

CHAPTER 6

NONVERBAL COMMUNICATION AND ABNORMALITY

6.1. Abnormality

In this chapter, we present salient aspects of nonverbal communication by (i) Schizophrenics, (ii) Autistic individuals, (iii) Aphasics, (iv) Mentally retarded individuals, and (v) Psychiatrically disordered people. Thus, our coverage of abnormality includes the phenomena of schizophrenia, autism, aphasia, mental retardation and psychiatric disorders. Since our focus is on communication, we restrict ourselves to a description of verbal and nonverbal aspects and their inter-relationships, and not on the factors that cause these abnormalities.

The speech of the schizophrenic is difficult to comprehend even though in it proper words are used, well formed sentences are generally produced and appropriate intonations are also maintained. The difficulty arises because of loose associations between words used, and because there is some illogicality in the way ideas are connected. A new idea is formed and expressed in a manner that is distinctly different from the manner new ideas are produced through logically connected meaningful words in normal language. There are also abrupt beginnings, abrupt endings and interruptions apart from long silences and rhyming of words without any purpose from the

point of view of the normals. The stream of thought as revealed in the language expressions of the schizophrenics is one of incoherence and irrelevance. The schizophrenics, in spite of their ability to speak well and produce sentences at a stretch, differ from the normals markedly in what they talk about and how they talk about it. Schizophrenics may not be able to use the context to interpret the discourse and they are also unable to use the structural characteristics of language in correctly comprehending messages communicated by others. The features of cohesion in speech uttered to them is missed by them and, in their own speech, meaning cohesion and coherence are missing. The lack of connection between ideas in the utterances of the schizophrenics is of six categories (Rochester and Martin, 1979): mild shift in thought within a sentence, slight shift from one sentence to next within the same topic, drastic shift from one sentence to next within the same topic, mild shift from one sentence to next under a different topic, drastic shift from one sentence to next under a different topic and drastic shift within a sentence. Schizophrenic speakers appear to refer to the immediate situation rather than to abstract aspects of the situation. Schizophrenics ignore contexts of lexical items, but comprehend individual lexical items. That is, they focus more on lexical meanings than on the sentential concatenation of them as parts. The sound character of individual words influences the verbal utterances and lexical choice. Conjunctive relation between sentences is not controlled.

Autism is described in several ways -- as the quality of psychotic ideation in which the patient referred everything in the world to himself, a typical ego development, a disturbance of mobility, a disturbance of language and as a disturbance of personality development with inability to relate

to others. Of the several defining characteristics of autism, the linguistic features or the limits to linguistic capacity exhibited by the child, wherever the child has language, should be recognised as very important for the characterization of autism. Among the autistic children, relatively a minority alone has verbal communication. Of this relatively few, only a very small number has expressive and auditory speech. There appears to be a progression from primitive oral speech of 'mumbling' to clear vocalizations, from primitive grammatical structures to complex and elaborate grammatical structures, across the members of the autistic population. In other words, the nature of grammatical structure and the clarity of vocal expression differs from one autistic to the other. More often there is immediate and/or delayed echolalia (parroting of words and phrases not understood, and the parroting of stored words and phrases). There is a process of reversal of pronouns, generally between *you* and *I* and there is the process of referring to the self in third person. There are also other uses of words with peculiar references and connotations peculiar to the autistic child but these references and connotations need not be consistently used. Extreme literalness, comprehension difficulties, limited vocabulary, inappropriate and non-communicative language, mutism, neologisms, articulation difficulties, lack of questions and informative statements, frequent use of imperatives, limited output, little comprehension, little use of gestures, limited syntagmatic abilities (concatenation of one word with another in an appropriate manner), reduced sentence length and deviations in intonations are other major characteristics of the autistic language. Every truly autistic, or rather centrally autistic, child is known to fall short of a complete mastery of communicative skills at some level or the other. The autistic child has difficulties with the use of

past tense, and, with remote reference. Only the 'here and now' expressions dominate speech.

Aphasia is a consequence of brain injury, and it is found in those who have already acquired speech. In essence, aphasia is an impairment of the ability to use language. The impairment may be in one or more of the four modalities of language, namely, listening, speaking, reading and writing. It may also affect one or more basic components of language, namely, phonology, lexicon, syntax and semantics. Many and varied classifications of aphasia are available. In *pragmatic* aphasia, the patient cannot find language to give meaning to any stimulus, irrespective of the modality. In *semantic* aphasia, there is inability to select words to express meaning. In *syntactic* aphasia, the patient has difficulty in maintaining appropriate syntactic order. In *jargon* aphasia there is failure to understand speech and to speak intelligibly. In *global* aphasia there is complete loss of language. In another classification of aphasia, that of Jakobson and Luria (Jakobson, 1971), six types of aphasic impairments are identified:

1) Efferent aphasia in which words are preserved but the patient has a lot of difficulty in the construction of sentences, the words are generally independent of contexts and are mainly substantive concrete nouns, purely grammatical words disappear;

