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THE BODILY ACTION RESEARCH OF RAY L. BIRDWHISTELL AND PAUL
EKMAN: IMPLICATIONS FOR ORAL INTERPRETATION THEORY

The University of Arizona

PH.D. 1983

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THE BODILY ACTION RESEARCH OF RAY L. BIRDWHISTELL
AND PAUL EKMAN: IMPLICATIONS FOR ORAL
INTERPRETATION THEORY

by
Kathleen Gilson Snow White

A Dissertation Submitted to the Faculty of the
DEPARTMENT OF SPEECH COMMUNICATION
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY
In the Graduate College
THE UNIVERSITY OF ARIZONA

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As members of the Final Examination Committee, we certify that we have read
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entitled THE BODILY ACTION RESEARCH OF RAY L. BIRDWHISTELL AND PAUL EKMAN:
IMPLICATIONS FOR ORAL INTERPRETATION THEORY

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Final approval and acceptance of this dissertation is contingent upon the
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I hereby certify that I have read this dissertation prepared under my
direction and recommend that it be accepted as fulfilling the dissertation
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David D. Williams
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Date

May 23, 1983

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SIGNED Kathleen Snow White

This dissertation is dedicated
to the memory of
my husband
Dr. Glenn Marlow White

ACKNOWLEDGMENTS

The author wishes to express her thanks to Dr. David A. Williams, the dissertation director, to Dr. Andrew A. King, and to Dr. William E. Bailey. Gratitude is expressed also to Drs. Henry L. and Barbara H. Ewbank and to Drs. Ted L. and Renate H. Rosenthal for their invaluable help and encouragement. Finally, I acknowledge the unconditional support I received from my parents Ruth and Elman Snow, support that was essential to the completion of this task.

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ABSTRACT

The purpose of this study was to compare the philosophical stance, terminology, methodology, and research findings of two representative and influential investigators in the field of nonverbal behavior, Ray L. Birdwhistell and Paul Ekman, drawing theoretical implications and practical applications for oral interpretation. The study found that while Birdwhistell has maintained that all nonverbal behavior is culturally learned and must be examined within the communication gestalt, Ekman has emphasized the innate, universal, and expressive elements of bodily movement, especially that of the face. Ekman has recognized the role of cultural learning, however.

It was found that neither Birdwhistell's nor Ekman's research has rendered support for any of the theoretical approaches to nonverbal behavior which oral interpreters have entertained in the past. However, it was found that Birdwhistell's and Ekman's approaches to nonverbal behavior do justify a more deliberate training strategy in oral interpretation.

It was found that Ekman's external variable research methodology which encompasses both indicative and communicative methods offers more chance of generating meaningful and useful research in oral interpretation than does Birdwhistell's structural approach. It was also found that Ekman's constructs of emblem, illustrator, regulator, adaptor, and affect display offer the most workable vocabulary

with which to discuss and elucidate nonverbal behavior, and that Ekman's research which is continually updating and expanding these categories illuminates concepts with which oral interpretation scholars have been grappling for years.

CHAPTER 1

INTRODUCTION

The oral interpreter of literature has only two means of expression at his command--his voice and his body. During the past few decades, however, the emphases accorded these two aspects of oral interpretation were discrepant. While the role of the voice was critically examined, and techniques for voice production were widely discussed in oral interpretation texts, the role of the body was passed over lightly or almost completely ignored (Okey, 1970). Despite the obvious centrality of nonverbal cues through which the meaning of an utterance can be massively altered, distorted, or even inverted by the presence or absence of the appropriate bodily responses, the oral interpreter's primary injunction as far as bodily action was concerned was that his body should not "call attention to itself." Why was bodily action so neglected by oral interpretation theorists? Robert M. Post, commenting on the status of bodily action principles in 1963, suggested that:

Bodily action, so vital to the achievement of an empathic response from an audience, seldom receives direct attention in modern oral interpretation textbooks or in the classroom. This omission is no doubt a result of the modern trend away from the stilted, artificial, and unnatural uses of body advocated by some elocutionists in the late nineteenth and early twentieth centuries (p. 236).

Today, however, the role of the body (nonverbal behavior) is emerging as an important aspect of oral interpretation. This renewed

interest has received impetus from current research by anthropologists and psychologists. As Leslie Irene Coger (1972, p. 275) has noted:

Teachers and theorists in oral interpretation are finding in the cultural milieu of our times provocative ideas for their changing emphases in the field. Nonverbal elements of communication are receiving attention from scholars of anthropology, psychiatry, psychology, the teaching of foreign language, literature, acting, and interpretation. All are finding that physical actions are important elements in their work, elements that augment and illuminate verbal constructs.

Although oral interpretation theorists are now alluding to contemporary anthropological and psychological research about nonverbal communication and suggesting that this research might have theoretical implications and/or practical applications (Coger and Pelham, 1975; Doll, 1977), no in-depth study of this problem has been published. Thus, a need exists for an examination of contemporary research on bodily action to determine the relevance and applicability of its findings to the art of oral interpretation. The purpose of the present study is to attempt such an examination of two major bodies of current nonverbal communication research. This writer will compare the works of two representative and influential investigators, Ray L. Birdwhistell, an anthropologist, and Paul Ekman, a psychologist.

It is imperative that oral interpretation theorists have a working knowledge of current research in nonverbal communication first, because the nonverbal elements of oral interpretation have historically caused considerable contention, and secondly, because the cultural milieu of the times has always influenced both the bodily action curriculum and its teaching methodology. A brief overview of the

principles of bodily action advocated by teachers of oral interpretation since 1750 substantiates this claim.

From 1750 until 1827, English elocutionists and their multifaceted concept of nature influenced American teachers. Mary Margaret Robb has divided these English elocutionists into two camps, the Natural School under the leadership of Thomas Sheridan, and the Mechanical School under the leadership of John Walker (Vandraegen, 1949; Mattingly, 1954). Robb (1968, p. 231) stated, "The natural school defined its methods rather hazily and depended upon a lack of method or an imitation of nature. The mechanical school taught by rules and notations." Alethea S. Mattingly (1972, pp. 255-256) has noted some similarities in the two schools, however. "Both schools sought a 'natural' manner. Both concentrated upon pronuntiatio, the fifth canon of classical rhetoric, and reflect the great tradition of 'rhetorical delivery'. . . ." Major elocution textbooks used in American colleges and universities during this time were from England, with the exception of the Rev. Ebenezer Porter's Analysis of Principles of Rhetorical Delivery as Applied in Reading and Speaking, published in 1827 (Robb, 1968, p. 67). Porter's theories were not new, however, but were based on those of Walker, whereas his methods were close to those of Sheridan (Robb, 1968, p. 41). Frederick W. Haberman (1954, p. 110) has described the principles of bodily action advocated during this period as being concerned with gestures of technical training and gestures of emotional expression. Grace and force were the qualities sought in bodily action. Control of gestures of technical training such as pointing a finger, sweeping an arm, clasping the hands were thought to

bring grace to delivery. Appropriate gestures of emotion were thought to add force.

The beginnings of scientific inquiry influenced elocutionists from 1827 until 1870. Although the elocutionists of the eighteenth century referred to elocution as an art, the elocutionists of the nineteenth century began to use the terms science and scientific and to attempt to base their theories on scientific evidence. Elocution became associated with speech correction, vocal physiology, and the physics of sound because of the research of Dr. James Rush, an American physician. Principles of bodily action, nevertheless, continued to be charted by English elocutionists, among them the Rev. Gilbert Austin. In the tradition of John Bulwer (Chirologia . . . Chironomia, 1644) and James Burgh (The Art of Speaking . . ., 1762) Austin contended that each emotion or passion has its corresponding gesture or attitude. In his Chironomia (1806) Austin sought to formulate rules for oratorical delivery, to compile an anthology of quotations from both ancient and modern rhetoricians on the subject of delivery, to set forth a scientific analysis of gesture, and to popularize an agglutinative system of gesture notation (Haberman, 1954, p. 118). Robb (1968, p. 140) has noted that Austin's book "was the source for most of the discussions of gesture written during the period (1827-1870)."

While the theories of Walker, Rush, and Austin continued to be influential, from 1870 until 1890 the research of two discrepant theorists added impetus to the interest in bodily action. The first of these two was the naturalist Charles Darwin whose book The Expression of the Emotions in Man and Animals (1872; reprinted in 1965) gave

credence to Bulwer's, Burgh's, and Austin's descriptions of the bodily actions indicative of emotional states. Darwin's inquiries led him to the conclusion that specific bodily expressions could be associated with each major emotion, that these expressions were both universal and innate. Darwin (1965, pp. 352-353) wrote:

As far as we can judge, only a few expressive movements are learnt by each individual; that is, were consciously and voluntarily performed during the early years of life for some definite object, or in imitation of others, and then became habitual. The far greater number of the movements of expression, and all the more important ones, are, as we have seen, innate or inherited; and as such cannot be said to depend on the will of the individual.

Darwin also propounded a theory the rudiments of which can be found in the rhetorical principles of Cicero's time. This theory later came to be associated with the theories of psychologist William James and physiologist Carl Lange. Darwin (p. 365) suggested that bodily action can induce emotion as well as express it:

The free expression by outward signs of an emotion intensifies it. On the other hand, the repression, as far as this is possible, of all outward signs softens our emotions. He who gives way to violent gestures will increase his rage; he who does not control the signs of fear will experience fear in a greater degree; and he who remains passive when overwhelmed with grief loses his best chance of recovering elasticity of mind. These results follow from the intimate relation which exists between almost all of the emotions and their outward manifestation; and partly from the direct influence of exertion on the heart, and consequently on the brain. Even the simulation of an emotion tends to arouse it in our minds.

In the introduction to his book, Darwin referred to the parallel research of several French physiologists, in particular to Guillaume Benjamin Armand Duchenne (Mechanisme de la Physionome, 1862) and Pierre Gratiolet (De la Physionomie et des Mouvements d'Expression, 1865). According to Robb (1968, p. 134), François Delsarte, a teacher

of vocal music and acting in Paris from 1839 until 1871, must have been aware of their work. Although Delsarte never wrote a book, his unique system of bodily action greatly affected American teachers of elocution. Steele MacKaye, an American who studied with Delsarte in Paris, brought the system to America in 1871, and it was subsequently adopted and adapted by such teachers as Genevieve Stebbins, J. W. Shoemaker, Emily M. Bishop, H. D. Northrup, Lewis B. Monroe, and Moses True Brown. Each teacher had his own interpretation of the system with several basic similarities. Each insisted that (1) elocution is a science as well as an art, (2) the body must be trained in order to discipline and develop its powers of expression, (3) a system of rules governing attitudes, positions, inflections, and movements must be followed so that the "natural laws" of expression might be obeyed. To aid their students in comprehending these "natural laws," each used diagrams, charts, and figures to illustrate the expression of every thought and feeling. Each accepted Delsarte's Law of Correspondence, believing that every outward manifestation of bodily action should be the result of an inner cause (Snow [White], 1968, pp. 48-49). From 1870 until 1890, the role of the body received as much attention as that of the voice (Okey, 1970).

Eclecticism was evident from 1890 until 1920. Delsarte's body charts were universally accepted as a method of training by the five major private schools of speech, The National School of Elocution and Oratory, The Emerson College of Oratory, The Columbia School of Oratory, The School of Expression, and the Leland Powers School of the Spoken Word (Renshaw, 1954, pp. 308-309). Elocutionists also drew

upon the research of prominent biologists. For example, in the four volumes of The Evolution of Expression, Charles Wesley Emerson adopted and adapted the evolutionary theories of Charles Darwin and the phylogenetic recapitulation theories of Ernst Heinrich Haeckel. Like Emerson, Samuel Silas Curry tried to base his philosophy of expression on nature, but he borrowed from philosophers rather than from natural scientists. He garnered ideas from Plato, Schiller, Spencer, Hegel, Kant, Comenius, Pestalozzi, and Froebel (Renshaw, 1954, p. 309). From the budding study of psychology, especially William James's Principles of Psychology (1890), teachers of elocution or expression as they began to call it drew theories of mental processes and mental activity. In "Elocution and Psychology," an article published in Werner's Magazine, Solomon H. Clark (1896, pp. 203-210) gave three reasons for his belief that elocution should be based on a sound study of psychology: it provides cultural and mental training, aids the understanding of the complicated mental process of vocal expressions, and assists judgments about the various schools of expression. Edyth Renshaw (1954, p. 309) has delineated the basic tenets of the period.

