LANGUAGE AND NONVERBAL SYSTEMS IN THE STRUCTURE OF FACE-TO-FACE INTERACTION

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1. Language and nonverbal sign systems

(1.1.) Although verbal language is the basic system through which, along the vocalauditory channel, people carry out the most complete and sophisticated form of interaction, that is, conversation, it is far from being an autonomous system. Researchers who traditionally would have undertaken a rather exact analysis of discourse but typically failing to acknowledge its nonverbal components, are now becoming increasingly aware that what truly gives the spoken words their total meaning (which at any rate is not contained only in them) are a series of vocal/narial voice modifications and independent sounds and meaningful silences which today we subsume under *paralanguage*; and that, if visually perceived, those verbal expressions are accompanied by a great number of facial, manual and bodily gestures, gaze activities, manners, postures, postural shifts and stills, which constitute kinesics.

Those three co-systems, language-paralanguage-kinesics, form the *basic triple structure*,¹ which became the foundation for my work on nonverbal communication, whether oriented towards linguistics, social interaction, literature, cultural anthropology, or semiotics, approached always in an interactive, interdisciplinary fashion. Once the unquestionable coherence of this triple body of message-conveying systems and its common lexicality and semanticity became clear—and even demonstrable through a realistic simultaneous transcription of language, paralanguage and kinesics²—it also became apparent to me, in the investigation of their further costructuration with other somatic systems, that language had to be seen not only as part of the basic triple structure, but in the broader context of intersomatic communication, diagrammed in the accompanying figure.

(1.2.) The diagram, which attempts to suggest the full complexity of what today is studied as face-to-face interaction, shows, first, the two basic triple structures that are indispensable in full, unhindered communication between two people. They afford a continuous exchange (as silence and stillness are also part of it) formed jointly by two word structures subject to grammatical rules (that is, morphological and syntactical), paralinguistic overriding or alternating features and kinesic overriding or alternating elements. The diagram suggests also how *chemical* messages emitted as natural or artificial body odors can be intimately associated with what words are said (e.g. emotional ones), how they are said (e.g. modified and accompanied by paralinguistic qualities and sounds such as crying or laughter) and how our face, eyes, hands and the whole body support (or perhaps contradict) those verbal and paralinguistic mutually bound messages. But the messages of, say, happiness, grief or contempt, channeled through verbal, paralinguistic, kinesic and chemical signs, may also be coded by *dermal* activities, such as flushing, which will add a fourth dimension to the words uttered, thus forming a coherent element with speech in a given situation, without which the meaning of the total behavioral



Fig. 1. Interpersonal communication systems.

complex would simply be different, if only slightly so. This fivefold body of communicative acts may still be accompanied by a *thermal* reaction, that is, a rise or fall in body temperature which will further qualify the already verbal-nonverbal—both controlled and uncontrolled—expression of happiness, grief or contempt, through an association with words no less meaningful than that of paralanguage or kinesics. The diagram, finally, indicates that these six strictly bodily activities are always subject to the two basic dimensions of face-to-face interpersonal communication, namely, the *proxemic*, or spatial relationship of the two persons, and the *chronemic*³ or temporal length of each verbal and nonverbal activity (as well as of their various combinations) and of the several portions of the encounter (that is, speaker's and listener's turns, each of the topics, different aspects of one topic, etc.).

The two individuals suggested by the diagram, are thus equipped with no less than the eight systems just indicated, the interrelationships among which must of necessity receive much attention on the part of anyone researching a psychotherapist-client, interviewer-interviewee, nurse-patient, or man-woman encounter. What even the researcher might be likely to neglect, however, is something that underlies any personal encounter, the *cultural background* of the participants; for even if they are members of a common culture they might still belong to different socioeducational, age, group or occupational spheres, within which the isolated and combined occurrence and interpretation of the various verbal and nonverbal codes will differ in varying degrees. If, on the other hand, they belong to different cultures the encoding and decoding problems may become more acute, as they

face several barriers, that is, linguistic (between forms of one language or between different languages), paralinguistic, kinesic and proxemic; or different interpretations of, for instance, the display rules determining the control of tear shedding in a situation of bereavement.

