formulae are called "models." The following four functions or purposes served by models were identified by Gerbner (1956):

1. Organizing function: A model shows the various elements or components of communication and presents how these relate to one another.
2. Heuristic function: It means that a model can help people to identify new hypotheses to test and new directions to look at communication.
3. Predictive function: This means that from the known factors and relationships in a model we can make some relatively safe guesses about behavior and outcomes.
4. Measurement function: A model serving this function can contain explicit statements about the relative importance of certain components and can show specific means for measuring a particular dimension of communication

In fact, the concept of "model" generally corresponds to "theory." If we want to make a more specific differentiation between these two concepts, we might consider "model" a brief form of "theory." As for "theories," nine important and overlapping functions may be identified as follows (Littlejohn, 1999):

1. "Organizing and summarizing" knowledge.
 2. "Focusing" attention on some variables and relationships.
 3. "Clarifying" what is observed.
 4. "Offering" an observational aid.
 5. "Predicting" about outcomes and effects in the data.
 6. "Heuristic" function.
 7. "Communicative" function.
 8. "Control" function for judging the effectiveness and propriety of certain behavior.
 9. "Generative" function for challenging and achieving change.
- From the abovementioned functions of "model" and "theory," organizing, heuristic, predicting, and measurement, relatively, seem to be the core functions.

“Focusing”, “clarifying,” and “communicative” functions could be included in the organizing function. “Measurement” function seems to be associated with an “observational aid.” As to the “control” and “generative” functions, they may reflect from the integration of organizing, heuristic, predictive, and measurement functions, as a whole. Therefore, organizing, heuristic, predictive, and measurement functions may be used as the important criteria for evaluating human communication models. A good human communication model should demonstrate as many functions as it can. The author would like to make all possible efforts to include the organizing, heuristic, predictive, and measurement functions in his development of the Integrated Communication Model.

Some Examples of Human Communication Models

For understanding the possible factors or variables involved in human communication, probably the existing human communication models could provide some important cues for reference. Usually the demonstration of “model” or “theory” might be interpreted or explained by brief words, illustrations, formulae and so forth. The presently known human communication models largely have this kind of qualities. Some of the known human communication models will be showed in advance and a collective discussion will be made at the end of this section.

The Lasswell Model

This model consists merely of a series of questions. The progression of the model illustrates Lasswell’s view of communication (Lasswell, 1948):

Who? Says what? In what channel? To whom? With what effect?

The Shannon-Weaver Model

This model consists of five basic components as follows (Shannon & Weaver, 1949):

1. Information source: The brain of the speaker.
2. Transmitter: The vocal mechanism of the speaker.
3. Receiver: The hearing mechanism of the hearer.
4. Destination: The brain of the hearer.
5. Noise source: Any disruption of the message that prevents it from being the same at the destination as it was at the source.

The relationships among abovementioned five components are presented in Figure 1.

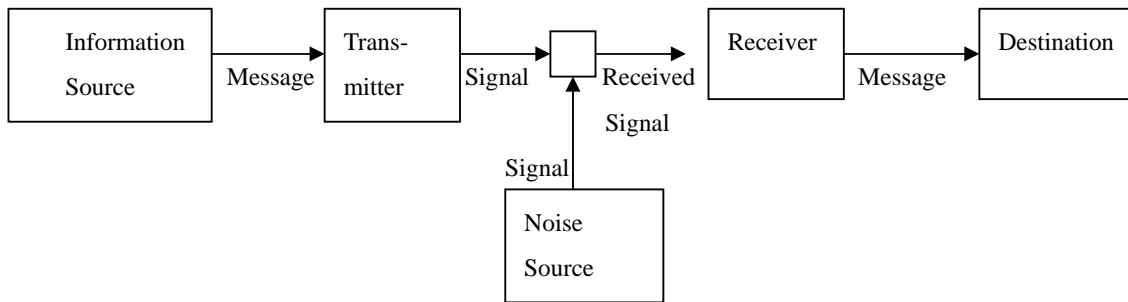


Figure 1 The Shannon-Weaver model
 (Adapted from Shannon & Weaver, 1949, p. 98)

The Gerbner Model

This model takes into consideration perception, the context of the message, and the participants' reactions. The following verbal model constructed by Gerbner (1956) could be used to understand Figure 2 of this model:

Someone	<i>Communicator and audience research</i>
perceives an event	<i>Perception research and theory</i>
and reacts	<i>Effectiveness measurement</i>
in a situation	<i>Study of physical, social setting</i>
through some means	<i>Investigation of channels, media, controls over facilities</i>
to make available materials	<i>Administration; distribution; freedom of access to materials</i>
in some form	<i>Structure, organization, style, pattern</i>
and context	<i>Study of communicative setting, sequence</i>
conveying content	<i>Content analysis; study of meaning</i>
of some consequence	<i>Study of overall changes</i>

Figure 2 shows the “someone” as a “man or machine,” represented by the letter *M*. The perceived event is indicated by *E*. *E* is used to indicate the “event as perceived.” *S* and *E* are the communication products.

