

The Role of Gestures in Communication

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Abstract—Because it plays such a very significant role in the life of every human being, it is difficult to imagine a world without communication. After all, communication, both verbally and nonverbally, has occurred and evolved between people since the dawn of humankind. As it is, during communicative interaction, verbal contact is supplemented with non-verbal information, laying the foundation for full-fledged communication. That means that nonverbal communication is an essential aspect of speech communication because it can either greatly increase the semantic meaning of a word or significantly weaken it. Moreover, non-verbal means of communication are typically expressive and laconic and greatly increase the possibilities of communication between people. That being said, one of the most commonly used non-verbal communications is gestures. In communication, gestures accompany speech or replace it. Gestures include movement of the hands, face, or other body parts, and each person uses various motions in communication to convey his thoughts. The gestures we use in daily communication add to a language's vocabulary and syntax. Furthermore, a gesture is more expressive than a unit of verbal language. With this in mind, this article discusses the various aspects of non-verbal communication and provides examples of typical gestures a person uses in everyday communication. This study consisted of 50 students ranging in age from 17 to 25 years old and aimed to reveal what types of gestures are used much more frequently by young people in everyday life.

Index Terms—non-verbal means, communication, gestures, classification, body language

I. INTRODUCTION

In communication and mutual understanding of people, an important role is assigned to nonverbal communication – that is, the language of gestures and body movements. Communication without words is the most extensive and reliable of communication. When communicating, we listen to verbal information, look each other in the eye, and perceive the timbre of the voice, intonation, facial expressions and gestures. Words convey logical information, and gestures, facial expressions, and voice complement this information. As a result, it seems almost incredible that nonverbal aspects of communication only just began to be seriously studied in the early 1960s. Moreover, the public only became aware of their existence after Julius Fast published his book *Body Language* in 1970 which summarized the research on nonverbal aspects of communication carried out by behavioural scientists before 1970; however, even today, most people are still unaware of body language despite its important role in their lives (Fast, 1970). Therefore, the relevance of this study lies in the absolute importance and necessity of using non-verbal components of communication in daily interpersonal communication since, as a rule, much more information is transmitted by this means than by oral speech.

Firstly, 93% of the communication process is unrelated to words. Professor Mehrabian (1967) states that he believes that three main factors play the most crucial role in communication: what we say (7%), how we say it (38%), and the body language we use (55%). Thus, only 7% of the information in a conversation falls on what is being said, and the subject of the discussion is one of the least essential elements of the conversation (Mehrabian, 1967). Still, even though

no nonverbal scholar doubts the importance of nonverbal cues to the communication process, it is often misleading to try to determine how important they are by a percentage (Manusov, 2016).

Nonverbal communication is a fundamental aspect of human communication, and its understanding of communication is essential (Galvano, 2023; Muratova et al., 2023). Indeed, a large number of works have appeared devoted to the study of certain aspects of non-verbal behaviour. These include the dependence of expressive features on gender (Hall, 1959) and race (Johnson, 1971), as well as famous works of applied value in which an attempt is made to offer the author's versions for codifying the gestural system and designed to give the reader an effective tool for understanding the behaviour of others (Pease, 1988).

Non-verbal means of communication include gestures. As a rule, gestures are used for illustration, emphasis, indication, explanation or interruption, meaning they cannot be isolated from verbal communication. Gestures are defined as actions used with the intent to communicate and are usually expressed using fingers, hands, and arms. However, they also include bouncy body movements such as "horsie" and facial features such as lip smacking (Iverson & Thal, 1998). McNeill (1992) considers gestures to be a component of the most natural form of communication known to humans in their face-to-face conversations. Gestures accompany over 75% of all clauses in face-to-face conversation (McNeill, 1992). Furthermore, researchers such as Cartmill et al. (2012) and Hostetter and Alibali (2008) note that using gestures in communication should be natural for conveying actions.

Nonverbal communication is inherently multidisciplinary. It contains various fields of interest including psychology, linguistics, medicine, sociology, anthropology, ethology, and law to name just a few.