2. The semantic cohesion of the basic triple structure, language-paralanguage-kinesics

(2.1.) Signs, sensorially and intelligibly apprehended, reach their finest communicative structure in the basic triple structure, the unique anthropomorphic (and anthroposemiotic) vehicle to which other systems (indicated in Fig. 1) are but secondary under normal circumstances in most situations. Two basic 'triple structures' (i.e. at least two sets of language-paralanguage-kinesics), are then indispensable in full face-to-face communication between humans, and instances of only continuous paralanguage, kinesics, proxemics or chemical communication, constitute cases of reduced interaction (such as blindness and deafness).

I have discussed elsewhere when dealing with kinesics (Poyatos, 1977), how words, whether coined and utilized as arbitrary signs ('house') or echoic signs ('swish') lack the capacity to carry the whole weight of a conversation, that is, all the messages being exchanged in the course of it. Our verbal lexicons are extremely poor in comparison with the capacity of the human mind for encoding and decoding an infinitely wider gamut of meanings to which at times we must refer as ineffable. If a natural conversation were to be conducted by means of 'stripped words' only (a concept hard to imagine), there would be, not just an intermittent series of 'semiotic (but signless) gaps', but some overriding vacuums as well, which are actually filled by nonverbal activities, either segmental (i.e., a click of the tongue, a sigh or a meaningful silence) or stretching over varying portions of our speech, from single phonemes to sentences to a complete conversational turn.

An uttered word can act as an affect-display of anguish ('God!'), doubt ('Maybe'), fear ('Oh!'), etc.—and even so it needs certain prosodic features and specific paralinguistic modifiers (implied in the context or described in written language)—but rarely as an emotional blend conveying all three feelings. But such an affect blend could not be expressed either by means of a morphologico-syntactical arrangement of words—as one would not include in that sentence the lexemes 'anguish', 'doubt' and 'fear', to begin with—because it would entail an 'unnatural' complex periphrastic expression which just would not happen in such a state. What actually suffuses those words with life is a series of paralinguistic and kinesic elements subtly interrelated which support, emphasize or contradict them.

(2.2.) Furthermore, the basic triple structure is the only communicative complex in which an object of the tangible world or an abstraction can be indistinctively denoted by a word from our established lexicon, a paralinguistic construct, or kinesically, the latter two possessing in many instances as much lexical values as words do within the structure of the sentence. A bad odor, for instance, after impinging on the olfactory epithelium and being decoded in the brain, can elicit a verbal reaction ('That stinks!'), a paralinguistic one ('Eeugh!'), or a hand-to-nose gesture. Furthermore, considering the capacity of these three systems for mutual substitution within a preserved syntactical order (altered only from a 'linguistic' point of view), we can argue that the sentence 'You and you . . . !' can be completed, rather than verbally ('. . . get out!'), kinesically pointing at the two in succession and then at the door while displaying an appropriate facial

expression; or that blushing can act as a cutaneous predicate of 'Oh, I'm so . . . (embarrassed)!', but this internal costructuration is never so deep as within the triple structure where verbal, paralinguistic and kinesic expressions combine invariably in a live sentence. Thus, what makes language-paralanguage-kinesics a functionally cohesive structure—and therefore the true core of human communication—is, first of all, their common kinetic generator, and then their combined semanticity and lexicality and their capacity to operate simultaneously, alternate with or substitute for each other as needed in the interactive situation, as was just illustrated. The other interactional channels can function intermittently or by themselves in exceptional and generally brief dyadic or multi-person encounters (e.g. thermal reactions that act as signals, an instance of blushing). But the two or more triple structures stand by themselves as virtually self-sufficient signproducing blocks that determine major communicative differences, not only among individuals but among cultures (e.g. Latins and Anglo-Saxons differ in the ways in which they combine verbal language, paralinguistic voice modifications and independent sounds and kinesic independent or accompanying expressions) and historical periods (e.g. a review of representative novels like Dickens' or plays like those of the Restoration period show not only verbal and nonverbal behaviors not used now but the extent to which factors such as moral values and changes in dress and furniture have conditioned, for instance, postures and manners).

