

MOTHER-CHILD CONVERSATION: A STUDY OF  
DYADIC INTERACTION

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## PREFACE

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## CHAPTER I

### INTRODUCTION TO THE RESEARCH

Language is a form of social behavior not merely an individual experience. Children raised in isolation do not use language; it is used by human beings in a social context, communicating needs, ideas, and emotions to one another. The egocentric monologues of children appear to be secondary developments derived from the social use of language (Vygotsky, 1962:19), and very few people spend much time talking to themselves. Communication is a function of language and conversation is a means by which to communicate, so it stands to reason that conversation is also a social process. Fundamentally conversation is verbal exchange between two persons, but it may and often does encompass a large group of persons as well. The range of the verbal exchange may be infinite but it is also constrained by a conventional system of uses and an extensive but finite shared vocabulary (Whorf, 1956:221). Consequently, the negotiated rules that form guidelines for use in any society can not be totally understood with reference to particular individuals (Mead, 1904:377).

Recent developments in sociology indicate that there is a growing interest in the sociological meaning of certain aspects of language, or conversational behavior. Considering these developments it is not clear that sociologists who are interested in these aspects can agree as to what methods are appropriate by which to study these phenomena of social

conversation, nor is it clear why they should agree, as varying methodologies result in different aspects of conversational behavior being examined and evaluated. There have been attempts to describe the communication phenomena from both an external and an internal perspective, looking at relevant variables and relating them to each other in various social situations, contexts, etc. The present research would be best described as an external analysis of the conversational process as it relates to a specific aspect of human growth, i.e., the process of development of linguistic self. The basic research effort is to examine conversational activity between 128 six-year old children and their mothers in five minutes of taped conversation and to describe and evaluate, through vocabulary analysis, pronominal reference, and narrative and response modes of conversation, the process of linguistic self development. The research goal is to add to, clarify and substantiate previous theoretical and empirical contributions to the understanding of the significance of verbal behavior forming the mother-child conversational relationship.

The following research focuses on the least complex (although by no means simple) and most elementary form of interactive communication: dyadic verbal interaction. Two individuals (mother and child) are engaged in focused interaction which is influenced by the goal of a merger of self and other; this, of course, in an academic merger. In an ideal situation they would attempt to anticipate, predict and behave in accordance with the joint needs of the self and other. The phenomena of their conversation that is being examined is measured neither by an extensive list of vocabulary words alone nor by a deciphering of the context to establish the actual or intended meanings of the words, but rather to

measure words, phrases, or modes used in the conversation that may reflect the relationship between the persons involved and the child's development. In other words, it is a description of the conversation or communication process that exists between mother and child and is indicative of the extent to which the child has developed linguistically.

Data manipulation and analysis of the 128 unique dyads of conversation were handled primarily by computer analysis. Although the manipulation could have possibly been completed by hand, the investment of time and energy would have at best been devastating, as the coding of the conversations was difficult enough using the computer. However, after using the computer it is the wish of the author that the reader does not assume that the people have been eliminated from the study. Hopefully, on the contrary, it has merely allowed me greater speed and efficiency in summarizing the characteristics and indices of their conversation so vital to an understanding of the mother-child relationship.

One further point I wish to make is that this research is one part of a year long study originated by Dr. Donald Allen and Dr. Rebecca Guy. Their objective is to examine and evaluate the relationship between the conversational behavior of mother and child as it is related to the child's performance in the educational system. As the sociology of talk (Allen and Guy, 1974) is a relatively new approach to verbal behavior analysis and as the present research is in some ways a methodological exercise formulated from the above method, it is hoped that the reader will be able to recognize the merit and value of this approach to the communication process, i.e., mother-child conversation.

In summary, this research which is exploratory in character is designed to evaluate and describe mother-child conversational patterns,

with the child's expression of development of linguistic self as special interest, through the measures of vocabulary analysis, pronominal references, and the conversation mode--narrative versus response. The first two chapters following this introduction are designed to familiarize the reader with the literature concerning aspects of conversational analysis. Chapter III specifically describes the previous theoretical and empirical contributions which form the foundation on which this research is based. This chapter also includes the basic research questions that are to be examined in the following chapters. Chapter IV then provides the reader with the characteristics of the sample, data collection and coding procedures, and a detailed explanation of the operational definitions used in the study. The last section of this chapter consists of a delineation and rationale for the statistical analyses that were employed. Chapter V contains the presentation of the information which was gleaned from the statistical analysis while Chapter VI is an attempt to summarize and condense the material into a meaningful whole. Various suggestions for future research which are outcomes of this project are also found in Chapter VI.

## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction to the Chapter

This chapter provides the relevant theoretical and empirical contributions that have been compiled in the area of conversational research. This review is designed to provide the foundation for the present endeavor. The first section of the review is concerned with the theoretical contributions of R. Brown, C. H. Cooley, G. H. Mead, and E. Goffman, while the second section discusses the most important work of D. Allen and R. Guy, F. Goldman-Eisler, L. S. Vygotsky and J. Piaget, among others.

#### The Review

##### Theoretical Contributions

Social psychology is concerned with the behavior and psychological processes of individuals who create positions in social structures, organizations and groups. On the one hand, social psychology is focused upon observation and description of the behavior of individuals as it is controlled, influenced or limited by the social environment. On the other hand, it is concerned with the manner in which the behavior of individuals response to shapes, and alters social patterns and enters into the functioning of groups (Lindsmith and Strauss, 1956). For social

psychologists, language is seen as another form of human behavior to be studied as to its relationships with other behaviors. It is not merely the system of symbols but the use of these symbols in interaction that is of importance to study.

There are perhaps two major functions of language, both under the rubrics of communication and symbolic interaction, which denote the explanation of behavior as a function of the influence that one person has on another as a result of the individual first mentally interacting with a set of shared definitions. Language can be seen as this system of symbolic responses by which individuals communicate with other individuals (inter-individual communication) or as a system of symbolic responses that facilitate thinking and action for the individual (intra-individual communication) (Carroll, 1964).

From the literature one can deduce that from within these two major functions of language other roles or minor functions have been deduced or created by the various theorists, such as: (1) language as a tool for the accumulation and transmission of cultural artifacts; (2) language as a means for the production and maintenance of "group solidarity"; (3) language as a creator or sustainer of experience, both physically and mentally; (4) language as a means by which to perceive, and finally; (5) language as a tool in the development of self.

As the primary objective of this research experience is to further explore the relationship of language and communication processes with a child's development of sense of self, it seems quite necessary to elaborate on the various theorists and their theories which have been concerned with language and self-development. Later on, a discussion will be made of the various empirical studies related with this same phenomena.

Literature in the area of communication reveals both theoretical and empirical contributions. One such theoretical contribution has been made by the theorist Roger Brown. Although his work has primarily been linguistic in nature, he has made some attempt to combine his linguistic perspective with that of social psychology. The social psycholinguistic approach of Brown's most appropriate to this research problem is concerned with the acquisition of language and the function of "names". Brown points out that in learning referents (meanings) the words presented by the child's "tutors" will tend to be the most common relevant ones. These words then to some extent control a child's behavior when referring to the objects and events by name.

Brown spends much detail discussing the controversy of language acquisition as progressing from concrete to abstract or from abstract to concrete in a child's cognitive development with the former viewing abstraction as a mature process rather than a primitive process. Brown (1958) then concludes the following:

. . .the sequence in which words are acquired is set by adults rather than the children, and may ultimately be determined by the utility of the various categorizations. This will sometimes result in a movement of vocabulary toward higher abstraction and sometimes a movement toward greater concreteness. The cognitive development of the child may nevertheless always take the direction of increasing differentiation or increasing concreteness (224-225).

Along these same lines and from his book Words and Things (1958), Brown asserts a similar idea that names are categories that people use to order their worlds, which is directly linked with the Whorfian hypothesis whose basic premise is this same formulation (Whorf, 1956). The Whorfian hypothesis could be summarized in the following manner: in an attempt to organize their world, and inasmuch as people think and behave

in terms of the classifications they use to create meaning for features of their world, language may not only be a vehicle by which people interact and communicate but it may also be an active determinant of the content of their thoughts and perceptions. Consequently language would seem to be an active determinant of the content of interaction as well. In other words, what can be interacted and communicated about is to some extent limited with respect to what word or concept "categories" are available; for example, how can one interact or communicate successfully as a biologist if the "biological word" groups are not known or used? For a child these categories are primarily dependent upon the environment of significant adults and later to other children.

