

## CHAPTER 1

### NONVERBAL BEHAVIOUR

#### 1.1. What is Nonverbal Behaviour?

What is nonverbal behaviour and what does study of nonverbal behaviour include? Nonverbal behaviour refers to communicative human acts distinct from speech. Since nonverbal behaviour includes every communicative human act other than speech (spoken or written), it naturally covers a wide variety and range of phenomena: 'everything from facial expression and gesture to fashion and status symbol, from dance and drama to music and mime, from flow of affect to flow of traffic, from the territoriality of animals to the protocol of diplomats, from extra-sensory perception to analog computers, from the rhetoric of violence to the rhetoric of topless dancers' (Harrison, 1973).

The nonverbal behaviour is taken generally to include facial and eye expressions, hand and arm gestures, postures, positions, use of space between individuals and objects, and various movements of the body, legs and feet. Since nonverbal behaviour is considered as distinct from speech, it also includes silence as well as dropping of elements from speech and/or the missing elements in speech utterances. There is a general consensus that, although non-verbal behaviour means acts other than speech,

in a broader sense nonverbal behaviour includes also a variety of subtle aspects of speech variously called paralinguistic or vocal phenomena. These phenomena include fundamental frequency range, intensity range, speech errors, pauses, speech rate and speech duration. These features are of a nature that somewhat eludes explicit description when used in communicative contexts. In other words, these features are employed for implied meanings and are not explicitly describable and/or stated through/as linguistic units. Also included in discussions of nonverbal behaviour are other complex communication phenomena, such as sarcasm, 'where inconsistent combinations of verbal and nonverbal behaviour take on special significance in subtly conveying feelings' (Mehrabian, 1972).

Thus, even though as a working definition nonverbal behaviour is conceived to be everything other than speech, the boundary between verbal and nonverbal is always blurred and there are certain aspects of speech which fall within the domains of nonverbal behaviour. In view of this, it is not surprising to find that the researchers have differed among themselves as regards the definition and scope of the study of nonverbal behaviour.

For Argyle (1969), nonverbal behaviour includes bodily contact, posture, physical appearance, facial and gestural movement, direction of gaze and the paralinguistic variables of emotional tone, timing and accent. Duncan (1969) includes body movement or kinesic behaviour, paralanguage, proxemics, olfaction, skin sensitivity to temperature and touch, and the use of artifacts. For Schefflen (1968), the nonverbal behaviour includes kinesic, postural, tactile, odorific, territorial, proxemic and artifactual categories, in addition to nonlexical vocal modalities of paralinguistic behaviours.

Knapp (1972) includes body motion, or kinesic behaviour, facial expression, physical characteristics, eye behaviour, touching behaviour, paralanguage, proxemics, artifacts and environmental factors. Poyotos (1977) proposes a classification of nonverbal phenomena based on sensory channels, possible combinations of verbal and nonverbal and on the interactional potential or otherwise of the behaviour. Thus, the sensory channels involved are acoustic, visual, olfactory and tactile. The classes identified are verbal-vocal, nonverbal-vocal, and nonverbal-nonvocal. Some acts are interactional and some are not interactional. Harrison (1973) covers the nonverbal behaviour domain under four codes: performance codes based on bodily actions, artifactual codes (the use of clothing, jewellery, etc.), mediational codes involving manipulation of the media, and contextual codes such as employment of nonverbal signs in time and space. Harper *et al* (1978) limit their consideration of nonverbal phenomena to those that are most important in the structuring and occurrence of interpersonal communication and the movement to movement regulation of the interaction. The nonverbal phenomena include, for them, consideration of spatial (proxemic) aspects of the physical setting of interaction, but not dress, use of artifacts and physical characteristics, as constituting nonverbal behaviour. Note that all these definitions generally centre around body area and body activities. Several of these also cover the use of artifacts. Most of the definitions cover the use of paralanguage and manipulation of certain aspects of speech under nonverbal behaviour.

In this book nonverbal behaviour is studied from the following angles: (i) Proxemic, (ii) Postural, (iii) Facial, (iv) Movement, (v) Paralanguage, (vi) Eye, (vii) Silence, (viii) Perceptual features (artifacts) and (ix) Gesture. These features are covered under

several chapters. Chapter-1, apart from presenting the scope and definition of nonverbal behaviour, discusses the relationship between verbal and nonverbal communication and various approaches to the study of nonverbal communication. Chapter-2 presents proxemic behaviour; Chapter-3 presents nonverbal communication as expressed through eye and face; Chapter-4 discusses nonverbal behavioural aspects of language use and silence; Chapter-5 discusses gesture; and Chapter-6 presents salient features of nonverbal communication in abnormal individuals.

## 1.2. Relationship Between Verbal and Nonverbal Communication

There are several ways in which the nonverbal behaviour is seen clearly related to verbal behaviour. This relationship is one of dependence and also of independence. There are nonverbal communicative acts that are easily and accurately translated into words. Several gestures clearly illustrate this relationship. For example, the gesture of folded hands for *namaste*, the gesture of handshake, a smile, a frown, etc., are generally translatable into words. There is also a class of nonverbal acts that are very much a part of speech and serves the function of emphasis. Examples are head and hand movements that occur more frequently with words, and phrases of emphasis. There are acts which draw pictures of the referents tracing the contour of an object or person referred to verbally. Yet another class of acts is employed for displaying the affects (feelings). Another class refers to acts that help to initiate and terminate the speech of participants in a social situation. These regulators might suggest to a speaker that he keep talking, that he clarify, or that he hurry up and finish (Ekman and Friesen, 1969).

There are at least six ways in which the relationship between verbal and nonverbal communication can be characterized. These are as follows:

(1) The relationship between verbal and nonverbal communication is one of the latter playing a supplementary role to the former. The nonverbal acts that are supplementary to verbal acts may precede or follow or be simultaneous with the verbal acts. For example, in many verbal acts one notices an accompaniment of one or more nonverbal acts, such as gestures, facial expressions, and movement towards or away from the addressee, to illumine the meaning of the former. While for any verbal acts such an accompaniment may only be considered redundant, for several others, such an accompaniment does, indeed, illumine the meaning of the former, adds explicitness, clarity, emphasis, discrimination and reinforcement.

(2) The relationship between verbal and nonverbal communication is also one of the former playing a supplementary role to the latter. In many verbal acts, both in children and adults, in normals with all the linguistic organs intact, and normals with some handicap to the linguistic organs, as well as in abnormal individuals, nonverbal acts may take precedence over the verbal acts in several ways. In the normals with all the linguistic organs intact, occasions demand the use of nonverbal acts such as pantomime and gestures for aesthetic purposes, and for purposes of coded (secret) communication. Indulgence in nonverbal acts as primary medium is also necessitated by the distance that separates the parties which can, however, retain visual contact while engaging themselves in communication.

(3) The relationship between verbal and nonverbal communication could be one of correspondence as well. That is, there are several nonverbal acts that can be accurately translated into words in the language of a culture in which such nonverbal acts are performed.

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A handshake, shaking a fist at someone, a smile, a frown, etc., are all nonverbal acts translatable into verbal medium in a particular language. The functions of these nonverbal acts, context to context, are also translatable. Furthermore, such correspondences are also codified in aesthetic nonverbal acts, such as dance, sculpture and other arts. The correspondence is sometimes translatable into words, sometimes into phrases and sentences, and several times translatable into compressed episodes involving lengthy language discourses. But the correspondence is there all the same and the import of this correspondence is shared between individuals within a community. There is also yet another correspondence of nonverbal acts in the sense that similar nonverbal acts could mean different things in different cultures.