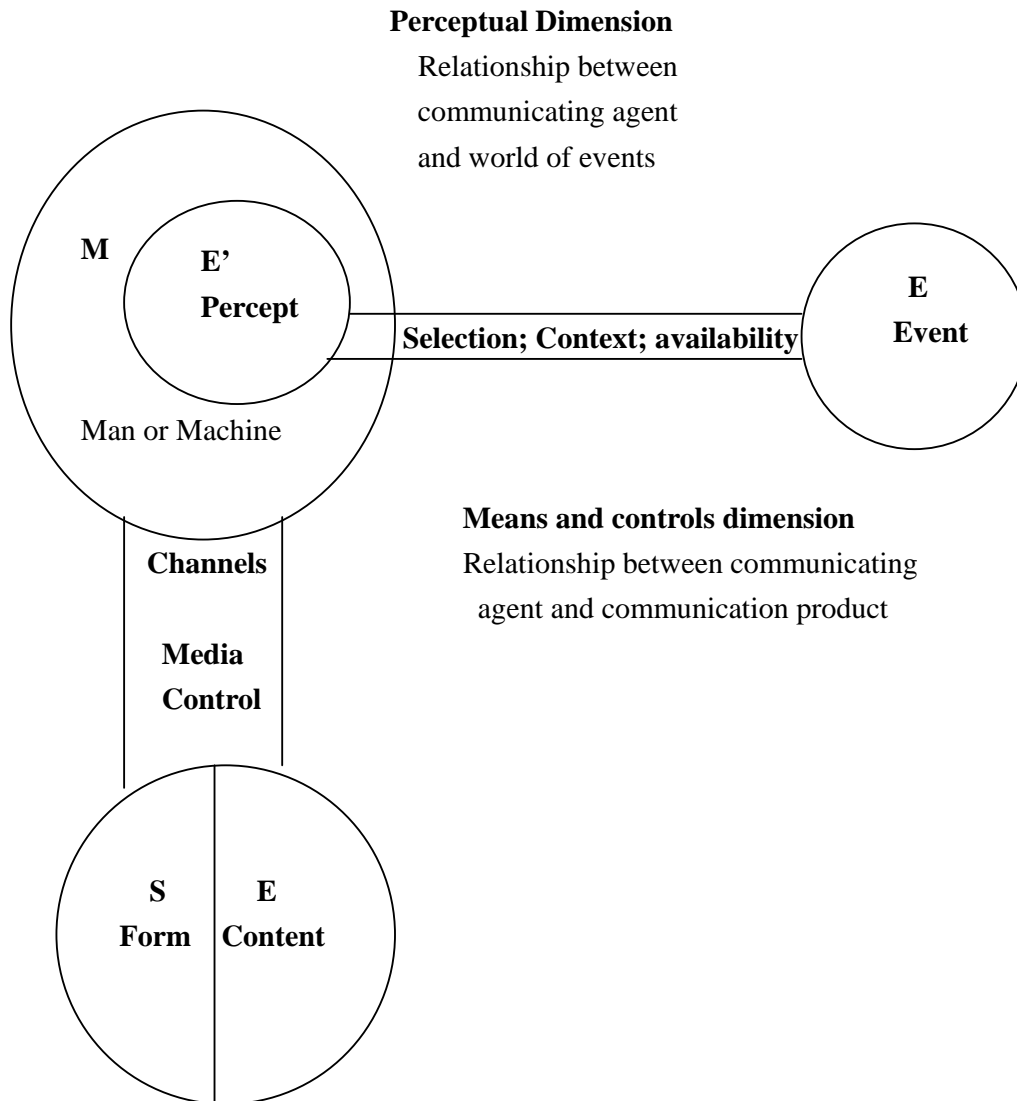


Figure 2 Gerbner's basic generalized model

(Adapted from Gerbner, 1956, p. 177)

The Schramm Models

Four models are included in the Schramm models (Schramm, 1955). They progress from a very simple model of communication to a complex one that represents communication as a simultaneous sending and receiving of messages. These four models are illustrated as follows:

The first model (Figure 3) indicates that the source-encoder represents one person sending a message (signal) to another (the decoder-destination).

