expectancies, permissions, and controls) are a necessary and perhaps predominant constituent of the content exchanged between vocalizing humans. As such, social relationships and the shared feelings about these relationships could not be haphazard, emotionally based additives, but must be patterned, learned, and integral aspects of communication behavior. Not until my work in kinesic structure revealed the structured nature of relational body motion (parakinesic) material was I prepared to accept the implications of those aspects of speech behavior which are so easily ignored as idiosyncratic or merely emotive. Some of this material is discussed on pages 108ff. on paralanguage.

My study of Kutenai kinship contributed little that was note-worthy about circum-Plains kinship systems, but out of the Kutenai experience came insights which continue to shape the direction of my research. Perhaps the most important was that perception is shaped by culture—that men do not take common perceptions and then shape them into differential conceptions. I was immediately impressed by the eyesight of the Kutenai, who could tell an Indian from a white man far beyond the point where features were at all distinguishable. That I was able to do the same thing within weeks did not reduce my pastoralist certainty about native visual acuity. To my mind, I had "learned" to do what they did "naturally." It was only after I made a mistake and misjudged two men at a distance as white men when one was Indian that I again became curious about appearance and identification, a matter which I am still studying and only beginning to get into perspective.

During the latter days of my stay in British Columbia I realized that Kutenai speakers moved differently when speaking Kutenai and when speaking English. Was the Kutenai when speaking English being an imitation white man? My premature judgment that the Indian was "acting like" a white man inhibited the discovery that there was a systematic relationship between audible and visible communicative behavior, that these are coercive and interdependent language systems. That recognition was not to come until I began to isolate kinesic morphology and, with the aid of linguists, to study the relationship between speech and body motion. I returned from the field in 1946 knowing that the Kutenai looked different from Canadian whites. And I was aware that both Indians and whites looked and moved differently in differing situations. However, these insights had insufficient strength to erase my commitment to the traditional conception that body motion was from time to time

stereotyped and conventionalized in matters such as stance and gesture, and thus, in formal interaction, was an artificial appendage to speech. Inherent in this position was the belief that more customarily body motion was "natural," that is, a "primitive" response to underlying and universal physiological and emotional states. The hypotheses based upon these beliefs were challenged by the data and I came to question the beliefs, as the following selections show, and eventually discarded both of them, but with reluctance.

5. There Are Smiles . . .

Lexpressions that from the beginning of my interest in human body motion communication I was tempted to see these as basic physiologically derived expressions, the study of which could provide us with a starting point for measuring special individual conventionalized behavior. When I began to film real children in real contexts, the temptation remained but the confidence in the method rapidly faded.

As long as we studied the laughing or crying situations as identified by the participants, it was easy to code (linguistically and kinesically) the laughter as laughter, the crying as such. It was not nearly so easy to code the constituents of these contrastive social acts exhibited by an isolated individual whose context was unknown. Since I found the sounds made by persons laughing or crying confusing, I decided to turn to smiling and "sad-faced." The latter category proved impossible to handle, but over the years the question of smiling, of when it is appropriate, and of how the child learns its appropriate employment have remained as concerns—particularly when we are trying to understand the children we see who are, socially and emotionally, seriously distressed and distressing.

Early in my research on human body motion, influenced by Darwin's Expression of the Emotions in Man and Animals, and by my own preoccupation with human universals, I attempted to study

the human "smile." * Without recognizing my own preconceptions, I had been attracted to a simplistic theory which saw "verbal" communication as subject to (and responsible for) human diversification while "nonverbal" communication provided a primitive and underlying base for (and was the resultant of) human unity. Smiling, it seemed to me, provided the perfect example of a behavior bit which in every culture expressed pleasure (in the jargon which I was using then, "positive response") on the part of the actor. Almost as soon as I started to study "smiling" I found myself in a mass of contradictions. From the outset, the signal value of the smile proved debatable. Even the most preliminary procedures provided data which were difficult to rationalize. For example, not only did I find that a number of my subjects "smiled" when they were subjected to what seemed to be a positive environment, but some "smiled" in an aversive one. My psychiatric friends provided me with a variety of psychological explanations for this apparent contradiction, but I was determined to develop social data without recourse to such explanations. Yet, inevitably, these ideas shaped my early research.