2) Sensory aphasia in which preservation of independent words becomes the major difficulty, the sentence pattern is preserved and the phonological combinations are also preserved. While in the efferent aphasia combination is deficiently found, in the sensory aphasia selection of words is deficiently found. The combination disturbances hamper the construction of a context, the encoding activity, as sentence construction is seriously impaired. The selection disturbances hamper the analysis of a context into its constituents, as sentence 'wholes' are retained but a

further breakdown into constituent elements is not achieved;

3) Dynamic aphasia in which the aphasic has difficulty in combining sentences, the dynamic aphasic has a lot of difficulty in constructing discourses and to build a monologue, the dynamic aphasic is unable to switch from one system of signs to another, such as answering a verbal order by a prescribed gesture;

4) Semantic aphasia in which the aphasic cannot grasp the difference between phrases, such as **wife's brother** and **brother's wife**, the word is uniform and inflexible;

5) Afferent or kinesthetic aphasia in which there is a disruption of the capacity for combination, a combinatory disruption different from the one found in efferent aphasia, the afferent aphasic makes a merger of phonemics, not a mere assimilation; and

6) Amnesic aphasia in which the patient is unable to make an appropriate iterative selection, the patient points correctly to his eye when asked to do so; when asked to point out his eye and ear, he points correctly to the first item and either omits the second or shows a wrong organ; when asked to point out eye, ear and nose in a sequence he is simply perplexed.

The mentally retarded individuals have retarded intellectual development and inappropriate behaviours. The mentally retarded individuals have impairments in maturation, learning and social adjustment. The mental retardates face the problem of concept attainment as well as language acquisition. While in the beginning, progress of language and concept formation may parallel the progress of their physical maturation, soon it will be seen that the conceptual ability and language skill are much less than the rate, quality and quantity of the same in normal children. They generally move through the regular stages of language acquisition and conceptual

attainment, but at a very slow rate. Whatever they have, by this slower rate, by adolescence will be their achievement all through later life. If they have reached by adolescence a mental age of 4 or 5 years they will have reasonably normal language. If they could reach only an age of 2 years or so, then the quality of their language and concept formation will be poor. Note also that the ability of a mental retardate to construct a fully grammatical sentence does not mean that he can speak or understand sentences fully. Since general intelligence is low, comprehension of sentences is also found low. Disorders of articulation and voice problems are easily found in the mental retardates. The language of the mentally retarded child is an incomplete language. The mentally retarded child has difficulty in providing names for categories which he has used previously. Speech defects are also commonly found. In the severely retarded there may be total absence of language even. The delay in speech development is already referred to above. The quality of language in terms of clarity of pronunciation, breath group pauses, intonations, etc., is also poor. There is less abstraction of ideas and this gets reflected in the manner objects are identified. The sentences produced are much shorter. There is also failure to go beyond the use of stereotyped patterns of speech, that is, a few fixed sentences are used for expressing needs in fixed patterns, just as second language learner does when he begins to learn the second language. The retarded children are unable to use language for further learning. These children have difficulty in matching verbs with their subjects. There is also the phenomenon of increase in verbs, pronouns and prepositions, but a decrease in nouns with the increase in mental age. Some retardates are given to repetition of vocabulary also. A very important characteristic of mental retardation is the incapacity of the

patient to retain what has been learned. The problem of storage and retrieval seriously hampers language acquisition as well as intellectual development, generally speaking. In essence, the mentally retarded have poor auditory memory, short attention span, deficient grammar and poor vocabulary and content, perseverance in oral speech, minimal imaginative and non-present time references and pursuits, inability to transfer, abstract and generalise meanings, absence of self-criticism, poor evaluation and organization of perceptual clues, and frustration in communication and withdrawal. There are inappropriate social responses and dependence on self-stimulation.

Under psychiatric disorders we consider neurotic disorders, character disorders and psychosomatic disorders: Neurotic disorders are generally called emotional disturbances. The major types of these disturbances are anxiety reaction, conversion reaction, dissociative reaction, phobic reaction, obsessive compulsive reaction, and depressive reaction. Anxiety reaction is revealed in direct expressions of anxiety, fear, sweating, etc. It is also shown by the tension, poor concentration, irritability, etc. In essence, anxiety reaction shows the ego's failure to cope up with the exigencies. Direct expressions of anxiety may be of a repetitive nature, imaginary fabrication and may be couched in a language of questions, with no impact of answers obtained on the language and on the non-verbal acts. In conversion reaction, stuttering is commonly attested. Hesitation phenomena are also common. Conversion reactions are transfer of psychological conflicts into body language. Thus, nonverbal communicative acts dominate, with voice subdued, faltering or totally lost. In dissociative reaction there is compartmentalization of experience. With changing roles, the style of language also changes. Phobic reaction is fear

even of things not realistically dangerous. Phobic reaction engenders avoidance, avoidance of speech itself. In obsessive-compulsive reaction, one is unable to give up the recent past. Character disorders are personality disorders. Inadequate behaviour marks these disorders. Inadequacy may be found in personality pattern, that is, there may be inadequacy in intellectual, emotional and social responses. There may be also personality trait disturbance as well as sociopathic personality disturbance. The psychosomatic disorders may cover reactions, such as those of skin and nervous system, endocrinal and cardiovascular systems. Contact ulcer, duodenal ulcer, gastrointestinal and respiratory reactions also are included here. Vocal tracts are affected and hence voice is affected. Psychosomatic disorders also influence style of language use.