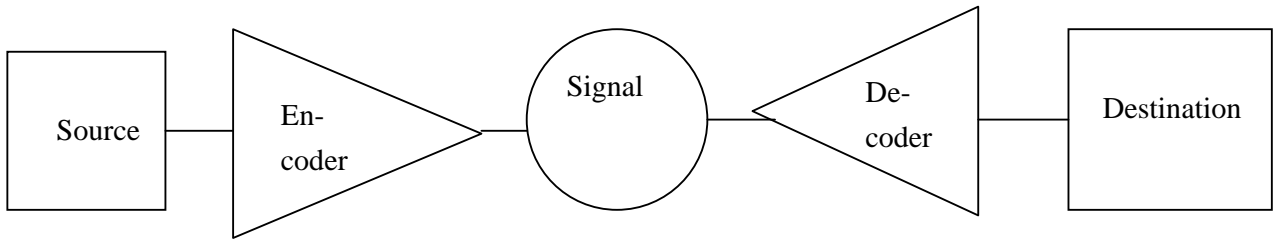


Figure 3 (Adapted from Schramm, 1955, p. 4)

The second model (Figure 4) emphasizes the accumulated experiences of both the sender and the receiver as an important consideration in communication.

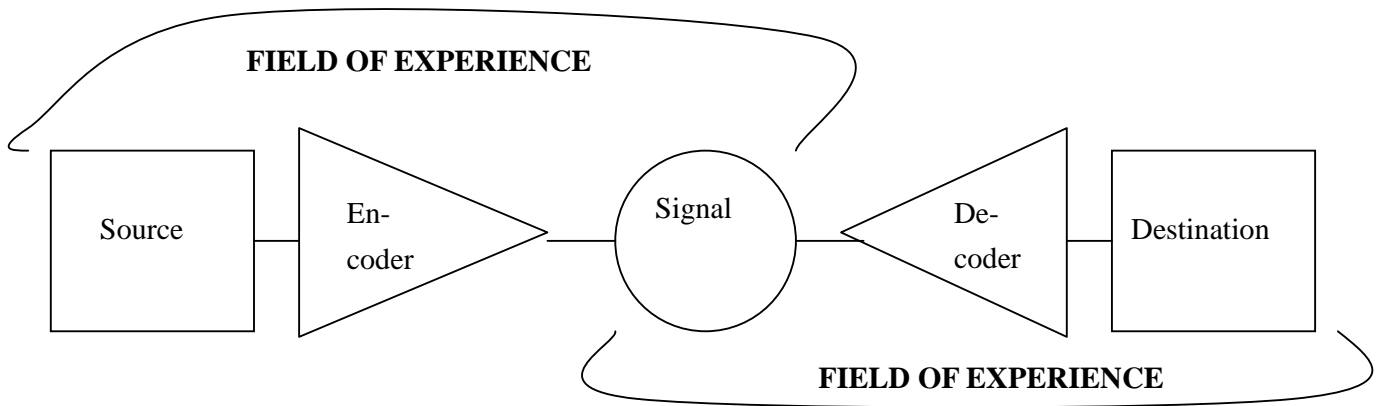


Figure 4 (Adapted from Schramm, 1955, p. 6)

The third model (Figure 5) indicates that each participant in communication is at the same time a sender and receiver who interprets the signals he sends and receives on the basis of his experience.

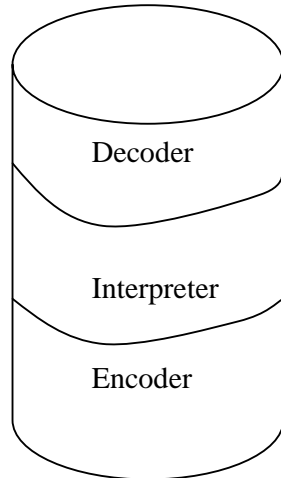


Figure 5 (Adapted from Schramm, 1955, p. 7)

The fourth model (Figure 6) illustrates communication as a system of constant feedback. Sending and receiving are occurring simultaneously by both communicators. The messages each participant sends are altered or affected by the feedback from the other participant. The communication is kept going under this dynamic, constant interaction between the participants.