As I enlarged my observational survey, it became evident that there was little constancy to the phenomenon. It was almost immediately clear that the frequency of smiling varied from one part of the United States to another. Middle-class individuals from Ohio, Indiana, and Illinois, as counted on the street, smiled more often than did New Englanders with a comparable background from Massachusetts, New Hampshire, and Maine. Moreover, these latter subjects smiled with a higher frequency than did western New Yorkers. At the other extreme, the highest incidence of smiling was observed in Atlanta, Louisville, Memphis, and Nashville. Closer study indicated that even within Georgia, Kentucky, and Tennessee there were systematic differences in the frequency of smiling; subjects from tidewater Georgia, the Bluegrass of Kentucky and western Tennessee were much more likely to be observed smiling than were their compatriots from the Appalachian sections of their states. If I could have maintained my faith in the smile as a "natural" gesture of expression, an automatic neuromuscular reaction to an underlying and "pleasurable" endocrine or neural state, I would have had a sure measure to establish isoglosses of pleasure with which to map the United States. Unfortunately, data continued to come in.

Almost as soon as I attempted to isolate contexts of propriety for smiling, data emerged which made it clear that while it was perfectly appropriate (as measured by social response) for a young female to smile among strangers on Peachtree Street in Atlanta, Georgia, such behavior would be highly inappropriate on Main Street in Buffalo, New York. In one part of the country, an unsmiling individual might be queried as to whether he was "angry about something," while in another, the smiling individual might be asked, "What's funny?" In one area, an apology required an accompanying smile; in another, the smile elicited the response that the apology was not "serious." That is to say, the presence of a smile in particular contexts indicated "pleasure," in another "humor," in others "ridicule," and, in still others, "friendliness" or "good manners." Smiles have been seen to indicate "doubt" and "acceptance," "equality" and "superordination" or "subordination." They occur in situations where insult is intended and in others as a denial of insult. Except with the most elastic conception of "pleasure," charts of smile frequency clearly were not going to be very reliable as maps for the location of happy Americans.

But what about the "natural" smile of the "happy" infant? (Twenty-five years ago, we believed that babies were not only more "natural" than grownups but also more like grown animals and more "primitive." By the time we were ready to forego the term primitive as applicable to non-Western people, we were not ready to give it up as descriptive of Western and non-Western children.) Friends who were studying child development said that as the infant matured past the point where his smiles were grimaces from gas pains he had a natural smile which some felt provided a naturally seductive stance with which to involve adults in care and protection. Others insisted that this infantile smile was a natural expression of pleasure and that, until the adult and peer world converted or suppressed it, the child would continue to smile "naturally" in response to his own euphoria or to situations of social euphoria. Others insisted that while there was a "natural tendency" to smile, this tendency was constrained as the child was conditioned to use the smile as a symbolic cue. That is, the infantile smile, as an organic or physiological and automatic reflex of pleasure, with maturation comes under voluntary control and becomes utilizable as a unit of the communication system. At the other extreme were those who, believing that the fetus resists birth and is born angry, see the infantile smile as descendent from the teeth-baring of an animal ancestry and thus signifying threat. The threat is mediated and the child subju-

variation in smiling frequency across USA

^{*}The pages which follow are adapted from "Kinesics, Inter- and Intra-Channel Research," in Studies in Semiotics, Thomas A. Sebeok, ed. Social Science Information, International Social Science Council (Paris, Mouton, 1968), Vol. VII-6, pp. 9-26.

gated by the social insistence upon converting the meaning of the smile from malevolent intent to benevolent intent. Finally, this apparent divergence of opinion is bridged by others who solve such problems by blending the dichotomy and who see man as basically ambivalent. For these persons the smile is a naturally ambivalent gesture which can be and is used to express the gamut of human feelings.

This is not the occasion to review some of the attempts to test these and other dependent hypotheses using caricatures, photos, and smiling models with infants in laboratory conditions. As I have read them I find them indeterminate although interesting. We do not have very reliable information about infant smiling in cultures other than those of the Western world. At the time of this writing I do not know whether infants in all societies smile prior to any socialization nor do I know what happens to infants in any particular society who do not smile at all or who smile all the time. On the other hand, there is considerable clinical and anecdotal material to indicate that at least in Western cultures children must learn to smile in appropriate situations. That is, they must learn how and when to smile; if they do not they are somehow isolated for special attention.