What is normality and what is abnormality can be defined only in terms of socio-cultural ethos of the individuals. A proper understanding of the socialization processes, social and cultural values and the exigencies of the situation all go into the determination of abnormality and whether a particular behaviour in a particular context is to be considered disordered or in order. Generally speaking, both normal and 'abnormal' elements reside within every individual all the time, and work in complementary roles in a 'normal' individual. Some major variables that are usually taken into consideration to decide on the normality and abnormality status of individuals include social behaviour, physical activity, use of language, perceptual factors, such as dresses, reasoning within the cultural ethos, performance of anticipatory acts, and mental and physical condition. Family history and neurophysiological information are also used. Poor intelligence including IQ assessments and poor academic achievements are some

other factors that are considered to decide on the abnormality status. An unexplained inability to learn, an inability to behave in a level that should be in consonance with the developmental status (physical, cognitive and linguistic attainments appropriate for the age group), difficulty in maintaining confidence and belief in one's self and in overcoming feelings of sadness, inability to cope up with stressful situations also go into the decision to call a behaviour as abnormal. Very often medical status of the individual and the medical decision on the nature of behaviour of the individual influence the decision as to whether an individual's behaviour is considered normal or abnormal. In contrast, more often than not, normal behaviour is defined as what the majority does. What is common is taken to be normal. Adjustment to social norms becomes a major criterion of normality, although because of fear and other psychiatric reasons, the most abnormal person may seem to adjust best (acquiescence) with the majority. Generally speaking, normality or abnormality is to be decided on the basis of many factors that have their roots in social acts, individual psychology, and physical and physiological conditions, age, relativity of deviancy and individual styles.

What happens to nonverbal communication in abnormality conditions? Does it become abnormal too or is it retained with its function to communicate? Is its complementary role with oral communication retained or affected? What happens to it when language is lost or when its relevance is lost? In earlier chapters we have pointed out that in its ontogeny nonverbal communication comes into existence in a child much before language sets in; it coexists with language and succeeds it in cases where language is lost. In its phylogeny, some form of nonverbal communication can be found in all beings and there is a belief that verbal

communication might have originated from the earlier nonverbal communication modes. Whether one fully subscribes to the last mentioned view or not one cannot deny the essentiality of the complementary role of nonverbal communication for the conduct of communication, if not the conduct of verbal communication itself. This essentiality is easily demonstrated if we analyze as to what happens to verbal language and non-verbal communication in abnormality conditions.

There have been always attempts to explain the language disorders and thought disorders based on a comparison of primate behaviour and the behaviour of the primitive societies. While the comparison with the primitive societies and attempts to establish a rough equation at the levels of animistic, anthropomorphic, logolatric, prelogical use of language with that of nonliterate tribes and children has been shown to be utterly misguided, by several scholars including L. Bloomfield, E. Sapir and others, comparison with the primates, their behaviour, and their modes of communication continue to provide a useful backdrop for the study of language and language disorders. Equation between the two is rightly frowned upon, but an understanding of the former helps towards an understanding of the limits to language capacity found in individuals afflicted by these disorders. It also helps us to understand the richness of the language capacity itself in human individuals. Information from the primate communication systems have been utilized in the study of normal language itself -- to highlight in linguistics the uniqueness of human language capacity. Such a comparison has also been made in the study of language disorders. There is a curious similarity between researches on animal communication, in particular, between the learning tasks provided to chimpanzees, and the learning tasks provided

to autistic children in the tests of mastery of communicative skills. As majority of the autistic children have deficient or inadequate speech and most of them no speech at all, researchers have tended to expose the autistic children to a mastery of nonverbal communicative tasks in the sense that these tasks do not insist upon the manifestation of speech but on the manifestation of an ability to recognize and express paradigmatic and syntagmatic relations, and on the comprehension and use of novel, yet appropriate, communicative tasks. Both the autistic children and the chimpanzees investigated did not show recognition of any order in the relations between the signs learned by them. They have not demonstrated their capacity to discriminate with respect to the order of elements in a situation. Further, they have not demonstrated their capacity for displaced communication, semanticity, productivity and novelty. Immediacy reigns supreme and abstraction and generalization are of a limited scope. The autistic, the centrally located autistic child, fails to master any of the more important and crucial features of human communicative language. While he acquires one crucial feature, he fails to acquire another which also is part of the set of features that comprise human communicative language. In essence, he is predicted as suffering from a defect that is an essential feature of his very being. One should view this ultimate inability to acquire and use normal communicative language even through and in nonverbal aspects as the essential defining feature of acute autism, the centrally located autism in a wide spectrum of autistic manifestations. Every truly autistic, or rather centrally autistic, child is known to fall short of a complete mastery of communicative skills, at some level or other.

