

# Verbal Communication and Nonverbal Communication

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## Communication in General

We, as human beings, are virtually involved in doing communication—both verbal and nonverbal— everyday. As a matter of fact, from the very moment you started reading this article, you have been engaged in a process of communication. Communication, particularly through language, is an essential part of our daily lives and a central feature of our humanity. Without the ability to communicate with others, cultural achievements would be extremely difficult, if not completely impossible. The famous anthropologist Edward T. Hall even flatly states that “culture is communication” (Hall 1959).

In a broad sense, communication refers to the exchange of information between two or more beings. In this sense communication is by no means restricted to our human species. Most animals possess communication system of one kind or another. Some of these systems can be very complicated, as studies in this field reveal. However, the communication system used by human beings is far more complicated and far more subtle than any other form of animal communication.

Human communication can be divided into two distinct categories: verbal communication and nonverbal communication. Nonverbal communication does not employ voices; rather it involves the use of gesturing, making faces, and manipulating the distance between the speaker and the listener. Verbal communication, on the other hand, involves the use of vocal apparatus.

Then, we may ask: What are the distinctive features of language?

Charles F. Hockett provides us a list of thirteen such design features (1958, 1960):

1. Vocal-auditory channel: Language is produced through the mouth cavity (and the nasal cavity); it is heard (received) through the ears.
2. Broadcast transmission and directional reception: When people speak, they can be heard in all directions. However, hearers can perceive the direction from which the speaker's voice is coming.
3. Rapid fading: Once a speech sound is made, it dissipates the very next moment. This commands the receiver to "decode" the message efficiently and correctly the first time.
4. Interchangeability: Every speaker can produce the signals he or she heard. Every speaker is a hearer, and every hearer a speaker.
5. Total feedback: The (normal) speaker can monitor his or her own utterance. This enables people to correct themselves when they make mistakes, even before they perceive any responses from the audience.
6. Specialiation: Language is highly specialized. Speaking serves the purpose of communicating. One consequence of this specialization is that we can do many other things while talking or listening. In other species, communication usually requires the full attention of the communicators.
7. Semanticity: Spoken messages are meaning-bearing — that is, conventionally agreed upon and quite regular associations exist between words and recurring features of the natural and sociocultural environment.
8. Arbitrariness: The connections between symbols (such as words) and what they refer to (meaning) are entirely arbitrary. What Japanese call "mizu" is "water" in English, and "shui" in Chinese. This means they have to be learned. However, it also means that people can communicate about anything once these connections are agreed upon.
9. Discreteness: Although the range of sounds that can be produced

by the human vocal tract is wide, only a small set of such sounds are utilized to communicate its entire semantic range. The advantage is that every speaker of a language has only to learn a very small sound repertoire.

10. Displacement: Virtually we can talk about anything. We can talk about things that are not physically present. We can talk about the past, the future, and things that are beyond the reach of our senses. We can also talk about things that have never existed and probably will never, such as a half-man-half-horse creature. Nonhuman communication, by contrast, is bound for the most part to messages about the immediate context of events. The fact that language enables us to communicate about things beyond the situational context makes language an extremely useful device for the exchange of information.

11. Productivity: It is a rare case that the same sentence is repeated in an exactly identical manner. Every sentence uttered is a new sentence, yet so long as it conforms to rules of usage, it will be understood. This feature can easily be verified: when we report to others what we hear from someone, we never repeat exactly the same words used by the speaker.

12. Traditional transmission: Although the human capacity to learn language is genetically encoded and inherited, every individual acquires his or her language competence through the process of socialization. In other words, we acquire a language in the process of learning a culture. Many other species, competence to communicate is acquired by genetic inheritance. But these systems—such as those used by ants or bees—are quite rigid. As language is handed down from one generation to the next as a part of the transmission of culture, the older generation can make choice what it wishes to teach, ignoring the irrelevant and modifying the content of the language according to the changing circumstances. This is possible because language is culturally rather than genetically transmitted.

13. Duality of patterning: Every utterance of language is composed

of two levels of patterning. On the phonological level, every utterance is a patterned sequence of sound segments called phonemes. On the grammatical level, every utterance is a patterned sequence of meaning called morphemes. Because the number of sounds in a language is highly limited (and it has to be, or the communication system would become inefficient), duality of patterning means that an enormous number of units of meaning (morphemes) can be represented by a small number of sounds—making it a very efficient communication device.

In the following figure, the communication systems of other species are compared to human language in terms of the thirteen features.

communication system features	Bee Dancing	Stickleback Fish Courtship	Gibbon Calls	Language
Vocal-Auditory Channel	no	no	yes	yes
Broadcast Transmission and Directional Reception	yes	yes	yes	yes
Rapid Fading	?	?	yes	yes
Interchangeability	limited	no	yes	yes
Total Feedback	?	no	yes	yes
Specialization	?	Partly	yes	yes
Semanticity	yes	no	yes	yes
Arbitrariness	no	?	yes	yes
Discreteness	no	?	yes	yes
Displacement	yes	?	no	yes
Productivity	yes	no	no	yes
Traditional Transmission	Somewhat	no ?	?	yes
Duality of Pattern	no	?	no	yes

[adapted from Hockett (1960)]

It is obvious that human language as a communication system is far superior to those of other animals, for given the fact that the communication systems of the other species have some of the design features of language, none of them has all the features that characterize language.

