BASIC ASPECTS OF COMMUNICATION

Basic ideas and history of communication

The word communication comes from the Latin *comunicare* meaning “*to transmit,*”\(^1\) and this describes the purpose of communication, which is to place with all people a common knowledge and feelings with respect to a certain detail or group of details.

We have no precise data on when and how the first act of communication occurred, only suppositions and conjectures that cannot be proven. Remember that our planet is estimated to be 4.5 billion years old, and for 3 billion of those years life existed only in the oceans. Animal life began approximately 500 million years ago, and Homo Sapiens made his appearance a mere 40 thousand years ago. During all these millennia there have been undeniable acts of communication.

Some definitions are given below for a better understanding of the concept.

Aristotle: “The main purpose of communication is persuasion, that is, the attempt of the speaker to bring others to his point of view.”

Aranguren: “Communication is the transmission of a message by means of a sender, conduction, and a receiver.

André Martinet: “It is the utilization of a code for the transmission of a message about a certain experience in semiological units in order to enable human beings to relate to one another.”

Willar Quine: “Communication is the indiscriminate response of an organism to a stimulus.”

Flores de Gortari: “Man, society, culture, civilization and progress are concepts that are reciprocally validated in close proximity; but the force that causes these processes to interact from the fundamental fact of existence, just as the flow of blood gives life to physiological man, is communication.”

David K. Berlo: “It is the process by which a transmitter sends a message through a channel to a receiver.”

De la Torre Zermeño y Hernández: “Communication is the mental process in which a transmitter and a receiver interact in order to exchange ideas, knowledge, experiences and feelings, which are transmitted by means of a code, a message, and an appropriate channel.”

\(^1\) "*Comunicare*" means: “to share, to make known, to convey the knowledge or information of, to partake, to call, to put into connection, to transmit, to live together, to correspond with".
Technological progress and the emergence of different electronic communication networks have paved the way to definitions that are less attached to human interaction. Thus, references are made today to communication between organisms that are not necessarily conscious beings, nor are affective bonds established, but rather they respond to a logical sequence of impulses within a pre-established program that produces an autonomous interchange of information as a result.

Banking networks are an example of this: the bank customer communicates his or her need for cash to a computer, which in turn communicates to a data bank to verify whether the applicant has sufficient funds. If the answer is affirmative, it gives the order to the automatic teller to dispense the amount requested and makes the respective deduction from the account of the applicant.

Forms of communication are increasingly moving away from traditional human forms toward impersonal communication with entities to which one cannot transmit reasons, feelings or experiences.

This leads us to the scientists’ discussion of whether communication and information are the same thing, although the majority believe that information is part of communication, and since the whole is greater than its parts, the two terms cannot be synonymous.

An example of this is the following. Suppose you receive a message and you decipher or decode it. If on understanding its meaning you only obtain data, then you are dealing with information, but if you change your attitude and give the sender a reply, then you are establishing communication.

Messages are always full of information, but only those that are complemented by feedback from the receiver close the cycle of communication: sender – channel – receiver – channel – sender.

Look at this example:

Sender: Alpha Centauri calling Planet Earth
Channel: Planet Earth does not respond
Sender: Alpha Centauri calling Planet Earth
Channel: Planet Earth does not respond

Since there was no response we can be sure that the communication failed, even though the information of the call may have reached some receiver on planet Earth. The lack of response could be attributed to many causes: the code may not have been correct, or the channel was unsuitable, or a combination of both. Whatever the cause, the sender on Alpha Centauri felt that there was no communication.
If the following had occurred . . .

Sender: Alpha Centauri calling Planet Earth
Channel: Planet Earth answers
Receiver: Go ahead, Alpha Centauri

. . . once Alpha Centauri heard the response to its call, communication would have been established.

Communication can be defined as a relationship set up by two individuals within a community for the purpose of achieving a reciprocal understanding.

**The importance of human communication (oral and written language)**

From the first human communities (the horde, the clan, the tribe) human beings needed to communicate in order to interact within their group or social circle to meet the challenges posed by survival. We can therefore say that human communication is an intrinsically social phenomenon.

Human beings are naturally gregarious, that is, they gather together with others of their kind, live with them, and take part in the evolution and development of their group. Communication, which in the beginning was rudimentary and based on gestures and shouts, gradually evolved to a form of communication observable only in human beings: language.

Human beings became able to talk once they could discriminate between sounds and apply specific sounds to certain objects that formed part of their surroundings. Eventually they became able to formulate subjective and abstract ideas from their feelings and experiences that were part of a collective set of social and environmental experiences. After assigning specific sounds to certain objects, the following step was to connect those sounds, now discriminated and articulated, to join them in a logical sequence to form articulated language.