One of the most relevant components of non-verbal communication for study at the moment are gestures, which are communicative kinetic behaviour, primarily with the help of hands, and capable of conveying meaning from the speaker to the listener (Kibrik, 2010). In addition, if the verbal component is based on a particular set of linguistic forms and obeys syntax rules, gestures do not contain such features because they are pictorial and pantomimic (Kendon, 2004).

In the twentieth century, gesture studies were conducted within the framework of various humanities and natural sciences. The following main areas of research can be distinguished: historical and cultural studies (e.g., J. le Goff, J. K. Schmitt, P. Burke, as well as studies on gestures by scholars of cultural studies including E. A. Bobrinskaya, A.V. Venkova, N. B. Mankovskaya, A. K. Bayburin, A. L. Toporkov, M. Yampolsky); semiotic studies including works by D. Armstrong, R. Birdwistel, E. V. Krasilnikova, G. E. Kreidlin, T. M. Nikolaeva, J. Allwood, D. Efron, devoted to sign language, its semantics, syntax and pragmatics, as well as its comparison with verbal language; works on the semantics of individual sign acts by the likes of A. Vezhbitskaya, A. Kendon, G. E. Kreidlin, P. Noller; sociological studies carried out by B. Turner, S. Williams and J. Bandilau; anthropological studies by the likes of K. Wolf; psychological studies by M. Argil, S. Goldin-Meadow, P. Ekman; psycholinguistic studies by D. McNeil, S. Kita, A. Ozyurek (also here it is necessary to indicate studies on the metaphor of J. Lakoff and M. Johnson); and art criticism studies by A.V. Arustamyan, A. Y. Brodetsky, O. Bulgakova, V. V. Zhadanov, G. Koch, B. Pasquinelli, Y. Tsivyan.

Gesture has many functions and is similar to speech in time and meaning. Motion differs from speech in several ways. Gesture conveys information holistically, spatially, and often simultaneously in a single event. A speech comprises discrete units that unfold incrementally and sequentially to create a cumulative meaning (McNeill, 1992).

II. MATERIALS AND METHOD

The leading methodological approaches are semiotic and applied to interpret the meaning of the phenomena under consideration - gestures. American anthropologist Birdwhistell (1952) was interested in kinesics and the relationship between gesture and language. He tried to show that motions should be considered a communication system with the same structural units as language. Initially, in the preverbal period of human evolution, nonverbal gestural manifestations, both voluntary and involuntary, were an independent means of communication (Hewes, 1977; Hockett, 1978; Kendon, 1981). Moreover, in the verbal period of development, they were fixed as a semi-conscious expressive means, retaining the functions of the previous stage: protection (rejection, exclusion), attack (acceptance, appropriation), and concentration (expectation, rituals and transitional states). For the observer, gestures appear as symbols of a specific language of images.

People from all known cultures and linguistic backgrounds use them, making gestures essential to communication (Feyereisen & de Lannoy, 1991). Rime and Schiaratura (1991) argued that gestures are not communicative. They added that interlocutors generally do not notice gestures, they make no difference to comprehension, and recipients fail to link gestures with linguistic content. In gesture research, however, compelling evidence for this argument has been collected from studies in different methodological traditions. A series of classic experimental studies by Kendon (1994) demonstrate the importance of gestures in communication. Another example are Berger and Popelka (1971) who showed that recipients understand them more accurately when utterances are made with emblems or quotable gestures (i.e., gestures that can be used instead of words, such as peace signs).

The methodological and theoretical basis of the study is based on the works of Ekman and Friesen (1972), McNeill (1992), Kendon (1981) and Labunskaya (2000) in the field of non-verbal communication. The article presents an analysis based on a statistical method compared with gestures used in everyday life. The material of the study was the data of an experiment conducted in which 50 people ages 17 to 25 took part.

III. RESULTS AND ANALYSIS

Before analyzing gestures, it is necessary to clarify the classification of gesture types. The first attempt to classify gestures was made by Efron in 1972 who posited that there are many different types of gesture classifications including those of deictic (pointing), iconic, metaphorical, and symbolic nature in literature (Efron, 1941, 1972; Kendon, 1983; McNeill, 1992). Efron identified two gestures: those used with speech and symbolic gestures or emblems. In turn, he divided the first gestures into subgroups:

Ideographic gestures which schematically depict the logical sequence of the statement and the structure of the argument. They are also in a relatively non-specific relation to the content of the statement.