In an earlier era the writings of Charles Horton Cooley and George Herbert Mead were the most valuable in terms of the relationship of language and communication processes to development of self. Cooley was concerned with describing how the individual comes to experience oneself as an object, while Mead's social behaviorism stressed the processes by which the individual becomes aware of and learns how to guide his own behavior.

Cooley's description of how one comes to think of oneself as an object is formulated around what he calls a social self or looking-glass self. A self-idea of this sort seems to have three principal elements; (1) the imagination of our appearance to the other person; (2) the imagination of the other's judgment of that appearance; and (3) some sort of self-feeling, such as pride or mortification (Cooley, 1908). In establishing this theory in empirical fact, Cooley observed his daughter and her development, a development not unlike any other, which vividly expresses the necessity and growth of language and communication in the



child's progression from the naive to the subtle in socially self-assertive action. Imagination cooperating with instinctive self-feeling created a social "I" and this became the principal object of interest and communicating endeavors.

Social behaviorist G. H. Mead describes in his writings certain mechanisms of communication as the central basis of mind, self, and society. In Mead's thought (which progresses beyond the work of Cooley and stands in contradiction to the rather deterministic argument of Brown) is the idea that the organism is an active agent rather than a passive recipient of external stimuli. His thesis could be that action determines the relation between the individual and the environment, a matter of cooperative behavior. Action is "the act". Stimuli are encountered and affect the course of the act. Identical stimuli are different for different persons and different for the same person during different acts, thus perception is selective and occurs during the action (Strauss, 1956). In action towards others people take themselves into account. This self-reflexivity is dependent upon language and comes as a result of group participation. Mead (1934) summarizes this concept as follows:

It is by means of reflexiveness--the turning back of experience of the individual upon himself--that the whole social process is thus brought into the experience of the individuals involved in it. . . Reflexiveness, then, is the essential condition within the social process, for the development of mind (134).

In his work Mead was very interested in such genetic things as a child's development and the rise of speech, thought, self, emotions, and personality. He wished to include mental activities within the orbit of the social act itself. Thus he agreed in part with Watson, the behavior-

ist of the time, but attempted to go beyond him and correct the crudities of Watson's behaviorism. Mead believed that the scope of behaviorism could be extended to include the introspective phenomena which many of the objective psychologists of the day had neglected. His outlook offers a set of concepts directly pertaining to crucial matters such as complex mental activities, self, self-control, audience, role-playing, social interaction, motives, group membership, and group functioning (Mead, 1934). Now at this time it seems appropriate to point out that Chomsky would be at least in partial agreement with Mead; in that, he is also concerned with mental processes as the basis for language. For Chomsky the essence of language, as well as that of human nature, is mental; consequently, he feels that any study of language is a dismal failure if mental processes, along with the social processes, are not a matter of concern (Chomsky, 1968).

In Mead's analysis, gesture and communication come before mind or self. A gesture is the mechanism through which social acts are effected. The term "gesture" may be identified with the beginning of social acts which are stimuli for the response of other forms (Mead, 1934). Gestures may be signs or significant symbols. The lower animals use signs because presumably they are not self-conscious. There is gesture and response in a dog fight and things happen, but there is not self and there is no other. A significant symbol is a gesture with meaning and is more than a mere stimulus. Furthermore, a gesture (symbol) finds meaning, or becomes significant, only through communication. The meaning thusly is found in the response of others to it as a part of a social act. The various acts presuppose the social process and

. . .the gesture arises as separable element in the social act, by virtue of the fact that it is selected out by the sensitivities of other organisms to it; it does not exist as a gesture merely in the experience of a single individual. The meaning of a gesture by one organism. . .is found in the response of another organism to what would be the completion of the act of the first organism which that gesture initiates and indicates (Mead, 1934:145-146).

This relation between a stimulus as a gesture and the rest of the social act constitutes where the meaning originates and exists. The meaning is in interaction and social in nature (Troyer, 1946).

A vocal gesture is best suited to transform the biological entity into a minded individual because it alone stimulates the speaker the same as it does the other. We can hear what is being said and thus can evoke in ourselves the same ideas (preparations to act) as are evoked in the other individual. Language, a highly specialized form of a vocal gesture, is the establishment of cooperation in a social activity in which the self and other are modified and regulated by the common act. Language, or the meaningful use of symbols, arises because the human being has the capacity to indicate to himself what the other person is going to do and then to take his attitude on the basis of that indication (Pfuetze, 1954).

If the individual reaches self-awareness only through communication with others, only through the elaboration of social processes by means of significant communication, then the self could not antedate the social organism, the latter would come first. In other words society precedes the individual (Mead, 1934). Mead's starting point, then, is social experience. Men live together in a world of meaning only because there is a prior undergirding of social process within which their biologic lives are set. Mead points out that "my" has no meaning except over and

against "yours", (Mead, 1934:234), and that unless there is a social interaction and a common dimension of experience the notion of individual private experience would be without meaning.

All group life defined by Mead is essentially a matter of cooperative behavior. Each acting individual ascertains the intention of the acts of others, consequently making a response on the basis of that intention. In order for this cooperation to occur there must be a way in society for each acting individual to come to understand the line of action of others and how to guide her/his behavior to fit in with those lines of action, i.e., socialization. This brings Mead (1934) to a summary statement as to the relationship of language and the development of self:

The language process is essential for the development of the self. The self has a character which is different from that of the physiological organism proper. The self is something which has a development; it is not initially there, at birth, but arises in the process of social experience and activity, that is, develops in the given individual as a result of his relation to that process as a whole and to other individuals within that process (135).

The self is formed, in other words, through definitions made by others in a manner congruent with the defining process for other objects, which is dependent upon language use in the communication process.

Erving Goffman, another important theorist in the realm of conversation analysis and interaction processes, indicates that the conversational exchange between two or more individuals is that of an interaction ritual. (Although Goffman does not directly concern himself with child development and language use, his theoretical discussion of conversation is a valuable contribution to the understanding of mother-child relations reflected in conversational patterns). Goffman suggests that

there is a "public order", a sort of social equilibrium operative in each and every interpersonal relation. In general people behave as to maintain this equilibrium, not because of the catastrophic consequences they must face if they do not, but because not attempting to maintain this balance is personally uncomfortable (Goffman, 1971). In other words, in maintaining this balance one is attempting to save face, which is defined as "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact." Face is an image of self delineated in terms of approved social attributes (Goffman, 1967:5).

Within this equilibrium framework, Goffman has developed an in-depth understanding or exposition of the structures of social encounters, i.e., the consequences of people coming into the presence of others and how this resultant interaction relates to the construction of self. He cites as the "key factor" in the structure "the maintenance of a single definition of the situation, this definition having to be expressed, and this expression sustained in the face of a multitude of potential disruptions" (Goffman, 1959: 254).

Following somewhat the thought of G. H. Mead, Goffman uses the vocabulary of the theater to explicate his concepts of the workings of society and the definition of the situation. As meaning is established in the interaction, which is a kind of transaction, Goffman sees that the individuals must use all resources available with which to find these meanings and to maintain a single definition of the situation. In this search the actors may manipulate objects, space, and even time, a procedure which Goffman calls management of impression between actors, a procedure which can also be readily seen in even very young children.

This process involves one person putting forth a definition of the situation by whatever means necessary and then the other accepting or rejecting this definition. If the other should accept the definition the interaction may go very smoothly, but if the definition is rejected or not understood the initiator must then choose a response of either accepting or rejecting this new definition and either saving or terminating the interaction, at the same time maintaining face. Goffman emphasizes as the main area of study the syntactical relations that are involved in developing a "working consensus" of definition of the situation when persons are interacting (Goffman, 1967). He capsulizes his point as follows:

When we allow that the individual projects a definition of the situation when he appears before others, we must also see that the others, however passive their roles may seem to be, will themselves effectively project a definition of the situation by virtue of their response to the individual and by virtue of any lines of action they initiate to him. Ordinarily the definition of the situation projected by the several different participants are sufficiently attuned to one another so that open contradiction will not occur. . . Each participant is expected to suppress his immediate heartfelt feelings, conveying a view of the situation which he feels the others will be able to find at least temporarily acceptable (Goffman, 1959).

Goffman goes on to say that it is always advantageous to be able to influence or control the responses of others especially when it involves treatment of ourselves. He sees impression management as a means by which one may get others to act voluntarily according to one's own plan, or in other words, a means by which to control the definition of the situation (Goffman, 1959).