It is this latter point which is relevant to our communicational studies. Smiles do not override context. That is, insofar as we can ascertain, whatever smiles are and whatever their genesis, they are not visible transforms of underlying physiological states which are emitted as direct and unmitigated signal forms of that state. And, the fact that subjects are not always aware that they are or are not smiling or are not always skilled enough to emit convincing smiles upon demand does not relegate such smiles into the realm of the psychologist or the physiologist. Linguistic or kinesic structure is no less orderly because performers are not conscious of their utilization of it.

At this stage of the study of smiling (I am fictionalizing the order of investigation and discovery somewhat for purposes of discussion) it had become clear that not only could I not support any proposition that smiles were universal symbols in the sense of having a universal social stimulus value but, insofar as the study of communication went, my work was only complicated by assumptions about communication as an elaboration of a panhuman core code emergent from the limited possibilities of physiological response. However, I could not rid myself of the nagging question occasioned by negative evidence from quite another level. I had talked with a great many

anthropologists who had studied in the most widely diversified cultures and none reported the absence of any smiling from their field work. And, in fact, none reported societies in which smiling never appeared in situations which could be interpreted as pleasurable, friendly, benevolent, positive, and so on. The question was: Even if smiling does not have the same meaning in every society and is not traceably a direct response to a primitive affective state, doesn't its universal distribution as a facial phenomenon give us the right to call it a universal gesture? Obviously it does if we are speaking at the articulatory level of description. That is, if a smile is the bilateral extension of the lateral aspects of the lip region from a position of rest, all members of the species Homo sapiens smile.

There then emerges the second question: Does not the fact that smiling in every culture can be in certain of its contexts related to positive response indicate that man, as he gained spoken language in a prelanguage situation, utilized this expression as a device for interpersonal constraint (in the Durkheimian sense) and that smiling cf. Ekmai is a kind of urkinesic form which has been absorbed into human communicational systems as they developed? The only answer that I can give to this is that I don't know. Important as it might be to answer this question, at this stage of research I am not particularly interested in origins or in the ethnography of atavistic or "vestigial" forms. However, I am interested in determining, in a descriptive sense, what it is that we mean when we say that someone "smiled." I am interested in being able to examine the structure of events relevant to "smiling" in order to deal with the social situations of which it is a part.

Over the past decade I have been engaged in intrachannel structural kinesic research. I have become aware that, similar to other "gestures," "smiling" is not a thing in itself. The term "smiling" as used by American informants covers an extensive range of complex kinemorphic constructions which are reducible to their structural components. The positioning of the head, variation in the circumorbital region, the forms of the face, and even general body position can be and usually are involved in the performance and reception of what the informant reports as "smiling." I have learned that "he smiled," as a statement on the part of an American informant is as nonspecific and uninformative as the statement on the part of the same informant that "he raised his voice."

Only by intrachannel analysis have I been able to free myself from an ethnocentric preconception that I know what a smile is. We have not done the semiotic or communication research necessary to establish the range of appropriate social contexts within which to measure the range of consequences (meanings) of the possible range of shapes of "smiles." I think that we know how to study "smiling" as a social act. However, I don't think we will know what a smile means until we understand, from society to society, its intrachannel role and its contextual variability.

Insofar as I have been able to determine, just as there are no universal words, no sound complexes, which carry the same meaning the world over, there are no body motions, facial expressions, or gestures which provoke identical responses the world over.* A body can be bowed in grief, in humility, in laughter, or in readiness for aggression. A "smile" in one society portrays friendliness, in another embarrassment, and, in still another may contain a warning that, unless tension is reduced, hostility and attack will follow.

Perhaps it would be useful to discuss the "smile" as a deceptively familiar facial expression. It may be possible through its analysis to make a series of points about so-called gestures and facial expressions. First, what kinds of behavior do we abstract when we say that a man or a woman has a smile on (note the preposition) his or her face? We could, if we wished, make a list of the musculature of the lips and around the mouth. Such a listing might be of interest to an anatomist or to the plastic surgeon attempting to restore expression to a mutilated face or to a neurologist searching for a way to repair the damage of a neural accident. But this is not what we are seeking. Even our most preliminary investigation reveals that the lateral extension of the corners of the mouth or the upward pull on the upper lips, or any combinations of these do not make a recognizable smile. These same activities occur with a snarl or a grimace of pain. The response of an infant to a gas pain seems to involve the same circummouth musculature as the response to its mother.