Spoken language is characterized by being conventional, tacit and arbitrary. It is conventional because there is an agreement of acceptance among the speakers for naming objects; this agreement is tacit and it is taken for granted. It is arbitrary because the creators of each language used their own judgment rather than any logical relationship to name an object according to taste or to circumstances. Of course, primitive speakers could have argued over the naming of objects.

Written language emerged a long time after oral language, when human thought had evolved sufficiently and our ancestors’ communication needs had become more complex, especially for carrying out their economic activities.

Human beings followed a long, slow path to written language. The Egyptians, for example, developed hieroglyphics, which were nothing more than a pictographic writing system, and which evolved to become ideographs. The Egyptians were thus
able to communicate the events of the lives of the Pharaohs, the floods of the Nile, and scientific information.

Another form of writing in ancient times was the cuneiform, used by Mesopotamian scribes, which also started out as a pictographic system. It later evolved toward a phonetic system, that is, the sounds of language were represented by letters or graphic signs. This progress was important for the development of alphabetic writing.

A legend says that the alphabet was invented by the ancient Phoenicians and that Cadmo, King of Tebas, had taken it to Greece. It is a historical fact that the Phoenicians were a Semitic people who used 22 Egyptian ideograms to represent the sounds of their language, which gave rise to phonographic writing.

All the alphabets that exist today come either from the Semitic, or from the Greek which led to the Roman; from which all the Romance languages are derived and consequently their alphabets.

We can conclude that the creation of oral language that preceded written language played a crucial role in the evolution of human thought and represents the human being’s developed consciousness and his desire to find a solution to all kinds of needs, including communication.

**Animal and human communication**

Human beings became radically different from other animals when they learned to make tools, such as stone axes, wooden cudgels, spears and arrows, which were primitive at first but were the starting point for the technological progress we enjoy today.

In the process of creation and use of simple tools there arose the need for communication among men, which led to articulated language. Communication and articulated language exercised an influence on brain activity, from which it can be deduced that communication created man; and, thanks to communication, society began to develop.

These processes of communication and creation are what marked the difference between human beings and animals. It is this human characteristic of being able to express thoughts that then become transformed into group actions for survival and adaptation which has made civilization possible, and which has led to that complex net of communications the twenty-first century boasts as its main feature.

In order to generate these processes of communication, man had to – and has to – meet the following requirements:
✓ Have a biological structure developed in such a way that he can use muscles and senses: hearing, sight, speech, etc.

✓ Have enough intelligence to know the set of signs necessary to produce and decode messages.

✓ Have the ability to perceive and analyze everything occurring in his environment and to make use of social conventions, which imply a relationship between the signs and the things they represent.

Since they have consciousness, human beings can report on their present acts and omissions, refer to their past and speculate about their future. In other animals, the processes of communication are automatic, since they depend on an instinctual system derived from the genetic information of each species. Human beings also inherit this instinctive type of reaction; it is common to see the smile on the lips of a newborn baby, or the baby’s response to the smile of its parents; and to hear a baby’s cry that communicates some discomfort or need.

It can be observed that when female cats go into heat, they meow differently from when they are hungry, when they fight, when they show affection or when they call their young. In fact, these are clear cases of animal communication, because all of them enclose a coded message that causes a reaction in the receiver who is able to decode that message. The enormous difference between animal and human communication lies in the fact that the animal’s repertoire of communicative acts does not include the past, let alone the future.

In spite of the fact that animal communication is based on sounds, these do not express thought. Animals lack a meta-language; consequently, they do not have abstraction or creativity, which have been observed only in human beings so far.

**Sciences linked with communication**

All sciences have some association with communication: all transfers of thought and knowledge among individuals are based on communication. Among the social sciences, psychology is one of the disciplines closely linked with the process of communication.

*Psychology and communication*

Psychology studies the process of communication at the following four levels:

- The individual level refers to the ability of the human being to become a channel in which the individual interprets, synthesizes and codifies reality.
- The interpersonal level attempts to establish the relationship between individuals who communicate, according to each person’s communication skills.
The group level is concerned with the relationships that emerge from the different kinds of human groups, and places emphasis on the various forms of communication and development.

The mass level deals with the use of psychological knowledge in the social media for the purpose of influencing the individual in his perception, behavior, attitudes or preferences. It is applied in advertising and propaganda, and aims to create a change in public opinion while at the same time it evaluates and attempts to explain the reactions that mass messages cause in the individual and in society.

There is a close relationship between psychology and communication. The former studies personality and behavior, while the latter studies common models or stereotypes in some way governed by the personality and behavior of individuals who communicate among each other. It is understood that personality and behavior are affected by the social environment and that this environment, in turn, is affected by the media.