First, for true expression, the whole man must speak through all his being. Second, the powers of his mind must act simultaneously and spontaneously at the moment of expression. Third, the voice and actions must be responsive and subservient to the idea being expressed. Fourth, technique must, therefore, be developed through careful practice. Fifth, problems to challenge the students' thinking should be assigned. Sixth, principles should be explained only after the student has already demonstrated them through a process of trial and error. And, finally, although these teachers believed in the existence of a sort of Platonic ideal standard, they repeatedly emphasized the importance of individual differences.

From 1920 until 1950, psychological research exerted a major influence. Gestalt psychology and behaviorism were protests against the German psychology of the late nineteenth century. Gestalt psychology protested against analyzing consciousness into elements and excluding the data of consciousness in psychology; behaviorism protested against including the data of consciousness in psychology (Boring, 1957). Charles H. Woolbert supported behaviorism; Wayland M. Parrish argued for the Gestaltists. Martha T. Barclay (1968) has suggested that behaviorism forced speech theorists to pay greater attention to objective analysis and scientific research to replace subjective methods, while Robb (1968, p. 194) believed that Gestalt psychology forced speech theorists to develop methods which emphasized "the emotional and the logical content of the material read rather than mechanical details of voice production." From the research of German psychologist Theodore Lipps, theorists borrowed the concept of empathy (Einfuhlung). Charles Woolbert and Severina Nelson (1934) defined its role in terms of the response of the audience to the reader. Cornelius C. Cunningham (1941) broadened its definition to include the reader's empathic response to the literature. From William James and Carl Lange theorists borrowed the hypothesis that emotion is the result rather than the cause of bodily changes. In Reading Aloud Parrish (1932, p. 94) described the James-Lange theory as a "new contribution to elocutionary method." He suggested that oral readers need no longer concern themselves "about traditional systems of gesture, about stereotyped positions of hands and head, except to avoid them" (p. 96), because "general bodily tension, alertness, or readiness will facilitate appropriate emotional responses" (p. 95).

The trend toward utilizing research in allied disciplines continued from 1950 until 1966 (Marcoux, 1964). The principles of bodily action advocated by teachers of oral interpretation were primarily descriptive. Emphasis was placed on the literature to be read rather than on techniques employed by the oral interpreter. For example, Martin Cobin (1959, p. 42) frankly stated in Theory and Technique of Interpretation that he was wary of discussing specific bodily action techniques because appropriate physical behavior is subject to the tastes of the people who respond to it, and these tastes vary from one period of time to another. Teachers advised students to use only those actions which did not distract from the literature, to use suggestive action rather than literal action which might call attention to itself. They also encouraged students to develop their own style of bodily action. The criteria were that an action must feel comfortable to the reader and that the action must add rather than detract from the literature being interpreted (Snow [White], 1968, pp. 123-125). During this period the role of empathy was again expanded. Wilma H. Grimes and Alethea S. Mattingly (1961, p. 307) in the first edition of Interpretation: Writer, Reader, Audience not only discussed the empathic response of reader to literature and audience to reader, but also included the reader's empathic response to his audience.

From 1966 until the present, the increasing attention paid to bodily action (nonverbal communication) by anthropologists and psychologists has renewed interest in the role of the body in oral interpretation. In the third edition of Communicative Reading Otis J.

Aggertt and Elbert R. Bowen (1972, pp. 184-185) noted this reawakening:

Nineteenth-century speech teachers such as François Delsarte placed great importance upon gesture, facial expression, stance, and body movement, but they lacked the scientific methods now being employed, and they sought to impose visible techniques on the speaker and reader. The results were often disastrous and contributed in large part to the disrepute into which elocution fell. Current research in kinesics emphasizes again the importance of communicating meaningfully with the eyes of your audience. Whether this new science will someday make further contribution to the arts and skills of the oral interpreter and speaker, we do not know.

In the more recent "Kinesics Applied to Interpreter's Theatre"

Leslie Irene Coger and Sharron Pelham (1975) suggested that current research in nonverbal communication is directly applicable to oral interpretation. Howard D. Doll's (1977) "Nonverbal Communication and Oral Interpretation" contains a cursory examination of some of the major areas of nonverbal communication research concentrating primarily on facial expression and eye contact. Doll (1977, p. 265) suggested that the major purpose of his article is "to suggest fruitful areas for nonverbal communication research and to determine whether current research in facial expression had relevance to the act of oral interpretation." He concluded that he is certain that nonverbal communication research can be useful to the oral interpreter. Coger, Pelham, and Doll have highlighted the research of both Ray L. Birdwhistell and Paul Ekman among others in their articles; however, they have failed to distinguish the essential differences in operating assumptions, theoretical constructs, methodology, and supporting evidence between the two, distinctions critical to an understanding of nonverbal research and to its application.

In setting the context for the present study, it is important to note that facial and bodily movement patterns have been a subject of serious scientific interest since Darwin's Expression of the Emotions in Man and Animals. The names of those who have written about expressive movement or nonverbal communication since 1872 read like a "Who's Who" in the behavioral sciences. From about 1914 until 1940, psychologists sought to discover how people communicate by their facial expressions. They conducted many experiments with rather disappointing results, and eventually concluded that the face does not express emotions in any reliably recognizable manner (Flora Davis, 1973, pp. 1-2). During this same period, anthropologists such as Edward Sapir (1949, pp. 533-543) pointed out that body motions are not random, but are learned like a language. They gave little attention to deciphering the code, however. It was not until the 1940's, with the pioneering research of David Efron (1941) reported in his book Gesture and Environment, that the psychological and anthropological aspects of bodily action came to be investigated systematically. Since that of Efron's, many studies of bodily action have been undertaken. Most have fallen into eight categories: developmental patterns, muscle tension, expression of the emotions, personality and psychodiagnosis, psychological interpretation of gesture, interaction and communication, cultural characteristics, and animal behavior. Among researchers there are diverse theoretical camps debating whether movement is innate or learned, individual or cultural, expressive or communicative (Martha Davis, 1972, pp. 2-3).

Ray L. Birdwhistell's Introduction to Kinesics (1952a) and Kinesics and Context (1970a) introduced a new concept, kinesics. In Understanding Body Movement Martha Davis (1972, p. 28) has credited him with being a pioneer who is ". . . at the forefront of the current interest in and investigation of body movement. The work of several other researchers, notably Condon, Schefflen, Kendon, and Loeb is directly related to his; and many other researchers are indirectly influenced by him." Birdwhistell is a leader of the theoretical camp which emphasizes the learned, cultural, and essentially communicative aspects of bodily action. His is the most ambitious attempt to systematize and code nonverbal communication in all of its variants. His research is not unknown to oral interpretation theorists. Elbert R. Bowen, Otis J. Agger, and William Rickert (1978, p. 151), referring to him in the fourth edition of Communicative Reading, stated that "Professor Ray L. Birdwhistell is the dynamic proponent of a relatively infant science called kinesics, the study of body-motion behavior in communication. Of course kinesics does not yet offer an instructional panacea, but it does provide insight into the complex nature of human visible activity."

Paul Ekman has published widely in the area of nonverbal communication since 1957. Martha Davis (1972, p. 60) has described him as "one of the most prominent and productive researchers of nonverbal behavior. . . ." The work of several other scientists, notably Wallace Friesen, Phoebe Ellsworth, Floyd Allport, Solomon Asch, and Silvan Tompkins is directly related to his. Ekman has emphasized the innate, universal, and expressive elements of bodily action. Ekman with

Friesen has developed a widely used system for classifying nonverbal behavioral acts (Ekman and Friesen, 1969c). Although Ekman's research is not as well known to oral interpretation theorists as Birdwhistell's, Robert Beloof (1973, pers. comm.) has suggested that there are distinctions made by the schools of thought represented by Birdwhistell and Ekman which should give interpreters much thought.

Because Birdwhistell and Ekman have conducted the most programmatic and influential research in nonverbal communication, and because they represent antithetical sides of major theoretical issues, this author has critically examined their work. The study has used as sources all the books, articles, and manuscripts which have been graciously supplied by Dr. Birdwhistell and Dr. Ekman, as well as personal correspondence with each of them. In addition, the author has used textbooks, articles, studies, and comments from other sources which have a bearing on the central focus of the study.

This dissertation is organized as follows: In Chapter 2 the operating assumptions, theoretical constructs, methodology, and supportive evidence of Ray L. Birdwhistell are described. In Chapter 3 Paul Ekman's operating assumptions, theoretical constructs, methodology, and supporting evidence are described. Chapter 4 presents a comparative analysis of the research of these men based on the descriptions of the philosophical stance, terminology, methodology, and research findings drawing implications for oral interpretation theory and practices. Chapter 5 summarizes conclusions drawn.

Some questions this dissertation addresses are:

1. Are there any essential differences between the operating assumptions of Ekman and Birdwhistell?
2. Can any of the theoretical constructs employed by Birdwhistell and Ekman be borrowed and utilized by oral interpretation theorists?
3. What methodological implications can be drawn from the research styles of Birdwhistell and Ekman for oral interpreters who wish to engage in empirical investigations of nonverbal behavior?
4. Does the empirical evidence gathered to date render support for any of the theoretical approaches to nonverbal communication which oral interpreter's have entertained in the past?
5. Do recent scientific approaches to nonverbal communication justify a more deliberate training strategy in oral interpretation?
6. Is there any utility for the oral interpreter in an attempt to systematize and code nonverbal behaviors?
7. Can oral interpretation pedagogy benefit from either Birdwhistell's or Ekman's research?
8. Based upon an evaluation of the works of Birdwhistell and Ekman, can a set of specific recommendations for oral interpretation be developed?

CHAPTER 2

THE RESEARCH OF RAY L. BIRDWHISTELL

Ray L. Birdwhistell (1972, pers. comm.) has said that he became interested in the study of language and the function of words in the communicative process when he read George Herbert Mead's Mind, Self, and Society and Stuart Chase's The Tyranny of Words as an undergraduate at Miami University of Ohio in 1938. It was then that he began to seek a model for communication that was continuous and not just a diadic interchange. He soon concluded that communication is a multi-channel process which uses different channels and channel combinations at different times. While no one channel is always operating, one or more channels are used continuously.

Birdwhistell expanded his interest in communication to nonverbal aspects in 1946 while on a field trip sponsored by the University of Chicago and the Canadian Social Science Research Council. He was to study the social organization of the Kutenai Indians. He soon was haunted by the realization that the Kutenai looked entirely different when speaking English than when speaking their own language. They seemed to be bilingual in both spoken and body language (1970, pp. 28-29).

When Birdwhistell (1963b, p. 126) began his studies of nonverbal behavior in the late 1940's, he first did so with the assumption that the basic human emotions were expressed the same way in all cultures

as Darwin had believed. He anticipated formulating a research strategy which would isolate universal signs; that once these signs were isolated it would be possible to delineate the body behavior characteristic of particular societies; that these signs would serve as devices for establishing particular personality patterns. However, as the research proceeded, it became clear to him that the search for universals was culture bound, that all meaningful motion patterns were socially learned. In his first book Introduction to Kinesics: An Annotation System for Analysis of Body Motion and Gesture Birdwhistell (1952a, p. 7) wrote, ". . . as a bilingual speaker changes languages he also changes kinesic systems. As will be stressed later, there seems to be no more universality to the meaning of kinesic patterns than there is to any sound pattern." Birdwhistell's perspective changed to a belief that body motion is a learned form of communication which is patterned within a culture, and which is organized to help stabilize predictability in human intercourse.

Birdwhistell's next breakthrough came in the 1950's when he turned his attention away from a search for universals and toward gestures that have a conscious, understood meaning like the salute. He found that even a salute can convey anything from approval to ridicule depending upon body stance, speed and duration, or upon context. When he realized that even understood gestures are only partial acts which require other gestures to have meaning, he was on the path to the development of his theory of kinesics. He postulated that these gestures must act like root forms in language, and if this were true, that bodily action might also be similar to language in other ways and

might be analyzed in a manner similar to that in which linguists analyze speech. By this time Birdwhistell had completed his Ph.D. in anthropology at the University of Chicago and had become the coordinator of the Inter-Disciplinary Committee on Culture and Communication at the University of Louisville. It was while he was at Louisville that he published Introduction to Kinesics (1952a), his first presentation of a notation system. This book was primarily a research manual in which Birdwhistell introduced the term kinesics to cover the physical, physiological, psychological, and cultural aspects of nonverbal interpersonal communication.

In 1959 Birdwhistell moved to his own laboratory at Eastern Pennsylvania Psychiatric Institute in Philadelphia where he is Senior Research Scientist and Director of the Studies in Human Communication. He is also associated with the Annenberg School of Communication at the University of Pennsylvania. At his laboratory he utilizes cinematic paraphernalia including slow-motion analyzers which enable him to examine and record a film frame by frame. This equipment allows Birdwhistell to conduct nonexperimental, observational research based primarily on an ethological or descriptive approach.