A detail from a painting which is limited to the behavior immediately associated with the oral cavity is ambiguous. It takes little observation to realize that this ambiguity arises from the fact that our abstraction is partial, that we have inappropriately sliced nature.

It is true that a child can be taught to make a large oval, put a

small circle in its center, two small parallel circles just above the central circle and an upwardly curving line below the central circle and the completed figure can be recognized as representing a face. When the abstraction is presented as a whole, the curved line in this drawing can stand for a smile. Yet, this figure is more of a statement about the conventional shorthand of cartoons or of Western European childish representation than it is proof that the smile occurs in the mouth. If one belongs to a culture that sustains this abstractional convention, the curved line stands for a smile. In other cultures which do not use this total figure for a face or recognize the curved line symbol for a mouth as a mouth, this abstraction is confusing if not downright nonsensical. The particular organization of sounds which are heard as "smile" stands for a particular facial expression only for members of those cultures which have made this arbitrary and conventionalized association between the complex of sounds "Smile" and a particular range of facial expression. Comparably, the curved line is a symbol, carrying meaning only in those societies which have this convention. However, it is very easy to be deceived into believing that because an abstraction can stand for an activity, the abstraction itself is a universal representation of this expression—that a smile, so abstracted, is an activity engaged in by the mouth.

Because artistic representation is always, if meaningful, in some sense conventionalized, we must look at faces and not at pictures of faces if we are to abstract and comprehend either "what" a smile is, how it is made up, or what it "means." That is, "smiles" must be studied in their social setting if we are to understand the ranges of meaning humans of a given society convey to each other when they display facial activity.

If a "smile" is not limited to the mouth, what are the physical involvements characteristic of its performance? If we limit our discussion to an American communicating by body motion, we can study this problem along two different but mutually contributive pathways. One of these is to take the mouth behavior which repeatedly appears in that activity which we, as members of an American, diakinesic system recognize as a smile and which our informants identify as a smile, and see where else it appears. By a few comparative operations we can quickly discover that the lips are pulled back, or up and back, in a variety of other facial expressions. That is, even though some degree of movement is required by the lips in order to smile, this same movement is utilized in expressions that could

^{*}The following section on smiles is part of a paper "The Artist, The Scientist, and a Smile" presented at the Maryland Institute of Art on December 4, 1964.

not by the farthest stretch of the imagination be called "smiling." By this operation we recognize that the mouth movement is a segment of a structure that can be used as part of a code and that it is not specifically meaningful in and of itself.

Analogically, we could compare the movement of the lips which is at times used to compose the expression "smile" as a conventionalized body activity, with the long vowel /uw/, which in my dialect stands between the consonantal clusters in the forms "school" and "fool." There is nothing about the /uw/ sound which signifies that these two words have an underlying common identity. By some other operations we might discover that the /uw/ sound is to "school" and "fool" as the /i/ sound is to "skill" and "fill." That is, these are significant pieces of linguistic structure but are not in themselves meaningful.

The lip movements we are discussing are also pieces of structure. They must be combined with other pieces of comparably derived structure to form a meaningful unit of American communicative body movement. By examining the neighborhood of the curved lips, we can discover that this behavior often, but not always, occurs with a shifting tonus in the cheek area. It may or may not be accompanied by certain changes in the circumorbital region. It may or may not be accompanied by a shift in the positioning in the upper and lower lids. There may or may not be involvement of the eyebrows, and/or the forehead. Careful observation may reveal that this behavior may be accompanied by a movement of the scalp. The head may or may not be tilted. Continuing this same investigation, we can, using our descriptive and abstractive method of search, discover that the shoulders and the arms may or may not be involved. The trunk, too, while often not shifting as the lips curve or assume an original "at rest" position, may at times be seen to move. The hips may or may not be involved. And, if we are careful enough observers, we may come to recognize that in many of the situations in which we observe mouths curving, the legs and feet can be seen to move in regular and characteristic ways.

By other operations of isolation and contrast we may discover that each of the variables which we have just discussed also may occur without the appearance of a curving mouth. If each of these taken separately or together in a variety of combinations influence the way that people characteristically respond to a particular complex of behavior, we know that we are dealing with pieces of structure. We can surmise that we have begun to isolate some of the building blocks for the system through which Americans communi-

cate with each other. In other words, we have discovered, on the one hand, that the word "smile" is a lexical (verbal) abstraction of very complex behavior and, on the other, that there are, in the American body movement system, events like words, sentences, and paragraphs. We have demonstrated that some order of lip movement seems required in the activity perceived by Americans as a smile. By extensive operations of search, in fact, we will discover that if other pieces of facial behavior are correctly presented there is no need for an actor to either curl or part his lips—a slight softening is sufficient. The observer will report that the actor has "smiled."