With this framework in mind, one can say that Goffman somewhat agrees with or has a base in Meadian thought concerning the development

of self and language. Goffman agrees that the self is social in origin but contrary to Mead and others, he does not see a one "true self" that has developed from the reception of others attitudes and appraisals alone. Rather, the individual is actively creating impressions designed to win favorable evaluations about himself from others, he creates or recreates himself through others. Knowing oneself is contingent upon knowing others, in the sense that one must know how others interact and communicate in order to interact and communicate with oneself. The self is a variable construction created anew in each new social interaction and situation. The self is not seen as a single consequence determined through language construction, which then itself becomes a determining factor, but rather that language and communication practices are mere expressions within the interactive processes which come to be called self, that is, self is defined in interaction.

Taking a more empirical view of communication research, conversation has been approached, often only as an afterthought, in terms of roles and role behavior. As Cooley, Mead, and others have pointed out, the self concept is developed through social interaction, which may in part be seen as the assignment of the person to a series of social roles. As a child performs and creates these roles, sense of self is influenced by the way in which others see the child and react to the specific role portrayed. For each role expectations are learned and behavior performed, creating individualized interpretations of that role. Goffman (1961) has vividly expressed the impact of role expectations on an individual:

It is important to note that in performing a role the individual must see to it that the impressions of him that are

conveyed in the situation are compatible with role-appropriate personal qualities effectively imputed to him: a judge is supposed to be deliberate and sober; a pilot, in a cockpit, to be cool; a bookkeeper to be accurate and neat in doing his work. These personal qualities, effectively imputed and effectively claimed, combine with a position's title, when there is one, to provide a basis of self-image for the incumbent and a basis for the image that his role others will have for him. A self, then, virtually awaits the individual entering a position; he need only conform to the pressures on him and he will find a me ready-made for him (87-88).

Does it not also make sense that if an individual learns these expectations of role behavior (s)he must, within that same context, learn expectations of verbal behavior as well? For example if a judge is to be deliberate and sober, verbal behavior must also reflect these characteristics; the role of judge demands a rather limited set of specific vocabulary as does the role of pilot, engineer, nurse and so on. It is also true that a person in a less stylized position has more flexibility in both action and word. Such is the case for the mother and child dyadic interaction; although much more flexible, there is still some conversational (verbal behavior) expectation, especially in the mother's role.

This type of reasoning which relates role expectations (sets) with communication or verbal behavior has led to various areas of research, such as communication and power (Reicken, 1958; Kelley, 1951), status and communication (Klein, 1956; Borgatta and Bales, 1953) or the use of verbal behavior patterns as clues to social relationships (Beidelman, 1963).

#### Empirical Contributions

Perhaps not yet being the major approach taken to conversational



analysis, the mathematical or quantitative approach is gaining a large audience in an attempt to precisely examine and interpret various aspects of conversation (the verbal stream) vital to an understanding of the communication process and verbal behavior.

The formal characteristics of speech are important determinants of how an individual carries out his social role. Such characteristics of speech, pitch, rates, density, length, pauses, and silence are aspects of social roles to which other individuals react. Changing these characteristics may systematically affect the reception an individual receives from the audience of his peers and significant others. It is often not what an individual says but the way in which he says it that influences how his peers react to him (Matarazzo, et. al., 1965:179-180).

As argued above, not only are content variables seen as important ones in the study of communication, but there are others as well. According to the exhaustive work of Allen and Guy (1974) there are perhaps five major variables of conversational analysis that have proven to be effective and informative in increasing the knowledge bank concerned with the communication processes. They are: (1) the analysis of intensity variations over a temporal distribution; (2) vocabulary analysis; (3) the analysis of somatic behavior as related to conversation (non-verbal communication); (4) the analysis of the specific elements of verbal interaction; and (5) analysis of the conversational process in general, most often the development of speech as related to human growth.

The specific aim of the first four methods previously mentioned is to gain an understanding of the generative processes involved in the production of speech. In all these methods the most important variable aspect is time. Goldman-Eisler (1968) writes:

Speech is a serial phenomenon, an activity spread out in time. It does not, however, fill time continuously, particularly when it is spontaneous, but comes in fits and starts with intermittent periods of non-speech. A passage of speech extending into time consists of two sorts of time: time of vocal action and time of silence (11).

Goldman-Eisler's preoccupation with time and temporal distribution has led her to do extensive research on the significance of hesitancy pauses in speech behavior. She asked such questions as where do pauses occur, what is the range and distribution of pause durations, and how frequently do these pauses occur (Goldman-Eisler, 1968). The research of Goldman-Eisler has greatly facilitated the expansion of this particular area of conversation analysis by opening the way for new and precise methods of inquiry.

Further considering intensity variations, many others have contributed to this approach with many other explorable variables. Chapple (1940), for one, was interested in an objective description of interaction, thus he considered the length and frequency of verbal conversation, silence, and interruptions. Allen and Guy (1974) using the dyadic structure as a basis for conversational analysis, examined such indices as range in loudness variation (amplitude), ratios of vocal participation between actors (equilibrium), wave length (the time length of an uninterrupted or continuous string of vocalized syllables terminated by a period of silence, or by vocalized emissions from the other actor), and the ratio of intensity variation to time (slope); finding that intensity variation is an important variable in dyadic relationships. Lennard and Bernstein (1969) have also conducted extensive research on the effect of social context as related to the flow of interaction.

As previously stated, another valuable variable in conversation

analysis is vocabulary. Language in use has served extensively as a basis for evaluating social and personal characteristics in psychological and sociological investigations. As Allen and Guy (1974) point out,

The word provides a consistent unit of measure. The list reflects the conventions of word use and the distribution of variant forms. Vocabulary range and diversity may be exactly identified. It is useful in specifying topical range and in generalizing on the particulars of topical reference (97).

Rapaport (1969) has used factor analysis to trace the acquisition of words and their various meanings. Brown (1957) showed how the grammatical practice of using certain words in certain parts of speech can affect cognition. He went on to show a distinct difference between children and adults in words used as nouns and verbs. Extensive analysis of vocabulary characteristics have been carried out by George Zipf (1935). One undebatable characteristic expressed is that the more frequently a word is used, the shorter its length is likely to be. This finding represents vocabulary change over time, for example, automobile to car, television to t.v., or airplane to plane.

Again within the dyadic structure Allen and Guy have examined the two basic properties of vocabulary: the extent of the word list and the total frequency of word usage. Differences were evaluated as to structure, sex, and content half, i.e., the first or second half of the conversation (Allen and Guy, 1974:105). Evaluations were also made of word length, syllable count, and pronominal reference. The results of these research efforts are that differences are to be found concerning these variables which would imply that in order to understand the communication process more fully, one must take these variations into account.

Directly related to vocabulary analysis, although not in the pre-

viously mentioned sense, is the work of the various sociolinguistic researchers. Grimshaw (1969) has attempted to show some of the complexities introduced in conversation analysis by the varying characteristics of topic, participants, audiences, social and psychological location, and so on. He stressed not only the importance of what a person says, but also how it is said. Another sociolinguistic, Labov, has applied the variables of casual speech, careful speech, reading style, and word lists to the development of certain discourse rules considered to vary over social context. He feels that it is important to know what is done with a sentence, in terms of use of words, phrases, sounds, etc., in order to more fully comprehend the communication process, as it is viewed through the sociolinguistic structure (Labov, 1972). Another important theme of sociolinguistics is that of communicative competence, a concept formulated from the notion of linguistic competence as introduced by Chomsky. This idea combines implicit knowledge of the language with the actual use of language in concrete situations. Hymes has elaborated this concept as it refers to the psychological, cultural, and social rules which discipline the use of speech in social settings (Hymes, forthcoming).