Even when verbal language seems to be the only message-containing behavior carrying the whole weight of an interpersonal encounter, it is actually never disassociated from the much more complex totality of co-occurrent hidden or explicit activities, neither biopsychologically on the part of the speaker, nor from the point of view of the conscious or unconscious perception of his listener. This is the logically derived additional perspective opened to us as soon as we attempt to analyze a fragment of interaction, only to realize that we can be truly systematic and exhaustive only if we carry out at least an exploratory semiotic probing into the behavioral structure of that encounter. We are, in other words, recognizing that verbal language cannot be studied in isolation, and that the only realistic point of departure is the integration of human intersomatic signalling systems, as has been suggested above, whereby the traditional message-conveying activities must be assumed to be co-structured in a number of universal, culture-specific, or individual-specific patterns that affect even the very dictionary items we so respect.

3. Language-paralanguage-kinesics within direct and synesthesial sensory perception: full and reduced interaction

(3.1.) The above thoughts on the basic triple structure, its place in interpersonal communication, encoding-decoding processes that take place in the real interactive situation, and on the hierarchization of verbal and nonverbal systems in that situation, suggest the need to probe deeper and acknowledge a further perspective which discloses the true functioning of verbal language and the other forms of somatic communication diagrammed in Fig. 1 as they operate in interaction between one sender and one or more receivers. While the receiver's perceptive modes are the distal systems of vision, audition and olfaction, and the proximal ones of gustation and cutaneous and kinesthetic sensations, the sender's systems include both the active stimuli (kinetic (kinesics), acoustic, chemical (language, paralanguage), thermal and cutaneous) and the static characteristics of shape, color, size, consistency and weight, although the last two can be temporarily varied by autonomous (e.g. muscle tension) or externally applied movement and pressure. Naturally, under normal circumstances, the roles of sender and receiver, or emitter and perceiver, are alternately or simultaneously interchangeable (even language in simultaneous speeches).

But what actually constitutes the true complexity of sensory interaction or, in reality, of interpersonal communication, is the physiopsychological phenomenon known as synesthesia, that is, the physiological sensation on a part of the body other than the stimulated one, and the psychological process whereby one type of sensorial stimulus produces a secondary subjective sensation from a different sense-from which derives the poetic image that ascribes to one sensory experience, e.g. color, characteristics of a different sense, e.g. softness. If we could decode applause only by perceiving its sound, the odor of someone's perspiration stain by its actual olfactory perception, the warmth of a body by its actual radiated temperature, the coarseness of a rough hand by its actual texture, or the consistency of another body's flesh by touching it only, our sensory and intelligible experiences of the people in our lives (whether really present or graphically represented in a photograph or painting) would be drastically curtailed. We very often hear, smell, touch, taste 'with our eyes' (which is, in fact, what operates in a high degree in magazine and TV advertising) and a man can imagine the consistency of a woman's body by the sound of her voice and its paralinguistic features (and even its lexical form and the topic of her speech), by her footsteps (which typically elicit an image in interpersonal communication as to the body type of another person), or by his specific kinesthetic perception of her movements and her body weight mediated by a shared couch.