While many of the techniques used in the abstraction and analysis of communication systems are relatively new, the insights on which the approach is based have been around for some time.* A popular beginning point for those concerned with the history of modern communication theory is Darwin's Expression of the Emotions in Man and Animals. In this work, the great biologist attempted to organize an extensive body of observations into some kind of ordered theory about the audible and visible behavior of mammals and the emotional states which induce such behavior. A rigorous observer, Darwin set a model for behavioral description which can be read with profit today. However, his concern with certain kinds of psychological problems, many of which remain unsolved, vitiated his attempt to regulate his data. In his role as synthesist he was hampered by preconceptions which even the sternest materialists of his day could not avoid.

Inheritance, as Darwin used it, seems at times a genetic, and at other times a social phenomenon. Perhaps it makes little difference to his major thesis which aspects of human behavior are biologically inherited as long as he demonstrates the continuity of the species and the society. However, for certain problems with which the human sciences are concerned today, it makes a great deal of difference whether or not vocal and body motion systems ultimately derive their order from the biological base or are exclusively a product of social experience. Careful reading of Darwin leads one to believe that if he had had some knowledge about social systems or even

^{*}This selection is adapted from "Paralanguage: Twenty-five Years after Sapir," in Lectures on Experimental Psychology, Henry W. Brosin ed. (Pittsburgh: University of Pittsburgh Press, 1961). [Note: References indicated by date in this paper and those following can be found in the Bibliography.]

about the systematic quality of language and its cultural inheritance, he might have unraveled or at least loosened some of these knots himself. Clearly, his work does set the stage for many of the problems with which some anthropologists, the modern ethnologists, and the comparative psychologists are now concerned:

Are certain kinds of social behavior, particularly gestures, facial expression, and certain sounds, somehow closer to the biological base than others?

Are such behaviors biologically inherited and thus specially revealing as descriptions of the emotional life of certain groups or members within the group?

Are there particular sounds and expressions and gestures which can be studied in isolation and which are evidence of particular, predisposing psychological states regardless of the cultural context of their appearance?

Cross-cultural research suggests that the answer to all of these questions is negative. How can we, then, comprehend and rephrase the evident regularities which we observe within particular social groups? And how can we assess the variations within these regularities? Scholars for over a hundred years have been concerned with analyzing the relationship between language and body motion and the personalities which express them. Insightful and even brilliantly intuitive though many of them are, most are directed toward a different order of data than we are developing here. They were largely concerned primarily with isolated examples of vocalic variation or gesture and posture as expressional behavior; their patent ethnocentrism, atomism, or biologism has precluded rather than encouraged cross-cultural study. With few exceptions, most of the work is not of direct concern to this presentation.

The development of microcultural analysis owes much to the work of Boas,* Efron (1942), Bateson,† Devereux,‡ LaBarre (1949) and Margaret Mead, among others. Mead's work especially has been stimulating to the development of kinesic analysis. Her reappraisal of the Gesellian position on development (1956), her work with Bateson which dramatized the usefulness of the camera as a research tool (1952), and her consistent stress on careful problem arrangement

in the analysis of culture and personality data were important contributions to the analytic procedures of kinesics. Several psychologists have also provided hypotheses, the analyses of which have led to the clarification of the linguistic-kinesic approach. Among these are K. Dunlap (1927), M. H. Krout (1933), Otto Klineberg (1927), Gardiner Murphy (1947), John Carroll (1953), and, especially, C. E. Osgood (1954). This is by no means an exhaustive review of the influences contributing to the development of the linguistic-kinesic approach to microcultural analysis. From every discipline making up the behavioral sciences have come insights which lead to the perspective best put by Bateson: "Our new recognition of the complexity and patterning of human behavior has forced us to go back and go through the natural history phase of the study of man which earlier scholars skipped in their haste to get to laboratory experimentation." §

6. Masculinity and Femininity as Display*

ZOOLOGISTS and biologists have over the years accumulated archives of data which attest to the complex ordering of animal gender display, courtship, and mating behavior. Until recently, the

† Gregory Bateson has been a consistent pioneer in both theoretical and methodological approaches to communication analysis. See particularly G. Bateson and Margaret Mead, Balinese Character, Special Publications of the New York Academy of Sciences, Vol. II (New York, 1942); Reusch and Bateson, Communication: The Social Matrix of Psychiatry (New York, Norton, 1951). His films, made with the assistance of the Josiah Macy, Jr. Foundation, laid the groundwork for the study of family interaction by microcultural techniques.