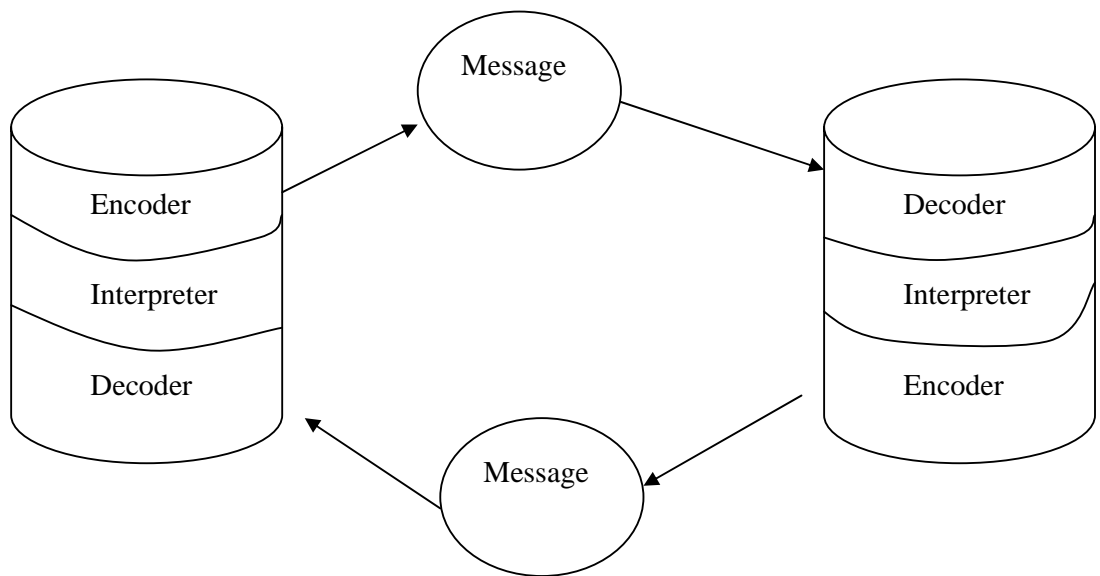


Figure 6 (Adapted from Schramm, 1955, p. 8)

The Berlo Model

This model (see Figure 7) indicates source, message, channel, and receiver as the components of the communication process (Berlo, 1960). The factors which affect

these components influence communication. For instance, the sender and receiver are both affected by their attitudes, their knowledge, and their social as well as cultural backgrounds, and by their communication skills. The message is influenced by what is sent and how it is sent. The channel is related to the five senses through which we receive all information about the world including messages from other people.

Source	Message	Channel	Receiver
Comm. Skills	Elements	Seeing	Comm. Skills
Attitudes	Content	Hearing	Attitudes
Knowledge	Treatment	Touching	Knowledge
Soc. System	Structure	Smelling	Soc. System
Culture	Code	Tasting	Culture

圖 7 The Berlo model (Adapted from Berlo, 1960, p. 72)

The Dance Helix Model

Dance's helix model (see Figure 8) combines the forward motion of a linear model with the continuing action of a circular model (Dance, 1967). Dance likens the nature of his model to those of the coiled spring which children play with. Like the coiled spring tumbling down the stairs, communication is constantly moving back upon itself even while it moves forward, and its forward motion is dependent upon its past act.

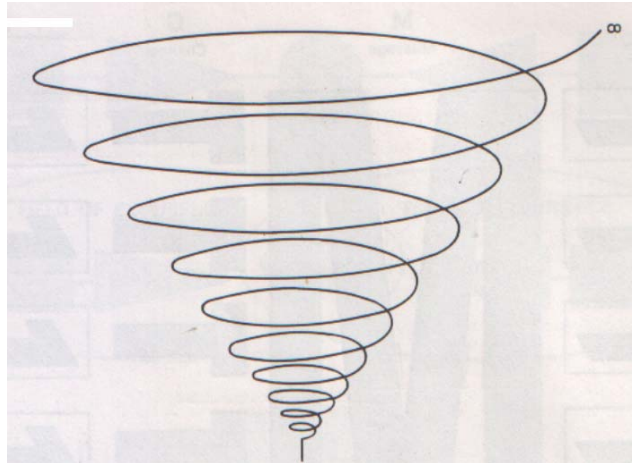


Figure 8 The Dance helix model (Adapted from Dance, 1967, p. 296)

Pragmatic Model of Interpersonal Communication

This model was presented by Fisher & Adams (1994; see Figure 9). This model is similar to Dance's helix model but more sophisticated. It not only presents the dynamic communication process like the function of a helix but also emphasizes the complete model possessing three elements: individuals (intrapersonal systems), relationship (interpersonal system), and context. Each of the three elements, respectively, has its importance in human communication.