The next area in which conversation analysis has concentrated is with somatic behavior as related to the conversation, i.e., non-verbal communication through movement of body, limb, and face. As is obvious, conversational activity extends well beyond verbal behavior. Each actor uses her/his whole body in a complex pattern of related actions in projecting ideas and in sharing them with the conversational partner. Erving Goffman has extensively elaborated upon the significance of somatic behavior in his most penetrating analysis of the relationship

between somatic behavior and the social situation. Congruently, Bridwhistell, in fact, has stated that somatic movements carry so much social meaning that only about 35% of the meaning of conversation is conveyed with words (Bridwhistell, 1970:158). This is, of course, an exaggerated estimate, for people are highly dependent upon words in order to communicate, but he does make the point that somatic behavior is vital to the interpretation of the interaction. Although this type of behavior is not necessary for communication to occur on a certain level, as in conversations on the telephone, it is necessary to recognize those somatic cues when studying conversation behavior as social action (Allen and Guy, 1974:134-160). This point is further exemplified in the writings of Jonathan Miller, for in the performing arts, all actors are dependent upon their body movements and voice inflections to convey the "right" sense of their performances. The words of a script may be very dull until the actor adds to them gesture, facial expressions and intonations. Therefore Miller (1972) says

. . .when the actor undertakes to perform the lines he is confronted by the peculiar task of investing them with a suitable accompaniment of non-verbal cues. . .This would offer no particular problems if one could read into the lines a set of specifications that automatically insisted upon the way in which they should be spoken; but as everyone knows it is possible to perform the lines assigned to Hamlet, say, in a hundred different ways, all of which are at least compatible with the basic semantic references of the script (362).

An area of more particular relevance to the present research is in the study of communication process in general, which in the literature has most often included the development of speech as related to human growth, and to this research, the linguistic process of development of self. This type of research involves both theoretical and practical

considerations, using both quantitative and qualitative approaches.

In considering the development of self as it is related to the structure of communication in the process of socialization, Bernstein has been very influential. His research has empirically distinguished family types within each social class and their varying communication structures. His major thesis is that family types can be distinguished according to the strength of their boundary maintaining procedures. The symbolic ordering of space can give indications as to the relative strength of boundary maintaining procedures. For example, one family may think it quite appropriate to leave shoes in the kitchen, magazines in the bathroom, coats in the family room and so on, where in another these happenings do not occur. Bernstein (1970) states that the relative strength of these boundary procedures will also reflect back onto the relationship between family members.

Where boundary procedures are strong, the differentiation of members and the authority structure is based upon clear-cut, unambiguous definitions of the status of the member of the family. The boundaries between the statuses are strong and the social identities of the members vary much as a function of their age, sex, and age-related status. . . We characterize the family as positional (174).

Bernstein further contends that if the boundary procedures are weak the family will be more person-centered, differentiation between members is based upon differences between persons. As he continues to point out, these differences in family type will result in differential aspects of self. The child from a person-centered family has grown up with continuous adjustments being made for the wishes, intentions, and motives of others. Conceptions of self are blurred with conceptions of others. But in positional families the child must learn and perform within the

pattern of formal obligations and privileges. Consequently if conception of self differs so will communication structures and verbal behavior.

. . .in person-centered families, the insides of the members are made public through the communication structure, and thus more of the person has been invaded and subject to control. In positional families of course, speech is relevant but it symbolizes the boundaries given by the formal structure of the relationship (Bernstein, 1970:175).

In positional families a child may develop a strong sense of social identity with little sense of autonomy, while on the other hand a child from a person-centered family would develop a strong sense of autonomy but a weak social identity. In summary, Bernstein is attempting to point out some very real differences in family structures that may account for varying speech codes and patterns of development of self-concept.

One of the most famous researchers who studied speech development of children was the Swiss psychologist Jean Piaget. In the words of Vygotsky, "It is not an exaggeration to say that he revolutionized the study of child language and thought" (Vygotsky, 1962:9). The basic thesis which Piaget attempted to answer in his research and stated in his book, The Language and Thought of the Child, can be stated as follows: "What are the needs which a child tends to satisfy when he talks?" (Piaget, 1926:1). This question should serve as a fitting prelude to any study of child logic.

Piaget's conception of the development of thought is based on the premise taken from psychoanalysis that child thought is originally and naturally autistic and changes to realistic thought only under long and

sustained social pressure. He also believes that play is the most spontaneous form of thinking, wishful imaginings that make the desired seem obtainable.

In the first place, there is no sustained social life among children of less than 7 or 8; in the second place, the real social language of the child, that is, the language used in the basic activity of children--play--is a language of gesture, movements, and mimicry as much as of words (Piaget, 1926:56).

Up to the age of 7 or 8, play dominates in the thought patterns of children to such an extent that it is often hard to tell invention from fantasy believed to be and acted toward as if true (Vygotsky, 1962).

Piaget's systematic observation of the child's use of language has led him to distinguish two types of conversational groupings, the egocentric and the socialized. In egocentric speech, the child talks only for himself (in the sense in which a lecturer may speak "for himself" alone, even though he naturally intends his words for the audience), expects no answers, and often does not even care if anyone is listening. In socialized speech, on the other hand, the child does attempt an exchange with others--(s)he begs, commands, threatens, conveys information, asks questions.

Egocentric speech may be categorized into three groups: (1) repetition--repeats words for pleasure of talking, often nonsensical; (2) monologue--thinking aloud without a direct audience; (3) dual or collective monologue--others present are not taken into account in the speech; presence is only a stimulus. Socialized speech consumes five fundamental categories: (1) adaptive information--actual interchange of ideas by argument or collaboration in pursuit of a common aim; (2) criticism--



remarks specified in relation to a given audience; (3) commands, requests, and threats; (4) questions; (5) answers--answers to real questions or commands (Piaget, 1926:9-11).

Piaget's experiments have shown that egocentric speech is a dominant factor in a child's verbal behavior. The thought of a child from six to seven, in its spoken manifestation, is egocentric in nature in the proportion of 44 to 47%. He further believes that the age at which the child communicates her/his thought (the age when egocentric speech is approximately 25%) is probably between seven and eight, which basically means that Piaget envisions a gradual transformation process, which perhaps culminates at this general age of 7 or 8, whereupon the child, then, proceeds to improve upon methods of interchanging ideas and upon mutual understanding of others, an essentially social process (Piaget, 1926:49). On the other hand, Vygotsky and others take issue with Piaget's contention that speech becomes predominantly social only in later childhood, at say seven or eight years. For Vygotsky, speech is essentially and primarily social. Investigations of the earliest forms of behavior in the child and of this child's reaction to a human voice show that the social function of speech is already clearly apparent during the first year (Vygotsky, 1962:42).

Vygotsky and his co-researchers conducted three series of experiments designed to refute Piaget's analysis of egocentric speech and to eliminate those characteristics of egocentric speech which bring it close to social speech. In the first situation the illusion of being understood was destroyed, in the second the possibility of collective monologue was varied, and in the third, the vocal quality of egocentric speech was varied. In all three situations egocentric speech diminished

resulting in the following conclusion:

. . . egocentric speech is a form developed out of social speech and not yet separated from it in its manifestation, though already distinct in function and structure. Subjectively, the child's egocentric speech already has its own peculiar function--to that extent, it is independent from social speech; yet its independence is not complete because it is not felt as inner speech and is not distinguished by the child from speech for others. Objectively, also, it is different from social speech but again not entirely, because it functions only within social situations. Both subjectively and objectively, egocentric speech represents a transition from speech for others to speech for oneself (Vygotsky, 1962:138).

Another person who has done considerable work with children and the importance of speech related to development of self, is Maria Montessori (1969). Although her primary interest is the process of education, Montessori provided a rather different perspective to the processes of social self development. She believes the basis for a child's character and social behavior is concentration. As a child's mind is very absorbent, we as adults must provide the sort of surroundings which encourage concentration (from about age three onward), and the child will develop in an acceptable and intellectually satisfying manner. Within this framework learning to speak and to speak with some degree of maturity, allows the child some sense of independence, (s)he is no longer dependent upon others but can now communicate to some extent with them. Montessori's point seems to be that a child must not so much be taught, but allowed to learn through absorption of the surroundings.

Keeping in mind the various theoretical and empirical contributions reported here, the thesis will now be focused upon the theoretical model which is used for the present research endeavor.

## CHAPTER III

### THEORETICAL-EMPIRICAL MODEL

The dominant emphasis in social research is on the importance of explanation and prediction. The view of Smelser is rather typical of those who hold this opinion,

Explanation. . . begins with the search for independent variables (or causes, or determinants, or factors, or conditions), to which variations in the dependent variable are referred. . . no investigative activity in sociology is scientifically legitimate unless it can be related directly to the core sociological enterprise: accounting for variation and interdependencies of data within a social framework (Smelser, 1969:14-19).

Blalock writes that the ultimate goal of science is prediction (Blalock, 1960:240). And Coleman (1967:109) concurs as he states that "one of the important fruits of social investigation should be its ability to predict."