### Origin of Language

There are still many technologically underdeveloped tribes on earth. Some of them are still living on hunting and gathering. Yet, so far we have not found any language that can be called "primitive". Does this mean that language had been with our remote ancestors from the moment they appeared on earth? Before any tentative answer can be made, let us take a look at our close living relatives, the apes and the monkeys. We find that they possess complex gestural communication systems. For example, chimpanzees reassure anxious group members with hand gestures. Baboons make use of ritual displays to show their dominance over or submission to other members. But the communication between these primates is primarily nonverbal. Nonhuman primates cannot be taught to speak, as one couple discovered when, as an experiment, they reared a chimpanzee in a way identical to that of their own baby girl (Kellogg and Kellogg 1933).

We might assume that our human ancestors some 30 to 35 million years ago communicated in pretty much the same way as apes do; that is, through gestures. However, it is almost desperate to try to reconstruct how and when language evolved, for over the millions of years since the hominid line differentiated from the pongids, not much concrete evidence has been found which can be used to account for the presence of language. We can only rely upon two kinds of information for our tentative conjectures: the cultural remains our human ancestors left behind, which shed light on the complexity of their social interactions, and the biological basis of speech in the evolving human brain.

At Terra Amata, a 300,000-year-old site on the Riviera near Nice, archaeologists have found evidence of oval huts with a capacity of housing subgroups of ten to twenty individuals each (Butzer 1971: 446). So far these remains are the earliest evidence we have of social groups being divided into concrete, bounded subgroups. It seems reasonable to conjecture that these subgroups had primary family organization.

Another site was found at Torralba, Spain, which dates back some 400,000 years. Here archaeologists found the earliest evidence of the use of fire (Howell 1966). Many stone tools, including the hand axes that are typical of most *Homo erectus*, have been found in many similar sites of the same period.

These tools are much more complex, refined and efficient than the pebble tools used by the australopithecines. These finds, together with the evidence that *Homo erectus* had been engaging in highly organized hunting of big game, seem to suggest that our *Homo erectus* ancestors had reached a level of social complexity that would be difficult to imagine unless an efficient communication system, such as language, had been developed.

As for biological basis, we have to take a look at the structure of the brain. Three areas of the brain are crucial for the human linguistic ability. (1) Broca's area, which is situated toward the front of the dominant side of the brain, activates, among other things, the muscles of the jaw, lips, tongue, and larynx; (2) Wernicke's area, which is in the temporal lobe of the dominant hemisphere, is connected to Broca's area by a large bundle of nerve fibers and is the brain site where verbal comprehension takes place; and (3) the angular gyrus, which is located adjacent to Wernicke's area, serving as a link between the parts of the brain that receive stimuli from our sense organs. These three brain areas are essential to speech; we could not possibly speak without them. Their location is also of great significance—they are all located in the cortex, which is much more developed in human than in any other animal.

The brain size of our australopithecine ancestors is roughly the

same as those of modern chimpanzees. From that time on an evolutionary expansion of the brain occurred, and by the time of *Homo erectus*, we find a cranial capacity of some 1,100 cc, which is close to that of modern *Homo sapiens*. This expansion of the brain entailed the evolution of the cortex, making it possible for the development of speech. On the other hand, other animals, including the apes, have not developed these three brain areas to any significant degree that allows the development of speech.

After the *Homo erectus*, the evolution of culture and, supposedly, language accelerated. Although the research on Neanderthal skulls done by P. Lieberman (1975) seems to indicate that speech at this stage of evolution was still slow and was limited to a small range of sounds, other research indicates that the speech of the Neanderthal men (300,000 B.C. ~33,000 B.C.) might have been as productive and flexible as the speech of modern humans (Burr 1976).

We still don't know the exact mechanism through which language evolved. There are many theories about the origin of language, but all are conjecture. Nevertheless, we do know that the evolution of culture, the evolution of human brain, and the evolution of language are inexorably intertwined.

Next let's go further and survey the relationship between language and culture.

### Language and Culture

Thanks to the vigorous investigations made by anthropologists, we know there are at least 47 language families—that is, evolutionary related groups of current spoken languages. There are 156 major languages that are spoken today. Besides, there are hundreds of minor languages used by small, relatively isolated groups of people (Spencer and John 1968). A language may split into several dialects, some of which are so different from each other (especially in pronunciation) that they are mutually incomprehensible. For example, Can-

tonese and Amoy dialects are derivatives of the Chinese language, but speakers of these two dialects cannot communicate verbally with each other, though geographically they are neighbors. In other words, they belong to different speech communities where different dialects are used.

A community possesses its own culture and language. It is mainly through the language of the community that the child acquires the attitudes, beliefs, values and ways of behaving of the culture. Our view of the world, the ways we can categorize our experience and conceptualize our environment, is, to a great extent, affected by our language. As Sapir puts it:

Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. It is quite an illusion to imagine that one adjusts to reality essentially without the use of language and that language is merely an incidental means of solving specific problems of communication or reflection. The fact of the matter is that the “real world” is to a large extent unconsciously built up on the language habits of the group....