**Intercultural communication**

Intercultural communication is a relatively recent field of research. Intercultural competence could be defined as the "... ability to negotiate cultural meanings and communicate effectively in keeping with the multiple identities of the participants" (Bracho GV). It should be noted, however, that effective communication does not mean a communication that is totally controlled and without ambiguities. Communication theory has repeatedly pointed out that perfect communication, even between interlocutors of the same culture, is truly difficult. People interpret messages according to their own knowledge, which may or may not coincide with that of the author of the messages.

In intercultural communication, we may get the impression that the interlocutor is manipulating or misinterpreting our discourse. However, the problem is not that the interlocutors are manipulating our discourse, but rather that his interpretation is simply based on other criteria. We must bear in mind that interpretations vary from one culture to another, and that they change over time even within one single culture. This clarification regarding interpretation and manipulation is important. We must realize that persons from other cultures are not necessarily making a deliberate misinterpretation or malicious use of our discourse, but rather they are simply applying different interpretative criteria. We need to be prepared for possible misunderstandings. In order to understand the other person, one must first understand his lack of understanding.

What do we mean by effective communication? It could be said that communication is effective when an acceptable degree of understanding is reached between two interlocutors. It is not perfect communication, but simply sufficient. With respect to intercultural communication we face a challenge that is by no means easy.
One of the objectives of communication theory is to study the process of communication in order to improve it. The aim is to determine the essential elements of the process and how it works. Normally, when we communicate in our own language and with someone of our own culture we are not particularly conscious of the process of communication. However, in an intercultural context we are usually far more aware of the different elements of the process of communication because of the difficulties inherent in intercultural communication. Even persons with the best predisposition toward intercultural contacts know the difficulties that exist in communication between persons of different cultures. To ensure intercultural competence, there has to be a synergy between the cognitive and emotive spheres in order to achieve an appropriate intercultural conduct.

Communication is not merely an exchange of messages, but rather a construction of sense. A discourse can have different levels of meaning to which only persons with a good knowledge of the culture of origin can have access. Intercultural communication often implies a certain degree of uncertainty. Uncertainty is a cognitive phenomenon that conditions our communication because it places us in a situation of doubt, or insecurity. Two types of uncertainty can be established:

a. Predictive uncertainty: regarding the prediction of attitudes, feelings, beliefs, values, and behavior of people from a different culture. That is, there is a certain element of doubt when one has to predict the communicative interaction with a foreigner.

b. Explanatory uncertainty: regarding the attitudes, feelings, and thoughts of people from a different culture. It is sometimes difficult to find explanations for certain reactions of foreigners by applying our own cultural criteria.

We understand our environment in terms of the social categories that we have acquired in our culture. If we lived in a monocultural community, these categories would be sufficient; however, few societies today are totally monocultural. Intercultural interaction obliges us to have new categories that make sense of the behavior of others. To acquire a certain intercultural cognitive competence it is necessary to put meta-communicative processes into practice.

We have to meta-communicate, that is, we have to be capable of explaining what we mean when we say something. In intercultural communication, any assumptions or concepts that we take for granted must be explained. This leads to a form of communication that is certainly less agile, but it is indispensable to have a stricter control over the foreign interpretation. We must not take it for granted that our interlocutor will interpret our message in the way we intend it to be interpreted.

In spite of the difficulties noted, it is obviously becoming increasingly important to ensure effective intercultural communication. The following criteria have been established for carrying out an intercultural dialogue:
1. Nothing is fixed. When a dialogue begins we must be open to potential change.

2. There are no universal positions. Everything is subject to criticism.

3. We must learn to accept conflict and the possibility of hurt feelings.

4. There is a certain element of perversity in the history we have been taught. Our identities have been built in opposition to those of others.

5. Nothing is closed. Any question can be reopened at any time.

**Ways to deliver communication**

The following are different ways in which information can be communicated to a group or groups of persons with diverse characteristics and objectives.

**Written materials**

Posters are a resource for places where there many people go (posters can be seen in the street, hospitals, bus stops, subways, community centers, etc.). A poster must be attractive. Graphic designers should be involved in making it, to make sure that the risk message will reach people in a clear and interesting way. If the poster synthesizes the message and has visual equilibrium, it will permit a quick understanding of the message. Its size should be appropriate to the content of the message and to where it is placed. Its durability will depend on the material used and where it is located; obviously indoor locations will be different from outdoor ones in this respect.

The pamphlet is an easy way to reach the public, and it can be given out personally or by mail. When its contents are preventive, it should have equilibrium and be synthesized as in the case of the posters. The typography and images should also be designed to arouse interest and spur the reader to preventive action. The design should be attractive enough to arouse the interest of the reader and prevent him from throwing it away without reading it.

The pamphlet can be the ideal complement of a talk, conference, workshop, video show, or puppet show. It should be written in an informative-persuasive style and have a clear educational focus. Careful selection of words is recommended so that there will be no ambiguous messages or double meanings.