(4) Yet another relationship between a verbal act and a nonverbal act is one of dependence. A verbal act may depend for its correct interpretation entirely on a nonverbal act. Likewise a nonverbal act may depend for its correct interpretation entirely on a verbal act. In extreme circumstances, the former is caused because of deliberate distortion of the verbal act, or because of the difficulty in listening clearly to the verbal act, or because of the difficulty in reading with clarity what is intended to be read in the written verbal message. Deliberate distortion is not found only in contrived acts such as poetry or drama. It is done in day to day language itself. Distortion and opacity of the verbal message are also required in certain socio-cultural contexts wherein it is demanded that verbal acts be suppressed and made dependent on nonverbal acts. The dominant nonverbal act also depends on verbal acts for clarity. This dependence, like the former, could be contrived. It also occurs in daily life.

(5) Verbal and nonverbal acts can be independent of one another. Something is communicated through a verbal act. The continued manifestation of this communicative act may be in the form of nonverbal acts. That is, in a

single communicative act, part of the message may be in verbal form and the rest in nonverbal, in an alternating way. Each part is independent of the other. This is contrived in poetry and drama. It is also found in every day life. An extreme form of this independence is the gulf that we notice between what one says and what one does. Also prevarication both in word and deed derives its strength, among others, from this feature.

(6) Another relationship between verbal and nonverbal acts is one of non-relevance. This is most commonly found in normal adult speech and its accompanying gestures which are produced simply without any communicative intent. We move our hands, snap our fingers, move our bodies while speaking, with these gestures having no relevance to the speech we make. When this non-relevance between verbal and nonverbal acts found in normals is shifted to non-relevance or irrelevance within the single domain, within speech itself or within nonverbal act itself (during which coherence in speech or act is lost), we start considering the individual abnormal in some way. That is, non-relevance across the verbal and nonverbal media is normal, but non-relevance within a single medium is abnormal. The non-relevance is idiosyncratic and could be imitational as well. In the normals the excessive non-relevance of nonverbal acts accompanying speech comes to hamper the understanding of the verbal acts.

Harrison (1973) has suggested the following functions for nonverbal communication:

(1) Nonverbal signs define, condition, and constrain the system; for example, time, place and arrangement may provide cues for the participants as to who is in the system, what the pattern of interaction will be, and what is appropriate and inappropriate communication content.

(2) Nonverbal signs help regulate the system, cueing hierarchy and priority among communicators, signalling the flow of interaction, providing meta-communication and feedback.

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(3) Nonverbal signs communicate content, sometimes more efficiently than linguistic signs but usually in complementary redundancy to the verbal flow.

Ekman and Friesen (1969) specify five general functions for nonverbal behaviour, namely, repetition, contradiction, complementation, accent and regulation. In repetition there is both verbal and nonverbal expression made simultaneously, where one will do. In contradiction, the verbal and nonverbal behaviours contradict one another as in the case of a verbal praise in a sarcastic tone. In accent, spoken words are emphasized through nonverbal acts. Through the use of eye contact, gestures and others, nonverbal behaviour is employed to regulate human interaction and communication.

Based on the above brief discussion, we find that the relationship between verbal and nonverbal behaviours can be considered as follows:

(1) The relationship between verbal and nonverbal communication is one of the latter playing a supplementary role to the former.

(2) The relationship between verbal and nonverbal communication could be one of the former playing a supplementary role to the latter.

(3) The relationship between verbal and nonverbal communication could be one of correspondence.

(4) The relationship between verbal and nonverbal communication could be one of mutual dependence.

(5) The relationship between the two could also be one of independence from one another.

(6) The relationship between the two could be one of non-relevance as well.



(7) The relationship between verbal and nonverbal communication could be one of one repeating the message of the other.

(8) The relationship between verbal and nonverbal communication could be one act contradicting the other.

(9) The relationship between verbal and nonverbal communication could also be one of mutual emphasis.

(10) Finally, the relationship between the two could also be one of mutual regulation.

While the study of verbal behaviour and non-verbal behaviour has been done independently in several disciplines, the relationship between the two has not received the attention it deserves. Human communication is a wholesome fusion of both verbal and nonverbal acts. This fusion appears to have both physiological (genetic) as well as socio-cultural consequences. The fusion of verbal and nonverbal behaviours in a communicative act marks the human species distinct from other species. That is, the manner in which the fusion between verbal and nonverbal acts has taken place in humans marks the humans distinct from other species. Also, societies and cultures are distinguished from one another by the style and exploitation of this fusion of verbal and non-verbal acts for varying contexts, pursuits and purposes. Moreover, various cognitive disorders, including language disorders, found in humans can be seen as those of differences in the degree and manner of fusing the verbal and nonverbal behaviours.

That the verbal and nonverbal behaviours are closely related is well recognized by all. Socialization processes in every society insist upon mastery and exploitation of this relationship in both children and adults in their communication

modes. For example, what postures, voice modulations, facial expressions, gestures, etc., that one should or should not employ in a particular context for a particular pursuit and purpose are all pre-determined in cultures. Deviations from the well-set norm are allowed for certain effects only. Deviations are also classified into several abnormal varieties. In essence, what makes communication essentially human is the intrinsic binding within all such communication between verbal and non-verbal facets.

This binding between verbal and nonverbal behaviour is the result of their phylogeny. Some have claimed that the same deep cognitive system is used in language and nonlinguistic behaviour. Some have claimed that nonverbal behaviour is a developmentally earlier and more primitive form of communication which man shares with animals (Werner, 1957). Reusch (1955) distinguishes between analogically and digitally coded information. The analogically coded information contains the immediate state of feeling of the individual. There is a continuous relationship between the events and the interacting individuals. The digitally coded information is verbally or numerically coded information which employs discrete units such as words and numbers. The digitally coded information is much more divorced from the interacting individuals than the analogically coded information.

These, unlike the analogically coded information, pertain to matter which may or may not be temporally or spatially tied to the prevailing interaction. Also, the information could be present in propositional form. Reusch suggests that actions, practical or expressive, convey their messages analogically whereas words and discrete symbols convey their messages digitally. According to Reusch, the analogic codification occurred first in the develop-

ment of communication. Also, analogic codification is viewed as related phylogenetically than digital codification to all communication. While the latter (digital codification) is more amenable for conscious control, the former is not and this is also taken to indicate the precedence of analogic codification over digital codification.

Nonverbal behaviours reflect very basic social orientations that are correlates of major categories in the cognition of social environments (Piaget, 1960). In other words, the nonverbal behaviours pursued in a society reveal the orientations towards interactions between persons that individual members of that society consider as basic. There are also common cognitive and behavioural dimensions for both animal and human social systems. Hence, some have claimed that primates, in particular, can provide complementary information, about certain aspects of affect and attitude communication in humans (Sommer, 1967). That is, the observation of animal social interactions can complement the study of individuals of a single culture and provide corroboration for identified dimensions of social interaction. Furthermore, it has been suggested by many that nonverbal behaviour is also produced by the same underlying processes employed in the production of linguistic utterance and that it shares some of the structural properties of the speech it accompanies.