Operating Assumptions

Ray L. Birdwhistell has a systematic view of communication that assumes that all interpersonal behavior is socially learned and communicative, and that verbal and nonverbal communication are integral and inseparable parts of a total communication system. He has rejected all diadic communication models which attempt to make a

dichotomy between linguistics and kinesics and which isolate these elements from the social context within which they take place. Birdwhistell (1970a, p. 98) has stated that he objects to

. . .any attempt to subsume all social behaviors under a linguistic, kinesic rubric. I do not think, as presently conceived, that all interactive behavior should be relegated to a communicational or 'semiotic' frame. However, I equally object to any conceptual scheme which could suggest that the linguist or kinesicist should only be concerned with single utterances or movement sequences. Whether studied from the point of view of the performance of a single actor or from the equally atomistic position of those who conceive of the world as made up of people who alternately speak and listen or move and watch, focus upon the actor and the reactor serves only to obscure the systematic properties of the scene. And this stricture holds whether the scene is viewed from the sociological or the linguistic-kinesic-communicational point of view.

In Approaches to Semiotics Alfred S. Hayes (1964) first described the basic assumptions underlying kinesics, the term Birdwhistell has coined to designate the systematic study of the communicational aspects of body motion measured in interpersonal contexts. These assumptions described by Hayes were drawn from an unpublished manuscript entitled the Natural History of an Interview (1971). Section V of Birdwhistell's (1970a) book Kinesics and Context contains the material from this original source and seems to be the most comprehensive and most clearly written exposition of kinesics. This is Birdwhistell's (pp. 183-184) succinct statement of the premises underlying his approach:

1. Like other events in nature, no body movement or expression is without meaning in the context in which it appears.
2. Like other aspects of human behavior, body posture, movement, and facial expression are patterned and, thus, subject to systematic analysis.

3. While recognizing the possible limitations imposed by particular biological substrata, until otherwise demonstrated, the systematic body motion of the members of a community is considered a function of the social system to which the group belongs.
4. Visible body activity like audible acoustic activity systematically influences the behavior of other members of any particular group.
5. Until otherwise demonstrated such behavior will be considered to have an investigable communicational function.
6. The meanings derived therefrom are functions both of the behavior and of the operations by which it is investigated.
7. The particular biological system and the special life experience of any individual will contribute idiosyncratic elements to his kinesic system, but the individual or symptomatic quality of these elements can only be assessed following the analysis of the larger systems of which his is a part.

Of these seven assumptions, Birdwhistell has said that the first two are the most crucial, the ones upon which the other five rest. Thus, he believes that through detailed descriptive analysis of kinesic material he can reach a point where interpretation of that material is also possible. Assumption seven points out, however, that extensive contrastive analysis is necessary to this attempt at interpretation.

Birdwhistell (1970a) also has warned that anyone who seeks to comprehend and interpret nonverbal behavior must avoid any shortcuts. These he (pp. 186-191) has labeled "Temptations" which are delineated as follows:

1. The "Carrier" Temptation which derives from a view that each gesture has real meaning just as words are supposed to have.
2. The "Closer to Nature" Temptation which consists of two assumptions, one that body movement is somehow more

primitive and thus closer to biological nature than verbal behavior, and two that nonverbal communication came earlier in evolutionary history than verbal communication and thus remained unpatterned. These two assumptions lead to an even more subtle temptation, to see infantile behavior as more natural than that of the adult.

3. The "Modifier" Temptation which assumes that words carry meaning and that all other nonword behavior merely modifies it.
4. The "Central Movement" Temptation which is the tendency of investigators to assume that one part of the body carries the meaning while other parts simply modify this central message.
5. The "Analytic Informant" Temptation which is the tendency of investigators to forget that informants are just that and not analysts; informants are adherents to and not objective interpreters of their communicational systems. Informant's reports are data and not evidence.

Theoretical Constructs

Ray L. Birdwhistell is a descriptive analyst of social communication. Adam Kendon (1972, p. 443) summarized his approach as follows:

The focus, then, is on what behaviors people characteristically engage in when they interact. Since we do not know what these behaviors are, we must look and see. Most often, an investigator with this orientation will seek to gather records on film or video tape of occasions when people are present to one another and then, by patient and detailed watching, he will try to describe the elements of behavior that occur and the way these elements are patterned to one another. Gradually,

as he accumulates examples, he will be able to state the contexts within which the elements he has isolated may be found, and from such statements specify the ways in which these elements function in the communication system he is studying.

Birdwhistell's approach is structural and represents an attempt to discover rule governed relationships among behaviors. He has conceptualized communication as a hierarchically structured system which consists of increasingly more organized units of behavior. All behavior is considered to be communicative with multiple meanings at a variety of levels of integration. Social meaning, however, does not inhere in any structural unit, but remains a function of the total interactional and communicational context in which it occurs. Thus Birdwhistell's study of communicative behavior proceeds from the most basic levels of organization to higher levels of integration.

Birdwhistell's approach to the study of nonverbal communication has relied heavily on a structural linguistic model. Thus kinesic building blocks have been modeled on linguistic analogues. Mark L. Knapp (1972) in Nonverbal Communication in Human Interaction has provided a good analysis of the linguistic-kinesic analogy that underlies Birdwhistell's methodology. Knapp (p. 92) stated that "The analogy is particularly useful in clarifying some of the very elementary units, and in reminding us of the interlocking nature of verbal and nonverbal systems. The difficulty with this analogy is most apparent when we attempt to identify nonverbal movement comparable to such things as grammar and syntax."

Just as linguistic study can be divided into descriptive and historical linguistics, Birdwhistell has broken kinesic study up into

prekinesics, microkinesics, and social kinesics. Prekinesics is the study of physiological determinants and limits of movements. Microkinesics concerns the identification of units of movements. Social Kinesics deals with units and patterns of movement in the social situation or context where their function can be determined.

Birdwhistell has also been concerned with what he calls parakinesic phenomena. Just as the voice has qualifiers of force, pitch, and duration associated with paralinguistics, he believes that there are motion qualifiers which modify small stretches of kinesic behavior or activity modifiers which describe an entire body in motion. These parakinesic phenomena include: (1) the degree of muscular tension involved in forming a movement pattern, (2) the length of time involved in movement, and (3) the extent of the movement.

Birdwhistell's basic unit of analysis or measurement (microkinesic analysis) is the kine. Kine refers to the smallest unit of perceivable action and is analogous to phone in linguistic analysis. Those kines or movements which may have the same differential meaning are called allokines. For instance, those kines that consist of raising the eyebrows are also allokines in that they can be substituted for one another without changing their meaning. Allokines are analogous to allophones. Together, allokines make up a kineme which is the basic unit of investigative focus and which may be defined as a group of movements which are not identical but which may be used interchangeably without affecting the social meaning of the movement. Kinemes are analogous to phonemes. Examples of kinemes include head nods (three kinemes of head nods have been identified: one nod, two nod,

and three nod), lateral head sweeps (one sweep, and two sweep), and brow positions (lifted brow, lowered brow, knit brow, and single brow movement). In American culture, Birdwhistell (1970a) has hypothesized about fifty to sixty kinemes. He wrote "physiologists have estimated that the facial musculature is such that over twenty thousand different facial expressions are somatically possible. At the present state of investigations, we have been able to isolate thirty-two kinemes in the face and head area." Kinemes "are combined into orderly structures of behavior in the interactive sequence . . . [contributing] to social meaning" (p. 99).

A further extension of the model suggests that kinemes combine to form kinemorphs, kinemorphic classes, and complex kinemorphic constructions. These levels of integration may be viewed as loose analogues to morphemes (words), sentences, and paragraphs. For example, a single kinemorph may represent several kinemes which in combination form a wink or a gesture. Several gestures combined might represent a kinemorphic class while a more extended series of gestures combined might reflect a kinemorphic construction containing some specified meaning. The meaning of these kinesic units has been determined through their social contexts. Although the interpretation of these higher levels of behavioral integration has been speculative, the nature of the relationship among these structural units has been clearly stated. According to Adam Scheflen (1973, p. 19), a psychiatrist influenced by Birdwhistell:

. . . we will directly observe the relation of the various elements of linguistic-kinesic behaviors in the various contexts

in which they regularly occur, thus observing the relation of small elements of visible and audible behavior to large units or patterns or event systems of behavior. . . . We will define meaning in behavioral and operational terms and meaning will be a relation between an act and the context in which it regularly occurs.

Birdwhistell (1970a) has also illustrated relationships between speech and movement. For example, he (p. 103) has defined markers as "particular movements that occur regularly in association with or in substitution for certain syntactic arrangements in American English Speech." Hand gestures which are incapable of standing alone without structural context are a form of kinesic marker or what Birdwhistell has called a bound morph. He has delineated five types of these markers which correspond to parts of speech: pronominal, pluralization, verboid, area, and manner. For example pluralization markers are body sweeps which appear to occur with plural nouns or pronouns, and tense markers are movements backward which occur with past tense verbs and movements forward which occur with future tense verbs. Birdwhistell's observation has also revealed a second series of behaviors such as slight head nods, eye blinks, small lip movements, and chin thrusts which he has called part of a quadripartite kinesic stress system which relates to linguistic stress. These suprasegmental kine-morphemes when associated with speech serve a syntactical function. A primary kinesic stress is a strong movement normally occurring with loudest linguistic stress. Secondary stress is weaker movement that occurs in association with the primary stress and can be contrasted with unstressed or normal movements accompanying speech. Destressed

allokines represent reductions of movements below the normal flow during phrases and clauses.

Birdwhistell's research to date has been limited to the study of the units of kinesic analysis. Schefflen, however, has gone beyond the units of kinesic analysis and attempted to specify behavioral programs which are movement patterns much larger than kinemorphic constructions.

Methodology

Birdwhistell's (1963e) methodology is primarily descriptive. He (p. 26) has stated that:

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 systems were concerned it has become clear that there are body behaviors which functioned 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. It was this research which made it possible to develop kinesics as a descriptive science concerned with the communicational structure of body motion behavior just as linguistics is the descriptive science concerned with the communicational aspects of verbal behavior. This is not to say that even for American movers we have exhaustively studied communicative body behavior. We do know now that it is studieable.

Birdwhistell has attempted to examine kinesic phenomena as they occur naturally rather than attempt to control and manipulate variables; thus, he has argued strongly for field observation. His descriptive approach demands unit deriving procedures. His simplest procedure has involved

observing and recording body movement and analyzing the behavior in terms of what seems to be going on. For this procedure Birdwhistell has developed an elaborate notational system which he calls kinegraphs. An extension of this procedure has involved using a member of the group being studied as an informant to indicate when a particular motion or pattern of movement is different from another motion or movement pattern. Birdwhistell's major methodological tool, however, has been an elaborate recording system which utilizes a movie camera and a slow motion analyzer, a projector that can be slowed to any speed enabling a frame-by-frame analysis through the use of kinegraphs.

Kinegraphs, Birdwhistell's notational shorthand system, has formed the backbone of his research. For every kine he has developed a shorthand symbol. The direction of movement of each kine is recorded by another set of symbols. He has divided the body into eight sections: (1) total head; (2) face; (3) trunk and shoulders; (4) shoulder, arm, and wrist; (5) hand and finger action; and (6) hip, upper leg, lower leg, ankle; (7) foot behavior, and (8) the neck. The notations for these areas are quite simple. For example, the notation for the head is a capital H. If the head is cocked, that movement is indicated by a diagonal line drawn through the H. The complete system was first described in Introduction to Kinesics: An Annotation System for Analysis of Body Motion and Gesture (1952a). Kinegraphs are the key to microanalysis, a recording of every movement that goes on in the twenty-four frames for each second of film. This record is made on huge sheets of graph paper. Birdwhistell once commented that it usually takes one hour to analyze one second

of film (Flora Davis, 1973, p. 30). Through microanalysis Birdwhistell looks for repeating patterns of movement.

Supportive Evidence

Most of the empirical research utilizing Birdwhistell's structural approach has been conducted in the interview situation. In a series of studies W. Condon and W. Ogston (1966, 1967) analyzed body movement in relation to the articulation and listening behavior of normal and pathological individuals. Through the use of a slow motion analyzer, they found a high degree of self-synchrony between body movement and changes of phonetic articulations of normal speakers. Furthermore, changes in direction of the movement of body parts tended to occur at the onset of new phonetic segments and particularly at the onset of syllables. They (1966, p. 338) noted "harmonious or synchronous organization of change between body motion and speech in both intra-individual and interactional behavior." In a follow-up study (1967), motion flow synchrony between interactants was also found. Thus, movements of both interactants were changed and sustained in precise coordination in addition to the synchrony within individuals between movement and speech. In contrast, disruption of self-synchrony was found to characterize drugged schizophrenics and aphasic patients.