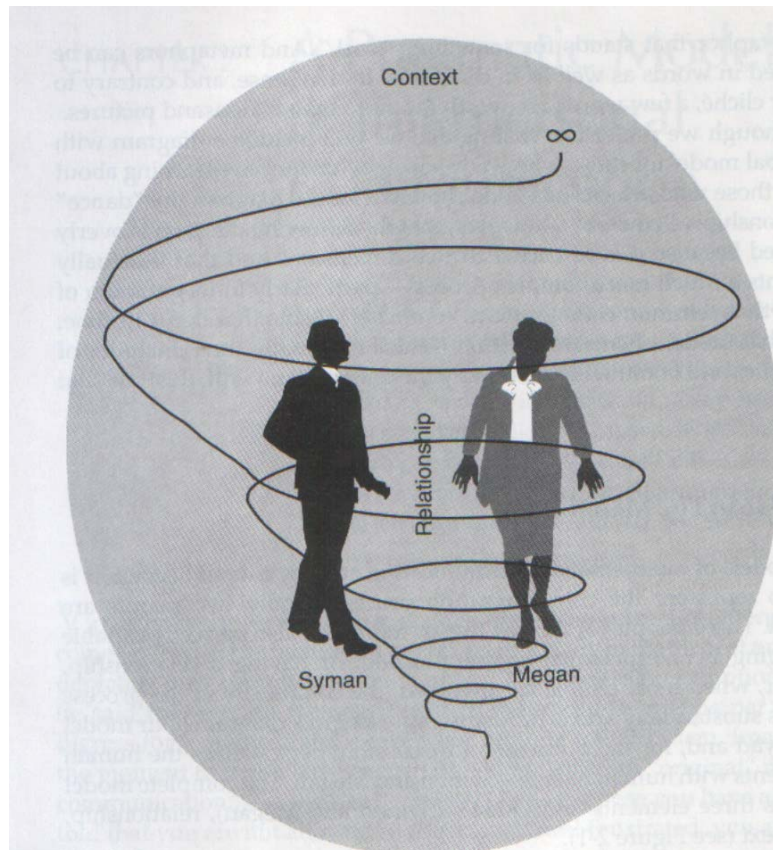


Figure 9 Pragmatic model of interpersonal communication

(Adapted from Fisher & Adams, 1994, p. 24)

The Webb Model

Webb (1975) asserts the importance of human relationship in interpersonal communication. Webb's model is presented in Figure 10. Several key points of this model are listed as follows:

1. Interpersonal communication relationships develop over time.
2. The focal point in a study of interpersonal communication is the relationship among persons.
3. Interpersonal communication is a dynamic interrelationship. Both communicators are sending and receiving signals simultaneously and constantly.
4. Interpersonal communication is a transactional relationship—a relationship with one another and with their environment.