This concern for prediction and explanation dominates the thought of large numbers of social science researchers today. Although understanding and explanation are designated as goals they seem to fall by the wayside under the weight of tons of rhetoric, becoming second fiddle to the more "profitable" predictive ability. The question, then, can be raised, that is, has successful prediction been achieved? The answer, despite much time, effort, and resources is sadly "no".

. . . despite the vast expenditures of money, and of time and manpower as well, sociologists have been generally unable to provide generalizations that explain very much of the social behavior in which they are interested (Phillips, 1972:7).

Oftentimes sociologists refuse to recognize the questionable success of their research efforts when a variable has been discovered which only "explains" 10% of the variance, and has the ability to successfully predict very little. Alvin Gouldner (1970) in The Coming Crisis of Western Sociology has commented on this phenomenon:

There is a fairly widespread tendency among sociologists to rest content with a demonstration that some sociological variable "makes a difference." If a variable can be shown to control even the smallest proportion of the variance in a problematic matter, it is all too readily regarded as a memorable contribution to sociology and all too ceremoniously ushered into its theoretical hall of fame. . .

This implies, then, that if prediction has not been successfully achieved, understanding, which must lay the foundation for this prediction, has not been achieved either.

The question then, is why has understanding and prediction not been achieved? First of all, perfect prediction among non-perfect beings can never be achieved, but possibly, if understanding were increased so would predictive ability. Phillips (1972) suggests two related conclusions as to why explanation and prediction among social relationships are quite limited: (1) most social knowledge is based on people's reports of their behavior, rather than on the actual observation of behavior and interaction (by far the most common modes of data collection are questionnaires and precoded interviews); (2) sociologists tend to underestimate the influence of their data collection procedures on the phenomena which they attempt to measure (Phillips, 1972:1-11).

As is well known, the relationship between theory and methods is plagued by the phenomenon of the "vicious circle"; what is known about social behavior is dependent upon the methods of studying behavior, while the methods for studying social behavior are dependent upon what is known about the phenomena, implying that in order to use an interview or a questionnaire, sociologists have to have a great amount of knowledge about social behavior; an assumption not always valid. Perhaps this is the point at which sociologists can begin to improve their predictive abilities (if that is their goal). In zealous pursuit of facts and figures of how happy people are, how people feel about this, that and something else, academicians often fail to look for the behavior that is actually occurring. Social scientists, therefore, must continually guard against placing their own interpretations of social phenomena in a superior position to the interpretations that are constructed as part of the social experience by the participants in the situation. They also fail to acknowledge biases in recognizing and evaluating those situational behaviors if they are observed. Phillips (1972) makes a pertinent suggestion at this juncture,

Social investigation must make an effort to communicate, as part of their presentation of a study, information concerning the theories and assumptions about social behavior that guided their research. . .to be more explicit about the context and grounds for their question construction, coding procedures, and so on (169).

Keeping in mind the above discussion, and as the area in which the present research is being conducted is a relatively uncharted one, the goal of this research undertaking is not to set forth an extensive list of predictive hypotheses which are to be supported or rejected, but to

examine the actual verbal behavior between mother and child in an attempt to discover any differences or similarities that may exist which, hopefully, will lead to a greater understanding of this dyadic conversational relationship. In order to guide my research, the three basic areas (vocabulary, pronominal reference, narrative versus response modes) that have been chosen from a large array of possible variables, in which a search will be made, must be delineated. The theoretical and empirical biases as to the areas seemingly most important and most appropriate to study will, in the following three sections of this chapter, be discussed.

#### Vocabulary Analysis

Socialization refers to the process whereby the biological individual develops into a specific social being. It follows from this that the process of socialization is a complex process of control and conformity, whereby a particular moral, cognitive, and affective awareness is evoked in the child and given a specific form and content. The socialization process progresses rapidly throughout the first ten months of life and continues throughout the life cycle, but one of the most intense periods is when the child is still at home with her/his mother or father in the pre-school years. This process sensitizes the child to various orderings of society as these are then reflected in the roles which they are expected to play, therefore, the primary agents of socialization are most often the family, peer group, school and work.

As role expectations involve both verbal and non-verbal behavior and as the family is a primary agent in the socialization process, it would seem logical that socialization would be taking place in conversa-

tion between family members. When two persons converse, each is experiencing some type of social growth, with the less experienced having a greater potential for receiving a socialization effect, such as is the case with mother and child. Since the mother most often is the child's primary source in the socialization process, it is important to study their conversational relationship or communication patterns to more fully understand the process by which a child does develop socially. Hopefully this analysis will result in a better understanding of the socialization process and how it is effected by conversation patterns.

As the purpose of this research is to describe the conversational process between mother and child in hopes of increasing knowledge of this phenomena, a synopsis of the work of Allen and Guy (1974), using vocabulary as an index of conversational bonding, would seem appropriate.

Conversational bonding is defined as an ongoing word by word social conjunction between two communicators who develop a consensus of mental experience. This does not necessarily mean agreement but rather the sharing of a common experience (128).

They hypothesized that more bonding would occur in homogeneous dyads (male-male or female-female), using vocabulary analysis to support this assertion in four applications. First, positive and negative supports (words) were more frequent in homogeneous dyads. Second, the homogeneous dyads were more diverse in their vocabulary, suggesting more sharing of information and thus a greater bond. Third, the total word output decreased for a female as she moved from a homogeneous dyad to a heterogeneous one. Fourth, there was a higher degree of equilibrium among the homogeneous dyads than the heterogeneous ones, again suggesting greater bonding (Allen and Guy, 1974:128-129).

Their research, along with the other theoretical and empirical contributions previously mentioned, have provided a basis for applying vocabulary analysis in order to study the mother-child conversational patterns. The nature and quality of social process is indicated in various ways by the manifest vocabulary. The range of information is implicit in the diversity of the vocabulary. The variety and definitiveness of nominal reference is a huge factor in such assessment (Allen and Guy, 1974:132).

Following the model set forth by Allen and Guy, the author will consider the subsequent basic research question: by use of a vocabulary variable, what differences or similarities are apparent between 128 mother-child conversation dyads that could be valuable in interpreting their communication process or conversation patterns? The vocabulary analysis will include the subsequent measures (operational definitions are provided in the methodology chapter): extent of word list, frequency of word usage, dictionary, diversity, equilibrium dictionary, equilibrium of total words, reference (by name) to self, family or friends, and homogeneous dyads compared with heterogeneous dyads.

#### Pronominal Reference

As has been discussed previously many sociologists view language (communication) as a process through which a social self is developed. Cooley (1908) discussed this idea at length in his analysis of self-words of a child.

It has long seemed to me that the first use by children of names for the self--particularly the pronouns "I", "me," "my," and "mine"--was a matter of peculiar interest. Here, if anywhere, I thought, we may hope to make out what the self-idea actually is, in its naive and comparatively simple form,



in the form under which it functions in the every-day relations of life. . .(339).

But Mead is perhaps the most eminent in terms of the concept of self development. Mead talks of the genesis of the self, which is the relationship between role-playing and various stages of self development. The stages are as follows: (1) the preparatory stage which is meaningless imitation; (2) the play stage which consists of playing at roles, the self is just beginning to form; (3) the game stage which involves the person in taking on a number of roles simultaneously. The self is completed as one takes on the attitudes of the "generalized other." (Mead, 1934)

The "generalized other" is a kind of corporate individual, a plural noun, a composite of all the roles which society has made available to each of its members. It is a general standpoint from which the individual views oneself and one's behavior (Pfuetze, 1954:84-86). This viewpoint allows the individual to become free from the pressure of the peculiarities of the immediate act. The individual is able to anticipate the future, remember the past, think in symbols and think abstractly. In fact Mead says "only by taking the attitude of the generalized other toward himself, in one or another way, can he think at all; for only thus can thinking--or the internalized conversation of gestures which constitutes thinking--occur" (Mead, 1934:156). The self then reaches full development by organizing these individual attitudes of others (in conversation this other is the immediate alter, which corresponds to the pronoun "you") into the organized society or group attitude (generalized other, which corresponds to the pronoun "they"). Thus the self becomes an individual reflection of the general systematic

pattern of social or group behavior in which it and the others are involved. The essence of the self is its reflexivity.