Adam Kendon (1967, 1970) found interactional synchrony in patterned eye contact which functioned as a signal to relinquish the floor to another during a conversation. Individuals tended to look away a few seconds before ceasing to speak and to look back at the

listener just as he ceased to speak (1967). Furthermore, he (1970) also found that interactants tended to coordinate their movements.

F. W. Loeb, Jr. (1968, p. 611) identified a micromomentary fistlike movement occurring "in contexts containing lexical expressions which are known to be regularly associated with the conscious content 'anger'."

Adam E. Schefflen (1974) followed Birdwhistell's approach to look at larger structural units of behavior which have (1) component parts, (2) definite organization, and (3) a specific location in a larger system. This was his (pp. 183-184) method of analysis:

Briefly, the many elements of behavior are examined to find their structural configurations as they appear in a stream of behavior. (This practice is very different from the usual approach in the psychological sciences, where this or that a priori decision is made about what elements of behavior will be selected or which qualities will be abstracted for study as variables.) Then, when a unit has been identified, each recurrence of it is examined in the contexts in which it occurs. By contrasting what happens when it does and does not occur, its function in the larger systems--and, therefore, its significance or meaning--is derived.

Birdwhistell's structural approach to and descriptive analysis of nonverbal behavior has been criticized on several major grounds. Allen T. Dittman in his 1971 (p. 341) review of Kinesics and Context concluded that "the basic hypothesis of kinesics as a communicational system with the same structure as spoken language is not a viable one." Additionally, he (p. 341) stated that "there is no evidence that movement elements are assembled into groupings based upon any set rules internal to the movements themselves." Shirley Weitz (1974) in Non-verbal Communication: Readings with Commentary also pointed to a problem with measurement. She (p. 130) suggested that "kinesic

analysis is very much like literary analysis: one can impose one's own structure on the material and never really be certain that this is the best fitting model or the 'correct' one." Robert G. Harper, Arthur N. Wiens, and Joseph D. Matarazzo (1978, p. 125) in Nonverbal Communication: The State of the Art criticized Birdwhistell's use of kinegraphs and microanalysis stating that

. . . the method of analysis is extremely time-consuming and the recording system (i.e., use of kinegraphs) is not readily adaptable to typewriters or for use with computers. In addition, there are only verbal descriptions of the kines, kine-morphs, and pictorial symbols in the observation system; no pictures are provided to exemplify what the precise movements are.

More recently Daniel Druckman, Richard M. Rozelle, and James C. Baxter (1982, p. 14) in Nonverbal Communication: Survey, Theory, and Research alluded to several of their own studies which provided incidental validity tests for Birdwhistell's nonverbal language system. They concluded that the utility and validity are questionable.

It appears that the theoretical underpinnings of Ray L. Birdwhistell's kinesic system have been drawn from his own assumptions about and observations of human interaction. He has been strongly committed to a model which has not always fit with subsequent research.

CHAPTER 3

THE RESEARCH OF PAUL EKMAN

Paul Ekman became interested in the study of nonverbal communication in 1953 when as a graduate student in psychology at Adelphi University he began searching for a method of measuring group interaction in psychotherapy. He soon came to the conclusion that nonverbal behavior was as important as that which was being said.

Upon completion of his M.A. thesis on body movement in 1955, Ekman received a predoctoral research fellowship from The National Institute of Mental Health (NIMH) to continue his studies. At that time Ekman (1957, p. 142) came to the realization that:

Although global methods of recording, which give hope of preserving the gestalt qualities of a situation, may appear to be most appropriate to the study of nonverbal behavior, their advantage may prove to be illusory. Essentially, global methods, which are most closely approximated by motion pictures or tape recording techniques, are of little help to the experimenter other than providing a permanent record of some of the stimuli present. Unless the data are obviously meaningful from initial inspection, the mere amassing of them in great quantities has no inherent merit. The problem of selection of variables to be analyzed still remains, for the data collected by global techniques are often of the same order of complexity as the original behavior itself.

Thus Ekman rejected the structural approach to the investigation of nonverbal behavior to concentrate instead upon the external variable approach strategy (see Scherer and Ekman, 1982).

Upon completion of his Ph.D. in medical psychology at Adelphi in 1958, Ekman joined the military. During his military service he

became a research associate of Wallace V. Friesen. This collaboration was later formalized in 1965 when Friesen joined Ekman's research team at Langley Porter Neuropsychiatric Institute in San Francisco.

After military service, a postdoctoral research fellowship from NIMH enabled Ekman to pursue an investigation of nonverbal behavior during interviews. This research convinced him (1964, p. 30) that ". . . body position and facial expression spontaneously shown during an interview are not random activity or noise, but have specific communicative value related to the verbal behavior. Furthermore, this relationship is not obscure or available to only the privileged few, but can be detected by untrained observers." This initial research has led Ekman into two branches of investigation, the indicative and communicative. His indicative studies have focused upon associating psychological states with nonverbal behaviors which are indicative of those states. His communicative studies have focused upon observers accurately interpreting the "meaning" of given nonverbal behaviors in terms of particular psychological states (Ekman and Friesen, 1968, pp. 195-198). Both branches of investigation have involved the decoding of nonverbal behavior presented to observers (see Dittman, 1972).

In 1966 Ekman and Friesen began a series of cross-cultural studies of nonverbal behavior concentrating specifically upon the face. Ekman now believes that these studies proved that there are universals. Whereas Birdwhistell has maintained that although certain anatomically similar expressions may occur in all cultures, the meaning people attach to them differs and is learned; Ekman (1970, p. 152) believes that his systematic studies "have firmly established pan-cultural

elements in facial expression of emotion." Ekman (1973, p. 216) has stated that while the events which elicit the emotional display may vary from culture to culture, "what is universal in facial expressions of emotion is the particular set of facial muscular movements triggered when a given emotion is elicited." These cross-cultural studies have led Ekman and Friesen to develop a categorical scheme for classifying behavior (1969c), a Facial Affect Scoring Technique (FAST) which utilized photographs rather than verbal descriptions as a guide to cataloguing facial expressions (Ekman, Friesen, and Tomkins, 1971), and a Facial Action Coding System (FACS) which was designed to measure all visible facial behavior (Ekman and Friesen, 1978a, -b).

Ekman has also been interested in speech, facial expression, and body movement in honest and deceptive interactions. He wishes to discover which channel is the best indicator of information leakage. Ekman and Friesen (1969b) have hypothesized that when an individual is engaged in deception, the body will be a greater indicator than the face because in Western cultures there is great social accountability for what is shown on the face. They (1974a) have tested this hypothesis and have discovered that subjects (encoders) are generally more aware of their facial behavior than their bodily actions, but that observers (decoders) only found the body a more accurate clue to deceptive behavior than the face when they had prior familiarity with the subjects' nonverbal repertoire. Studies (Ekman, Friesen, and Scherer, 1976) conducted in 1976 have indicated that pitch level goes up in a deceptive situation. More recent studies (Ekman, Friesen, O'Sullivan,

and Scherer, 1980) have proved inconclusive. This is an area for further research.

Currently Ekman is a Professor of Psychology at the University of California at San Francisco where he directs a research laboratory on Human Interaction and Conflict. His headquarters are at Langley Porter Neuropsychiatric Institute in a converted brownstone. There with a research staff of about twenty he conducts his empirical studies with the aid of an on-line, videotape computer which he and his staff designed.

Operating Assumptions

Paul Ekman began his research with the assumption that observable, nonverbal behavior might have some communicative value. After extensive empirical research, he and his colleagues have categorized the kinesic domain via the origins, usage, and coding operations involved in kinesic activity (Ekman and Friesen, 1967c, 1969c).

Ekman believes that the origins of nonverbal behavior are determined multiplexly. He has included genetically determined neurologic programs, learning that accrues to belonging to a particular culture, and learning that results as a function of species membership as major factors that account for nonverbal modes of communication.

Usage refers to the circumstances surrounding the occurrence of a nonverbal act including such variables as the external conditions, relationship to verbal behavior, awareness of the behavior, and the feedback received about the behavior. In addition the type of information conveyed through the nonverbal act yields clues about the

functions of nonverbal behavior. Thus informative acts elicit similar interpretations in observers independent of the sender's intentions to convey such information. In contrast communicative acts are those in which the sender intends to send a specific message to the receiver via nonverbal modes. Interactive nonverbal behaviors are acts by one person that influence or modify the behavior of another person or persons. Ekman and Friesen (1969c, p. 57) have justified the use of this somewhat complex terminology by stating that:

We have developed this terminology in order to clarify our own thinking and illuminate possible differences between our approach and those of Birdwhistell, or Schefflen, and of Mahl. Birdwhistell and Schefflen have applied a communication framework to nonverbal behavior, based largely upon the argument that much of the nonverbal behavior they observe influences the behavior of the other interactants. We believe that their use of the term 'communicative' is too broad; it fails to distinguish among that behavior which has a shared decoded meaning (informative), and that which influences the other person's interaction (interactive), and that which is intended to transmit a message (communicative). Many nonverbal behaviors may have interactive affects, but not be intended to communicate nor best be considered as analogous to verbal communication. Similarly, nonverbal behavior with a shared decoded meaning may not be intended to communicate, nor best be considered as analogous to linguistic phenomena.

Coding refers to the relationship between any nonverbal act and its meaning. Ekman has delineated four such codes. An extrinsically coded act is one that signifies something else; the meaning of the act cannot be seen from the action itself. Some extrinsic acts are coded arbitrarily and bear no resemblance to their meaning. An iconically coded extrinsic act does, however, resemble what it means. One example is the waving of a clenched fist as a representation of aggression. An intrinsically coded act is not really a code but is the action itself. For example, punching someone during a conversation is

not similar to aggression; it is aggression. In this case the meaning of the act inheres in the action itself. Nonverbal acts can also be pictorial, spatial, rhythmic, or pointing.

Ekman and Friesen (1968) have suggested that there are five implicit interrelated reasons why they have studied nonverbal behavior. First, nonverbal behavior can function as a language of relationships "sensitive to, and the primary means of, signalling changes in the quality of an ongoing interpersonal relationship" (p. 180). Second, nonverbal behavior is "the primary means of expressing or communicating emotion" (p. 180). Third, nonverbal behavior may convey in some instances symbolic messages concerning a person's attitudes toward himself or others. Fourth, nonverbal behaviors can serve metacommunicative functions in regulating human disclosure. Fifth, nonverbal behaviors are less susceptible to attempts at censorship of communication.

Theoretical Constructs

Paul Ekman began his studies of nonverbal behavior on an experimental basis and has developed his theories based upon empirical research. As Ekman and Friesen (1972a, p. 355) have said, "We were antitheoretical when we began our work measuring body movements, blaming the sorry state of this field of research on an overabundance of theory with too few facts." Throughout his studies Ekman has attempted to maintain an open, comprehensive approach. In a review of his work, Shirley Weitz (1974, p. 131) suggested that:

Ekman, then, is not trying to establish a grammar of body language, or even to study the communication process per se, as Birdwhistell is. Rather, his concern is the relationship of nonverbal behavior to inner feeling states and the

decoding of these states by others. His more recent work on facial expression is clearly in this area. Ekman also does not integrate the verbal and nonverbal spheres, a primary goal of the Birdwhistell school. Ekman is concerned with the psychological problem of communication of emotional state, rather than the structural one of the nature of the communications system itself.

Ekman and Friesen (1969c) have provided the most widely cited description of the various roles that nonverbal behaviors play in human communication. They have specified five general functions that nonverbal behavior serves in relation to spoken communication: repetition, contradiction, complementation, accentuation, and regulation.

Through his research Ekman has differentiated five kinds of nonverbal categories according to their origin, usage, and coding. These categories include emblems, illustrators, affect displays, regulators, and adaptors. In introducing these categories Ekman and Friesen (1969c, pp. 62-63) noted that "nonverbal behavior is not a single, unified phenomenon with but one type of usage, one origin, and one form of coding. Instead, facial and body behavior involve a number of quite different kinds of behavior which will be described in terms of five categories distinguished by the particulars of usage, origin and coding."

Emblems have direct verbal translations and are understood by the people of a given culture. Exemplars include such gestures as the tracing of a woman's body and the sign language of the deaf. Emblems have a communicative function and as such are potential carriers of social influence. Thus, an outstretched hand may cue the social other to reciprocate with an appropriate handshake. In our culture a wink might suggest social interest and interpersonal attraction. Ekman

(1976, p. 24) has suggested that "miscommunication between people from different cultures can unwittingly occur when an emblem performance symbolizes different messages in two cultures.