We have elsewhere suggested (Thirumalai

and Subramanyaiah, 1980) that the ultimate inability of the autistic child to acquire and use communicative language so well revealed through the impasses (Churchill, 1978) is symptomatic of his sub-human status as far as language is concerned. We have also claimed that the uniqueness of language found in each autistic child and the far-ranging varieties of the autistic language are the "relics" of the arduous process of evolution the *homo sapiens* had to undergo before they finally attained the propensity for the communicative language of the present stage. Since we have evidence that nonverbal behaviour is a developmentally earlier and more primitive form of communication which man shares with animals and since we have also evidence that nonverbal behaviours reflect very basic social orientations that are correlates of major categories in the cognition of social environments, we have to revise our position suitably.

A normal human being has both modes of communication -- verbal and nonverbal, properly mixed, one supporting the other. In the centrally autistic individual, not only this supportive function is lost, but also both the modes of communication are disordered/disoriented. Thirdly, in place of a balance between the two, in the centrally autistic individual we find divisibility of functions which should not have been divided but kept as single wholes for proper functioning of the communication. The unified signs are split and this appears to be the basis of the disorder. In other words, the language of the autistic provides ample evidence that communication process as a sign in humans has both verbal and nonverbal characteristics unified cohesively in it. A communication process may be considered normal so long as these two values are unified. A communication process is considered abnormal and disordered once this link between the verbal and the nonverbal is broken.

The loss of this link leads to further consequences. The manner by which the loss of this link is carried out in disordered individuals gives us a framework to classify and subclassify these disorders under various categories, such as autism, schizophrenia and others.

As regards the autistic at the nonverbal behaviour level, the centrally autistic individual is concerned only with his own self. At the verbal level, however, the autistic recognizes only the other. The reversal of pronouns so frequent and so characteristic of the autistic clearly indicates that at the verbal level the autistic has difficulty in mastering the use of first person pronouns (difficulty with own self) but no difficulty with the third person pronouns (easy recognition of the other). Where there is the provision of exclusive and inclusive pronouns in the plural slot of the first person, there is utter confusion since, both the forms, in one way or the other, identify the self with the other. Language is the institution where the antithetical positions of self and the other are synthesized. This synthesis is conspicuous by its absence in the language of the autistic. The unified function of the communicative sign shared by both verbal and nonverbal facets of the sign is split, with one part of it being assigned to the nonverbal and the other to the verbal without maintaining the link between the two. The individual is called autistic, at this level, only because of the former -- his exclusive concern with his own self in the nonverbal context -- rather than for his concern with *the other* in the verbal context.

The autistic recognizes only *here and now* in verbal behaviour. He is only partially successful with the *here and now* in his nonverbal behaviour. We call him autistic because of his self tying down to the *here and now* in his verbal behaviour and

not for his partial success with the same in his nonverbal behaviour.

The autistic is unable to master the past (tense) at all in his verbal domain, whereas he exhibits some partial memory trace in his nonverbal behaviour. Likewise, he is unable to master the *there and the future* in his verbal domain. He is partially successful with the *there and the future* in his nonverbal domain. He occasionally points out. He asks for things occasionally. He is unable to focus on this around. In other words, a dichotomy between the present and the nonpresent is maintained. At the verbal language level it is the present that is retained. At the nonverbal level it is the nonpresent that is retained.

The autistic has partial combining ability in nonverbal behaviour, but has no combining ability in verbal behaviour. The centrally autistic individual is able to proceed at least partially from one activity to another, whereas he has difficulty in combining sentences and/or producing a cohesive text of sentences. While the autistic engages himself in incessant activity, all by himself, he does not even recognise any activity around him.

The bases of verbal behaviour are found in nonverbal behaviour. There is a close link, a nexus between the two. The former is the extension of the latter. Autism as a disorder represents a break in the link between nonverbal and verbal language in humans. Furthermore, autism is to be viewed as a disorder not only in the verbal level but also in the nonverbal level.

We propose that in the very same manner the nature of the transmutation processes between the verbal and nonverbal modes would underlie specific form of disorders of communication. However research in these lines are yet to begin in any

substantive manner. In the subsequent sections, we take up, one by one, the aspects of nonverbal communication and show how these are found in the abnormalities listed for consideration. Thus we discuss speech and paralinguistic disturbances, proxemic behaviour in the abnormality, visual behaviour in the abnormality, face and abnormality, and kinesics of the abnormality.

6.2. Speech and Paralinguistic Disturbances in Abnormality

Speech disturbances in normals are revealed through the problems they have with the structural properties of sentences and words, lack of coordination between gestures, facial expressions, voice modulation and other language aspects, and by their inability to properly perceive the implicit communications. These disturbances do communicate the condition of the individuals, their social status, their motives, etc. In the case of the abnormality, specific speech disturbances become diagnostic markers of the disorder. We have earlier considered the manner in which language is used, the implicit communication of content and intent via language and the paralinguistic features as part of nonverbal communication in normals. In the case of the abnormality also, language use may be considered as forming part of nonverbal communication in the sense that the language use in the abnormality communicates implicitly the nature of the disorder.