Flyers distributed in the street have little or no impact. Passers-by often indifferently refuse to receive them, especially in large cities.

Another, more sophisticated, type of publication can be used to reach a public of a higher educational and social level. In recent years there has been a proliferation
of science magazines with a well-defined public of students, professionals in
different fields, teachers, and the general public. Risk communication using this
type of publication is effective because the message is the result of a description
and analysis of the problem. For example, a description can be made of the
sources of air pollution, meteorological processes and the orographic conditions
that influence them, as well as the impacts on the health of high-risk sectors of the
population (children, the elderly, and persons with respiratory or cardiac problems)
and the need to be alert to the broadcasting of levels of air pollution by the
pertinent authorities for the purpose of protecting those high-risk populations.
However, since the readership of these publications is relatively small, such efforts
will need to be reinforced by other messages through different media.

Audiovisual materials

Messages broadcast by radio are for the ear and not for the eyes of the receiver.
Its messages are ephemeral. While the radio speaks or broadcasts music, the
listener may be writing, driving his car, running through the park, or reading a book.
His attention is not focused; therefore, radio communication always attempts to
have the person who hears “prick up his ears” and listen.

Radio involves the linguistic code and the sound code. It is important to note that
the combination of these two codes makes up a syntax that gives the message the
fluidity and rapidity to produce interior visual images in the receiver. Some radio
communicators manage these codes and formats with such dexterity that they are
able to attract and dissuade an audience with great facility. Since radio is the
broadcasting method closest to the people, it is the medium that can be given
preference for transmitting preventive measures for natural disasters and damage
caused by human activities (collisions on the highway, contamination,
environmental accidents, alterations in sanitary conditions, etc.).

Radio is synthesis, brevity, promptness, simultaneity and rapidity. It is for that
reason that the language and the sounds used should be selected for clarity and
simplicity of expression. Radio communicates with a heterogeneous public with
different levels of comprehension. Thus, radio messages should be made to reach
all levels of the audience and capture the interest of each one. It has been
observed that although there are many messages containing commands, such
messages do not necessarily have the expected impact; therefore it is preferable to
transmit messages that suggest and persuade.

Preventive messages that are given an advertising format can reach and positively
influence the behavior of the receiver. It is better not to use the sound track of an
audiovisual message, because the audience could err in interpreting the message.
Care should also be taken in selecting voices for the message; voices associated
with advertised products should be avoided. The voice that transmits the message
on the radio should be clear, well modulated, and without any additional
connotation. The radio format calls for a great deal of creativity, a strict selection of
the sound code, and a concise message. It is important to remember that on the radio we work with suggestion, persuasion, and the hearer's imagination.

Another way to transmit messages about risk could be by means of interviews, documentaries, and special reports. Speaking on the radio means explaining, telling a story, and dialoguing with the listener.

The main characteristics of television are simultaneity, instantaneity, and being current. This medium has developed a technology that accelerates audiovisual information. The viewer is practically one actor more in the events shown by this medium. Information about surgery to separate Siamese twins in the East, a bomb that exploded in an urban area in a Latin American city, the explosion of a gas pipeline in Alaska, a train crash in Europe, and many other news items, can be transmitted in an hour of television.

Regional television has an efficient development of journalistic spaces and it broadcasts local, regional and international news, thereby promoting community interest. Risk communication messages can be inserted here. If the aim is to produce a culture of prevention and protection, the electronic media can certainly participate in this effort.

In order for televised preventive communication to be successful, it must be designed properly. This means managing the three fundamental codes: the iconic code, the sound code, and the linguistic code. In addition to correct codification and format, risk communication done on television must be well placed within the schedule of programs. Special consideration must be given to the segments where it will be included, the timing, the public, and the area of influence of the signal (regional, national and international). On the other hand, audiovisual messages are fleeting; therefore the selection of images, words, and sounds should take this characteristic into account. Well-designed preventive messages can have a more efficient influence on the behavior of the receivers if they contain a single principal idea adapted to the target public, rather than multiple concepts.

Materials targeting television audiences should be prepared with extreme care, taking mass communication into account, as well as the time they will be shown, and whether they will be broadcast on private or public channels.

Video film is another interesting medium for delivering information. Although the video involves the recording of programs, it targets a reduced audience. This format is ideal for working with specific audiences (for example, agricultural workers), although it is important to note that it is expensive to produce, and it will be necessary to find the right times and places for showing it. In this case, the codification varies according to the public to which it is directed. The usefulness of this educational method is significant, because it permits the visual expression (with the necessary audio support) of all kinds of educational information to complement the presence of technical personnel. The exhibition of a video can enrich other communicative actions such as dialogue with a captive audience,
debate, or the distribution of informational pamphlets. An added advantage is that it can be rewound to view important scenes over and over, for emphasis.

References


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