Pointing gestures which indicate the subject of the statement.

Pictorial gestures which schematically describe the shape or size of the subject of discussion as if illustrating the content of the statement.

Conducting gestures which are performed in time with speech.

Based on this classification, Ekman & Friesen created their variety of gestures as seen in the Figure 1 below (Ekman & Friesen, 1972):

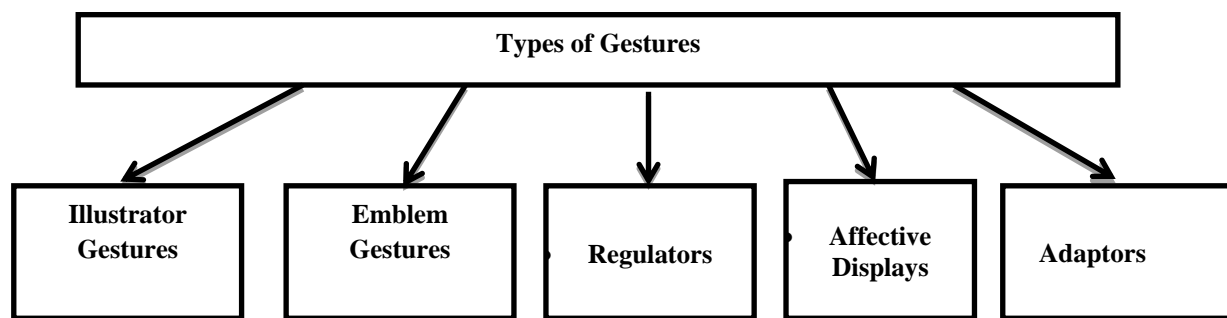


Figure 1. Types of Gestures by Paul Ekman and Wallace V Friesen

According to Ekman & Friesen, gestures can be classified as follows:

Illustrator Gestures are message gestures: pointers ("pointing finger"), pictographs, i.e., symbolic pictures of the image ("this size and configurations"); kinetographs — body movements; gestures "bits" (gesture "go-ahead"); ideographs, i.e., peculiar hand movements and connecting imaginary objects.

Emblem Gestures are substitutes for words or phrases in communication. For example, hands clenched together like a handshake at chest level mean, in many cases can mean "hello" and raised above the head can mean "goodbye."

Regulators are gestures that express the speaker's attitude toward something. These include a smile, a nod, the direction of the gaze, and purposeful movements of the hands.

Affective Displays are gestures that express certain emotions through body movements and facial muscles.

Adaptors are specific human habits associated with hand movements such as:

- a) scratching or twitching of individual parts of the body;
- b) touching or spanking a partner;
- c) stroking or touching individual objects at hand (pencil, button, etc.).

A review of research in nonverbal behaviour has shown that there is no unified typology of nonverbal means. In addition, these tools have functional features. Different approaches to understanding these features determine the differences in the currently existing typologies of nonverbal means which are necessary to decide what their communicative roles are. In other cultures, the specific meaning of individual gestures differs, but there are also similar gestures.

Furthermore, Labunskaya (2000) distinguishes groups of gestures as follows in Figure 2:

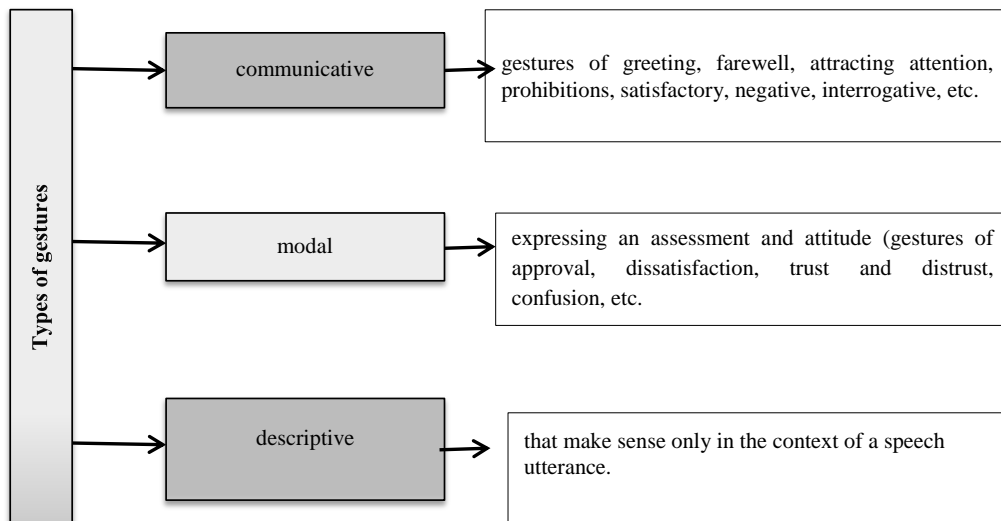


Figure 2. Types of Gestures by Labunskaya (2000)

Non-verbal messages in the complement function make speech more expressive and accurate and explain its content. Speech can be remembered better and more clearly if gestures duplicate them. For example, when people greet each other, they shake hands.

Non-verbal cues can also enhance the most significant moments of speech. For example, you can attract the listener's attention by raising the volume of your voice, pausing or gesturing in a certain way.

Moreover, gestures are very informative. They can be a signal for the end of the meeting (for example, the willingness of one of the interlocutors to get up from the table - the body is slightly tilted forward, while the hands rest on something). On the other hand, they can have the opposite meaning and indicate interest in the conversation, for example, as when the hand is under the cheek as shown in Figure 3 (Allan, 1988).



Figure 3. The Hand Under the Cheek Gesture

Gestures indicating indifference, inattention, misunderstanding, boredom, and disinterest should be avoided such as the critical raising of eyebrows, biting of lips, frozen rigid facial expression, inappropriate smile or laughter, yawning, scratching head or other parts of the face and body, picking at nails, playing with hair, pen or other objects, and so on (Rodat, 2019). Figure 4, below, provides some examples:



Figure 4. Gestures of Boredom and Unwillingness

IV. FORMATION AND SUBSTANTIATION OF THE RESEARCH PROBLEM

When communicating with each other, people always pay attention to the behavioural reactions of their interlocutors. Moreover, while some people do not attach much importance to the nonverbal means of communication, facial expressions and gestures are essential for others. They can tell a lot about the mental state, attention, mood, and so on of another person. This question has been and will always be relevant at all times and among representatives of any age group, especially among young people. This is because young people, being active and mobile, often use gestures and facial expressions during a conversation.

To reveal what gestures are used much more frequently by young people in everyday life, using the most common classification of gestures by Ekman and Friesen (1972), we surveyed the students from Karaganda Buketov University. A group of 50 students were chosen for the survey, 32 of whom were girls and 18 of whom were boys. The age of the respondents ranged from 17 to 25 years.

Based on the survey results, the following conclusions can be drawn (as shown in the diagrams below):

Firstly, gestures are actively used among respondents. Moreover, most often, these gestures are Adaptors that demonstrate specific human habits associated with hand movement (e.g., automatic painting on paper, clicking the cap of a fountain pen, scratching the head). However, emblem gestures are used as a kind of substitute for words or phrases in communication; a thumb raised, two fingers hands in the form of a V, a heart with the help of indicators, and a twist of a finger at a temple are all examples of these emblem gestures (Khassenov et al., 2022).

Secondly, males most often use Regulators, thereby expressing the speaker's attitude toward something or someone (for example, a nod, a handshake, purposeful movements of the hands, and so on). The students tend to also use illustrator gestures which are symbolic pictures of the message ("like this size" or "like this shape" hand movements connecting imaginary objects, for instance).

Thirdly, the majority of both genders who were asked the question: "How do gestures help you in communication?" answered the question with "To facilitate understanding" which indicates the importance of using sign language by a person in society. Further analysis and research is needed on this topic to improve communication methods and achieve mutual understanding between different people.