Mead distinguishes two facets of the self, the "I" and the "Me". The "I" is the analytical and synthetic process of cognition while the "Me" is the empirical self, an object of science. The "I" is an activity not a content. It is the self of unconditioned choice, of undreamt hypotheses, of inventions that change the whole of nature (Pfuetze, 1954: 39-43). The "Me", on the other hand, is the self conceived and apprehended in terms of the point of view of significant others and of the community at large. The "Me" respects laws, mores, and appears in consciousness. It is the self the individual is aware of. The "I" is the response of the organism to the attitude of the others. It is the answer the individual makes to the attitudes which others take toward them. It gives a sense of freedom, initiative, uncertainty, uniqueness, and propulsion, while the "Me" provides direction. As the "I" asserts (social change) the "Me" limits (social control). The "I" both calls out the "Me" and responds to it. The self equals the generalized other in the "Me" plus the spontaneity of the "I". Self is essentially a social process going on with these two phases, and if these phases did not interact there could be no conscious responsibility and nothing novel in experience (Mead, 1934:173-178).

Cooley's earlier observation of his third child and her language development perhaps laid the ground work for Mead's analysis. Cooley was most concerned with how the "I" is learned and what it means. His observations suggested that normal use of self-words seems to have been acquired by the age of thirty-three months. He concluded that the child gradually comes to notice the indications of self-feeling (the emphasis,

the appropriate action) accompanying the use of "I", "Me", and "My" by others. These indications awaken his own self-feeling, already existing in an articulate form. (S)He sympathizes with them and reproduces them in her/his own use of these words. They then come to stand for self-assertive feeling, for self-will (Cooley, 1908:339-341).

Nearly thirty years later Bain attempted to repeat Cooley's study. His conclusions were basically the same. The child learns to know others before (s)he knows herself/himself as a self; there is little pronominal confusion and the child masters the self and other words sometime before the age of two and a half or three years (Bain, 1936: 767). He also asserts as Cooley did that the "I" is social in nature.

Piaget (1926) also demonstrated that younger children have an ego-centric view of the world--people and things are seen in the child's own highly subjective framework. With increased age, the child develops reciprocity, or the ability to see the other person's point of view (generalized other as Mead would say). Pronoun use seems to reflect these stages of self development.

The employment of personal pronouns as a special research category has been undertaken by several investigators. Ervin-Tripp (1969) examined pronoun usage as an indicator of characteristics of the communication code and its relationship to characteristics of the communicator or the communication situation. She also used examples of pronoun usage to aid in the development of performance models which will account for speech, imitation, comprehension, and other forms of speech. Lambert (1967) has shown that the rules of usage of the pronouns tu and vous (French) are sensitive indicators of difference between social groups and of social change. Brown (1957, 1958) has isolated the second person

singular and plural pronouns as indicators of power differentials and degrees of intimacy in interpersonal relations in the European language. French, Carter and Koenig (1930) sampled telephone conversation, finding that pronouns were the most numerous of all grammatical categories. They found 17,900 pronouns in a total of 79,390 words (cited in Allen and Guy, 1974:115). Allen and Guy (forthcoming), through evaluation of five-minute conversations between college students, found a clear ordering of frequency of pronominal reference in self, the immediate other, generalized other, and self-group. The distribution fit quite successfully to the contagious Poisson distribution. After discovering this distribution, they reached the following conclusion:

. . .the pronominal reference may be a stable effect in dyadic conversation. If so, we have evidence of the centrality of the actor, the immediacy of his direct associate or partner of the moment, of his somewhat lesser concern with the self identification groups in the act of communication. This, of course, refers only to the speaker as actor, in direct relation to his conversational partner. But it probably indicates the nature and dimension of the social bond of the individual to the social entities with which he is dealing both directly and indirectly in the process of social action.

As can be witnessed from the previous research efforts, pronominal reference can be evaluated as a viable measure in conversation analysis. Trying to follow closely the work of Mead, Cooley, and Allen and Guy concerning pronoun usage as reflections of social self development in conversation, the author will be examining pronoun usage in a five-minute conversation between mother and child over 128 unique dyads. The following will be considered in the search for possible differences between dyads as to an emphasis and awareness of the social linguistic self as actor: (operational definitions will be provided in the method-

ology chapter) (1) extent of pronoun usage; (2) self reference; (3) specific other reference; (4) immediate other reference; (5) generalized other reference; (6) nominative versus accusative forms.

#### Narrative Versus Response

This final area in which conversation between mother and child will be studied is the least documented of the three. In fact, as to the specific definitions which are put forth in this study, no research has been conducted, although some work has been done with narratives or narration speech modes. Labov and Waletzky (1967) presented a framework for the analysis of informal narratives or oral versions of personal experience. They saw narratives, whether formal or casual, as involving problems of sequencing par excellence, since it is inherent in the problem of narration that the hearer must understand the sequence in the referent events.

Allen and Guy (1974) were also interested in looking at the profile of the conversational exchange. They found two clearly contrasted forms: the narrative and the responsive.

In the narrative profile, one speaker emits verbal sequences which include one or more assertions while his partner's verbal sequence contain only auxiliary verbal acts. In the response profile, both speakers alternatively include assertions in their verbal output (195).

They concluded, by definition, that the narrative cycle, as it is imbalanced, would reduce the quality of the bond between conversational partners, which then implies that a response profile would increase the bond as it involves cooperating and reciprocating processes. In their research they found some differences in male-male, female-female, or

or male-female dyads. Both sexes seemed more responsive toward males and less responsive toward females, suggesting that this could be a result of society's placing of the sexes.

A dialogue, as Riegel (1976) points out, has temporal structure. The speakers alternate in their presentations and each successive statement has to reflect at least the one immediately preceding it. Incorporating only the preceding statements represents a minimal requirement for a dialogue, while a maximum is attained if each utterance should reflect basic issues of the topic or theme which are presupposed but not necessarily openly expressed in the dialogue (Riegel, 1976).

Considering the statements of Riegel and the definitions of Allen and Guy, the present research will in part incorporate them both, but a slightly different conception is made of narration and response. If the narrative mode is defined in terms of a more sharing conversational relationship with both partners contributing to the information stream and the response mode as a domination of one over another (no reflexive coordination), say for example one partner carries on the conversation with merely minimal responses from the other, these could then be interpreted as two modal levels instead of two distinct modes.

It could be assumed that if two people are conversing in a responsive mode the depth of conversational exchange would be minimal. This is not to deny that there is some information exchange, both verbally and non-verbally, but it does imply, especially for mother and child, a different level of conversational-relational involvement. If in a five minute conversation the only mode is responsive, it would imply that, at least during that time period, they were operating on a minimum of exchange. On the other hand, if the mode is narrative, both partners

add to the conversation with more than simple answers from direct questions or with more than simple "I'm still with you" noises, the conversational exchange has become more complex and displays a greater degree of bonding in the relationship.

The question is then, what could possibly be interpreted from differences in dyads as to mode of the conversation. These differences, if any are found, and/or similar patterns could lead to interpretations as to the nature of the conversational relationship between the dyadic pairs, the stage of development in conversational abilities, societal influences as to conversational relationship, or perhaps still other insights. The goal of this research is to look at the modes expressed in the conversations and explicate any possible differences and/or similarities as to implication for a greater understanding of the mother-child conversational relationship and its implications for the future.

## CHAPTER IV

### METHODS OF THE RESEARCH

#### Introduction

The following chapter is divided into four main sections in an attempt to maximize clarity and integration from section to section and chapter to chapter. The first section is concerned with the research sample and setting, also including the procedure that was used in data collection. The second section contains the necessary operational definitions that lay the foundation for the third and fourth sections, which exemplify the procedures involved in the coding and statistical examination of the variables.

#### Research Sample and Setting

##### Characteristics

The sample for the research under consideration consisted of 128 unique dyads. Six year old children and their mothers were paired for five minutes of conversation. Each child was the first-born child of a working class family, with no older foster or adopted brothers or sisters. The children were chosen such that all had attended kindergarten and none had experienced any special developmental difficulties, such as speech problems or poor health. Both parents of each child were either presently living at home or had been living at home during the



period when speech habits were first developed.

With the above characteristics in mind, the children were located through school records at the central offices in both City-1 and City-2 (the cities were of approximately equal size but were situated in different geographical locations). Parents of these potential subjects were notified by mail explaining the research project including a description of their expected function in it (see Appendix A). The parents were then asked to reply if they were interested in participating, resulting in subsequent telephone calls being made to set up available time periods for the taping sessions. The sample of completed tapings in City-1 was a saturated sample of the children and mothers who were willing to participate and who met the required characteristics, totaling 64 unique dyads with equal distribution of race and sex. Although not saturated, a similar sample was then collected in City-2. As a result the following breakdown comprised the completed sample: 1) 16, black, male, City-1; 2) 16, black, female, City-1; 3) 16, black, male, City-2; 4) 16, black, female, City-2; 5) 16, white, male, City-1; 6) 16, white, female, City-1; 7) 16, white, male, City-2; 8) 16, white, female, City-2.