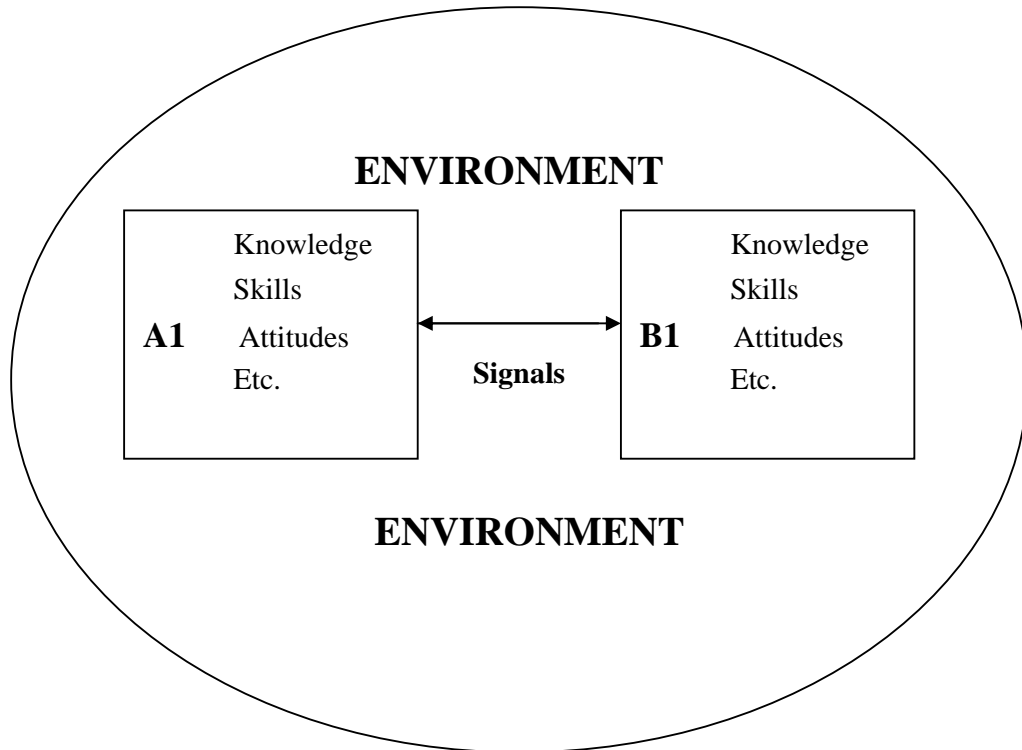


Figure 10 The Webb model (Adapted from Webb, 1975, p. 24)

From the above mentioned human communication models, we could find the earlier models (Lasswell, 1948; Shannon & Weaver, 1949; Gerbner, 1956; Schramm, 1955; Berlo, 1960) seem rough and simple and some basic variables such as communicators, communicative messages, channels, and communicative context are somewhat related to these models. Lately, Fisher & Adams (1994) made an innovation by including interpersonal relationship in the human communication model. Dance's helix model (Dance, 1967) combining the forward motion of a linear model with the continuing action of a circular model seems to indicate the importance of time in human communication. Each of the aforementioned models has its specific features but incomplete. The author argues that an adequate and complete human communication model should take communicators, communicative messages, channels, communicative context, time, and relationship into consideration. The development of the Integrated Communication Model is based on these six fundamental human communication factors.

Development of the ICM

From the above analysis of some known human communication models, the author advocates that a complete model should include and integrate the factors

communicators, communicative stimuli, channels, communicative situation, time, and relationship. Based on this rationale, the Integrated Communication Model (ICM) is constructed and illustrated as Figure 11. The meaning of fundamental communication factors, the relationships among the communication factors, the functions of the ICM, as well as some future research questions recommended will be presented and discussed as follows.

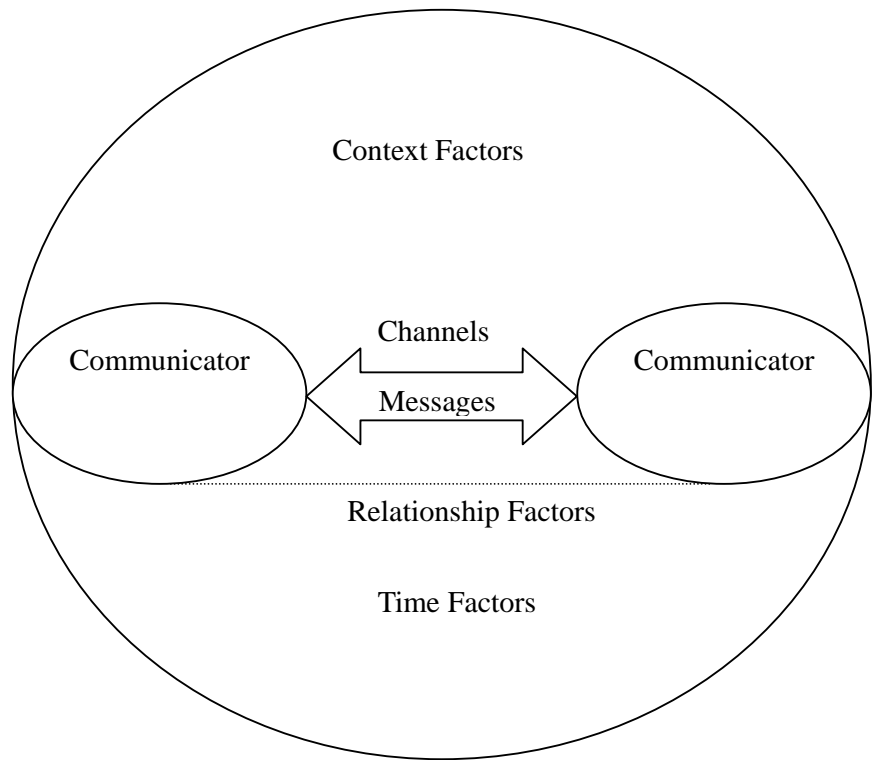


Figure 11 Integrated Communication Model

The Meaning of Fundamental Communication Factors

From Figure 11, we could find six important factors or variables involved in the ICM are communicators, communicative messages, channels, communicative context, time, and relationship. These factors or variables might directly or indirectly affect human communication. The meaning of these communication factors are described and analyzed, respectively, as follows.