TABLE 1
SURVEY RESULTS

№	Survey Questions	Guys (18)		Girls (32)	
		Quantity «+»	%	Quantity «+»	%
	<i>Mark the gestures that you often use "+", do not use "-"</i>				
1	two fingers in the form of a V	15	83	25	78
2	unbuttoning a jacket	10	55	21	66
3	pointing your finger;	12	67	18	56
4	showing hands heart	13	72	28	87
5	touching or rubbing the nose with the index finger	18	10	25	78
6	head-scratching	16	89	26	81
7	fingers connected like a dome of a temple	7	39	5	16
8	clicking the cap of a fountain pen	12	67	27	84
9	Winking	14	78	21	66
10	shoulder shrugging	18	100	29	91
11	greeting gestures- a hug, kiss, handshake	18	100	32	100
12	show your thumb	18	100	32	100
13	clenching your hands into fists	18	100	21	66
14	tilting the head	5	28	9	28
15	cross your fingers	16	89	28	87
16	the hand covers the mouth	3	17	26	81
17	automatic drawing on paper.	9	50	18	56
18	How do gestures help you in communication?				
a.	to facilitate understanding	10	55	20	62
b.	to feel confident	6	33	6	19
c.	to express emotionally	2	11	4	12
d.	don't help	1	8	2	6