‡ George Devereux has shown a consistent interest in the analysis of communication, particularly in the clinical context. For his interest in cross-culturally measured paralanguage, see "Mohave Speech and Speech Mannerisms," Word, Vol. 6 (Dec. 1949), pp. 268–272.

§Personal communication in research seminar, CASBS, Palo Alto. 1956.

*Presented to the American Association for the Advancement of Science, in December 1964 under the title "The Tertiary Sexual Characteristics of Man: A Fundamental in Human Communication."

^{*}The influence of Franz Boas is expressed in the work of his students, particularly Mead, Sapir, and Efron. Professor Boas was among the first scholars to utilize the movie camera as a field research instrument.

of the salute. By often almost imperceptible variations in the performance of the act, he could comment upon the bravery or cowardice of his enemy or ally, could signal his attitude toward army life or give a brief history of the virtuosity of a lady from whom he had recently arisen. I once watched a sergeant give a 3-second, brilliant criticism of English cooking in an elaborate inverted salute to a beef-and-kidney pie. It was this order of variability on a central theme which stimulated one of the primary "breakthroughs" in the development of kinesics.

My own research has led me to examine extensively American gestural behavior and I have done preliminary work with German, French, Italian, and Spanish gesture behavior. From this work I can say conclusively that in the American and English movement system, and it looks likely to be the same for these other less well-studied cultures, "gestures" not only do not stand alone as behavioral isolates but they also do not have explicit and invariable meanings. Under analysis, those aspects of body motion which are commonly called gestures turn out to be like stem forms in language. That is, these are bound forms which require suffixual, prefixual, infixual, or transfixual behavior to be attached to them to determine their function in the interactive process. Like /couth/ they cannot stand alone.

The isolation of gestures and the attempt to understand them led to the most important findings of kinesic research. This original study of gestures gave the first indication that kinesic structure is parallel to language structure. By the study of gestures in context, it became clear that the kinesic system has forms which are astonishingly like words in language. This discovery in turn led to the investigation of the components of these forms and to the discovery of the larger complexes of which they were components. At least as far as English, American, and German kinesic systems are concerned, it has become clear that there are body behaviors which function like significant sounds, that combine into simple or relatively complex units like words, which are combined into much longer stretches of structured behavior like sentences or even paragraphs.

This does not mean that even for American movers we have exhaustively studied communicative body behavior. We do know now that it can be studied.

The other direct result of the original survey of gestural behavior

was the fact that even this limited kind of survey dispelled another primary misconception about body motion material. This is the "more natural" conception of the body. We have, over the years, come to recognize that the "mind" and its products are subject to training. Only the most ethnocentric can believe that theirs is a natural language while other societies speak some distortion of it. However, there is a prevalent belief which maintains that, beyond certain motor skills which are specially developed in particular societies, there is a natural pattern of movement which other peoples have either learned badly, not evolved to, or lost. Or, alternately, it has been assumed that there are universal, core movement patterns characteristic of all men. It is, of course, self-evident that with a common somatic organization, men will stand with their legs, lift with their hands and arms, manipulate with their fingers, turn, lift, and lower their heads, and so on. However, although we have been searching for 15 years, we have found no gesture or body motion which has the same social meaning in all societies. The immediate implications of this are clear. Insofar as we know, there is no body motion or gesture that can be regarded as a universal symbol. That is, we have been unable to discover any single facial expression, stance, or body position which conveys an identical meaning in all societies. I am unprepared, as yet, to conclude from this that the relationship between various body motion systems is parallel to (or different from) the traceable relationship between language families. However, I think that not only can we dispense with so-called "natural" gestures as being single-culture bound, but we can be prepared to discover that the methods of organizing body motion into communicative behavior by various societies may be as variable as the structures of the languages of these societies.