(3.2.) Superficial as the above example might seem to someone focusing exclusively on speech and neglecting the existing co-structuration of language with other systems, it contains a clear illustration of the coherence of verbal and nonverbal sign systems. One can, of course, seek the relationship of verbal language to nonverbal somatic, and even extrasomatic, systems in many other situations, say a man-woman encounter across a small table in a lounge, or a job interview (the latter a growing topic in certain areas of nonverbal communication studies). In the first instance, besides language, both direct and synesthesial sensory perceptions are equally active and equally assisted by the thought processes of both participants. For it is not only what they say (language) and how they say it (paralanguage) and how they accompany what and how they say it kinesically that conveys a number of intended or unintended messages, but the way in which their linguistic-paralinguistic-kinesic structures become further qualified (as among the three basic systems, supporting, emphasizing or contradicting) by other sytems, for instance: the chemical signs emitted by both perfume and shaving lotion (after all, the basis of a good part of the advertising industry's manipulating strategies), which will even create olfactory memories to be experienced along with auditory, visual and perhaps tactilekinesthetic ones; the visual signs of clothes (which include color and texture) and perhaps their tactile perception, both in turn associated to the systems mentioned so far (and perhaps quite consciously on the part of the encoders); the light, colors and perhaps music of the place, together with the degree of room density, distracting elements, and the degree of noise or silence. All these systems operate, of course, in the two dimensions of any social encounter: the spatial or proxemic one (in this case, the interpersonal distance) and the temporal or chronemic one, that is, the duration of the encounter (and, of course, smaller temporal units, such as their respective speaker's and listener's turns, as well as the eloquent duration of silences and/or still positions). We can, in a similar way, seek the inter-system co-structuration which exists in the job interview

situation, which typically determines the desirable or undesirable flow of the encounter and the quality of its outcome.

I have elaborated somewhat on this point because it shows how important it can be to record all activities and systems, even if we want to produce the triple linguisticparalinguistic-kinesic transcription outlined in Note 2. Even though some would be registered as part of the 'setting' or the 'context', we must never attach too secondary a status to those concepts, for they do represent some inherent elements of the total interaction.

Returning briefly now to the observations on direct and synesthesial ways of decoding interpersonal signs, it is interesting to note that out of the forty-one different modes of consciously or unconsciously receiving information in personal interaction, only twentyone represent direct sensory perception between source stimulus and its corresponding sense, while twenty constitute indirect synethesial assumption of the former, often in situations in which language-paralanguage-kinesics seem to carry all the communicative signs.

(3.3.) The implications of this count are far from being just curiosities of communicative behavior of no linguistic concern. If we think, for instance, of the distinction between full, unhindered face-to-face interaction and 'reduced interaction', the real significance of our perceptual capabilities will become more apparent, and its application much too important to be neglected. Interaction should not be considered only from the point of view of totally unhindered, normal participants, but from that of the blind, the deaf and others suffering from the various forms of physical disabilities that may curtail sensory reception of messages (and give language a status obviously different from the one it has when all channels are available). Take, for instance, anosmia (lack of olfaction), which, in the man-woman example, would impede the present co-structuration of chemical messages such as perfume with other systems, as well as the formation of olfactory memories; or a low threshold of cutaneous sensitiveness. It is precisely the highly combinatory properties of that array of systems that allow the sensitive interactant to step up certain signalling devices while stepping down others that may not be properly decoded by the receiver, thus seeking to acquire the interactive fluency necessary for each occasion.⁴ Beyond these desirable optimum combinations, the various systems may, of course, reach a specific order or hierarchization beyond our control, due to emotional factors (e.g. blushing or sweating, overpowering words and movements), excessive distance (e.g. wide-range gestures and high-volume language or no language), etc.

I will only point out how the basic triple structure language-paralanguage-kinesics fares in the two most critical instances of reduced interaction, blindness and deafness, as the implications not only for interaction but for research on those particular situations will be rather clear.

Blindness blocks off visual kinesics and gaze from the triple structure while language, paralanguage and audible and tactual kinesics are still available, and perhaps olfactory signs. The blind person, therefore, misses: (a) visible gestures, manners and postures, (b) very specifically the cointeractant's gestures and gaze behaviors with which interactive silences are filled, (c) the exact distance from his interactants, which cannot be appreciated only by the voice or the odor coming from them, (d) social and psychological static cues, such as clothes and jewelry, (e) signs of other people and (f) whether they shed tears (unless short distance makes it perceptible either olfactorily or through touch). The most important loss is, of course, the visual kinesic behaviors of his co-interactants, as they can emphasize, illustrate, contradict or repeat their words or replace them, displaying affects not given away verbally and revealing a number of cultural and personality characteristics. However, although we cannot control the communicative consequences of so-called language markers, identifiers and visual externalizers in conversation, we should ideally develop an effective kinesic repertoire by using other nonverbal categories, particularly self-adaptors, alteradaptors and object-adaptors.⁵ As for their own display of non-verbal behaviors, one should consider the person born blind, studied by Eibl-Eibesfeldt (1973) to illustrate the universality of facial expressions of emotion. We must also consider that the blind can have no synesthesial assumption of visual kinesics by hearing our voice, unless they have experienced it previously through active or passive touch.