Illustrators are movements which are directly connected to speech and illustrate what is being said verbally. Pointing is one example; depicting a spatial relationship is another. To the extent that illustrators serve to clarify or emphasize verbal messages, they are potential mediators of social influence processes.

Affect displays involve primarily facial expressions. They give more personal information than illustrators and most emblems, and often possess idiosyncratic meaning when affect blends occur in individuals. Affect displays are the distinctive movements of the facial muscles for each of a number of primary affect states such as happiness, anger, surprise, fear, disgust, sadness, and interest. Ekman (1973, p. 71) believes that these displays are universal, maintaining a neurocultural theory which ". . . postulates a facial affect program located within the nervous system of all human beings, linking particular facial muscular movements with particular emotions. It offers alternative non-exclusive explanations of the possible origin of the linkages in the affect program between the felt emotion and the movement of the facial muscles." Ekman believes, however, that display rules which call for the management of facial appearance are socially learned. His (p. 71) theory holds that:

. . . the elicitors, the particular events which activate the affect program are in largest part socially learned and culturally variable, and that many of the consequences of an aroused emotion are also culturally variable, but that the facial muscular movement which will occur for a particular emotion (if not interfered with by display rules) is dictated by this affect program and is universal.

Regulators are acts which maintain and regulate the back and forth nature of speaking. They are related to speech as illustrators, but are related to the flow of conversation rather than specific moment-to-moment speech. Examples of regulators are head nods, eye contact, slight movements forward, and small postural shifts. Regulators are thought to be ingrained habits which are not communicative in the sense of interactants being aware of or intending to control each other's behavior.

Adaptors make up the final category in Ekman's typography of nonverbal behaviors. They are movements which are first learned as part of an effort to satisfy self needs or body needs, or to perform certain bodily actions, or to manage and cope with emotions, or to develop or maintain prototypic interpersonal contacts, or to learn instrumental activities. These behaviors are residual childhood acts which developed to reduce drives or manage emotions. Through stimulus generalization they are displayed in adult life, elicited by the similarity of a given situation to an earlier childhood setting. Three kinds of adaptors have been described: self, alter, and object. Self-adaptors are learned through the socialization process and are related to grooming, cleansing, and modifying attractiveness. As they appear in adult life, they serve to facilitate or hinder sensory input. For example, eye covering may function to prevent input, avoid being seen, or indicate shame. In order to obtain the precise meaning of a self-adaptor, the antecedent conditions which set the occasion for the response must be considered. These conditions will vary as a function of the individual's history. While emblems and illustrators will almost never be shown when the individual is totally

alone, self-adaptors will occur with higher frequency and in their most complete form when the person is alone. Alter-adaptors are learned through interpersonal contact. They stem from movements of giving or taking from another, attacking or being attacked, withdrawal or flight. Postural movement and changes in spatial distances may be labeled alter-adaptors. Object-adaptors originate from movement originally learned in performing a task. They differ from self- and alter-adaptors in that they are learned later in life and there are fewer social taboos about their performance.

Ekman's most recent research interest is whether or not facial expressions can be controlled or disguised. In Emotions in the Human Face: Guidelines for Research and an Integration of Findings, Ekman, Friesen, and Ellsworth (1st ed., 1972) and Ekman (2nd ed., 1983) have suggested that the face is an accurate determinant of emotions, but that a subject's (encoder's) control over his facial behavior and the social pressures which dictate such control can conceal the very behavior the investigator (decoder) has attempted to discover. In Unmasking the Face: A Guide to Recognizing Emotions from Facial Clues, Ekman and Friesen (1975) have reiterated four facial management techniques first postulated in 1969: qualifying, modulating, falsifying, and masking. Qualifying a facial expression consists of adding a further expression as a comment on the expression just shown. The smile is the most frequent qualifier, usually added as a comment to any of the negative emotions. The smile qualifier presents a clue as to the likely consequences, or limits, of the negative emotion. Qualifying is the mildest form of facial management. Modulating

a facial expression consists of adjusting the intensity of the expression to show either more or less than you actually feel. A facial expression can be modulated by varying the numbers of facial areas involved, by the duration of the expression, or by the excursion of the facial muscles (how strongly the muscles pull). Falsifying a facial expression of emotion consists of showing a feeling when there is none (simulate), showing nothing when indeed you do feel a particular way (neutralize), or covering a felt emotion with the appearance of an emotion you do not feel (mask) (Ekman and Friesen, 1975, pp. 140-145).

Ekman and Friesen have warned that in order to avoid being misled by facial deceit, you must learn to recognize signs of leakage and deception clues. They have defined leakage as the nonintended betrayal of a feeling a person is trying to conceal. A deception clue is a hint that facial management is occurring. They (1975, p. 145) have described four aspects of facial expression which might indicate a leakage or deception.

The first is facial morphology, the particular configuration of the appearance of the face. . . . The second aspect is the timing of an expression--how long it takes to appear on the face, how long it remains, and how long it takes to disappear. The third aspect is the location of the expression in the conversation. And the fourth is what are called micro-facial expressions which result from interruptions.

All four factors--morphology, timing, location, and micro-expressions--must be interpreted in light of the social context in which an expression occurs. For example, you will learn how to tell from morphology where to look for a trace of fear in what appears to be an angry expression. But to determine whether that trace of fear is leakage of an attempt to conceal fear or a fear-anger blend, you must rely upon the social context.

In Unmasking the Face, Ekman and Friesen (1975, pp. 155-157) have also delineated eight styles of facial expression:

1. A withholder has a face that rarely shows feeling.
2. A revealer always shows feeling, is just not able to control the expression of emotion.
3. An unwitting expressor does not know he is showing how he feels when he is showing it.
4. A blanked expressor is convinced that he is showing an emotion on his face when, in fact, his face looks neutral or completely ambiguous.
5. A substitute expressor characteristically substitutes the appearance of one emotion for another without knowing it.
6. A frozen-affect expressor may have a face that always looks a bit sad, or disgusted, or surprised, or angry, or worried.
7. An ever-ready expressor characteristically shows one emotion as his first response to almost any event in any situation.
8. A flooded-affect expressor always shows one or two emotions in a fairly definite way almost all of the time.

Ekman views his theories of facial deceit as hypotheses which must still be regarded as tentative until he has completed his research.

Methodology

Paul Ekman's external variable approach to kinesic behavior is the major methodological alternative to Birdwhistell's structural linguistic model. It represents an attempt to relate the occurrence of specific nonverbal behaviors to a variety of external variables such as

personality characteristics, the interaction situation per se, or the particular referent or attitude communicated. Ekman has worked primarily within a laboratory setting (Scherer and Ekman, 1982, pp. 16-17).

Ekman's indicative studies have focused upon the statistical relationships between psychological states and the nonverbal behaviors indicative of those states. In 1968 Ekman and Friesen outlined five indicative methods for the analysis of nonverbal behavior:

1. Rate measures, or the frequency of nonverbal behaviors over time;
2. Situational or role context, such as the location of interaction or the fact that the person is the interviewer rather than the interviewee;
3. Frequency of nonverbal behaviors related to the other interaction participant's behavior or characteristics;
4. The relation of one nonverbal behavior to another in terms of frequency or co-occurrence; and
5. The relation of nonverbal behavior to spoken language.

They (1968, pp. 195-196) stated that:

An indicative study is designed to establish a relationship between some prescribed aspect of nonverbal behavior and some other class of event. One or more types of nonverbal activity are measured in relationship to setting, role, communication, or personal characteristics; the type of activity may be very broadly defined, such as the occurrence of a particular nonverbal act in one part of the body. The frequency of foot movements, or of the specific foot act of tapping, might be related, for example, to verbal themes of anger, or to the ethnic background of the person, or to his character structure. Once this relationship is established, the nonverbal act has psychological meaning in that

it can be considered to indicate the other related variable. Such indicative studies do not determine whether the nonverbal behavior measured has any communicative value to those who observe it.

Ekman now calls this indicative approach the "measurement of sign vehicles approach" (Scherer and Ekman, 1982, p. 86).

Ekman's communicative studies have been concerned with the meanings attributed by observers to various nonverbal behaviors. Ekman and Friesen have outlined four methods for conducting these studies. One method is to use selected samples of nonverbal behavior in a judgmental task. For example, those who view either all or part of a film might be asked to describe the affect, the attitudes, or the personality of the sender. A second communicative method evaluates differential communication from different sources of nonverbal behavior (hands, face, etc.). In the third, a single nonverbal act can be presented and judgments obtained as to its meaning. Fourth, different channels or modes of behavior can be examined as to their relative information value. Ekman and Friesen (1968, p. 197) have maintained that:

The indicative and communicative methods, and the specific analytic procedures are complementary. Communicative studies can be utilized as a first assay, to gain an impression of what information may be contained in a sample of nonverbal behavior, suggesting what may later be isolated through indicative studies. Indicative studies may highlight certain salient nonverbal acts, which can then be selectively examined for their communicative value.

Ekman now calls this communicative approach the "message judgment approach" (Scherer and Ekman, 1982, p. 86).

In their studies of the face, Ekman and Friesen have utilized both judgmental and component designs. In their judgment studies

facial behavior was treated as a stimulus, and the question addressed was whether observers who judge a subject's face could agree about the subject's emotion or could distinguish between facial behaviors emitted under different emotional states or circumstances. In their component studies, facial behavior was treated as a response, and the question addressed was whether a certain position or movement of the subject's face was related to some measure of the subject's emotional state or circumstances (Ekman, Friesen, and Ellsworth, 1972, p. 31; Ekman, 1983, p. 22).

To facilitate their judgmental studies, Ekman, Friesen, and Tomkins (1971) developed a scoring technique which they have called FAST (Facial Affect Scoring Technique). This technique can be used for evaluating either fixed facial expressions (photographs) or live (videotaped) facial expressions. The technique requires that decoders view separate areas of the face for observable facial movements which are then compared to FAST still-photographic examples. Eight FAST atlas photographs are provided for the brows/forehead area, seventeen for the eyes/lids, and forty-five for the lower face. Once the scoring is completed by the decoders, formulae are used to derive the emotion prediction for each facial movement. The output of the scoring system is a series of duration scores for anger, fear, surprise, sadness, disgust, and happiness for the brows/forehead, the eyes/lids, and the lower face. Data analyses can be performed by measuring either the frequency of occurrence of each emotion within each facial area or the duration for emotion within each facial area.

In 1976 Ekman and his collaborators (Ekman and Friesen, 1976a, -b; 1978a, -b; Ekman, 1983) developed a sophisticated coding system for recording facial affect. The Facial Affect Coding system (FACS) describes visibly distinctive facial actions in terms of muscle activity. For example, a smile can be produced by the action of zygomatic major, zygomatic minor, buccinator, risorius, or caninus muscles. FACS allows for scoring each of these actions, combinations of these actions, and combinations of these with still other facial actions. FACS requires that all observable facial behavior be measured.

Ekman's major methodological tool, however, has been his Visual Information Display and Retrieval (VID-R) system. The system utilizes a set of recorders, monitors, printers, and a digital computer. An operator can locate and collect bits of behavior to be shown at various speeds by specifying time, location, or content. The VID-R system has enabled Ekman to develop a Systematic Classification and Analysis of Nonverbal Behavior (SCAN). VID-R does not analyze data; it collects and organizes events that, when coded, are in a data form which can be analyzed (Ekman, Friesen, and Taussig, 1969).

Supportive Evidence

Paul Ekman's research interests can be divided into three general categories: the decoding of body movements, facial expression as a sign of emotion, and nonverbal leakage and clues to deception. In each of these areas Ekman has conducted experiments to test his hypotheses.

Much of Ekman's research has been done within an experimental interview situation in which observer subjects decode nonverbal behaviors shown to them. In an early study (1965b) Ekman postulated that head cues provide information about affect while intensity is expressed by body cues. Decoders rated face-only, body-only, and whole photographs on Schlosberg's pleasant-unpleasant and sleep-tension dimensions. As predicted, judgments for sleep-tension were more consistent for the body than face whereas judgments of pleasant-unpleasant were more consistent for the face than the body. In a subsequent study, Ekman and Friesen (1967a) repeated the procedure, but this time judgments of the face and body cues were made in terms of emotion categories. As predicted, there was more agreement for head than body cues. The analysis of data in this study, however, led to a reformulation of the initial hypothesis. They proposed that emotions can be judged from head cues and body acts whereas body positions and head orientation convey gross affective states. Further, the intensity of affect can be conveyed through head and body cues. Body acts generally convey moderate to high intensity ranges of emotion while body positions can reflect a full range of intensity.