1. Communicators

In human communication, each participant is often both a sender and receiver at the same time. As a communicator both receiving and sending messages, his/her own self concept, needs, values, worldview, belief, socio-cultural background, knowledge, experiences, communication abilities, social norm, regulations, roles, expectations, stereotypes, perceptions toward others and so on might more or less affect human

communication and interaction.

In addition, visual and auditory perceptions are important for message receiving in the psychological process of communication. Both all include a process of attention, sensation, comprehension, and memory. In this process, more attention needs be paid to the following two issues.

(1) Input: Every human being is individually, socially, and physiologically dependent not only upon stimulation, but upon a continually varied and changing sensory stimulation in order to maintain normal, intelligent, coordinated, adaptive behavior and mental functioning (Brownfield, 1965). Our experiences are what we agree to attend to. Only those items which we notice shape our mind--without selective attention and interest, experience is an utter chaos (James, 1950).

(2) Filters: Selective attention is processed by the filters through which all input or sensation must pass. A filter is a limit on a person's capacity to sense or perceive stimuli. There are two kinds of filters as follows:

A. Perceptual filters: Perceptual filters are built-in biological limitations on human senses. The limitations vary somewhat from one person to another so that the accuracy problems of our various senses exist. Many human communication difficulties are rooted in our visual or auditory misunderstanding.

B. Sets: Set is another form of selection that is an expectancy or predisposition to respond. One of the most powerful determinants of set is culture. For example, the Muller-Lyer illusion is a set in visual perception that Western people are particularly likely to experience, and one to which certain non-Western people are much less susceptible. In a daily conversation situation, while we are asked, "How are you?" we are accustomed to answer, "Fine, thank you." It's another example of set.

2. Communicative messages

Communicative messages may be verbal or nonverbal stimuli, and they may be intentional or unintentional.

(1) Verbal stimuli: A verbal stimulus is any kind of spoken communication which uses one or more words. It includes the following types.

A. Intentional verbal: These are the conscious attempts you make to communicate with others through speech.

B. Unintentional verbal stimuli: these are the things you say without meaning to.

(2) Nonverbal stimuli: These are all the stimuli you transmit without words or over and above the words we use such as facial expression, posture, tone of voice, hand movements, manner of dress, and so on. They also include the following:

A. Intentional nonverbal stimuli: They are nonverbal stimuli we want to transmit.

B. Unintentional nonverbal stimuli: They are all nonverbal aspects of our behavior transmitted without our control.

3. Channels

We rely mainly on three senses to receive the stimuli: hearing, sight, and touch. Our choice of channels is seemingly influenced by both individual and cultural preferences. For example, while extending affection, most western people often use hugs to express their emotion, whereas most oriental people are more bashful and at most use some words to show their love.

4. Communicative context

Communicative context is the situation in which human communication happens. It includes those conditions that we can sense such as furniture arrangement, environmental displays, interference or noise, and so on. Among those factors, interference deserves the most attention. It is anything which distorts the information transmitted to the receiver or distracts him or her from receiving it. In terms of interference, the following conditions need to be considered:

- (1) Signal-to-noise ratio: It refers to the relationship between the essential information in a message and the extraneous or distracting factors.
- (2) Technical interference: It denotes the factors that cause the receiver to perceive distortion in the intended information or stimuli such as interferences from difficulty making words clear, stereo blaring, or other people nearby speaking too loudly.
- (3) Semantic interference: It happens when the receiver does not attribute the same meaning to the signal that the sender does.

5. Time

The process of human communication could be represented in the form of a helix which can be constantly moving back and forward like a coiled spring tumbling. It involves the time factor in this process. The time factor has the following 3 functions:

- (1) Time affects the intensity of human relationships: For instance, the relationships among members of Marathon encounter groups change along the amount of time they spend in the groups.
- (2) The mode of communication changes over time: For example, the form of communication between mother and child changes along the child's language development.
- (3) Time can change the style of communication: For example, the speech of married couples or very close friends is becoming "abbreviated" (Vygotsky, 1962, p. 141).