Deafness, which blocks off language, paralanguage and audible kinesics, still allows visual and tactual kinesics in the otherwise severely curtailed triple structure. The loss of audible kinesics cannot compare with the deaf person's inability to perceive language and paralanguage. Not counting his own sign system, he relies (apart from lip reading) on the kinesic behaviours of his co-interactants, who usually make an effort to make themselves understood. Typically, the deaf person averts his gaze much less than the hearing one, maintaining almost constant eye contact with his co-interactant, whose eye contact is also expected. He can properly interpret common emotional states (happiness, sadness, anger, horror), controlling gestures (stop, come, go, look), gestures describing ordinary objects, and manners and postures identifying certain social and personal relationships, but he misses the paralinguistic language markers and illustrators. However, gross misunderstandings also occur in the emission and reception of meaning between unimpaired people and deaf or deaf-mute people, that is, in the encoding and decoding of the intended or unintended messages. On the other hand, the person born deaf can have no synesthesial assumption of sound.

Much research can be done, therefore, within nonverbal communication studies, on the perceptual world as well as on the emitting possibilities of both the blind and the deaf, and on how unimpaired people must adapt their interactive fluency when interacting with the blind and the deaf, and the exact functions and possibilities of language in such situations.

4. Some neglected aspects in the study of language in interaction

(4.1.) It is a fact that the receiver in an interactive situation is usually more conscious of the speaker's nonverbal behaviors than the speaker himself, because nonverbal activities, from a paralinguistic click of the tongue, to blushing, or momentary interactive silence, may occur quite out of awareness. They may be, in other words, encoded and put in motion at a subconscious level, without the intellectual process required for the production of words (although one cannot ignore the many very lexical nonverbal constructs we may carefully 'think out' together with speech), but decoded nevertheless by the listener. Furthermore, they can play important functions and have a definite effect on the decoding process of even the verbal message when it is truly the central one.

(4.2.) Once verbal or nonverbal signs are encoded the meaning itself can be: *shared*, if it is common to a series of individuals, to the members of an age group or work group, to a whole culture, to several cultures in contact through direct interaction or through

the media, or universal, such as the expressions of emotion found to be universal (see Eibl-Eibesfeldt, 1979 and Ekman, 1977), Idiosyncratic, whether recurrent or not, when the association of the sign and its meaning is peculiar only to a single individual, As idiosyncratic encoding, one person may perform a gesture, for instance, with a specific meaning only for himself; as idiosyncratic decoding, another gesture, or a paralinguistic feature, can be interpreted by one individual only, as happens, for instance, within the family, where only the wife may be able to understand some of her husband's gestures and other behaviors; *falsely decoded*, if the message encoded at the input end of the emitter, that is, the sensible signs, is misinterpreted and, while the true meaning is lost, another one takes its place, which was never wittingly encoded by the emitter. This interesting, though unintentional, semiotic trap is illustrated, for instance, by intercultural homomorphic kinesic antonyms (e.g. the North-American 'OK' finger-ring gesture meaning money in Japan, but a sexual invitation in Ghana, a sexual insult among Venezuelan men, or simply a typical language marker in Spain), by misinterpreted paralinguistic features (a Westerner hearing the prolonged mid-to-high pitched moaning sound given as feedback by a Japanese woman speaking on the telephone in the next room tends to misinterpret it at first), and even by misunderstood verbal constructs; and zero decoding (as differentiated from 'zero sign' when a sign signifies 'by its very absence' [Sebeok, 1974, p. 241]), if the signifier is not at all perceived by the receiver, and neither a correct nor an incorrect input-output occurs. In other words, they are acts which can be intentionally or unintentionally encoded but never decoded by anyone. Zero decoding of verbal or nonverbal messages is a semiotic blank on which much research is needed in order to seek the rate between decoding (false or correct) and zero decoding in specific situations and by specific receivers across, for instance, socioeconomic and educational strata, age or work groups, and whole cultures, as well as in pathological instances, in all of which so many verbal and nonverbal messages may pass unnoticed.