### **1.3. Research Strategies**

Research strategies employed in the study of nonverbal behaviour can be grouped as those following or falling within linguistic methodologies, methodologies of anthropological investigations and methodologies of psychological investigations. Note, however, that within each of these major pursuits there are several variations based on

the approaches and aims of schools within these disciplines. Also note that there are mutual influences found among these strategies. Some of the strategies are not followed widely and some have become strategies rather clearly identified with individual scholars.

### **1.3.1. Linguistically-oriented Studies of Nonverbal Behaviour**

Modern linguistics, both Indian and Western, does not include study of nonverbal behaviour as part of grammar. There are elements of nonverbal behaviour, or rather elements shared both by verbal and nonverbal behaviour, such as implied meanings (presupposition, illocutionary acts whose implications could be brought out by paraphrase etc.) that are sought to be treated within grammar in modern times. However, these attempts have become characteristics of certain off-beat grammatical studies, rather than the core or integral part of grammatical approaches and general practice. In contrast, traditional Indian studies of language always included study of nonverbal behaviour as an integral part of grammar (See below 1.3.5 for a brief descriptive statement and summary). Bloomfield (1933) distinguished between the act of speech and other occurrences which he called practical events. Any incident for him consisted of three parts, in order of time: practical events preceding the act of speech, speech itself, and practical events following the act of speech. While there is, thus, a recognition of occurrence of both speech and nonspeech acts in a communicative act, linguists generally focus upon speech rather than on the practical events preceding, accompanying and following act of speech. In general, linguists ignore the nonverbal concomitants of verbal act.

Linguistically-oriented studies of nonverbal

behaviour are, indeed, very few and those few studies also generally aim at adequacy of language description by way of describing such nonverbal behaviours that impinge on verbal behaviour and/or exploit verbal-like elements in the nonverbal act. Moreover, the linguistically-oriented studies of nonverbal behaviour extend the method of description and transcription of linguistic elements to a description and transcription of nonverbal behaviour. A clear case of linguistically-oriented description of nonverbal behaviour is that of Trager (1958). Another study is that of West (1963) who seeks to identify sign language units corresponding to linguistic units, such as words, clauses, phrases and sentences.

Trager recognizes that communication is more than language. Although linguistics aims at the description of language as a system of communication, linguists limit themselves to examination of such parts of linguistic structures as they could define and examine objectively. In view of this self-imposed restriction, communication systems other than language remain outside their purview of research. Trager finds this an unsatisfactory approach to the study of language and seeks to devise ways and means to describe systems adjunct to language. Trager calls the study of language and its attendant phenomena as macrolinguistics and divides it into prelinguistics, microlinguistics, and metalinguistics. Prelinguistics is said to include physical and biological events. The statement of the relationship between language and any of the other cultural systems constitute metalinguistics while microlinguistics is linguistics proper.

Communication, according to Trager (1958), is divided into language, vocalizations and kinesics. Language employs certain noises made by organs of speech. It combines these noises into recurrent

sequences and arranges these sequences in systematic distributions in relation to each other and in reference to external world. Vocalizations do not have the structure of language and consist of variegated noises. Vocalizations also include modifications of language and other noises. In general, vocalizations may be seen as consisting of *paralanguage*, *voice set* and *voice qualities*. Variegated noises other than language ones, and modified language and other noises together are called paralanguage. Voice set involves the physiological and physical peculiarities of noises. With the help of these peculiarities we identify individuals as members of a societal group. We identify them as belonging to certain set, age, state of health, body build, rhythm state, position in a group, mood, bodily condition and location. Many other identifications are also made. Voice qualities consist of matters such as intonation. These are recognizable as forming part of actual speech events and are identified in what is said and heard. Trager lists the following as voice qualities identified so far -- pitch range, vocal lip control, glottis control, pitch control, articulation control, rhythm control, resonance and tempo.

The voice set and voice qualities are overall or background characteristics of the voice, whereas the vocalizations are identifiable noises. All these are different from language sounds proper. Trager identifies three kinds of vocalizations constituting paralanguage. These are vocal characterizers, vocal qualifiers and vocal segregates. The vocal characterizers are laughing, crying, giggling, swickering, whimpering, sobbing, yelling and whispering, moaning, groaning, whining, breaking, belching and yawning. The vocal qualifiers are those of intensity, pitch height, and extent. Vocal segregates are items, such as uh-uh, uh-huh and uh, sh! These are sounds which do not fit into phonological and/or

word frames in sequences in a language.

Trager has viewed study of paralanguage as contributing directly to an understanding of kinesics (study of movement, posture and position individuals assume in their interaction). It may be that in their overall structure these two fields of human behaviour may be largely analogous to each other. For all the variables identified, Trager provides symbols for transcription. The scope of description of the nonverbal behaviour is limited to descriptions of sound features and their functions in manifest behaviour. Thus, even in Trager's efforts, while the importance of nonverbal behaviour for a total description of communication process is recognized, its accommodation in the discipline of linguistics is only towards an illumination and adequate coverage of linguistic behaviour. Also the method of description of nonverbal behaviour is always an extension of the methods of study of linguistic behaviours. Attempts are also made, in this process of extension, to posit corresponding levels of linguistic and nonverbal behaviour.

### **1.3.2. Anthropologically-oriented Studies of Nonverbal Behaviour**

The anthropologically-oriented studies of nonverbal behaviour have a long history. The sign languages of the aboriginals, the communicative processes carried on through (non-sign language) gestures, postures, and exchange of goods and rituals, etc., have been discussed in anthropological studies. Nineteenth century American anthropologists showed a lot of interest in the aboriginal sign languages of the Americas. They recognized that the conventional gestural codes employed by American Indians (Red Indians) are independent communication systems which have the range

and flexibility found in speech. This recognition is still continued as we find in the works of Kroeber characterizing the sign language communication as follows: 'What makes it an effective system of communication is that it did not remain on a level of naturalness, spontaneity, and full transparency, but made artificial commitments, arbitrary choices between potential expressions and meanings'. The early 19th century work by Colonel Garrick Mallery, who made a collection and study of North American Plains sign language gestures and made a comparison of the same with other codes such as gestures and sign languages of the deaf, gave an impetus to modern interests in nonverbal communication processes in the West. This interest and study influenced anthropological studies in the beginning. At one time nonverbal behaviour within anthropological studies focused only on gestures. Later on other aspects of nonverbal behaviour were also studied. And very soon, in modern anthropology, culture itself began to be viewed as communication. Yet the study of nonverbal communication, in the sense of communication as it is effected through behaviour whose communicative significance cannot be achieved in any other way, is only a recent introduction to anthropology and it is yet to establish itself fully in anthropology. However, even today the communication processes in the sense of oral and nonverbal *interaction* has not attracted much attention in anthropological studies. To quote Codere (1966) 'the subjects of gestures, medicine, or games are rarely considered in any single volume ethnography and are even more rarely given any extended treatment ... Once the major ethnographic topics of social organization, economic organization and religion are dealt with, the task is not done if it is defined as giving any sense or indication of the richness and complexity of the culture



concerned. Yet why do such topics as technology, the yearly round, and the life cycle have a secure conventional place as secondary topics; such topics as humour and the three mentioned here, no place at all; and such topics as the arts only, an occasional one'. However, in the evolution of studies on nonverbal behaviour as a comprehensive and perhaps an independent discipline, anthropology has played a crucial role. Hall's study of proxemics (See, Chapter-2) has revolutionalized ideas, assumptions and identification of domains of nonverbal behaviour studies. And Hall's contributions come from anthropological bases. If the study of aboriginals' signs is considered the precursor of modern anthropologically-oriented studies of nonverbal behaviour, Hall's contributions have led the anthropologically-oriented nonverbal behaviour studies to explore areas such as proxemics that have become since then bases of ideas and assumptions as well as subject matter of experimental investigations on nonverbal behaviour. Likewise Birdwhistell's works present a formal tool for a description and understanding of nonverbal communication.