When Ekman and Friesen (1972b, p. 12) first began to measure body movement, their unit of analysis was the nonverbal act. They defined it as "a movement within any single body area (head, face, shoulders, hands, or feet) or across multiple body areas which has visual integrity and is visually distinct from another act." Decoding studies conducted within a clinical setting (1968), however, indicated a need to develop a theory for the classification of acts into functional

categories (1969c). Johnson, Ekman, and Friesen (1975) have investigated one of these categories, the emblem. This research employed three methodological steps. First, subjects were asked to encode various emblems from definitions given to them with instructions to display only those actions which they knew were used in ordinary conversation. Second, these behaviors were videotaped and the performance of these emblems was compared across encoders. Those emblems not similarly enacted by at least 70% of the encoders were not further considered. The selected emblems were then enacted by one of the investigators on videotape. Third, this videotape was shown to decoders whose task it was to write down the message conveyed by the behavior and to make ratings of how sure they were about their decoding. By employing these three steps the researchers obtained a final list of emblems for which (1) the decoder interpretation closely matched the definition of the particular emblem in at least 70% of the cases, and (2) at least 70% of the decoders judged the action pattern natural in usage. This method provided a means of systematically evaluating the relative degree to which an emblem is known and used in a particular culture. This study investigated American emblems, Colombian emblems, and Sicilian emblems. Currently they are comparing American, Japanese, Iranian, and Israeli emblems.

In his review of nonverbal communication studies, Randall Harrison (1973) divided researchers on the face into those interested in emotion and those interested in other factors. He (p. 100) further divided these researchers into those who employed a "dimensional approach" and those who took a "category approach." Ekman is one

who uses categories to investigate facial expressions as indicators of affect. In their review of the nonverbal communication literature, Harrison et al. (1972, pp. 467-468) stated that:

The Ekman, Friesen, and Ellsworth volume, Emotion in the Human Face: Guidelines for Research and an Integration of Findings, might well have been titled: 'All you ever wanted to know about facial research, and never would have thought to ask.' . . . it is a must reading for any modern researcher who would study facial expressions. And it is an instructive reference book for any scholar with a general interest in nonverbal communication.

Harper et al. (1978, p. 79) concurred, stating that "though Tomkins and Izard made invaluable contributions to the study of facial behavior, no one has elevated research in this area to its present state of scientific respectability as much as Ekman."

Through his research, Ekman has attempted to answer several basic questions about facial behaviors as signs of emotions. First, what emotion categories can observers judge from facial behavior? Ekman has proposed seven: happiness, anger, surprise, fear, disgust, sadness, and interest. These emotions, he said, "were found by every investigator in the last thirty years who sought to determine the vocabulary of emotion terms associated with facial expressions" (Ekman and Friesen, 1975, p. 22). A real possibility for confusion lies, however, in the presence of affect blends which was illustrated in a study by Kiritz, Ekman, and Friesen (1971). In this study observers who were allowed to indicate an affect blend did so for stimuli which in earlier studies had yielded a 60% to 40% distribution of judgment between the two categories making up the blend.

Can judgments of emotion from facial behavior be accurate?

Ekman has reported that most of the studies of accuracy in judging facial expression failed to provide conclusive evidence one way or the other; however, he has maintained that accurate judgments can be made. As proof, he has cited two of his own studies. In one experiment (Ekman and Bressler, 1964) photographs were taken of psychiatric patients when they were being admitted to a mental hospital and again when they were ready for discharge. Untrained decoders were shown these photographs and were asked whether each facial expression was shown at time of admission or at time of discharge. The judgments were accurate. These same photographs were shown to another group of observers (Ekman and Rose, 1965) who were not told that they were seeing photographs of psychiatric patients, but instead were asked to judge whether the emotion shown was pleasant or unpleasant. The facial expressions shown at admission were judged more unpleasant than those shown at discharge.

Are there universal facial expressions of emotion? Ekman has answered with a resounding yes, stating that "research conducted in our laboratory played a central role in settling the dispute over whether facial expressions are universal or specific to each culture" (Ekman and Friesen, 1975, p. 23). In one experiment (Ekman, Friesen, and Malmstrom, 1970) stress-inducing films were shown to college students in the United States and in Japan. Part of the time each person watched the film alone, and part of the time the person watched while talking about the experience with a research assistant from the person's own culture. Measurements of the actual facial muscle movements,

captured on videotapes, showed that when they were alone, the Japanese and Americans had virtually identical facial expressions. In the presence of the research assistant, however, where cultural rules about the management of facial appearance (display rules) would be applied, there was little correspondence between the Japanese and the American facial expressions. In another experiment, Ekman, Friesen, and Tomkins (1970) showed photographs of six primary emotion expressions to observers in the United States, Japan, Brazil, Chile, and Argentina. The observers (decoders) in these different cultures had to choose one of the six primary emotion words translated into their own language for each photograph they saw. The same facial expressions were judged as showing the same emotions in all countries, regardless of language or culture (Ekman, Friesen, and Ellsworth, 1972, pp. 158-159). Essentially the same experiment was carried out independently by Carroll E. Izard (1969) who found the same evidence of universality with decoders in eight different countries. To validate their conclusion that facial affect was pancultural, Ekman, Sorenson, and Friesen (1969) conducted a series of experiments in the Southeast Highlands of New Guinea with isolated people called the Fore who had no visual contact with the outside world. Each observer (decoder) was shown three affect photographs and a translator read an emotion story and asked the observer to point to the photograph that fit the story. The observers in New Guinea selected the same face for the same emotion as did the people in all the other cultures studied. In a related experiment (Ekman and Friesen, 1971), other New Guineans were told an emotion story and were asked to show the emotion on

their faces. Videotapes were taken of these intended emotion expressions, and analysis of these intended emotional expressions again showed that the same facial expressions were produced for the same emotions as had been found in other cultures, with the exception of surprise and fear, which were confused with one another. Karl and Eleanor Heider (Ekman et al., n.d.) conducted similar experiments in West Irian (New Guinea) with people even more visually isolated than those Ekman and his colleagues had studied. The Heiders also obtained evidence of universality.

How does each emotion appear on the face? As Ekman began to investigate exactly what universal expressions of emotion looked like, he sought to construct an atlas of the face. Working with Wallace Friesen and Silvan Tomkins, he constructed a table which listed all of the facial muscles in relation to six primary emotions: happiness, sadness, surprise, fear, anger, and disgust. They then entered into the table what earlier writers such as Darwin, Duchenne, Huber, and Plutchik had said about the appearance of the face for each emotion, and they filled in the gaps with information from their own cross-culture studies. They next photographed models who were instructed to move the particular facial muscles listed in the table. Three areas of the face which are capable of independent movement--the brow/forehead; the eyes/lids and root of the nose; the lower face--were photographed separately. This work has resulted in the formulation of the Facial Affect Scoring Technique (FAST) and the Facial Affect Coding System (FACS).

Can measurement of the components of facial behavior provide accurate information? Results obtained in Ekman's laboratory have provided convincing evidence for the differential importance of facial areas in the expressions of emotions. Using the Facial Affect Scoring Technique, Ekman and Boucher (1975) found frequent co-occurrence between the seven primary emotion categories and three facial areas: eyes/lids, brows/forehead, lower face. For example, happiness was best identified from the cheeks/mouth (98% correct judgments) and eyes/lids with cheeks/mouth (99%); surprise was best judged from all three areas together (brow/forehead, 79%; eyes/lids, 63%; cheeks/mouth, 52%). These results were derived from a procedure in which subjects (decoders) rated each facial area on all emotion categories giving an intensity value for each. A facial area was considered to contribute to an accurate judgment if the subject rated that emotion highest in intensity. More recently, Ekman, Friesen, and Ancoli (1980) used FACS to correlate visibly distinctive facial actions to the felt intensity of a pleasant or unpleasant emotion. They discovered that even when a subject reported enjoying two experiences, facial measurement discriminated which was enjoyed most.

Nonverbal leakage and clues to deception is Ekman's current research interest. He studied this problem initially in 1969 in a clinical setting, examining the value of head and body clues in detecting deception in patients. The results, in general, supported the hypothesis that head cues would transmit the patient's intended message while body movements would indicate deception (Ekman and Friesen, 1969b). In two subsequent studies, Ekman and Friesen (1972a, 1974a)

showed pleasant and unpleasant films to nurses. During the unpleasant film, the nurses were asked to simulate pleasant feelings while withholding their unpleasant feelings. Observers (decoders) were then shown face-only or body-only videotapes of these nurses in the two situations. Half the observers were first shown a sample of each nurse engaged in spontaneous communication and then a second videotape segment that they were to judge as being either deceptive or honest. The other half of the observers were not given a sample of the nurses' spontaneous responses. As predicted, facial rather than body clues were identified more often by observers as the behavior that was modified in deception, and observers were more accurate in identifying deception from the body than from the face (1974a). Additional analysis of the nurses' body movements also revealed a change in the frequencies of various hand movements during the deception session. The nurses engaged in more hand-shrug emblems, fewer illustrators, and more face-play adaptors. In particular, the rate of self-adaptors was highly correlated with judgments of deception (1972a). Ekman et al. (1976) used the audiovisual records obtained in the experiment with the nurses to investigate the relative importance of body movement and voice pitch in a deceptive interaction. They found that voice pitch level went up in the deceptive situation and that this and perhaps other vocal changes may have drawn attention to the auditory channel and away from the visual channel. Subsequent research into the relative importance of the face, body, and speech in decoding judgments (Ekman, Friesen, O'Sullivan, and Scherer, 1980) indicated that it would be unwise to claim that any one channel predominates.

Which channel predominates depends on what characteristic is being judged as well as the interpersonal situation in which the judged behavior occurs. This is an area for further research.

In their review of nonverbal communication research, Harper et al. (1978, p. 133) said of Ekman's work:

In summary, it is difficult not to be impressed with the conceptualization of nonverbal behavior offered by Ekman and Friesen. While both Ekman and Birdwhistell began with careful analysis of nonverbal behavior and the sequence and context of nonverbal acts, the latter's insistence on never considering any behavior in isolation or in relation to specific external variables, in our opinion, imposed a tremendous methodological handicap. Though Birdwhistell's approach might seem more encompassing or broader by beginning with the assumption that 'all behavior is communicative,' his findings and those of his structuralist colleague, Schefflen, can actually be subsumed into Ekman's classification scheme.

Indeed, Paul Ekman's research efforts have been prolific, not only in terms of data collection and analysis, but also in his integration of other orientations with his own.

CHAPTER 4

IMPLICATIONS FOR ORAL INTERPRETATION THEORY

The goal of the oral interpreter is to discover, create, express, and communicate literary meaning. As a communicator, the oral interpreter must play a dual role since he must recreate the message of the author yet be the creative transmitter to the audience. Throughout the act of oral interpretation, it is essential that he be the master not only of the literature but also of himself; it is impossible for the oral interpreter to be a neutral agent of transmission. He must develop performance skills, and perhaps these very skills will add to his discovery of the text. Bodily action is an integral part of the performance of literature. The research of Ray L. Birdwhistell and Paul Ekman should have both theoretical implications and practical applications for the oral interpreter.

Comparison of Operating Assumptions

Ray L. Birdwhistell and Paul Ekman represent antithetical sides in the nature/nurture controversy which has raged through the years among those interested in bodily action. Birdwhistell has insisted that all nonverbal behavior is culturally learned and is essentially communicative. He even believes that we learn our looks; we are not born with them. In addition he believes that we learn how we present our bodies. Paul Ekman in contrast has emphasized the innate, universal, and expressive elements of bodily action, especially facial movement associated

with affect display or the display of emotion. However, Ekman believes that nonverbal behavior is complex, and that it results from cultural learning as well as from genetically determined neurologic programs.

Birdwhistell and Ekman disagree on the nature of nonverbal behavior as well. Birdwhistell has contended that nonverbal behavior is communicative, that it influences the behavior of others, and that it must always be considered in context. Ekman believes that nonverbal behavior can be informative and interactive as well as communicative, and that aspects of nonverbal behavior can be considered in isolation.

Birdwhistell has maintained that detailed descriptive analyses of nonverbal behavior will lead to an interpretation of that behavior. He has conceptualized nonverbal behavior as a kind of body language which can be investigated and comprehended like vocal language. To him body movement is systemic. Ekman, on the other hand, has offered no a priori cohesive concepts of nonverbal behavior. He does believe that it has expressive, symbolic, and communicative qualities which can be investigated by testing its relationship to inner feelings or psychological states and the decoding of these states by others.