(4.3.) The concept of *redundancy* has been traditionally misused in everyday language and even in serious research, for what appears to be redundant is most of the time only complementary, that is, supporting, emphasizing or contradicting the essential message. Blushing, for instance, is not necessarily redundant after or before words of the same messages, for it may act as a dermal means of expressing the degree of emotion contained, or perhaps controlled, in those words, or it could perhaps also betray a deceiving verbal or nonverbal statement. Likewise, a beckoning gesture is complementary to 'come here' when it specifically denotes how we really mean it, since the kinesic act can be performed in different ways. A silence, even after having verbally stated that we cannot say anything, adds information, as a complementary message, by its duration and by its co-structuration with our kinesic behavior (perhaps our very stillness). One could argue, then, that redundancy rarely occurs, as the blushing or the gesture always assist the verbal or nonverbal message. It is when that complementary quality is not obvious that we can legitimately speak of redundancy. Yet redundancy must not be given a negative connotation of purposelessness either, as it may express a personal style characterized precisely by redundancy, or serve to identify specific cultures.

(4.4.) The matter of redundancy vs complementarity links with another needed differentiation in communication studies, that which exists between *primary systems* (or messages) and *secondary systems* (or messages). If we try to establish a hierarchization of systems in a given interactive situation—for each situation would entail a different organization of verbal and nonverbal behaviors—we soon discover that the verbal code, despite the claimed superiority of 'language' over other systems, is not necessarily the main one. This is, in part, related to the differentiation between redundant and complementary. A rise in body temperature, blushing, or a silence, may carry the main message when language, paralanguage, kinesics or proxemics simply support it as complementary information or duplicate it as redundancy. In this respect, what determines the hierarchization is the intensity of the various systems involved and their individual location in the communication stream.

(4.5.) The fifth aspect of interpersonal communication I wish to emphasize is that each activity can act either as *modifier* of one's own behavior or our cointeractant's, or simply as a *contextual* element. An apico-alveolar click 'Tz' plus pharyngeal ingression can elicit my own 'Well . . .', or slight frowning, or both; or (being a typical 'turn-claiming' signal in conversation) it can make my interlocutor ask 'What is it?'. But it could be just a contextual behavior, as in 'Well, tz, I think I can do it'. Furthermore, that same click could modify the *meaning*, that is, the message (as when giving a following 'Yes' a rather negative tinge), the *form* (a hesitating sort of 'Yes') or the *behavior* itself (not eliciting a verbal expression, but a shoulder shrug), supporting, emphasizing or contradicting the basic message. On the other hand, my verbal or nonverbal behavior can modify my interactant's verbal or nonverbal behavior; for instance, my 'Please don't quote me, but . . .' can make him lean towards me, raise his eyebrows slightly, perhaps only blink slowly while staring at me.

In addition, both modifiers and contextual elements perform either a self-regulatory function or an interactional one, or both. One of my verbal or nonverbal acts can regulate (and not exactly modify) not only the production of my other verbal and nonverbal activities—in terms of order of occurrence, amount displayed and beginning and end of the display (*self-regulatory function*)—but also my interlocutor's behavior—thus regulating the flow of our transaction, by means of cues (words, pitch changes, gestures, silences) which indicate my intention to conclude the conversation, change the subject, contradict or agree with him, etc. (*interactional function*).

(4.6.) Finally, what completes the systematic approach to interaction is the needed acknowledgement of its basic qualifiers, namely, location, co-structuration, intensity, and duration.