Speech disturbances have two functions in the abnormality. Both are diagnostic functions. The first function of the speech disturbance is to indicate that the subjects are disordered in some sense. Speech disturbances when occurring in a pervasive manner in individuals and in great frequency leading on to stoppage or extensive

interruption of communication processes define the people involved as disordered. Once speech disturbances are confirmed occurring in a pervasive manner in an individual, that individual may be considered as disordered in some sense. Here, the failure to respond, silence, is also to be considered a speech disturbance. The second function of speech disturbances is to indicate the nature of disorder, to place the disordered individual in a specific spectrum of disorders, to label him/her an autistic, a schizophrenic, an aphasic, etc. That is, the nature of speech disturbances is seen to vary from one disorder to another and as such the speech disorders are diagnostic markers of various types of disorders. Note that in the description given above, we do not make a distinction between language and speech and that in fact we use the term speech synonymous with language. Beyond speech, the nature of relationship, rather the link between the verbal and the nonverbal communication processes is a sure indication as to whether an individual is disordered or not. The speech disorders, for that matter, disturbance in any plane, in the normals, take on a social function, are governed by social behaviour and are interpreted as having certain specific meanings, both by the individual exhibiting the disturbances and those who observe the disturbances in the individuals. In the case of the abnormals, exhibition of such disturbances is not interpreted occurring within the ambit of social discourse with fixed social meanings, and as a transient phase in the individual who exhibits it or is forced to exhibit it voluntarily or involuntarily. The essential fact is that there are varying degrees of disturbances and that for each type of disturbance specific characteristics of speech and language are affected. Also there are varying degrees of use of language as such, uses of language for implicit communication (which we have treated as falling within the

nonverbal domain) and the use of nonverbal communication processes themselves. Under the use of language we include the manipulation of language skills -- listening, speaking, reading and writing as well as the manipulation of various manifest linguistic structures -- phonological, syntactic and semantic. Each disorder listed above has its own language characteristics and these language characteristics have the diagnostic function to identify and specify the disorder. This is not to say that one disorder is characterized as definitively distinct from another in terms of language use and that they do not share certain features of language use/nonverbal communication processes. In fact, this area in recent times has received some impetus from the developments in theoretical linguistics and is thus being explored only recently in greater depth, the results clearly revealing the specific linguistic features and the overlapping areas. The implicit communication processes have not yet received much attention. And as such what is presented below is generally concentrating upon the manipulation of language skills and various linguistic structures -- phonological, syntactic and semantic -- which perform the diagnostic function.

Speech disturbances in individuals who have normal language speech (whether the individuals are normal or disordered) communicate to the listener the anxiety status of the individual. Intrusive sounds, in particular laughs, sighs, and hiccups, indicate stress. Sweat also increases in stressful situations. Articulation errors also show anxiety. While speech disruptions indicate anxiety, there are situations in which verbal productivity, and increased rate of production of utterances also indicate anxiety. Ambiguity in speech is also related to anxiety. More difficult situations, in the sense of embarrassment and ambiguity,

also lead to disturbances. Dysfluency may be caused also by the status of individuals who elicit utterances. For showing deference and respect, dysfluency may be caused. There may be more dysfluency in certain domains such as family matters. If the situation is understood as one of distrust, dysfluency in speech may follow. Deceitfulness also leads to dysfluency. In most cases, dysfluency in speech lowers the credibility of speakers and listeners may form a low opinion of the abilities of the speakers.

We have already suggested that the nature of disturbance in language use marks the nature of disorder. Difficulty with the use of pronouns marks autism, use of language inappropriate to context marks schizophrenia, inability to use complex structures identifies mental retardation and division of language use into constituent modalities and use of one modality but failure in another modality distinguishes aphasia, and use of structures in a faulty manner transitorily and ability for self correction marks psychiatric disorders. Specially, under the category of paralinguistic usage, both psychiatric disorders and those forms of aphasia wherein vocal speech and concatenation are not affected fall under one class, more or less of proper use, whereas all the other disorders under consideration here fall under a category in which paralinguistic utterances are seriously impaired. Neither intonational patterns nor pauses within sentences nor the use of paralinguistic features for implicit communication are identified in the second category. For the entire group we may posit a hierarchy in the following order of ascending difficulty: intonations, meaningful juncture within sentences and implicit communication. As regards comprehension on the part of the patients of the second class of disorders, the same seems to be maintained. Yet the patients are liable

not to perform well in comprehension tasks at all if facial expressions on the part of the speakers are marked.