6. Relationship

It is evident that the relationships among communicators will affect their interactions. The interactions between strangers are quite different from those between acquaintances. This kind of relationship factor not only influences the nature of

messages transmitted but also the form of communication.

The Relationships among the Communication Factors

In the Integrated Communication Model, the factors communicators, communicative messages, channels, and communicative context seem more evident, whereas the factors time and relationship are more obscure. Of all these factors, the factor of communicators should play a key role for human communication. The importance of communicators can be visualized from the focal status on the presentation of the ICM in Figure 11. Not only the intrinsic factors of a communicator such as motivation, needs, self concept, values, belief, socio-cultural background, knowledge, experiences, communication abilities, stereotypes, and so on might influence the interaction process, but also the self-awareness of a communicator toward the aforementioned intrinsic factors and his willingness and ability to empathize with the other party would bear concrete effects for communication results.

In fact, other variables in the ICM such as the nature of message, channels, context, time, and relationship could be more or less attended or employed by a communicator. If a communicator could take care of these factors well, he might make a difference in human communication.

Therefore, the communicator should be the actual controller or manager in the entire communication process. The author believes that a communicator could have the potential to transmit some kind of energy in human interaction. Even though the condition of someone we communicate with exists objectively and we could not deny it, we still could bring this kind of energy forth to influence the atmosphere and results of communication by considering the factors of relationship, time and context as well as better employ his verbal and nonverbal acts. It might be difficult to change a human being but how we communicate and interact with others is up to us and is controlled by us. Speaking from this point of view, we not only have the energy to change others, but still we could do something for our destinies.

The Functions of the ICM

The ICM presented in this article has integrated the fundamental factors affecting the process and outcomes of communication. Although how these factors impact on the process and outcomes of communication needs to be investigated for the future studies, whether the presented ICM practically fulfilling the organizing, heuristic, predictive, and measurement functions which the author wanted should also be attended to.

First of all, from Figure 11 we could find that the “message” transactions by “communicators” through various “channels” apparently exist in the aura of the factors “context”, “time” and “relationship.” Particularly, the transactions between communicators are not only affected by the existing “relationship” but also probably

impact on their future relationship. Thus, the factor of “relationship” is symbolized by connecting “communicators” with a dotted line. So, it should be obvious that the ICM has the quality of “organizing” function. Secondly, from the relationships existing among various factors in the ICM, it is helpful to find out some hypotheses for testing and guidelines for study. Therefore, it is undoubtedly to say that this model possesses heuristic function. In addition, the variables related to the “communicators” such as self concept, needs, values, worldview, belief, socio-cultural background, knowledge, experiences, communication abilities, social norm, regulations, roles, expectations, stereotypes, perceptions toward others and so on, the selection of “communicative messages” and “channels,” the factors “communicative context,” “time,” as well as “relationship” all have the property of being measurable. It could be confirmed that the ICM possesses the function of “measurement.” Owing to the measurability of these communication factors, the predictive function should be naturally conferred on the ICM through quantifying the communication factors and employing statistical methods. Therefore, the ICM developed in this article seems to have reached the expected four indices of organizing, heuristic, predictive, and measurement functions.

On the other hand, if we compare the ICM with the aforementioned human communication models introduced in the article, it is easy to find that the completeness and integration in terms of factors included in the ICM, which are hard to see in other communication models. Furthermore, the importance of “communicators” in human communication or interaction emphasized by the ICM is less attended by other communication models.

Recommendations for Future Research Questions

The ICM developed in this article is only an initial frame of reference for human communication research. Many research issues might spin off from this frame of reference. To name the more significant, some questions for future research might include the following issues:

1. How do the variables related to the “communicators” such as self concept, needs, values, worldview, belief, socio-cultural background, knowledge, experiences, communication abilities, social norm, regulations, roles, expectations, stereotypes, perceptions toward others and so on affect communication effectiveness and satisfaction?
2. How does the “relationship” between “communicators” affect communication effectiveness and satisfaction?
3. How does the factor of “time” affect communication effectiveness and satisfaction?
4. How does the factor of “communicative context” affect communication

- effectiveness and satisfaction?
5. What are the differences in communication effectiveness and satisfaction among the usages of “channels?”
 6. What are the differences in communication effectiveness and satisfaction among the usages of “communicative messages?”
 7. How does the integration of the factors “communicators,” “channels,” “communicative messages,” “time,” “communicative context,” and “relationship” affect communication effectiveness and satisfaction?
 8. How does the intrapersonal dialogue of “communicators,” metacommunication, affect communication effectiveness and satisfaction?

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