Location refers literally to the physical position in the behavioral stream of the interactive situation. A seemingly clear handshake of agreement becomes secondary when it is followed by 'Okay, but you do it', for instance; silence and stillness may either precede or follow the most 'conspicuous' behavior, such as words or a gesture, but actually they may act as primary or secondary systems when judged by their location and by the characteristics of the related activities.

Co-structuration refers, first, to that of the speaker's behaviors with his own most immediate behaviors, that is, preceding, simultaneous and succeeding, but also to the relationship with the verbal and nonverbal behaviors of his co-interactants. Apart from the more obvious effect of preceding activities, the simultaneous and succeeding ones are particularly interesting. As one of the aspects of the interactive functions, the speaker's silence can be, and generally is (if imperceptibly at times), accompanied by movements (kinesics), just as his stillness can be, but not as often, accompanied by speech, thus

conditioning each other and being affected, in turn, by their respective intensity, location, and duration; while his own succeeding behaviors may retroactively condition his other behaviors when he can predict them. For example, he prolongs his pause while intently looking at her, as he predicts the ensuing embrace. If he cannot predict that embrace, then the long, intense pause itself will elicit it (in fact, a blend of linguistic and/or paralinguistic, proxemic and kinesic complementary, and not redundant, messages).

Intensity, which is measured by the degree of the qualifying features (e.g. light-deep blush, lax-energetic negating gesture), depends also on the duration of the behavior in question, for the longer a silence is prolonged, for instance, the tenser the whole situation may grow. While intensity refers mainly to the co-occurring activities that fill the seemingly silent or motionless segment of behavior, it can certainly be enhanced by the effect of the preceding behaviors, which determines, in turn, the characteristics of those co-occurring with silence and stillness immediately after.

Duration, then, is ultimately related to both co-structuration and intensity, as well as to what could be termed 'temporal signs' or chronemic attitudes.

Conclusions

I have tried in this short paper to bring together those aspects of speech behavior which are still being neglected in many otherwise exact studies. Even when language is considered as accompanied by para language and kinesics, this communicative complex can still be dissociated from the other surrounding bodily co-systems, which leads in turn to ignoring the preceding, simultaneous and succeeding activities when trying to analyze a particular verbal or nonverbal behavior. Those other systems generate around language a series of channels over which travel a great number of directly and indirectly, consciously or unconsciously perceived signs, which definitely affect language production and reception. The problem, as has been suggested, lies in the lack of attention given to the interrelated encoding-decoding processes to which communicative activities are constantly subject, according to the characteristics of both speaker and listener, as well as to the interrelationships of all the systems involved. Consequently, most studies tend to be hampered by different limitations as they fail to see language within the reality of face-to-face interaction. As soon as we probe this reality, however, we face a host of conditioning factors which are in turn subject to a series of biological (sex, age, etc,), physiopsychological (medical state, personality, etc.), cultural and socioeducational variables, all acting upon the emitting and perceiving capabilities of the participants. Hardly anyone would ignore all of them, but neglecting some while emphasizing others usually leads to a partial view of the communication situation being examined. We are compelled, on the other hand, to look beyond what many have traditionally regarded as 'language', or 'communication', and practice an integrative approach that discloses many other important implications besides the few suggested here, ranging from development aspects of verbal and nonverbal systems, through their occurrence in clinical settings, to the specific characteristics of communication in the written text and, further, in the translated one.

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¹ Paralanguage is constituted by the nonverbal voice qualities (pitch, rhythm, etc.), voice modifiers (pharyngeal control, labial control, articulatory control, etc.), and independent sounds (clicks, hissing sounds, hesitation sounds, narial sounds, etc.) and silences with which, consciously or unconsciously, we support, emphasize or contradict the linguistic, kinesic and proxemic messages (Poyatos, 1975; 1976, Chapter 4).

Kinesics can be defined as the systematic study of psychomuscularly-based body movements (gestures and manners) and/or their resulting positions (postures), either learned or somatogenic, of visual, visual-acoustic and tactile or kinesthetic perception, that, whether isolated or combined with the linguistic-paralinguistic structures and with the situational context, possess communicative value, either in a conscious way or out of awareness (Poyatos, 1977; Birdwhistell, 1970).