#### Data Collection Procedures

Precautions were taken during the actual taping sessions to assure the most natural setting possible under the circumstances. Mother and child were instructed to talk in a relatively quiet but familiar room which usually was the dining area where they were seated opposite each other. The recorder is stereo which allowed the tape to pick up the mother's voice on one channel and the child's on the other. This aided

in the coding process. The mother and child were also instructed to talk about anything they wished and were subsequently left alone for at least five minutes, while other children, if any were present, were entertained. After the required five minutes each dyad was allowed to listen to the conversation, both for their enjoyment and to allow them to clarify any questionable portions of the recording. Part of the taping session involved gaining other information concerning the family: mother's occupation, father's occupation, mother's age, number of other persons also living in the home, and finally, notation of any possible change or phone number for future reference. Along with the above information each mother gave written permission for use of the taped conversation and for participation of the child's school in future research (see Appendix B). After completing the session each child was given a small gift for their cooperation.

#### Operational Definitions

The following operational definitions have been formulated for this research:

##### Vocabulary Analysis--

<u>Dictionary</u>	- number of unique words for each actor in the dyad;
<u>Diversity</u>	- ratio of dictionary to total words for each actor in the dyad;
<u>Equilibrium Dictionary</u>	- ratio of child to mother dictionary;
<u>Equilibrium Words</u>	- ratio of child to mother total words;

##### Pronominal Reference Analysis--

<u>Accusative Case</u>	- recipient of action; me, us, them, him, her;
------------------------	--

<u>Generalized Other Reference</u>	- they, them;
<u>Immediate Other Reference</u>	- you, yourself;
<u>Nominative Case</u>	- source of action; I, we, they, he, she;
<u>Self Reference</u>	- I, me, myself, we, us;
<u>Specific Other Reference</u>	- he, she, him, himself, her, herself;

#### Mode Analysis--

<u>Narrative Mode</u>	- a sharing conversational relationship with both partners contributing to the information stream;
<u>Response Mode</u>	- domination of one partner over the other with minimal response and little or no reflexive sharing of information.

#### Coding Procedures

The vocabulary lists that are being analyzed were generated from a series of 128, five minute conversation episodes involving unique pairs of mothers and their respective daughters or sons. The recordings were transcribed by two persons, including two of the original four interviewers. This material was transferred to IBM cards and exhaustively checked for typing errors, inaccurate coding, or transmission errors. All words and portions of words were transcribed in conventional spelling (hyphens designated syllables) and literal conventions were applied to vocalizations such as "ha" for each syllable of laughter and "ah" for the hesitation sound. In the manuscript, each actor was individually coded in order to permit accurate representation of the exchange patterns. Regular words were conventionally spelled even if the participants slurred syllables or mispronounced the word, but conventional abbreviations were retained for such words as "math" for mathematics or "abc's" for the alphabet, etc. Widely used slang expressions such

as "yea", "hu-uh" and "uh-hu" were also retained. Verbal fragments were coded in regular spelling to the degree that the fragments were recognizable; examples include "bu", "wha", "fam" and single initial letters which occur from stuttering. Proper names, including compounded proper names, were entered in the vocabulary list as a single word to maintain the correct unit of personal reference. The same principle applied for place or activity names so the "Memphis, Tennessee", or "The Grand-Ole Opera" would be extracted as a single word if the speaker had so designated all parts of its reference. Numbers were retained in script form as single words and sets of initials used as names were recorded as single words counting one syllable for each vocalized syllable identified in the set.

The verbatim record of the 128 conversations was entered on computer data cards incorporating actor identification codes and character codes for the identification of certain parts of speech, such as laughter, interjections, fragments, assertions, or questions. Alphabetized word lists with frequency counts for each the mother and the child were developed by machine processing for each dyad together with total syllable count, total word count, unique word count, diversity and equilibrium ratios (see Appendices C and D), (Allen and Guy, 1974:102-105).

#### Statistical Analysis

With the essential operational definitions and coding procedures made explicit, it is now possible to continue with the objective in this section. As different statistical procedures were used for each of the primary variables, this section will be considered in three parts: vo-

cabulary, pronoun usage, and mode analysis.

### Vocabulary

As the goal of this research is for the most part exploratory and not necessarily predictive, many varied analyses were conducted, with subsequent tests dependent upon the preceding results, in an attempt to discern any valuable information. Ultimately the concern of this research endeavor is to gain information in addition to that which is "statistically different" and not necessarily to gain it for the sake of prediction, but for understanding.

In terms of the word list in general, the primary concern was with dictionary and total words used by both mother and child. As the data is considered to be interval and nominal in nature, various statistical tests could be administered without violation of measurement assumptions. Again as the nature of the study is exploratory and due to the fact that other classificatory variables were not available, the nominal categories used were sex, race, and city, along with mother and child distinctions. As the number of working mothers was a relatively small percentage, as was also the number of one child families, these categories were not conducive to statistical analysis. Consequently, the following examinations were made: a correlation between the mother's and the child's dictionary and again for the mother's and child's total words was calculated; t-tests were made to locate any differences by race or sex in the child's words, child's dictionary, mother's words, or mother's dictionary; a chi-squared analysis was administered to elaborate on any further information concerning the relationship between mother and child with respect to their dictionaries and total words; and

finally, a two-way analysis of variance was performed eliciting the dependent variable, child's dictionary, with respect to the independent variables, race and sex.

As is evidenced in the section defining operational variables, diversity and equilibrium are by definition ratio scales, therefore conducive to the analysis of variance procedure, assuming no differences exist between mothers or children by race or by sex. After examining the means and standard deviations of the diversity measure for the children and the mothers, overall and by race and sex, finding surprising similarity, no further statistical analysis was calculated. Differences in the equilibrium measures as to direction and degree suggested a further analysis would be appropriate; therefore, two separate two-way analysis of variance procedures were performed on equilibrium dictionary and equilibrium words using race and sex as the two independent variables. Also note that when sex type is used as an independent variable, dyad type, whether homogeneous or heterogeneous, is automatically also a consideration; one that will be dealt with in the summary of the findings.

Another part of the vocabulary section is concerned with name references, which is a tabulation of frequencies of references in the five minute conversations to self, family and/or others by name. These were measured for each the mother and the child. Thinking that the type and extent of reference might vary as to the structure of social groups involving the family, the means were compared using the t statistic by race, sex and city location. The mere frequencies were also, in and of themselves, considered valuable insights into the conversational activity.

The final area under vocabulary was an examination of high-use words, excluding pronouns which are examined under the next general topic. A high-use word is defined as one used exclusively by at least one child more than ten times in the five minute conversation. A listing was then compiled for these high-use words as to frequency by the child. Comparison categories for females and males were created in the following manner: 1) one or two female/males using the same word for ten(10) or more times; 2) 3-19 female/males using the same word ten (10) or more times; and 3) 20 or more female/males using the same word 10 or more times.

#### Pronominal Reference

Research conducted by Allen and Guy (forthcoming) using 74, five minute conversations between college students has suggested that an ordering of frequency of pronominal reference to self, immediate other, generalized other and self-groups is highly likely. They concluded that the distribution of frequencies fit quite well to the contagious Poisson distribution as indicated in Coleman (1964:299). It seems reasonable to assume that the same ordering of frequencies would occur in this research as well; therefore, the data from both mother and child were fitted to this distribution. The contagious Poisson is quite amenable to this type of data because of the "contagion" effects of speech, for in speech behavior, and in other social behavior as well, when one person takes an action, the probability of a second person's taking the action is changed. The probability is sometimes increased (a positive contagion) or sometimes decreased (a negative contagion). The contagious Poisson distribution takes this factor into account by positing

an increment in the transition rate in each succeeding state. (See Coleman, 1964:Chapter 10).

Along with the application of this distribution to the data, further examinations were made. The average use of the various pronoun forms per dyad, by race and sex, were explored, with those showing the most differentiation subjected to a test for significant differences of means.