If all nonverbal behavior is learned as Ray Birdwhistell has maintained, then it is axiomatic that teachers of oral interpretation must be concerned with that communication channel as well as with the voice. They cannot be content with the belief that students will automatically use their body in a way that contributes to their performance of literature. Teachers cannot even contend that if students empathize completely with the thought or emotion contained within the literature, they will necessarily display that emotion optimally, for Paul Ekman,

too, incorporates social learning in his conceptualization of nonverbal behavior. One implication of the research of both Birdwhistell and Ekman is that oral interpretation teachers must address more attention to the role of the body within the communication complex. They can no longer be content with Geiger's (1963, p. 88) tautology: "When the interpreter's gesture is successful, then it is successful." They cannot depend upon physical warmup exercises to aid the student in preparation for performance (Long and HopKins, 1982, p. 55). They cannot expect that their student's body will necessarily be "a suitable instrument of expression" (Roloff, 1973, p. 102).

If oral interpretation teachers can no longer depend upon physical readiness, contextual criticism and empathy to elicit optimal bodily action in performance, does this mean a return to the training strategems of the past, those strategems against which teachers of oral interpretation revolted between 1900 and 1920 (Snow [White], 1968)? Neither the assumptions of Birdwhistell nor Ekman suggest that this should be the case.

Birdwhistell's systemic approach to bodily action differs dramatically from elocutionary systems such as those of François Delsarte and Gilbert Austin. Delsarte and Austin sought to create systems of notation that would encompass all gestures that express emotion. They believed that gestures could be taught in isolation, and they formulated prescriptive laws or rules for the use of each gesture. In contrast Birdwhistell has maintained that body movement has meaning only within the communication gestalt. He would contend that a gesture cannot be

analyzed or taught in isolation. His system of notation is to be used only to facilitate an interpretation of nonverbal behavior, not to prescribe it.

Ekman's basic assumptions also differ markedly from those of the elocutionists. Although Ekman has emphasized the expressive qualities of bodily movement, especially that of the face, he has offered no formulae. He has recognized that expression may be controlled or uncontrolled, qualified, modulated, or simulated. As he has stated about the face, "There is not one face for each emotion, but a set or family of related but different expressions, often with each member of the set having a different but related nuance of meaning" (Ekman and Friesen, 1975, p. 171).

Birdwhistell's and Ekman's assumptions about nonverbal behavior do justify a more deliberate training strategy in oral interpretation than currently exists. Students can learn what movements best aid in the communication of the literature they wish to interpret, utilizing their actions to enhance verbal content and vocal behavior. They can also learn what actions tend to "call attention to themselves."

According to Birdwhistell body set which indicates status, gender, age, health, rhythm, body image, territorial status, and mode is learned. This assumption is an important one for the oral interpreter who is concerned with characterization. In Performing Literature: An Introduction to Oral Interpretation, Long and HopKins (1982, p. 382) have suggested that in rehearsing drama, "many successful performers begin with the character's body and how it moves through space." They go on to suggest that the interpreter visualize how the characters

move and then practice that movement. However, what if there are characters in the literature whose cultural patterns are unfamiliar? The student has no image to "visualize." In this case the teacher could suggest that the student follow Birdwhistell's dictum and conduct a field study and investigate the unfamiliar patterns. Such a study might also be geared to discover the display rules that Ekman says are culture specific. Once the student has developed some familiarity with this new cultural pattern, then he has some basis upon which to model and to practice. The student could then follow David A. Williams' (1975, p. 54) suggestion for training: "In a practice session the student should begin with a full impersonation and then 'cut it down' by seeing what he can suggest without losing the strength of the character or persona. The interpreter works for economy of movement in order to suggest the character while always keeping the literature in primary focus."

Comparison of Theoretical Constructs

Ray Birdwhistell's basic unit of observation is the kine, a micro movement which requires a slow motion analyzer to isolate. Birdwhistell's use of the kine has necessitated the development of an elaborate and somewhat cumbersome notational system to record kinesics. Birdwhistell based his theoretical constructs on a linguistic model, using terms analogous to those used in linguistics. Paul Ekman's basic unit of observation is the act, a clearly discernible movement that has a distinct beginning and end. His scheme of classification was built directly from the actions and positions he observed on videotape. He has rarely been concerned with micro or molar events. His classification

system has been based upon five basic constructs: emblems, illustrators, affect displays, regulators, and adaptors.

Ekman's unit of analysis and his five categories of nonverbal behavior appear to have far more utility for the teacher, scholar, and student of oral interpretation than do those of Birdwhistell. It is highly unlikely that oral interpreters will need to isolate micro movements. One is forced to concur with Ekman that the use of Birdwhistell's classification system will only succeed in generating a mountain of data which will be unmanageable. The oral interpreter has no real need to catalog all movement, and, indeed, Birdwhistell's classification system could easily be subsumed into Ekman's.

Ekman's constructs are compatible with terms used in oral interpretation theory and pedagogy. Emblems and illustrators encompass the historic term gesture. Affect displays, display rules, and blends incorporate emotion and expression. The category regulator could be used in conjunction with feedback. Adaptors offer a way of explaining what oral interpretation theorists mean when they say that the body is "calling attention to itself." In short, Ekman's categories offer oral interpretation a workable vocabulary which elucidates concepts that have been used nebulously within the discipline for years. The fact that these categories have become paramount in technical discussions of nonverbal behavior only adds to their utility.

The field of oral interpretation seems to be widening its focus from one that is primarily text centered to one that includes the importance of performance. Wallace Bacon noted this change in his article "The Dangerous Shores a Decade Later" (1975a) in which he updated a

speech "The Dangerous Shores: From Elocution to Interpretation" (1975b) delivered in 1959. Marion Kleinau (1981, p. 55) has also described this changing emphasis: "We are in the process of shifting the center of our discipline toward performance--performance seen in more complex dimensionality and in more extensive contexts. It seems, however, that we have yet to grasp the larger integrating vision of such a shift, the new defining shape toward which we grow." Ekman's theoretical constructs should prove of great utility as this shift continues. He offers oral interpretation theorists a way of organizing and describing nonverbal behavior which is such an integral aspect of performance. Also he and his colleagues are continually adding new insights to their classification system as the data demand it a posteriori. Ekman's approach offers more heuristic promise than does that of Birdwhistell.

In "Kinesics Applied to Interpreter's Theatre" Cogger and Pelham (1975, p. 94) warn against the limited function of literal gestures. Literal gestures are what Ekman calls emblems. There can be emblems both of face and of body. The message of the emblem is totally unambiguous, even taken out of context. However, the emblem is culture specific, and the size of the repertoire of emblems varies considerably among cultures. In investigating emblems Ekman (1976, p. 25) has discovered that "when there are social or contextual constraints inhibiting the transmission of a message but that message is quite salient nevertheless, emblematic slips can occur without awareness." The oral interpreter's improper use of emblems can alter, distort, or even invert the meaning of an utterance. Emblematic slips are also a way in which the oral interpreter's body can "call attention to itself."

Ekman's category illustrator describes movements which are tied to speech rhythms, serving to illustrate what is being said. He has found that the type and frequency of illustrators indicate ethnicity, culture, and social class. For example white, middle-class Americans increase their use of illustrators when there is affective involvement in what is being said and decrease their use with boredom or conflict about the process of communicating (Ekman, 1976, p. 15). Illustrators can reinforce or contradict verbal language. Coger and Pelham (1975, p. 93) have noted that the oral interpreter should be aware that "When body language reinforces the message of the spoken language that it accompanies, the redundance seems to intensify the strength of the message. . . . when contradictory messages are received, one vocal and the other kinesic, the message from body movement will rule."

The oral interpreter is concerned not only with the intellectual content of literature but also with the emotional content. It is through what Ekman calls affect displays that this emotional content is shown nonverbally. There are at least four aspects of the body that contribute to the nonverbal display of emotion: the face; tilts of the head; total body posture; and movements of the arms, hands, legs, and feet. Of these aspects, the face is the most salient. As Ekman says, "With the visual channel, people focus more on the face than on other sources; facial expressions are tuned more than body movements, and people look at faces more than body movements" (Ekman and Friesen, 1975, p. 19). Ekman's studies of the body have explored the differences in what the face and the body communicate. He has found that emotions are shown primarily on the face, not the body. The body shows how

people are coping with emotion. Ekman has conducted hundreds of experiments on how the face displays emotion. His discoveries can be utilized by the teacher of oral interpretation. Just because a student wants to share feelings, it does not necessarily mean that he will be able to do so. The interpretation teacher can aid students in developing a keener awareness of how the face can reflect or can hide the emotions by using Ekman's facial atlas which shows how the six basic emotions--happiness, sadness, surprise, fear, anger, and disgust--and thirty-three different blends of these six emotions appear on the face. As Ekman has said, "Although learning the facial blueprints will chiefly improve your ability to spot emotion in others, it can also teach you to be keenly aware of what your own facial muscles are telling you--about you" (Ekman and Friesen, 1975, p. 5).

Affect display is often governed by what Ekman has called display rules. These rules can be both cultural and individual. Once learned, display rules operate as habits. Cultural display rules are ingrained conventions that can forbid the showing of an emotion and can even specify what emotion must be shown in its place. Cultural rules can also demand adjustments in the intensity of an emotion. Personal display rules are based upon idiosyncratic habits. Ekman has outlined eight styles of facial expression related to personal display rules: withholders, revealers, unwitting expressors, blanked expressors, substitute expressors, frozen-affect expressors, ever-ready expressors, and flooded-affect expressors. The teacher of oral interpretation can utilize Ekman's display rule constructs to explain to the student why

his performance has been or has not been effective. As Howard Doll (1977, pp. 263-264) has noted:

The beginning interpreter often finds that he has learned to restrain himself so well that he is unable to project any emotion with credence or power, thereby reading with a 'poker face.' The effect is often one which prompts the spectator to say to himself, 'he doesn't understand the story.' On the other hand, too much emotion can destroy aesthetic distance; therefore, the interpreter who communicates a happy mix of emotional tension and aesthetic control can make a text fulfill all its promise.

If the student is too restrained, the teacher can help him discover what cultural or personal display rules have come into play to inhibit his performance. If the student has displayed too much affect or affect which is incongruous, the teacher can help him recognize that his style of facial expression has interfered with his performance.

Ekman's regulator category can be an important aid in the directing of Readers Theatre. Coger and White (1982, p. 105) have noted that:

The tilt of the head, leaning forward or backward, nods, facial expressions, ways of standing or sitting, and tensions of the muscles are a few of the subtle movements that communicate attitudes and reactions. These are of the greatest importance in Interpreters Theatre but must be utilized in conventional Readers Theatre. This kinesic, nonverbal language completes the interaction of the speaker and the listeners in a scene.

The actions which they have described are those which Ekman has termed regulators. Coger and Pelham (1975, p. 95) have maintained that "The failure of interpreters to use body movements as regulators can result in an unsuccessful Interpreters Theatre production."

When an oral interpretation student is told that his body has "called attention to itself" in performance, it is often because the

student has used movements which Ekman calls adaptors. Sometimes these adaptors manifest themselves in situations in which stage fright or what Roloff calls "presentational energy" (1973, p. 104) is called into play. Adaptors also appear when a student attempts to simulate an emotion which he does not feel. Ekman has noted that adaptors are usually emitted with little awareness and with no intention to transmit a message (Ekman and Friesen, 1967a, p. 91). When the teacher sees that a student is using adaptors, the teacher can attempt to discover the cause and alleviate it. Adaptors are usually a sign of stress or duress.

Comparison of Methodologies

In 1969 Starkey Duncan summarized the history of research in nonverbal communication, identifying two broad research strategies. In the structural approach nonverbal communication is studied as "a tightly organized and self-contained social system like language" (p. 121). In the external variable approach the relationships between nonverbal behaviors and other variables are studied. Structuralists do not concern themselves with whether individual elements occur together; they assume that if they are natural elements of a communication structure, they will be present every time. External variable researchers are concerned with the statistical relationship of variables. Duncan (p. 121) emphasized that both approaches were "complementary and mutually facilitating."

Ray Birdwhistell represents the structural approach to nonverbal communication research. He proceeds deductively to relate nonverbal

behavior to the larger communicational contexts. However, the rules which govern the relationship between the vocal, verbal, and nonverbal building blocks have remained unspecified, and only structural units at the most basic levels have been isolated. Kinegraphs, the recording system that has evolved to study kinesics through microanalysis, appears intricate and unwieldy to the novice. His method would seem to have little applicability for the teacher or student of oral interpretation. It might have some utility, however, for the investigator.