² The transcription of language, paralanguage and kinesics—which I first used in 1976 with a joint team from the Universities of Birmingham and Nancy in a project on discourse analysis—had been suggested to me earlier by the pioneering work on psychotherapy interviews by Pittinger *et al.* (1960), McQuown (1957) and McQuown *et al.* (1971) and, of course, by Trager's (1958) first thoughts on paralanguage. The transcription contains, in parallel sections which show the co-structuration, synchrony and disynchrony of its different components: orthographic transcript, paralinguistic transcription (comprising the overriding person-identifying primary qualities, and then the occurring qualifiers, differentiators, and alternants), phonemic transcription, kinegraphic and parakinegraphic transcription (i.e. symbols [Birdwhistell, 1970; Kendon, 1969; or as on that occasion, my own] used to represent the various parts of the face, whole head-trunk-legs-feet and shoulders-arms-handsfingers and qualities of intensity, range and duration), body-adaptors and object-adaptors (see Note 5 below), proxemic notation (cf. Hall, 1974), chronemic notation (added to each of the other sections) and a contextual description including any relevant conditioning factors, such as the setting, cultural background, and socioeducational status (Poyatos, 1983).

³ Proxemics, initiated by Hall (1966), will be defined here as: people's conception, use and structuration of space, from their built or natural surrounding to the distances consciously or unconsciously maintained in personal interaction.

As analogous to proxemics, I have proposed to study formally the other basic dimension of social life, time, as *chronemics* (acknowledged in Key, 1980), defined as: our conceptualization and handling of time as a biopsychological and cultural element lending specific characteristics to social relationships and to the many events contained within the communicative situation, from linguistic syllables and fleeting gestures, through meaningful glances and silences, to the duration of a whole encounter. Chronemic behavior must be analyzed as a structured overriding 'supra-activity', a continuum that can be coded in universal as well as in culture-specific ways, and whose meaning serves to differentiate situational contexts, cultural backgrounds and personality and biological configurations.

⁴ Fluency must be understood, not only as linguistic, but as depending on both the emission and reception (interpretation) of the nonverbal systems, mainly paralanguage, kinesics and proxemics, and those that determine what is actually interactive (and even intercultural) fluency (Poyatos, 1983, Chapter 1).

⁵ It is difficult to speak of discourse without discussing some of the already established nonverbal categories (Birdwhistell, 1970; Efrón, 1841; Ekman and Friesen, 1969; Poyatos, 1983, Chapter 4), which are simply inherent components of it, namely: language markers, conscious or unconscious movements of the face, eyes and hands mainly with which (depending on our degree of articulateness) we punctuate and emphasize the acoustic and grammatical succession of words and phrases according to their location and relevance in the speech stream; identifiers, kinesic behaviors or paralinguistic utterances, simultaneously to or immediately alternating with verbal language to refer or, literally, give bodily form to and identify certain abstract concepts ('impossible', 'absurd'), moral and physical qualities of people and animals ('unfriendly', 'tough', 'hard', 'soft', 'cautious'), and qualities of objectual and environmental referents ('dirty', 'hard', 'soft', 'murky', 'crystal clear'); and externalizers, reactions, if almost imperceptible at times, to other people's past, present, anticipated or imagined reality, to what has been said, is being said or will be said, silenced, done or not done by us or someone else, to past, present, anticipated or imagined events, to our own somatic phenomena, to animal and environmental agents, to esthetic experiences, and to spiritual experiences. As for adaptors, Ekman and Friesen (1969) differentiated self-adaptors and alter-adaptors as movements in which we touch ourselves and others, respectively, while I have later studied (Poyatos, 1983) body-adaptors as both the substances and objects most immediate to the body (food, drink, masticatories, cosmetics, clothes, etc.) and the kinesic behaviors conditioned by them, of unconscious or very conscious communicative value in interaction (as in the manwoman example given in section 3.1).

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