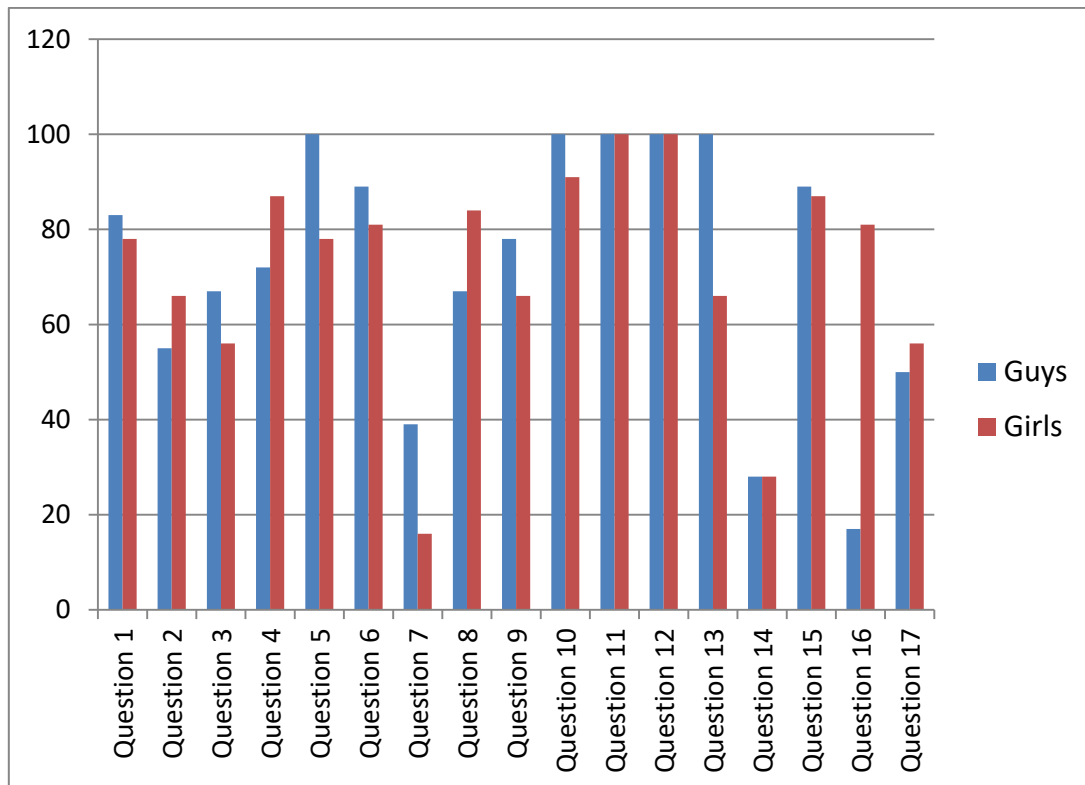


Chart 1. Ratio Data

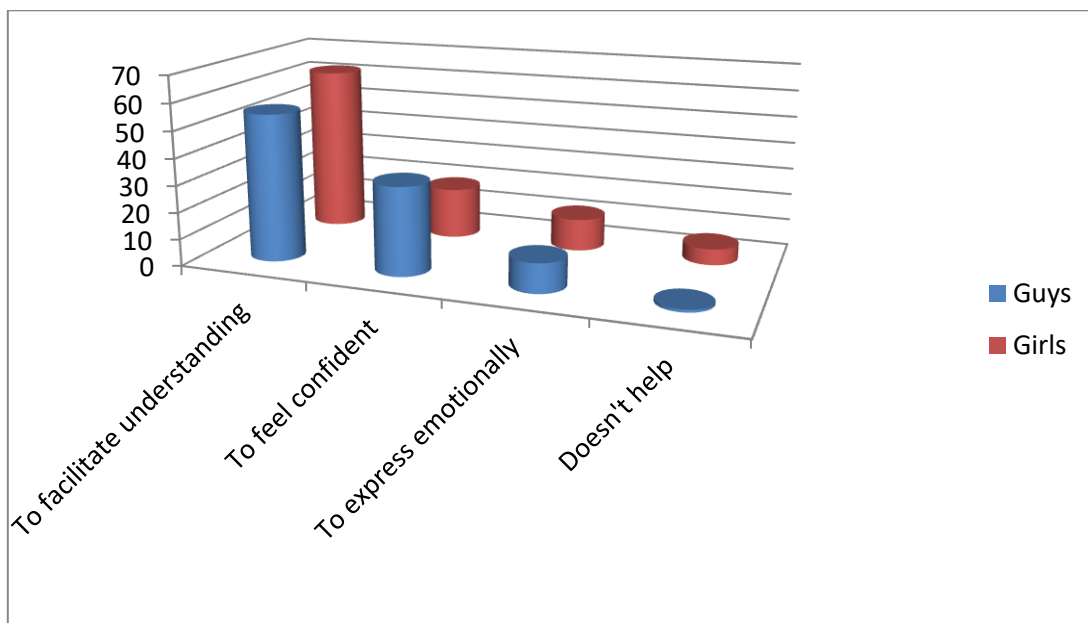


Chart 2. Impact of Gestures on Communication

There are a vast number of gestures in the world, and each of them plays a significant role in positive or negative communication. However, the most important thing in communication is to observe gestures and use the permissible means in a particular situation. For instance, an adult can pat a child on the shoulder, stroke his head or take him by the chin, but if a child does something like this with an adult, it will be a serious violation of etiquette.

It is usually easy for speakers and listeners to talk to each other using lively facial expressions and expressive motor skills. In *Tips to Lecturers*, Koni (1956) writes: “Gestures enliven speech but should be used carefully. The expressive gesture should correspond to the meaning and significance of this phrase or a single word. Too frequent, monotonous, fussy, sharp movements of the hands are unpleasant, dull and annoying” (p. 58).

Furthermore, active gesticulation often reflects positive emotions and is perceived as a sign of interest and friendliness. Excessive gesticulation, however, can be an expression of anxiety or uncertainty.

Finally, a person controls his gestures and postures much less than his words so that they say more about him than direct statements. By learning to read other people's gestures, we can recognize whether they are sincere or lying, friendly or hostile.

V. CONCLUSIONS

Gestures are used in communication to convey additional information, that is, to clarify thoughts and opinions in speech. Being closely related to words, they give a different tone and clarify the thought. Therefore, in this paper, we have considered the origin, classification and functions of gestures from which we can draw the following conclusions.

Firstly, the primary purpose of a gesture in communication is the manifestation and presentation of a person's inner world and state of mind.

Secondly, there are many classifications of gestures in the interpretations of various researchers and scientists. A review of research in non-verbal behaviour has shown that there is no single typology of non-verbal means. In addition, these means have functional features. Different approaches to understanding these features determine the differences in the currently existing typologies of non-verbal means necessary to decide their communicative role.

Thirdly, gestures play a significant role in communication, and we must pay special attention to them. Attentive interlocutors can understand a lot through gestures. When learning body language, it is important not to analyze motions in isolation. Body language is what the whole body says.

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