6.3. Proxemics in Abnormality

The use of personal space in abnormality is different in many cases from the use of personal space by normals. For example, the autistic spends most of his time away from other humans including members of the immediate family. He prefers a corner away from others and objects, and engages himself in hyperactivity ignoring/not recognizing the presence of others. The psychiatrically disordered people wish to be away from others wherever and whenever possible. When they are with others, they withdraw themselves internally. The schizophrenic shows fear in the presence of others and withdraws to a corner. He also makes flight reactions and when he is of a violent type, the schizophrenic makes others to run away from him so that he is able to maintain a greater personal space between him and others. The mentally retarded does not recognize personal space at all. Significant reduction in interpersonal distances both in the autistic child and the schizophrenic shows a recovery process from illness. The same holds true also for the psychiatrically disordered people. While in most cases of the disorders listed above, the scheme of maintaining personal distances between the patient and others around is maintained also for their distance from the objects, in some cases one finds that the distance between objects and patients is not that much avoided. In the case of the autistic, it is the hyperactivity that makes him break the closeness between him and the object. He is close to the object, the distance between him and the object is reduced and yet he will switch from one object to another frequently because of the instigating

influence of hyperactivity. In the case of humans, the autistic generally avoids others, perhaps because the humans are objects of a communicating nature, objects that make demands on the autistic to communicate, for which the autistic is not equipped and disposed favourably. In the case of the schizophrenic also, one finds that the schizophrenic closes the spatial gap between him and the objects and yet the relevance of object is lost on him. It is not that the schizophrenic, like the autistic, shifts from one object to the other; while remaining with the object the schizophrenic shifts to another whether that object is present or not. That is, the relevance of the object present and is physically near is lost on the schizophrenic. In the case of the mentally retarded, the relevance does not exist at all even though the spatial gap is narrower and the retention of the object near the patient is much longer than one finds in the autistic and the schizophrenic. There is practically no proxemic behaviour of significance in the case of the mentally retarded.

Touch within proxemic behaviour has greater relevance for the psychiatrically disordered people than for people having other categories of disorder. Because of insistence of maintaining a personal distance the schizophrenic has no provision for use of touch, whereas the autistic, even when he comes closer, is unable to receive the benefit of touch, for, in him, everything is transitory and not cumulative. In the case of the mentally retarded there is some benefit received from the use of touch by others, but its cumulative effects are lost on him because of his failure to recognize the possible effects. The aphasic receives the full benefits of touch and it becomes an important step in his process of recovery of cognitive skills in place of language mode, which is lost for ever. Touching as a mode of communication

indulged in by the disordered people is found among the psychiatrically disordered, the aphasic and in some moments with the autistic and the schizophrenic also. In other words, touch as an expressive mode in these disorders does exist but its use is variously distributed.

Odour recognition is present in the psychiatrically disordered and the aphasic. While it may be present in other disorders as well, its use as a communicating element is not recognized at all. Even the odour from food is not recognized as a communicating element. Indulgence in the enjoyment of one's own bodily odour, characteristic of all living organisms, is retained even in severely affected conditions.

6.4. Visual Behaviour in Abnormality

If vision is considered most expressive by creative writers of literature in India and in other cultures, avoidance and aversion of vision become the hallmark of, psychiatrically disordered people. Gaze aversion is also an important characteristic of the autistic and the schizophrenic, while the mentally retarded maintains gaze but with no purpose served. There is a close relationship between flight reaction and gaze aversion in the schizophrenic. Such a close relationship between gaze aversion and hyperactivity does not seem to be in operation in the case of the autistic. Indeed it is difficult to isolate gaze aversion and gaze avoidance from hyperactivity indulged in by the autistic. In all these four cases (the mentally retarded, the autistic, the schizophrenic and the psychiatrically disordered), however, seeing through without manifest purpose is common. If this is also considered as gaze avoidance (that is, here gaze avoidance is not achieved by turning aside, but seeing through the eyes of the other),

then gaze avoidance must be considered as the norm in all the abnormal conditions.

Another interesting point is that eye as a communicating means is generally not employed by the disordered people other than the aphasics. Gesturing via eye is not made. Expression of feelings other than pain is not also made. There is no coordination between the eyes and the expression of satisfaction (or happiness). This is similar to the condition we noticed as regards touch. The significance of touch is recognized but use of it as an expressive means is not found. The significance of stare is recognized and reacted to, but use of the same as a means of expression is not exploited; if resorted to, the use is transitory and does not form a regular pattern and is not repeated. All the same, use of vision as a means to express is found used earlier than the use of language when the psychiatrically disordered begin their recovery.

One of the most difficult things is the establishment and maintenance of eye contact with the non-aphasic disordered people. Since eye contact acts as a bridge-head for further therapy procedures, often the therapy becomes a frustrating experience with the autistic, the schizophrenic and the mentally retarded who show marked disinterestedness in eye contact. In the normals, eye contact begins the communication in face to face situations. In these three disordered categories of individuals, activities could be initiated without eye contact as well; since continuing the activities require eye contact, failure to maintain eye contact on the part of the patients brings the activities to a halt. In the case of the psychiatrically disordered, absence of eye contact could lead to worsening of the condition of the disorder. That is, while eye contact is refused, such a refusal could be

a reason, a contribution to further worsening of the condition. In these cases, percentage of no eye contact generally correlates very highly with anxiety and dysfluencies.

Another important function of eye is to announce the abnormality condition. Often it is found that the glaze in the eye performs this function. Perhaps this conclusion is culturally motivated and yet associating various quantities of glaze in the eye with one disorder or the other, or with one undesirable trait or the other is very commonly found across cultures. Very often glaze in the eye is associated with some form of schizophrenia. When this glaze is found occurring along with some other characteristics of a disorder, the glaze comes to support the conclusion arrived at.