We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation (Sapir 1921).

On the other hand, we can only make sense of a language by entering the speech community and observing how the language is used by the people in their everyday life. Language is deeply rooted in culture; only in the cultural context does speech acquire its meaning. And it is also in this respect that from time to time intercultural communication causes problem to a large or small extent, depending on how much these two cultures differ. Take the concept of time for example. Every one of us is affected by the passage of time. But people from different cultures have quite different concepts of time. To the North American, time is just like a real commodity; he can spend time,



waste time, kill time, and past time. And he tends to schedule his time precisely and lives with a constant orientation toward the future. It can be said that he views things in a time-oriented manner. Most middle-clasa Americans, when making a firm appointment, expect at most a fifteen minute margin of error. In Latin American countries, however, to arrive forty minutes "late" is to arrive "on time."

Hall presents us examples of how people from different cultural backgrounds differ in their concepts of time:

Time with us is handled much like a material; we earn it, spend it, save it, waste it. To us it is somewhat immoral to have two things going on at the same time. In Latin America it is not uncommon for one man to have a number of simultaneous jobs which he either carries on from one desk or which he moves between, spending a small amount of time on each.

While we look to the future, our wiew of it is limited. The future to us is the foreseeable future, not the future of the South Asian that may involve centuries. Indeed, our perspective is so short as to inhibit the operation of a good many practical projects, such as sixty-and one-hundred-year conservation projects requiring public support and public funds (Hall 1959: 20).

There are also numerous lexical differences cross-culturally. The Hopi use a single word to name all flying things (such as airplanes, insects, aviators) except birds, whereas English has specific words for each of these things. On the other hand, the Eskimo have many different words for snow—flying snow, slushy snow, etc.—while there is only one in English.

Does the fact that a language does not have specific terms for certain phenomena mean that the users of this language are unable to distinguish these phenomena themselves? For example, are Americans unable to see the differences that Eskimos see in snow? Or, are the Hopi Indians unable to make a visual distinction between an airplane and an insect? If we are really confined to the conceptual system imposed on us by our language, how does it come about Whorf himself

was able to express in English the different types of snow familiar to the Eskimos? The probability is that, as in the case of lexical encoding, it is often a question of “relative ease or difficult” of expressing certain abstract concepts in one or another language. If this were not the case, intercultural communication would be next to impossible.

### Nonverbal Communication

As it is mentioned above, language is the primary means of human communication. But language seldom stands alone. When we speak, we also make use of various gestures, facial expressions, and body movements, with the change of the tone, the tempo, and the pitch of speech. We manipulate, sometimes unconsciously, these means to admit, to deny, to emphasize something, as well as to show various feelings or wishes toward something. It is not a rare scene to see a speaker waving his hand violently when he is making a strong statement. Also we often shake our heads to show our denial or disapproval of something, no matter whether it is accompanied with speech or not. In other words, nonverbal communication can be independent of speech, though it is much more often that it occurs with speech.

Like language, gestures and other nonverbal signals are highly conventional; they vary from culture to culture. It is almost a hopeless task to try to complete even a simple inventory of gestures and their meanings within the same culture, let alone one cross-culturally. Take American society for example. The simple act of shaking hands can mean friendliness, affection, enthusiasm, concern, indifference, sexual excitement, etc. The raising of one's eyebrows can communicate a questioning attitude, thoughtfulness, or a sense of irony. The pioneer of nonverbal communication Ray L. Birdwhistell illustrates that a presumably standardized gesture as the military salute may communicate a vast array of messages

By shifts in stance, facial expression, the velocity or duration of the movement of salutation, and even in the selection of inappropriate

contexts for the act, the soldier could dignify, ridicule, demean, seduce, insult, or promote the recipient of the salute. By often almost imperceptible variations in the performance of the act, he could comment upon the bravery or cowardice of his enemy or ally, could signal his attitude toward army life or give a brief history of the virtuosity of a lady from whom he had recently arisen (Birdwhistell 1970: 78-80).

Same or similar gestures may have very different meanings in different cultural contexts. Among middle-class Americans, whistling can communicate enthusiasm over the performance of a sports team, but in many European countries such whistling is a gesture of severe disapproval. In most societies, visitors are supposed to wait until they are asked to sit down, unless they are very close friends of the family. In Samoa, however, a visitor signifies his or her friendly intentions by walking directly into one's home and sitting down, without waiting to be asked.

Conversely, the same message can be communicated quite differently from culture to culture. What Americans often use to express intimate affection by kissing is communicated among Eskimos by rubbing noses.

Just as there are no universal words or phrases, there does not exist such a thing as a truly universal gesture the meaning of which remains constant throughout the world. And like language, nonverbal communication systems make sense only in their own cultural contexts. The study of nonverbal communication is still at its infancy. Yet both verbal and nonverbal communications have to be accounted for if a complete understanding of human communication is attempted.

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