Birdwhistell's research strategy (Birdwhistell, 1970) is a clear and illustrious example of the influence of linguistics on the study of nonverbal behaviour. Influenced by developments in American structural linguistics, Birdwhistell makes a very significant contribution, adopting and effectively modifying underlying concepts, methods, and tools of transcription and description of units of language, as propounded and practised in neo-Bloomfieldian structural linguistics. According to Birdwhistell, our communication system is not something we invented but rather something which we internalized in the process of becoming man. Also, research on communication as a systematic and structured organization could not be initiated until we have some idea about the organization of society itself.

Birdwhistell contends that communication is multi-channel. It includes both language and paralanguage; it also includes gesture and kinesics. There is the inter dependence of visible and audible behaviour in the flow of conversation. Meaning includes both the contents of words and other measures. Also, not all shifts of the human body are not of equal importance or significance to the human communicational system. 'As the organs involved in breathing and swallowing are also involved in vocalic communicative behaviour, so also is the activity of the skin, musculature, and skeleton involved in communicative behaviour. Which particular behaviours are of patterned communicative value, and thus abstractable without falsification, can be determined only by the systematic investigation of the behaviour in the communicational context' (Birdwhistell, 1970). So, what Birdwhistell seeks is not idiosyncratic nonverbal behaviour but patterned behaviour within individuals and across individuals and a systematic study of the same.

Birdwhistell believes that the investigation of human communication by means of linguistic and kinesic techniques is desirable and relevant. Body motion is a learned form of communication, which is patterned within a culture and which can be broken down into an ordered system of isolable elements, just as language. Hence, Birdwhistell pursues the research for communication units based upon linguistic and kinesic analysis. The dependency of Birdwhistell's analysis of body motion on structural linguistics is seen throughout his work. He also finds that such a dependency is not without handicap:

'Techniques and theories developed over the last 2000 years of linguistic research are now and may in the future remain quite relevant for

kinesic research and are absolutely necessary to communicational research. However, these techniques are not all immediately and without adaptation transferable to kinesic research. For example, the informant technique, so basic to research on spoken language, is difficult to control in the investigation of kinesic material'.

The influence of linguistics in Birdwhistell's study of kinesic behaviour is clearly seen in his coinage of technical terms for the description of kinesic behaviour, identification of units of kinesic behaviour, correspondence of units between kinesic and linguistic behaviour, method of identification of units, description of units, transcription of units and building up of smaller units into components of larger units. In all these, we find Birdwhistell adopting terms from linguistics. Parallel between linguistic behaviour and kinesic behaviour is rather too manifestly emphasized. This does not mean, however, that Birdwhistell has simply transferred linguistics to the analysis of nonverbal behaviour or that he has nothing new to offer by way of analysis of nonverbal behaviour. Birdwhistell's contribution lies not only in showing the applicability of linguistic analytical tools and methods to kinesic behaviour, but also in providing an indepth study of kinesic behaviour itself in several cultures. He has also demonstrated the parallel characteristics of different modalities of communication. We present a few of his contributions in our chapter on proxemics.

Another significant anthropologically-oriented study of nonverbal behaviour is that of E.T. Hall (1959, 1969 and 1977). While Birdwhistell focuses his attention on the description of kinesic behaviour in formulaic expressions, involving a number of derived technical terms, Hall looks at nonverbal behaviour from a descriptive, ethnographic angle

without much technical terms and formulaic expressions. Hall's approach to study of nonverbal behaviour is decidedly anthropological and very much ethnographic and crosscultural as well as meant to be a guide for a better world of understanding, tolerance and insightful utilization of human resources; it is also linguistically influenced at least in its origins. There is not much of an influence of linguistic terms but there is a sharing of concepts from structural linguistics. However, Hall's work is more an anthropologist's study of nonverbal behaviour. His transcription system does not draw from linguistics as much as the Birdwhistell's system draws from linguistics. Also, Hall's work is more a comparative ethnographic study of nonverbal behaviour whereas Birdwhistell's approach generally restricts itself to the description of nonverbal behaviour, in particular, the kinesic behaviour, of a group without resorting to any comparison of the same with others.

E.T. Hall considers that culture is bio-basic; it is rooted in biological activities. There is an unbroken continuity between the very distant past and the present in the sense that although man is a culture-producing animal at present, there were times when there was no man and no culture. There was infra-culture that preceded culture. This infra-culture became elaborated by man into culture. Hall argues that by going back to infra-culture we could demonstrate the complex biological bases upon which human behaviour has been built at different times in the history of evolution. Infra-culture is behaviour on lower organizational levels that underlie culture. Hall suggests (along with his colleague Linguist Trager) that the number of infra-cultural bases are indeed few and bear little or no apparent relationship to each other on the surface. These are called Primary Message Systems. There are ten systems:

- (1) Interaction,
- (2) Association,
- (3) Subsistence,
- (4) Bisexuality,
- (5) Territoriality,
- (6) Temporality,
- (7) Learning,
- (8) Play,
- (9) Defence, and
- (10) Exploitation (use of materials).

Note that only the first, the primary message system of interaction, involves language. All other systems are nonlinguistic forms of communication. Hall finds that language is the most technical of the message systems. It is to be used as a model for the analysis of others. In other words, Hall implies that the analysis of other forms of communication may follow the procedures of analysis of language. He also emphasizes that in addition to language there are other ways in which man communicates that either reinforce or deny what he has said with words. Nonverbal behaviour is an integral part of culture and it includes not only acts but also material objects having the potential for communication:

'Like a telephone system, any communication system has three aspects: its over-all structure, comparable to the telephone network; its components, comparable to switch boards, wires and telephones; and the message itself, which is carried by the network. Similarly messages can be broken down into three components: sets (like words), isolates (like sounds), and patterns (like grammar or syntax). A breakdown of messages into these components, sets, isolates, and patterns is basic to understanding culture as communication'.

Patterns are implicit cultural rules by which sets

are arranged to give meaning. For example, most people take horses as a single set whereas a trainer of horses examines a number of sets such as height, weight, length of barrel, thickness of chest, depth of chest, configuration of the neck and head, stance, coat conditions, hoofs and gait. These are seen as isolates by laymen but the trainers of horses see them as sets leading on to patterns. Order, selection and congruence characterize the system of communication.

Hall's major investigations centre around man's use of space. Every living thing has physical boundary that separates it from its external environment. That space communicates is well recognized in all societies. Space as an informal cultural system is studied by Hall in all its details. Formal patterning of space has varying degrees of importance and complexity. Use of space is closely linked with status as well. Hall investigates the use of space by humans in relation to distance regulation in animals, crowding and social behaviour in animals, distance receptors such as eyes, ears and nose, immediate receptors such as skin, and muscles, visual space, and use of space in cross-cultural contexts. Hall's investigations also exploit literary works and other arts to an understanding of use of space by individuals, social groups and different language communities. Hall presents his work on use of space for a better understanding of different peoples and their cultures, and for a better world of living and understanding. He finds that literally thousands of our experiences teach us unconsciously that space communicates. A painstaking and laborious process awaits one who wishes to uncover the specific cues. The child who is learning the language cannot distinguish one space category from another by listening to others talk (examples are, He found a place in her heart, He has a place in the mountains,

I am tired of this place, and so on). In spite of this the children *are* able to make the difference between various space terms from the very few cues provided by others: Space as an informal cultural system is different from space as it is technically elaborated by classroom geography and mathematics. Hall seeks to identify what space is in various cultures, how it is interwoven with individual and social behaviour, how space comes to communicate various values and how its use becomes the diagnostic marker of various individual and social values. Hall is the one who systematized the study of space in human interactions and brought out various crucial facts underlying use of space. All this he does taking an interdisciplinary attitude, but all the same the approach is anthropologically-oriented.