There is one last item which we must deal with at this time. This has to do with "expressive" behavior. Almost as soon as the linguist or the kinescist meets someone he is asked, "What can you tell about me from my speech or my body motion?" More fearful or more coquettish respondents manifest considerable anxiety that their behavior is going to reveal their deepest secrets to the expert. Unless the specialist is in a particularly playful or vindictive mood, he has a proper answer to these queries. It is quite true that the individual member of the society has had special experiences which make his performance differ from that of his fellows. To use Ted Schwartz's useful distinction, the special idiolect or the idiomovement system of any individual is a product of the special experiences of his

ically, all specifically idiosyncratic body behavior lies outside the field of kinesics, whether such behavior gains its peculiar cast from organic sources or from some special conditioning experience on the part of the actor or viewer. Yet it is essential to the methodology of kinesics, as it is for linguistics, that the behavior of any participant in an interaction situation be described as idiosyncratic only after the patterned aspects of the behavior have been exhaustively de-

of kinesics, as it is for linguistics, that the behavior of any participant in an interaction situation be described as idiosyncratic only after the patterned aspects of the behavior have been exhaustively described. That is, in the process of classification and testing, individuality is assigned after not before the fact of data exhaustion. Our theoretical framework provides us with an approach to the problems of allocating data to prekinesic or to macrokinesic levels, but only when cross-cultural research provides us with clear indications of symptomatic activity concurrent with specific organic malfunction can we be secure in our assessment of particular pieces of behavior.

While anthropologists have long been aware of differing cultural emphases on disease or accident, the literature is exceedingly thin with regard to the specific variations in symptom presentation. Discussion of this problem with physicians whose practices are limited to the ethnic variations of an American city has convinced me that practitioners are aware of the difficulties involved in treating symptoms expressed by various groups as though there were a common and universal symptom structure for a given disease. This point was repeatedly stressed by M.D.'s whose practice included the range of variation provided by a Santa Fe or an Albuquerque hospital. Yet to my knowledge the data remains essentially impressionistic. Perhaps as the World Health Organization expands its research area, specific and extensive attention will be given to the cross-cultural examination of the social structuring of symptoms. Such data as would be supplied by these studies-properly organized-should help us to be more explicit about the separation of prekinesic and kinesic behavior.

My own convictions in this area derive from experience gained while doing research on the social structure of two adjacent but differing subcultures in central Kentucky. Not only did the "Bluegrass" and "Hill" Kentuckians differ in their attitudes toward disease in general, but their choices of favorite ailments varied as systematically as did other aspects of their social organization. This research was done prior even to the preliminary systematization of kinesics, yet we were aware of the fact that there were styles of symptom presentation in both verbal and kinesic statements of illness which were sufficiently different in the two areas as to lead to

misunderstanding between them. The discussion to follow is based on insights gained during this community research project, measured against the material gathered by a number of investigators in the cross-cultural sphere, and reinterpreted through the recent formalization of communication research.

Although Dry Ridge was only about 15 miles into the hills from the Bluegrass community Green Valley, the health set of this area is markedly different from that characteristic of the valley. As a culture, more rigorously individualistic and puritanical than Green Valley, sickness was patterned in Dry Ridge into "nonreference to health" and "critically ill." Ideally, any variation between these two states is to be ignored or, at least, should remain a private matter. Ideally one is forced to go to a doctor, take medicine, or go to bed. The kinesic message that one is critically ill (although conscious and not yet bed-ridden) is best covered by the gestural reference, "stiff upper lip." This includes retraction of the scalp, tightening the skin of the forehead (with a significant reduction of brow markers), reduction of smiling, carrying the torso hyper-erect, reduction of velocity in hand and arm movement, increased precision in gross movement (decreased overkick-anterior and posterior-while walking) and increased "foot-planting" (both feet-heel and ball-on floor while standing or sitting). If this does not elicit response from responsible kindred, this general quality is sporadically interrupted by "sag" behavior of about 2 to 5 seconds' duration followed by "pulling together" behavior of about 2 to 4 seconds' duration. The sag and pull-together should not take place very often or the quality shifts and the behavior is reacted to as malingering or as an infantile appeal. I have never, in over a year of watching this behavior, seen the sag and pull-together used by males more than once in 15 minutes except by the very young and the very old. Females, on the other hand, sag and pull-together more frequently—several as often as two or three times in 5 minutes. This statement of variation is probably overprecise, but there is quite obviously a difference in expectancy here. A child, an old person, or a woman may engage in sag and pull-together at greater frequency within a time span without being considered as malingering. It is perhaps unnecessary to stress the point that in Dry Ridge the full cross-referencing system is made up of "stiff upper lip" plus "sag and recover." It is perhaps of interest to note that the health image quality behavior of "stiff upper lip" differs from the mood image of anger in Dry Ridge in only two behaviorial aspects that I have been able to trace. First, in eye convergence and focus—in anger the Dry Ridger avoids focusing on the eyes of others—looking to either side of other communicants, whereas, in sickness, he looks at his communicant with in-and-out-of-focus variation. Second, in aspiration presentation: in sickness he engages in intermittent pronounced chest presentation with audible aspiration (usually through the nose). Paralinguistically this is very close to a sigh. In anger, he uses deep, measured, visually perceptible breathing which is usually inaudible.