What is the reaction of the categories of disordered people towards those who refuse to have eye contact with them or fail to communicate with them through eyes? There appears to be some qualitative difference between the autistic and the schizophrenic in this regard. Since the non-congenital schizophrenic has a past, he does comment upon such behaviour towards him indulged in by others, although he does not follow it up in his subsequent reactions in any serious manner. On the other hand, in the absence of such a past, or an experience in social context where eye contact and communication via eye is essential and socially regulated, the autistic does not even recognize the potential of eye communication. In the case of the mentally retarded, the significance of eye communication ranges from its nonrecognition to its brief partial utilization to meet their biological needs. In fact, for both the autistic and the schizophrenic, the avoidance of any interaction with them by the normals would perhaps be most welcome. Avoidance of contact and gaze aversion

for them appear to be aversion and avoidance of aggressive encounters as seen from their flight and withdrawal. Gaze aversion in some cases in the autistic may also serve the purpose reducing high arousal since the autistic are under the strain of high arousal conditions. The schizophrenics engage themselves less in gaze. Their gazes are shorter in duration. This less frequency and shorter duration of gazes match very well with the schizophrenic's impairment of ability for social contact.

Apart from the above listed difficulties, it is generally seen that children with a language disorder, a disorder caused by a cerebral dysfunction, have a greater visual bionocularity problem. (Binocular vision is simultaneous use of both the eyes). They may also have difficulty with eye movement. These children are unable to move their eyes properly, with direct and exact fixation. This problem is found in children who have neurologically instigated learning difficulties. Another abnormality noticed is the failure to focus. These children, instead of covering a normal range, may cover more than what they do normally, when it comes to reading language materials and as such they face reading comprehension difficulties. Reversal of letters, mirror image writing, inability to coordinate eye movements with bodily movements, failure to gauge the size, position and momentum of objects, failure to retain visual symbols in memory, poor reproduction of geometrical designs and general failure to connect visual stimuli with information conveyed are some of the defects generally noticed in terms of dysfunction not only of the eyes but also of the cognitive mechanism. Some of the other deficiencies are the failure to discriminate between objects which have only very slight differences, focus on a single visual stimulus while screening out other visual stimuli,

failure to bring out the details of an object in the sense that some of the major parts of an object may be omitted in the description, reversal of order of items presented, substitution of one for the other, etc.

Since the quality of vision in normals is not merely seeing an object or event, but seeing it in a manner experience has made it, the visual behaviour in abnormality conditions naturally lacks the significance of vision as we find it in normals. In abnormality conditions the patients are deprived of the experience of the world as the normals have. Thus, their vision lacks the significance attached to the seeing in normal, in several ways, and generally remains at the level (if the optic physiological mechanism is not impaired) of meaningless afferent processes in the optic pathway. This pathway, in abnormality conditions, does not get integrated with experience and intelligence to give meaning. As Professor Hall (Hall, 1969) points out, 'the visual process is complex, and so is its development, which is correlated with maturity, postural control, manual coordination, intelligence and personality. We gain experience in the world through our senses -- gustatory, olfactory, tactual, thermal, kinesthetic, auditory and visual. It is most usual for us to see and taste, see and smell, see and touch, see and feel hot or cold, see and move, and see and hear. There are relatively few occasions when we are able to feel and hear but not to see'. This coordination between senses is significantly absent in the disorders we have listed for our consideration. Secondly, as already pointed out, sight remains at the physiological level and does not get coordinated with the experience. In view of these, use of vision in nonverbal communication remains deficient.

6.5. Face in Abnormality

Facial displays of some emotions, such as fear, pain (sadness ?), anger and happiness are identified in the schizophrenic. However such displays, more often than not, are rarely beamed towards the other people. Self-expression, without manifest communicative intent, appears to be the dominant way in the exhibition of facial expression. Also note that the expressions shown on face are more transitory than one finds in the normals. There is a peculiar transition from one state to another in the facial expressions in abnormality conditions. The effects of the emotions on the face are erased out too soon. This is true also of the autistic and the mentally retarded. In all these cases, there is no relationship between what is expressed in one moment in the face and what is expressed next and/or behaved/performed subsequently. In normals there is a lingering effect which is lost in these disordered people. Also note that as in the case of normals, verbosity and excessive verbalization mark conditions of happiness in the disordered people; that is, under conditions of happiness, the disordered people engage in more verbalization than they normally do otherwise. In general, happiness must be identified with the fluency of speech in the mentally retarded, the schizophrenic and the autistic. What is required is to set up a standard background against which changes in emotions on face may be identified. Happiness in verbosity and verbal fluency, anger in stoppage of work, hyperactivity in the autistic, sadness in confused looks in all the three and pain uniformly expressed in restlessness and groaning in all the three disorders are attested. Shame as an emotion is identified in the face of the schizophrenic.