It is seen from the study of literature on nonverbal behaviour that modern growth of explicitly stated studies in communicative nonverbal behaviour in communicative interactions, especially in the United States, indeed, is closely linked with the contributions of Trager, Birdwhistell and Hall. Trager's contributions remained an island, continue to be so even now within linguistics, which, while giving a spurt to investigations of language-related disciplines, has somehow continued to treat nonverbal behaviour studies as a peripheral matter. A remarkable fact is that in spite of the very many attractions within his own paradigm, calling him to go beyond language variables and to attack variables that impinge on nonverbal behaviour, the linguist in Trager has not strayed beyond what is strictly and formally linguistic (according to Trager) and relevant to an understanding of nonverbal behaviour. Birdwhistell's investigations continue but not with many adherents, and yet his investigations have a distinct bearing on studies of nonverbal behaviour. Hall's work is

largely absorbed in the current experimental investigations of nonverbal behaviour although it is generally restricted only to some aspects of nonverbal behaviour. Hall's work, unlike those of many other authors, has also caught the imagination of popular science writers leading on to both insightful and not so insightful investigations of nonverbal behaviour, and to speculations. All said and done, anthropologically-oriented approaches to the study of nonverbal behaviour is a continuing and positive aspect of nonverbal behaviour studies and enriches the experimental investigation by providing possible and insightful variables for research and for cross cultural validation of experimental findings.

### **1.3.3. Psychologically-oriented Approaches to the Study of Nonverbal Behaviour**

The psychologically-oriented approaches to the study of nonverbal behaviour are many and they currently dominate the nonverbal communication research scene. Some psychologically-oriented studies focus upon the association of psychological states with nonverbal behaviours. The nonverbal behaviours are taken to be indicative of underlying psychological states. In these studies description of nonverbal behaviour is linked with the description of psychological states of the individuals emitting nonverbal behaviour. In another approach, the studies focus upon observers. The observers are asked to interpret the given nonverbal behaviour in terms of psychological states. These are studies that involve decoding of nonverbal behaviours presented to observers. In encoding studies, different situations, to which corresponding attitudes are explicitly ascribable and clearly linked and elicited, are identified, subjects are placed in these situations and their responses measured. These studies are generally of a role playing type. There is also another approach in which various choices



of nonverbal behaviours are presented to subjects. They are asked to indicate their preference among the given nonverbal behaviours for specific social situations. That is, subjects are asked to choose among forms or combinations of behaviour to communicate various attitudes. Evaluating these approaches, Mehrabian (1972) suggests that whereas encoding methods are appropriate in the beginning stages of communication research, the last mentioned above, which he calls the encoding-decoding method, is appropriate for highly developed phrases of nonverbal behaviour research.

The psychologically-oriented approaches have led to a wider coverage of a variety of nonverbal behaviours. Currently studies of all forms of nonverbal behaviour, such as crowding, space utilization, visual behaviour, facial expressions, abnormal nonverbal behaviour are generally initiated and enriched by the emergence of psychologically-oriented researches. These researches can be traced back to the beginning of modern psychological investigations. After all, retrieval of meanings of human behaviour, and interpretation of human behaviour have been the major purpose of psychology. The specific communicative means of behaviour have always been subject matter of investigation along with the behaviour itself. A salient feature of psychologically-oriented studies of nonverbal behaviour is the exploitation of statistical measures which are generally not resorted to (or even avoided) in the linguistically and anthropologically-oriented studies. Also, in contrast to linguistically and anthropologically-oriented studies, the psychologically-oriented studies of nonverbal behaviour are mainly experimental studies, hardly based exclusively on observations. These studies are generally based on individual psychological factors, rather than on social factors, although the social function is not lost sight of.

Moreover, the feelings, attitudes and evaluations of individuals are the basic referents of nonverbal behaviour in these studies. Confirmation of these behaviours across statistically significant sets of populations leads on to the social basis, and to confirmation and revelation of the social function of thus proven nonverbal behaviours. In addition, these studies also aim at identification of variables of nonverbal behaviours in communicative contexts. For example, some studies focus on status, positiveness, etc.

Generally speaking, the psychologically-oriented studies of nonverbal behaviour are typically articles in research journals based on controlled experiments focusing on limited variables. Validation or rejection of hypotheses, description and explanation of processes involved and an attempt at bringing out a hierarchy of events and variables involved and the hidden processes through an understanding of manifest processes become the focus of these psychologically-oriented studies of nonverbal behaviour. All aspects of nonverbal behaviour are sought to be dealt with under experimental conditions. Accordingly a lot of energy is expended not on identifying facets and aspects of nonverbal behaviour *per se*, but on means to bring out the observed nonverbal behaviour variables in a form suitable for controlled experiments. The significance of these variables are hypothesized beforehand and their validity proved or disproved in the experiments. In the process, however, several new meanings hitherto hidden are identified and a pattern as well as a hierarchy is established. The psychologically-oriented studies of nonverbal behaviour, naturally, are influenced by various models of psychology, particularly of learning. The psychologically-oriented studies of nonverbal behaviour, in a manner of speaking, have become the central part of all nonverbal behaviour studies.

These studies are more in number, cover most of the aspects of nonverbal behaviour, attract more investigators and students, and accommodate findings on nonverbal behaviour worked out in other fields, such as linguistics, anthropology and semiotics.

Since most of the psychologically-oriented studies are independent articles, the overall assumptions of psychologically-oriented nonverbal studies are not generally explicitly stated. Mehrabian (1972) suggests that any attempt at a comprehensive description of findings in the study of nonverbal communication has to include the large numbers of behavioural cues that are studied (e.g., eye contact, distance, leg, and foot movements, facial expressions, voice qualities). Further, the description should also account for the relationships among these cues, the relationships between these and the feelings, attitudes, and personalities of the communicators, and the qualities of the situations in which the communications occur. Note that this scheme is carried out with well designed tools of questionnaires administered orally or visually under appropriate situations for both controlled and experimental groups. Also, appropriate statistical measures are applied to data thus obtained to prove or disprove proposed hypotheses.

#### **1.3.4. Semiotically-oriented Studies of Nonverbal Behaviour**

Where psychologically-oriented studies of nonverbal behaviour restrict themselves to empirical methods and findings, subjecting them to statistical measures and arriving at theoretical models that are generally found in psychology proper, semiotics draws facts from different disciplines and views them from the points of view of sign theory or theories. There is no experiment conducted as

a matter of routine, or as a norm in semiotic investigations. Observation, and reasoning out the inter-relationships between observed facts, identification of patterns, validation of facts based on patterns worked out, and identification of/ or bringing out manifestly the covert processes through proposals as regards patterns and dynamic processes dominate semiotic investigations. There is, indeed, no model building in semiotic investigations in the sense of forming schools and restricting pursuits within the assumptions and postulates of the school. However, there is a body of knowledge contributed by different scholars as regards the nature, function and componential features of signs and their inter-relationships. There are also procedures, generally not stated explicitly but found practised in most of the semiotic investigations.