In Green Valley the situation differs both linguistically and kinesically. A kith and kin community, health is used as a device for establishing interdependent interaction. Ill health is discussed and, in a manner of speaking, "enjoyed." A public affair, any manifestation of physical malaise occasions group diagnosis and comparison of symptoms. Accompanied by extensive verbalization, the kinesics of all communicants are characteristically directed with kinesic area markers. The etiquette of illness even in Green Valley (both of these communities are, after all, American) demands that the viewer initiate verbal discussion of the actor's debility. Thus, the community member introduces a cross-referencing appeal which is sustained until it is responded to by other participants in an interactional scene.

In Green Valley the kinesic illness behavior is characterized by first- to third-degree medial compression of the brows accompanied by first-degree brow raise. The lids sag and there is tensing of the lateral aspects of the orbit plus upper cheek sag. The lips fill and the lower lip falls slightly away from the lower teeth. The neck is out of tonus, often with a forward or forward and lateral thrust. The upper torso sags anteriorly as do the shoulders. Belly may be presented. Arms and hands may hang at the side or move in overslow velocity with lower arm performing any arc at greater velocity than do the hands. Feet drag while walking, or rest anteriorly on heels while sitting. There is, of course, variation in completeness or duration of this quality behavior—but it is my conviction that this variation is a function of the lack of response on the part of the other communicants rather than of the seriousness of the debility represented. This is supported by the fact that as soon as the malaise of the initiator is responded to, the body moves into tonus and a verbal recital of symptoms is accompanied by pointing-touchingrubbing—caressing of the ostensibly involved body parts. Even persons who are apparently (from doctor's diagnosis) quite ill become animated, with eyes in focus-mouth at zero, and body at increased

frequency of response during such conversations. Such activity is intermittently interrupted by "sag and recover," if the responses get "too" general in nature. I am somewhat unsure about this, but it is my feeling that malingering is suspected in this community when the "sick" person does not interrupt his or her performance with sympathy and empathy activity, when the traded symptoms are introduced by other participants in the conversation. An actor's preoccupation with his own health is a signal that his appeal is not simply a statement of illness.

These are neighboring systems and there is some intermarriage between the two groups. With this range of difference, it is easy to see that some misunderstanding arises in an intermarriage situation. It is perhaps of no consequence to this present chapter, but it is interesting to note that Dry Ridge, an economically poorer region than Green Valley, has produced four doctors since 1890 while Green Valley has produced but one.

Further discussion of body-base and body-set must await a more extensive presentation. These examples should serve, however, to illustrate the general propositions concerning the function of this aspect of the parakinesic system as a cross-referencing system. This discussion and these examples may be somewhat misleading for they do not properly underline the point that while we are able to abstract some fairly precise movements as central indicators here, such behavior may congruently or incongruently be modified on the macrokinesic level, which contains kinemorphic constructions, the constituent behavior of which may function on both levels of systematization. Further, our analysis must not omit what is probably the most critical (and least adequately analyzed) level of parakinesics. This area includes that behavior which I have termed the motion qualifiers, and the kinesic action and interaction modifiers. Although they in general refer to shorter stretches of behavior than do the base and set cross-referencing systems, these parakinesic qualifiers and modifiers may cover activity as limited as a kinemorph or a single kinemorphic construction or stretches of behavior of such duration as to make us feel that they may ultimately be relegated to the base-set level.

Motion Qualifiers

The stream of body motion behavior has thus far been discussed as though there were a somewhat mechanical all-or-nothing quality