Paul Ekman represents the external variable approach. He proceeds inductively, beginning his investigations with individual behavioral acts. The drawback to this research method is that relating nonverbal behaviors to external factors creates experimental findings that often lack cohesiveness and continuity. To deal with this problem, Ekman has attempted to organize his research into the framework of the theoretical constructs which he has identified. The oral interpretation scholar has long been accustomed to using analytical methods in his field of study. The external variable method is merely a refinement of the inductive method and as such should be of value to the oral interpretation scholar. As Marion Kleinau (1969, p. 240) has noted: "The student of oral interpretation need not be an expert in statistical methods to embark upon a program of empirical research. Expert practitioners exist who can facilitate the statistical process. What such experts can not do is to discover meaningful areas for research in oral interpretation."

Ekman has outlined two external variable approaches, the indicative or measurement of sign vehicles approach which examines the

relationship between nonverbal variables and other variables, and the communicative or message judgment approach which examines the decoding of nonverbal behaviors by observers. Both of these approaches could facilitate investigations within the context of oral interpretation. In addition empirical research could also focus upon encoding nonverbal behaviors as outlined by Albert Mehrabian (1981).

Over the years oral interpretation theorists have hypothesized that body movement is not only necessary for the performance of literature, but that it also aids the interpreter in communing with or assimilating the literature. Brooks, Bahn, and Okey (1967, p. 5) in The Communicative Act of Oral Interpretation suggested that: "The actual movement that you use may reveal new attitudes toward your material that a more inhibited approach has not made possible. Thus freedom of expression may aid you especially in developing an understanding of character in play, narrative poems, and stories." Wallace Bacon (1979) in The Art of Interpretation suggested that the interpreter should assimilate the literature into his body to truly understand it. He (p. 19) wrote:

The interpreter need not carry out all the acts suggested in literature; nevertheless, it is necessary that he develop attitudes that show his understanding of the acts implied or expressed. Such attitudes involve tensions, empathy, and kinesthesia. The interpreter's participation in the literary text must be active, a reaching into the experience of the language.

Robert Breen said it this way:

The hope is that the reader's imitation of the gestures expressed in the text will lead him to an understanding of those whose gestures he successfully imitates. A gesture transmits subconsciously a quality of thought or feeling

which can be satisfactorily appreciated only if the observer imitates the gesture (Bacon and Breen, 1959, p. 302).

These assertions are really hypotheses, however. As Mary Frances HopKins and Beverly Whitaker Long (1981, p. 237) have noted in their probing article "Performance as Knowing and Knowing Performance,"

In recent years . . . we have moved away from the bifurcation of script analysis and performance, as if the two were discrete processes, and we are confident that performance analyzes the text instead of being merely a product of analysis. But we have not explored the implication that improving performance skills may be analogous to improving any other critical skill. Are performers well trained in voice and body better able to use performance as a method of discovery? . . . In other words, is the performer's training in technique a factor in discovering the text?

Paul Ekman's external variable approach could be utilized by oral interpretation theorists to test this hypothesis and discover if, indeed, body movement training is a factor in the discovery of the text.

The following is an example of how such an external variable experiment might be conducted. The question to be answered is: Does training in nonverbal communication improve oral interpretation performance by aiding in the discovery of the text? Oral interpretation involves two major channels, the vocal and the nonverbal. If training in nonverbal behavior does indeed aid the interpreter in discovering the literature he is interpreting, this should be indicated in both channels. Thus, the channel to be used as a test measurement is the vocal channel.

The method of testing could be as follows. A five-point rating scale (1 = excellent, 2 = very good, 3 = adequate, 4 = needs improvement, 5 = poor) could be applied to audiotapes of ten female subjects interpreting a five-minute passage of dramatic literature twice. The

subjects would be of the same gender to avoid confounding the study. The conditions of the study would be as follows. All subjects would be individually tape recorded in an unrehearsed performance of the dramatic passage. Subjects would not be allowed to overhear each other. Five of the subjects designated as a control group would then be given a pep talk on the importance of nonverbal behavior in dramatic literature. The other five experimental subjects would be given actual training in nonverbal behavior. The training might follow the model outlined earlier, actual impersonation of the characters using costumes and props, or it might be any training methodology which the investigator wished to validate. Then all ten subjects would be recorded again without being allowed to overhear each other. All twenty audiotapes would be color coded to indicate control or experimental, first or second reading. These tapes would then be scrambled and be subjected to a blind rating. Judgments would be made by three raters who were experts in oral interpretation and who had shown similarity of judgments using the five-point rating scale in training sessions conducted prior to the study.

The example above illustrates how Ekman's external variable methodology could be used to test oral interpretation pedagogy and to lead to greatly improved teaching methods.

Although Birdwhistell's notation system and structural approach to the investigation of nonverbal behavior is not readily adaptable to oral interpretation pedagogy, his call for field observation is an approach which could prove of benefit. As noted earlier, it is a way for students to become familiar with new cultural patterns. Ekman's

theoretical constructs could be combined with Birdwhistell's field observation. Students could be asked to discover culture-specific emblems, illustrators, or display rules of an unfamiliar cultural group or even of their own cultural group. This is an out-of-class assignment which could widen a student's horizons and improve his nonverbal performance.

Oral interpretation pedagogy can also benefit from Ekman's tools for the decoding of facial affect, the Facial Affect Scoring Technique and the Facial Affect Coding System. Through them Ekman has attempted to construct a blueprint of the face and facial expressions. As he has said, "We knew we could not teach people practical information about facial expressions through words alone. . . ." (Ekman and Friesen, 1975, p. 169). Teachers of oral interpretation can use them as a touchstone for teaching about the complexity of the emotional experience as conveyed in performance.

Comparison of Supportive Evidence

Ray Birdwhistell's structural methodology demands a holistic approach in which the study of kinesics becomes the study of the total communication system. He and the adherents to this model have been adamant in stating that the meaning of nonverbal behavior does not inhere in the behavior itself but in the communicational and interactional context in which it occurs. Research employing this methodology has been sparse, and it appears highly unlikely that a behavioral dictionary and a concomitant grammar will emerge containing any degree of generalizability across contextual considerations. Allen E. Dittman (1971,

pp. 341-342) has offered an excellent assessment of Birdwhistell's work and his structural approach:

Birdwhistell's initial impact was to spur a number of workers to look at these phenomena, using whatever methods were available. . . . If the basic hypothesis of kinesics had been accepted by all investigators interested in the communicative aspects of body movement, their research would have been limited to linguistic methods which are really not appropriate to research in this area, and the chances are that we would not know as much about these phenomena as we know today. Communication by means other than language is a field of a number of diverse topics and the types of information encountered by the research are also diverse. . . . Theories and methods appropriate to all these different kinds of information are needed. Birdwhistell has given a theory, resting on untenable premises, which would confine investigators to only one method.

The very nature of Birdwhistell's structural methodology and holistic view has curtailed the production of hard evidence to support his contentions.

Paul Ekman and his collaborators have produced a plethora of data from which they have constructed their theories about nonverbal behavior. His external variable method is geared to generate supportive evidence.

Birdwhistell's assumptions often conflict directly with Ekman's supportive evidence. For instance, Birdwhistell has argued that communicative signals emitted from different channels are nonsimultaneous. Ekman has found that in some instances nonverbal material may be redundant with linguistic information. Birdwhistell has maintained that no act or gesture has meaning in and of itself but must always be viewed in context. Ekman has provided evidence that suggests that some nonverbal stimuli have a consistent meaning when assessed by judges of different age, sex, occupation, and culture. Birdwhistell

asserts that nonverbal acts have different meaning across cultures. Ekman has provided evidence to prove the contrary. Birdwhistell believes that facial expressions of emotion are learned differently in each culture, that they are not universal. Ekman's research has found pancultural elements in facial affect.

As noted earlier, Ekman's external variable methodology seems to have substantially more utility, applicability, and validity for the oral interpretation student, teacher, and scholar. A comparison of the supportive evidence provided by the two investigators only confirms this claim.

Ekman's current research interests, nonverbal leakage and clues to deception and the efficacy of the various channels of communication, are ones which should also have theoretical implications and practical applications for the oral interpreter. The investigations which he and his colleagues are now conducting offer the promise of a better understanding of how nonverbal behavior is managed or controlled, and what nonverbal behavior's relationship is to vocal and verbal behavior.

One thing is certain. The evidence of both Birdwhistell and Ekman implies that the oral interpreter cannot not display nonverbal behavior during the performance of literature. Bodily action whether controlled or uncontrolled is still an essential and integral aspect of performance. Attention must be paid. Nonverbal behavior can no longer be passed over lightly; it can no longer be ignored. Paul Ekman and Ray Birdwhistell provide oral interpretation theorists and teachers the tools to comprehend what nonverbal behavior is and how it is

learned and displayed. Their research can show why bodily action is so crucial to oral interpretation performance and how it can be understood, utilized, and controlled.

CHAPTER 5

CONCLUSIONS

It was the purpose of this study to examine critically the corpus of two representative and influential investigators in the field of bodily action, Ray L. Birdwhistell and Paul Ekman. The study addressed several major questions. First, are there any essential differences between the operating assumptions of Ekman and Birdwhistell? Yes. It was found that Birdwhistell believes that all nonverbal behavior is culturally learned and must be examined within the communication gestalt. He assumes that nonverbal behavior is similar to vocal and verbal language and can be investigated and comprehended as such. Ekman emphasizes the innate, universal, and expressive elements of bodily movement, especially facial movement; however, he does recognize the role of cultural learning. Ekman believes that nonverbal behavior can be investigated by testing its relationship to inner feelings or psychological states and by the decoding of these states by others.

Can any of the theoretical constructs employed by Birdwhistell and Ekman be borrowed and utilized by oral interpretation theorists? It was found that Ekman's categories of emblem, illustrator, regulator, adaptor, and affect display offer interpretation theorists the most workable vocabulary with which to discuss and elucidate nonverbal behavior.

What methodological implications can be drawn from the research styles of Birdwhistell and Ekman for oral interpreters who wish to engage in empirical investigations of nonverbal behavior? It was found that Ekman's external variable approach which encompasses both indicative and communicative methods offers more chance of generating meaningful and useful research than does Birdwhistell's structural approach.

Does the empirical evidence gathered to date render support for any of the theoretical approaches to nonverbal communication which oral interpreters have entertained in the past? Not really. It was found that while Birdwhistell's approach is similar to that of Delsarte, and Ekman's is similar to that of Curry, neither investigator validates these earlier approaches completely. The evidence of Birdwhistell is descriptive in nature; early teachers like Delsarte prescribed rules for "natural" bodily expression. Ekman acknowledges the role cultural learning plays in the development, modification, and control of nonverbal behavior; teachers like Curry believed that an empathic response to the literature ("think the thought") would of necessity produce the desired bodily responses.

Do recent scientific approaches to nonverbal communication justify a more deliberate training strategy in oral interpretation? The answer appears to be yes. Both Birdwhistell and Ekman believe that cultural learning plays a role in nonverbal behavior. It follows that if bodily action is learned then it can also be taught. Ekman's current research into nonverbal leakage, deception cues, and facial deceit is generating material which could be utilized in training oral interpreters. The major question is how it should be taught. Neither Birdwhistell

nor Ekman addresses this problem. It remains for the teacher of oral interpretation to determine the way that these data are to be utilized. This is an area for further study.

Is there any utility for the oral interpreter in an attempt to systematize and code nonverbal behavior? Birdwhistell's systemic approach appears to be too elaborate and cumbersome to be of much utility to the oral interpreter. It would only succeed in producing a mountain of data, an exhaustive cataloguing of all movement. It offers little heuristic promise.

Can oral interpretation pedagogy benefit from either Birdwhistell's or Ekman's research? At this point it appears that Ekman's research offers the greatest promise to teachers of oral interpretation. His classification scheme could easily be incorporated into oral interpretation theory. His theoretical constructs and the research which is continually updating and expanding them could illuminate concepts oral interpretation scholars have been grappling with for years such as how the body "calls attention to itself." His Facial Affect Scoring Technique and his Facial Affect Coding System could be used to develop a keener awareness of exactly how the face reflects emotions and how to identify basic facial emotions. His methodology could facilitate oral interpretation scholars in their quest for knowledge about nonverbal behavior and its relationship to both the discovery of and performance of literary texts.

Based upon an evaluation of the works of Birdwhistell and Ekman, can a set of specific recommendations for oral interpretation be

developed? The field of nonverbal behavior research is so young that researchers like Birdwhistell and Ekman are primarily concerned with describing the various elements of bodily action and the meaning attached to or transmitted by them. For this reason no set of specific recommendations can be developed at this time. Neither Birdwhistell nor Ekman has developed any definite prescriptions. However, they are continually adding new insights concerning the role of the body within the communication complex. It is now a question of how these insights will be incorporated into oral interpretation theory and how they will be taught. This is a problem which we can and must address if oral interpretation is to be in step with the cultural milieu.

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