The semiotically-oriented studies of nonverbal behaviour view it as constituting semiotic systems involving various types of signs. Investigations may be carried out based on models of experimental psychology by individual authors. They may, however, build their theory and explanations in a semiotic fashion, taking the sign values of facts as crucial. The semiotic analysis of nonverbal behaviour is mainly the interpretation and explanation of data collected through other means. This interpretation and explanation, however, leads on to newer insights and identification of hitherto unknown facts. This is, indeed, one of the major strengths and achievements of the semiotic method. The semiotically-oriented studies of nonverbal behaviour, generally speaking, compare and contrast the verbal with the nonverbal behaviours. This comparison and contrast takes on the presentation of features involved in a binary opposition. It is also shown as to how the features balance themselves in a communicative act. In this analysis,

hidden processes and new information and variables are also revealed and added on.

A sign is everything which can be taken as significantly substituting for something else. This something else does not necessarily have to exist or actually be somewhere at the moment in which a sign stands in for it. Saussure (1915) implicitly regarded sign as a communicative device taking place between two human beings intentionally aiming to communicate or to express something. Not all signs are, however, communicative signs. For example, black clouds are a sign of rain, but we do not communicate with it; the clouds do not respond to us. The communicative signs are all artifacts expressed by persons. Unless there is a response to a sign, the sign cannot be interpreted and is not considered a communicative sign. As Cherry (1980) points out, any artifact may possibly be a sign (a scratch on a stone, a printed mark, a sound -- anything), but its signhood arises solely from the observer's assumption that it is a sign: 'Signs are outward happenings and thus are observable, which calls for interpretation, or meaning. Such interpretation is of course mental (not observable) so it is revealed by a *response sign or reply*. All signs require another sign to interpret them; no event can exist as a sign in isolation. Sign can operate only within a working system of signs' (Cherry, 1980). Note that nonverbal behaviour does fall within the system of signs directly and immediately, because nonverbal behaviours are acts of communication.

Peirce (1931-1935) finds sign as something which stands to somebody for something in some respects or capacity. Morris (1938) suggests that something is a sign only because it is interpreted as a sign of something by some interpreter. Eco (1977) defines sign as everything that, on the

grounds of previously established social convention, can be taken as something standing for something else. It has also been defined as a proposition constituted by a valid and revealing connection to its consequent, when this association is culturally recognized and systematically coded.

Half a dozen possible relationships are empirically found to prevail between the signifier and the signified. Signifier is the sound or visual image of a sign. Signified is the concept aspect of a sign. Both the signified and the signifier are dialectically united in the sign. The six species of the sign are as follows (Sebeok, 1976):

- (1) **Signal:** When a sign token mechanically (naturally) or conventionally triggers some reaction on the part of a receiver, it is said to function as a signal. Examples of signals are the exclamation 'go!' or alternatively the discharge of a pistol to start a foot race.
- (2) **Symptom:** A symptom is a compulsive, automatic, nonarbitrary sign, with a natural link between it and what it signifies. For example, bodily symptoms indicate the underlying disease.
- (3) **Icon:** A sign is said to be iconic when there is a topological similarity between it and what it signifies. Examples are pictures, diagrams, etc.
- (4) **Index:** A sign is said to be indexical in so far as it is contiguous with what it signifies. Indexes give physical indication. Examples are compass, needles, weather vanes, footprints and droppings of animals, etc.

- (5) **Symbol:** A sign is said to be a symbol when it does not have similarity or continuity with what it signifies, but a conventional link between them is established. Examples are badges, flags, etc.
- (6) **Name:** A sign which has an extensional class for its designatum is called a name. In accordance with its definition, individuals denoted by a proper name as *Veronica* have no common property attributed to them save the fact that they all answer to *Veronica*.

Note that of the six types of signs listed above, signal, symptom, icon and index fall within nonverbal domain fairly comprehensively and fully. There are elements of symbol as well in nonverbal communication, but these are of a limited quality and quantity. The sign *name* is perhaps nonexistent in nonverbal communication and its nonexistence is probably a distinguishing mark of nonverbal communication. There are also scholars who consider all the six types of signs occurring in nonverbal communication.

Semiotic approaches to the study of nonverbal communication focus more on the dialectics within nonverbal behaviour, on how patterns are formed, and on how the inter-relationships between verbal and nonverbal communication balance themselves in communicative contexts. Coupled with the experimental investigations and findings of psychologically-oriented studies of nonverbal communication, the semiotic approaches to the study of nonverbal communication, indeed, dominate the current assumptions and procedures in studies on nonverbal communication.

### 1.3.5. Indian Studies of Nonverbal Behaviour

Traditional studies of nonverbal behaviour by Indian scholars link the nonverbal behaviour of every day life with those of performing and other aesthetic arts and see these behaviours in terms of their exploitation and function in these arts. In other words, nonverbal behaviours are seen as something which occur in nature, in normal communication and as something not fully at the conscious level. These unconscious acts are studied to reveal their communicative nature and to bring out their functions and patterns. In the process of study, the roots of nonverbal behaviour in language, social acts and biology are emphasized. While every act of nonverbal behaviour has its basis in language, society and biology, their exploitation, use, and the manner of their use is based on the psychological need and state of the individual. The ultimate goal of the study of nonverbal behaviour is their exploitation for effective communication in aesthetic arts, for enhancing the aesthetic value of the communication resorted to. It is then seen as an effective tool for aesthetic communication, providing a variety of techniques and a variety of acts. Because the study of nonverbal behaviour is tied to performance, their physical manifestation in the body and the intent of these manifestations to represent underlying psychological needs and states were emphasized. Since in the view of Indian scholars there is a unity of purpose between poetry and drama, indeed, between all arts, physical manifestation of nonverbal behaviour as representations of underlying psychological needs and states is included in every art, in poetry through appropriate description and metaphor using language, in sculpture through direct, indirect and oblique representation of nonverbal acts as physical manifestations, and in dance combining both poetry and sculpture



adding to the combination the dimension of movement and symbol.

A chief characteristic of Indian studies of nonverbal behaviour is the inclusion of the same in grammar. For example, Indian traditional grammars include not only the description of intonation patterns and their functions within their scope but also other paralanguage features meant for sarcasm, doubt, emphasis, contradiction and specific identities of registers. This is sought to be achieved in two ways -- one, by a direct description and analysis of utterances in terms of their functions in communicative contexts just as in linguistic description which present how segmental sounds and sentence intonations get elliptical in the speech of certain professional groups; secondly, by identifying linguistic mechanisms that carry these nonverbal acts, as in the case of prolonging the pronunciation of consonants for certain effects. Also, Indian traditional grammars have developed so as to include separate chapters on nonverbal behaviours, and their import for poetry and other aesthetic arts. The incorporation here with linguistic facts is sometimes peripheral, at times not relevant, but many a time highly relevant for effective communication, choice of diction and standard speech. Thus, by incorporating chapters on nonverbal manifestations, the grammars focus on the performative factors of speech as well, apart from forming a bridge between language of every day discourse and the language of poetry and aesthetic arts. Then, by the mere inclusion of study of nonverbal acts, the overall goal of grammar and its learning is changed. History has not, however, seen to it that what began originally as a descriptive-cum-prescriptive approach to account for the then prevailing practices grew wide and dynamic enough to be alive to the changes in practices

or to further develop the system of research applicable to matter other than texts.