The link between facial expression and the

content communicated in oral language and/or behaviour is broken in normal communication to meet certain ends. The break in this link on all other occasions, (on occasions not intended to meet certain deliberate needs of pretension) is an indicator of abnormality conditions. Also note that the break in this link is involuntary under abnormality conditions and the abnormal individual is not aware of it. Only biological needs are met with by facial expressions in the abnormal; particularly expression of pain dominates. Expression of other emotions is carried out through other channels; for example, as already pointed out, verbalization and verbosity characterize the condition of being happy. The most important characteristic of facial expressions of the disordered people (those other than the aphasics) is their inability to express social emotions, such as approval, disapproval, sneer and sarcasm on their faces. Another dimension is their inability to bring forth social emotions or even biological emotions other than fright at will for demonstration or for other purposes of communication in the absence of any instigating real need.

Another interesting point about the facial expressions the disordered people have is that they do have culture bound aspects of facial expressions. These may not have been acquired consciously and may have been acquired by unconscious imitation only. There is, however, no clear cut communicative intent exhibited by the disordered. These may also be traces of behaviour acquired before the onset of abnormality. Note that in congenital abnormality social facial expressions are not acquired at all; culture bound aspects of smile in reception, etc., are not also acquired. However, in abnormality which sets in after acquisition and emergence of universal and culture bound aspects of facial expressions, the social expressions

are totally lost in their communicative intent. Even if the universal and culture-bound aspects are retained, as in some minimally disordered people, and in less severe cases, the communicative intent and content is limited. Only expression of pain appears to retain more of its original form and function.

The facial expressions in individuals are of different types -- some of them aim at hiding one's real feelings, some of them are reactions to the other's actions and objects, some have the function of accompanying and supplementing vocal language expression and some are mere adaptive behaviour as in the case of sigh or relief. While the first form of facial behaviour is conspicuous by its absence (and perhaps is beyond the capacity of the abnormals since their cognitive ability for communication is affected), the last mentioned is more easily, even if rarely, found in abnormality. As a rule, facial expressions are difficult to manipulate at will by the disordered.

It is seen that blind children show facial expressions similar to normals. This evidence prompts us to posit an innate component to facial expressions. Furthermore, some experimental investigations indicate that there are differential physiological readings for joyful, angry and sad thoughts, without any manifest expressions on face (Schwartz, 1974; Schwartz, et al, 1975). The above cited scholars also suggest that the normal resting state for the depressed is one of sadness, and not similar to the resting state we find in normals. This is comparable to what one finds as regards the difference in resting positions of the tongue in normals and in those whose speech is disordered. Basically, in all aspects of behaviour, the resting positions -- the normal positions -- are differentially established in the

normal, and in the abnormal. Facial expressions are no different in this regard.

6.6. Movement in Abnormality

Both lack of movement and excessive movement characterize disorder. The autistic moves away from the people around and engages himself in excessive motion of his limbs and body while engaging himself in his own activities. The schizophrenic's movements of both his limbs and body as well as his eyes show dissynchrony. There is complete lack of movement in some types of schizophrenic cases whereas in some others repetitive action similar to hyperactivity of the autistic is found. In some others there is purposeless wandering, and flight. Inability to sit tight and to concentrate on anything in particular is absent, whereas moving away from the habitual place in one's own residence to a public place and make it the habitual place of stay and transaction is common. The mentally retarded ignores movement.

As regards the movements of individual body parts, such as head, hands and legs, leg movements are more numerous. In the case of the psychiatrically disordered there is a correspondence between the moods and bodily movements of the patient. There is always a similar correspondence in the normals. The correspondence between the two in the condition of abnormality, however, is of a different type: The transition to the normal state is faster and surer in the normal condition than in abnormality.

Purposeless and mechanical movements mark abnormality conditions. Failure to use gestures for communication is another characteristic. Postural appropriateness is found lacking in terms of social norms. Often grasps and grips communicate

needs. Uncertainty and confusion and inability are also expressed through selected hand movements. To what extent these hand movements are performed with an intent to communicate cannot be decided. These movements appear, more often than not, to be instinctive reactions to the situation encountered. They are not transformed into and utilized as deliberate communicative acts. In some cases of schizophrenia, there is not even coordination between limbs on both sides of the body. The gait of the disordered is not in coordination with his steering looks. The gait could be of varying speed without any predictability. Circling and spinning may characterize some of the schizophrenic cases. They may also be given to outlining of objects with fingers. They may also trace around the given objects; but this outlining and tracing around process is not used for gesturing. Again the outlining and tracing around objects may be accompanied by oral description. The oral description may begin appropriately but will soon be not in consonance with the object being described.

The function of body movement, rather the function of movement per se in the disordered, is varied. It may be just a reaction to internal physical discomfort. It may be a function of the nature of the disorder. It may also be a function of communicative intent. Movements toward object, for instance, may be an effort to communicate something in relation to that object. Preoccupation with and manipulation of one part of the body may be a factor of the nature of the disorder. In some cases, movement may be a function of the speech uttered. Assigning meanings to movements of the disordered becomes a problem, indeed, to the clinician and the caregiver. In any case, like most of the other behavioural patterns, movement as a function of speech, that is, its association with speech uttered (only those appropriate movements) signifies return to recovery.

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