In the Sanskrit school of grammar, nonverbal behaviour is prominently discussed within *rasa* theory. The theory of *rasa* is intimately connected with the theory of *dhvani*. It forms the most important aesthetic foundation of Sanskrit poetics. It first appears in the dramatic theory of Bharata; originally in connection with drama (explicit nonverbal behaviour), then as one of the essential factors of poetic theory (description of the nonverbal as suggestive of the underlying intent). While the theory of *rasa* itself is older than Bharata (500 B.C.?) the general conditions of the theory as fixed by Bharata continue to be accepted as the basis.

Elevation of nonverbal communication to aesthetic status and the exploitation of modes of nonverbal communication for aesthetic purposes is clearly seen in the concept of *abhinaya* in treatises on drama and dance, in essence on theatrical performance. *Abhinaya*, according to Bharata Muni (*Nāṭyaśāstra* Chapter IV : verse 23, translation as found in Ghosh, 1967) has four kinds of histrionic representation, or shall we say that communication is carried on through four kinds of means in dance and drama. These are *āṅgika* which deals with bodily movements in their subtle intricacies, *vācika* which refers to vocal delivery, *āhārya* is communication via costume and make up and *sāttvika* is communication through the accurate representation of the mental and emotional feelings. All these are physical manifestations. The *āṅgikābhinaya*, which is the visible form of communication through bodily gestures and facial expressions, is certainly primary nonverbal communication mode; there is an insistence on the need for gestures and facial expressions to be in consonance with one another.

Communication through perceptual factors such as costume and make up, and the physical manifestation of mental states and emotional feelings are also emphasized for a successful performance. The role of vocal delivery is not minimized either in the process of communication. The practice of representation in a dramatic performance is two fold: realistic (Natural, popular) *lokadharmi* and conventional (theatrical innovation, and used conventionally) *nāṭyadharmi* (*Nāṭyaśāstra*, Chapter VI and verse 24, as found in the translation of Ghosh, 1967). In other words the communication in aesthetic arts is carried on both by natural (realistic) and conventional signs. Of all the modes of non-verbal communication, gestures and implied meanings in oral delivery have been given a pointed attention in the elucidation and exploitation of nonverbal communication for aesthetic arts. We present the salient features of gestural communication as used in Indian aesthetic arts in Chapter 5, section 5.4.5. As regards implied meanings we may make a brief statement here on the role of suggestion treated in the Dhvani School of Sanskrit scholars, since we do not deal with the Indian position in Chapter 4 which discusses nonverbal characteristics of language use and silence. In course of our discussions on the scope and definition of nonverbal behaviour we suggested that implied meanings, through an absence of linguistic units, are a form of nonverbal expression. In the *dhvani* school of poetics, it is suggestion/implied meaning that is considered the essential characteristic of good poetry. The *dhvani* school, in its analysis of the essentials of poetry, finds that the contents of a good poem may be generally distinguished into two parts. One part is that which is expressed and thus it includes what is given in words; the other part is the content that is not expressed, but must be added to it by the imagination of the reader or the listener. The

unexpressed or the suggested part, which is distinctly linked up with the expressed and which is developed by a peculiar process of suggestion, is taken to be soul or essence of poetry. The suggestive part is something different from the merely metaphorical. The metaphorical or the allegoric, however veiled it may be, is still in a sense expressed and must be taken as such; but the suggestive is always unexpressed and is therefore a source of greater charm through its capacity for concealment; for, this concealment in which consists the essence of art, is in reality no concealment at all. The unexpressed in most cases is a mood or feeling (*rasa*) which is directly inexpressible. The *dhvani* school took up the moods and feelings as an element of the unexpressed and harmonized the idea of *rasa* with *dhvani*. It is suggested that poetry is not the mere clothing of agreeable ideas in agreeable language. In poetry, the feelings and moods also play an important part. The poet awakens in us, through the power of suggestion inherent in words or ideas, the feelings and moods. *Rasa* is brought into consciousness by the power of suggestion inherent in words and their sense. Thus, nonverbal communication in aesthetic arts is viewed in Indian treatises as spectacular presence of physical manifestation and suggestive absence of vocal elements.

In the Dravidian School of Grammar (Tolkāppiyam of pre-Christian era, 300 B.C.?) also, description and study of nonverbal behaviour is an integral part of grammar, poetry and drama. Nonverbal communication is seen anchored on to physical (and physiological) manifestations. The term used to refer to the nonverbal itself clearly reveals that the idea of nonverbal communication is grounded in physical and physiological manifestations. **meyppātu** (**mey** meaning body and **pātu** meaning the acts based on body or expressed through bodily

acts) is the term used to refer to those manifestations which appear on the body of an individual as a sign of what goes on inside the mind. Those manifestations for whose understanding there need be no deliberation and whose occurrence is revealed (in poetry and drama) in a natural manner through the bodily acts form the scope of the study of nonverbal behaviour. Tolkāppiyam presents eight types of **meyppātu**. All of these are grounded in bodily manifestations. Each one of these eight manifestations is related to four moods or feelings. These moods or feelings may be either causative or consequential. In other words, the major eight manifestations are related to 32 different types of moods/feelings; the latter could be either the causative mechanisms or consequential results. Commentators have differed among themselves as to the content of 32 items, but not on the essentiality of body acts for nonverbal communication, it being the natural, external manifestation of internal states, and its retrievability and comprehension without deliberation. It is also considered an essential component of poetry. The grammar prescribes that the poets are not to refer to the feelings as such experienced by the individuals but only to the external manifestations on the body. By reference to the bodily manifestations, and with the help of such references, the reader retrieves the causative and consequential contexts of the poem, its intent and so on. Because of this device, suggestion reigns supreme in poetry. The injunction that the poet is not to refer directly to the feelings of characters but only to bodily manifestations, while recognizing the communicative function of bodily manifestations, aims at making a poem more suggestive and open for varied interpretations and enjoyment. The nonverbal mode is considered a tool to express the internal states. The scheme also includes certain verbal acts as part of the nonverbal. 'We see that even speeches

by the heroine and others have been included as forming part of the (nonverbal) group. If the speeches are mere expressions of inner thoughts they are speeches. But if they are emotional outbursts of inner commotion and feeling they are certainly **meyppāṭu**. If we closely scrutinize the list of **meyppāṭus** in Tolkāppiyam we will see that only such emotional expressions have been listed under **meyppāṭu**' (Sundaramurthy, 1974). Suggestive power includes under the rubric of the nonverbal whatever has been left out, not said, in the verbal act but is communicated because of their being left out, not said, in the verbal act. Another dimension included is that the nonverbal also includes the verbal if the latter is one of emotional outcome. Note that these view points are also currently held in modern studies of nonverbal behaviour (See Mehrabian, 1972). Also note that in traditional Indian treatises the nonverbal exploits both aural and vision media. The same classification of the nonverbal we find in the traditional Indian grammars is also found in several modern studies of nonverbal behaviour.

### 1.3.6. Literature and Text-oriented Studies of Nonverbal Behaviour

Creative artists provide insights into human mind, human behaviour, and individual and social thought and behaviour. Both intuitive observations and empirical experimentations of nonverbal behaviour benefit a lot from absorbing what the creative artists have to say on various facets of nonverbal communication and what they have identified and exploited as regards nonverbal behaviour and communication in their works. Creative artists are similar to the investigators who prefer to use mainly their own intuitive analysis, but with one difference. The investigators may tend to look at an object and/or a phenomenon with their

own set of rules, ideas and concepts whereas the creative artists may look at the same object and/or phenomenon from so many different angles, rather get into the soul and body of their characters, that a comprehensive picture is provided by them. Note, however, that such a picture is at times quite far from reality.

In literature, the nonverbal behaviour modes depicted by authors may illumine the content or be itself the content of the literary work. The texts provide records of nonverbal communication of the past as well as of the present. They may be in codified ritual texts, in didactic works, in religious discourses, or in literary or folk episodes handed down from generation to generation. These provide a clue to the belief system of the societies, provide the world view of the society whose behaviour it regulates or had regulated. Textual analysis gives us rare as well as frequent practices, indicates the significance of nonverbal communication across several social and spatio-temporal levels. The past is linked with the present in the textual analysis. The present is more clearly revealed in the past and its understanding. Textual analysis requires several tools -- semantic analysis, morphological and syntactic description, correct identification and interpretation of the act described in the text and establishment of linkage between items across texts. Assessment of correctness of interpretation requires several measures such as identification of roots of words, morphological patterns, syntactic comparison and establishment of patterns. The most important function of analysis of nonverbal behaviour as found in texts is the understanding of current behaviour that is narrated.

Textual analysis opens up a mine of information. In literary texts, such as novels, story is carried

on and established by what the characters say (linguistic behaviour) and by a description of the nonverbal act indulged in by the characters. Punctuation marks are but only one device which give focus to some paralinguistic features. Other nonverbal communicative acts are revealed in terms of proxemic behaviour, expressions via eye and face, kinesics, use of implied meanings and so on. A large part of the author's narrative, without any one being aware of it, is aimed at the description of nonverbal communicative acts of the characters. Thus, because of infinite possibilities for human stories and acts, and because of insightful observations and artistry of the authors, literary texts also become a mine of information for those who propose to study nonverbal communicative acts.

The paralinguistic characteristics are conveyed by the authors in two ways -- through the use of punctuation marks using both conventional ones and those specifically created ones by the authors themselves. The punctuation marks are of a limited quantity. Not many have been really added to the set available, and in Indian languages they were largely adaptations from European languages. Repetition of a punctuation mark, reversal of its placements (in contrast to normal practice), omission of a punctuation mark where it would be generally expected to be used, some peculiar devices either specially defined or brought from a stock of symbols used elsewhere for other purposes but now sought to be used as a punctuation mark, tinkering with the spelling are some of the initiatives one notices in this area. Another device resorted to, to give an aura of the paralinguistic characteristics, is their description sometimes through metaphorical transfer, sometimes through foregrounding processes (foregrounding refers to the stimulus which is not culturally expected in a social situation; when foregrounding



of something takes place, it provokes special attention; foregrounding is generally an intentional distortion of the linguistic), many a time by impregnating an ordinary word with potent meanings.

Poyotos (1977) suggests that it is the depiction of the linguistic-paralinguistic-kinetic structure of the people involved in the story that conveys a feeling of authenticity and becomes a vehicle to transfer what the author has created to the mind of the reader. Nonverbal communication, in the hands of authors, performs six functions, according to Poyotos. Nonverbal communication brings about physical realism, distorting realism, individualizing realism, psychological realism, interactive realism and documentary realism in literary texts. Physical realism conveys the sensorial perception of people's behaviour. Physical realism is differentiated from psychological realism. In psychological realism, the narration of the author delves into the subtle inner reactions, which may be both body and purely mind-based. In distorting realism, the literary, or artistic, expressionistic rendering of physico-psychological reality is 'meant to ridicule, to offer a caricature of reality, or, truly to show what the eyes cannot see'. Individualizing realism is shown in 'the conscious effort to differentiate the characters as to their physical and psychological characteristics, by means of their verbal repertoires and, in the best cases, by their nonverbal ones as well'. Poyotos sees interactive realism employed by authors as 'a thoughtful depiction of the mechanism of conversation mainly in face to face encounters'. The documentary realism is historical realism and is a consequence of physical realism as regards depiction of nonverbal behaviour. Ritualistic and etiquette behaviours, occupational activities, general task-performing activities, and activities

conditioned by clothes, hairdo, furniture, etc., are part of this realism.

Poyotos also identifies four ways by which the authors usually transmit the nonverbal behaviours in the narrative text. One way is by describing the behaviour and explaining its meanings. This is plain and has been exploited for a long time. Although this method is plain, it, in no way, diminishes the story telling so long as the artistry and content of the story are superb and associated with some greatly influential thoughts. Also note that this plain way of presenting nonverbal behaviours may be dictated by the current practices in story telling and could also be a stylistic marker of individual authors. Another process of transmitting nonverbal behaviour is by describing the behaviour without explaining the meaning. This is generally meant for a contemporary audience familiar with the meanings of the nonverbal behaviour described. Also note that in contemporary contexts, an obtuse nonverbal behaviour when described, but without its meanings explained, becomes a technique of narration, leaving more to the personal abilities and sensitivities of readers to retrieve the meanings. A third way is by explaining the meaning without describing the nonverbal behaviour. This meaning may or may not be fully understood by the reader in the same manner it is meant by the author. Another method of presenting nonverbal behaviour in the narrative text is 'by providing a verbal expression always concurrent with the nonverbal one, which is important, but not referred to at all'.

Poyotos also finds that the nonverbal repertoires of the characters play four definite and important functions in narrative technique. These are initial definition of the character, progressive definition, subsequent identification and recurrent identification

of characters. Initial definition of the character is done by means of one or more idiosyncratic linguistic, paralinguistic and/or kinesic features. These features include use of verbal expletives, personal choice of words, a particular tone of voice in certain situations, a gesture, a socially but individually conditioned way of greeting others, other manners and mannerisms, a typical posture which we can identify as a recurrent behaviour, etc. Progressive definition of characters through nonverbal behaviour is by means of adding gradually new features as the story proceeds. 'A feature adds to another feature previously observed, complements it, builds up the physical as well as the psychological or cultural portrait, and assists the reader in the progressive total appreciation of the narration'. Subsequent identification of characters through nonverbal behaviour is by means of repetition for the first time of a feature or features. Such a repetition immediately not only brings back the image but also does it at a point in the story when the readers may confuse between characters or may have forgotten the characters' external personalities. Repetition may focus upon verbal expletives, gestures, peculiar tones of voice, etc. Finally, the recurrent identification of characters through nonverbal behaviour is by means of a known feature repeated as many times as necessary at varying intervals in the narration.

Thus, in a narrative text, the depiction of nonverbal behaviour has several functions to perform -- ^ it carries the burden of the story; it complements what the characters say; without such a complementation a comprehensive locale and content cannot be built for the story to proceed further and be comprehended by the readers. The depiction of nonverbal behaviour also provides various types of realism to the story, while providing at the same time various means at the disposal

of the author -- various processes to define the characters and to retain and recall such definitions to meet the demands of the story as well as the artistry.

Both textual analysis and the analysis of literary works provide us with insightful identification of the types, function and defining characteristics of nonverbal communicative acts. Empirically-oriented experimental investigations of nonverbal communicative acts can draw from this mine of information so as to fashion the acts for controlled experimental studies.

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