#### Narrative and Response Modes

Previous research concerning the narrative and response mode, such as Allen and Guy (1974), uses the concept of verbal flux to differentiate between these two modes; a concept whose length and amplitude could be graphically displayed using the syllogram (1974:177-185). This distinction was not primarily concerned with what was being said but on the contrary, it was measuring length of time a speaker continued to emit verbal flow and the extent to which interruptions were made. This analysis is of significant merit when examining the character of a conversation but is not exactly appropriate to this research. Content of the conversation as well as the character of the responses are important; therefore, a thorough examination had to be made of each separate dyad activity. In order to study the conversation for mode character, several subjective interpretations had to be made, such as, what constitutes a narrative or response mode, how is length to be determined, where does one mode stop and another begin, and how should the character mode be compared across conversations. First of all, a narrative mode is one in which there is an exchange of information between actors, more than mere yes or no responses. Conversely, the response mode is such



that the character is one of little information exchange and merely yes or no responses on the part of at least one actor. The response mode in general lacks reciprocity. In actually defining the extent of the mode, each conversation was read thoroughly and at each point where exchange no longer occurred or at the point where it did occur, the mode was changed. In order to determine length of mode, words were counted up to each change, which were then added to any other words counted for a like mode. The totals for each mode were summarized into percentages (rounded to the nearest five) so that each conversation could immediately be called as primarily narrative or response in character. The conversations were divided as to those primarily narrative (75%-100% narrative), narrative-response (60%-70% narrative), even (45%-55% narrative), response-narrative (30%-40% narrative), and response (0%-25% narrative), which were then compared by race, sex and city. When the goal of research is to explore for differences and trends, this more subjective type of examination can be of great worth in providing insights into a highly complex conversational activity.

## CHAPTER V

### PRESENTATION OF THE RESULTS

#### Introduction

This chapter is primarily concerned with the presentation of the variables for analysis, further discussion of the assumptions of the analysis, and the results of the analysis. Once again, as there are three major areas of the study (vocabulary, pronouns and communication mode), the results will be discussed in three corresponding sections. Chapter VI will be an attempt to integrate the three sections with the theoretical base.

#### Vocabulary

Tables I and II present summaries of the variable dictionary and the variable words; overall and controlling for race and sex. As one can see from Table I, for most of the conversations the mothers were doing more talking than the children and, understandably, distributing a wider vocabulary of unique words, with the means varying by approximately thirty words. It is interesting to note that the mothers had a lower minimum value and a higher maximum value for both dictionary and total words, which implies that over the 128 cases the mothers displayed a larger variability of word use. Upon examination of Table II, it is clear that when controlling for race and sex the range of variability, although displaying the same relationship between mother and child, is

TABLE I

SUMMARY OF MEANS, MINIMUM AND MAXIMUM VALUES FOR  
DICTIONARY AND TOTAL WORDS

VARIABLE	MEAN	MINIMUM VALUE	MAXIMUM VALUE	RANGE
Child's Dictionary*	119.74	49	231	182
Child's Words	277.34	91	879	788
Mother's Dictionary	149.22	22	286	264
Mother's Words	431.63	28	941	913

\*128 cases within each category.

TABLE II

SUMMARY OF MEANS, MINIMUM AND MAXIMUM VALUES FOR DICTIONARY AND  
TOTAL WORDS CONTROLLING FOR RACE AND SEX

VARIABLE	BLACK			RANGE
	MEAN	MINIMUM VALUE	MAXIMUM VALUE	
Child's Dictionary*	115.94	54	231	177
Child's Words	269.38	91	879	788
Mother's Dictionary	137.11	22	253	231
Mother's Words	416.00	28	853	825
	WHITE			
Child's Dictionary	123.55	49	196	147
Child's Words	285.30	100	622	522
Mother's Dictionary	161.33	76	286	210
Mother's Words	447.27	130	941	811
	MALE			
Child's Dictionary	112.80	49	197	148
Child's Words	250.17	100	622	522
Mother's Dictionary	152.03	61	286	225
Mother's Words	438.35	132	941	809
	FEMALE			
Child's Dictionary	126.90	54	231	177
Child's Words	305.37	91	879	788
Mother's Dictionary	146.32	22	253	231
Mother's Words	424.70	28	853	825

\* 64 cases within each category.

substantially different between categories. For whites and males, the range for both mother and child is consistently lower than the overall case, which would suggest that there is some unknown dimension existing between white males and their mothers.

Again upon examination of Table II, one notices that the means between the children as well as between the mothers are quite different, suggesting that some influencing relationship exists when considering race and sex. Table III presents the results of a t-test for difference in means. When controlling for race there is a statistically significant difference between mothers on the dictionary variable, with black mothers using less unique words. This difference could possibly be eliminated if the very low minimum value for the black mothers and the high maximum value for the white mothers were extracted, but this is not highly likely as the median values are very similar to the mean values. When controlling for sex, statistically significant differences were found between males and females, with the females exhibiting more total words and more unique words during the five minutes of conversation.

In order to gain further understanding of the reciprocated influences of mother and child in the conversational interaction, the Pearson Product-Moment correlation was calculated and is reported in Table IV. The correlation for mother and child as to the dictionary variable was in the negative direction but rather low,  $-.0982$ . This low relationship suggests that the mother and child are hardly influenced by each other as to the extent of dictionary used, but it does not suggest that the mother has not influenced the extent of the child's dictionary, only that in the conversation when the mother uses more unique words the child tends to use less. The same type of relationship is found when

TABLE III

THE T-TEST FOR DIFFERENCES IN MEANS CONTROLLED BY RACE AND BY SEX  
FOR THE VARIABLES DICTIONARY AND TOTAL WORDS

VARIABLE	RACE	
	t-VALUE	LEVEL OF SIGNIFICANCE
Child's Dictionary*	1.225**	p > .20
Child's Words	.734	p >> .20
Mother's Dictionary	3.362	p < .001
Mother's Words	1.099	p > .20
	SEX	
Child's Dictionary	2.135***	.02 < p < .05
Child's Words	2.590	.001 < p < .01
Mother's Dictionary	-.761	p >> .20
Mother's Words	-.478	p >> .20

\*64 cases within each category.

\*\*Positive value indicates that the largest mean is in the white category.

\*\*\*Positive value indicates that the largest mean is in the female category.

TABLE IV

PEARSON PRODUCT-MOMENT CORRELATION BETWEEN CHILD'S AND MOTHER'S  
DICTIONARY AND BETWEEN CHILD'S AND MOTHER'S TOTAL WORDS

VARIABLE	MOTHER'S DICTIONARY	MOTHER'S TOTAL WORDS	LEVEL OF SIGNIFICANCE
CHILD'S DICTIONARY	-.0982(128) *		p = .270
CHILD'S TOTAL WORDS		-.1956(128)	p = .025

\*Number of cases in parentheses.

considering total words,  $r = -.1956$ , although the relationship, due to the large number of observed values, is statistically significant at the .03 level. Of course this relationship makes sense when one considers that time in the conversation is exhausted when someone speaks and if one actor is speaking more, another will speak less. Over an extended period of time these relationships would undoubtedly change. To further elaborate on the relationship, a chi-squared was calculated to see if there was actually a difference in children's total word use and dictionary with respect to the mother's score on these variables. As the means and medians were very similar the variable child dictionary, child words, mother dictionary, and mother words were dichotomized at the mean into high and low levels. Tables V and VI present the conclusions. For each case the chi-squared value is statistically significant below the traditional level of .05, showing that there is a difference in child's total words and dictionary with respect to mother's total words and dictionary, respectively. This is to say that the proportions are not equal across categories of mother's high-low words or dictionary and that some relationship exists which corresponds with the correlation results.

Continuing with the relationship that seemed to be occurring when race and sex were the independent variables, I decided to perform a two-way analysis of variance on child's dictionary using these variables. Table VII presents the results. Basically the analysis of variance test is designed to explain or account for variation among various categories of the sample whose different explanatory power is tested for statistical significance by the use of the F-test. The first F-test to be performed is the test for "interaction", or a possible effect due to the peculiar combinations of the two nominal variables, race and sex.



TABLE V  
CHI-SQUARED VALUE FOR CHILD'S AND MOTHER'S WORDS

CHILD'S WORDS	MOTHER'S WORDS		TOTALS
	LOW	HIGH	
LOW	34 51.5% (39.70) *	43 69.4% (37.30)	77
HIGH	32 48.5% (26.30)	19 30.6% (24.70)	51
TOTALS	66	62	128

\*Expected frequencies in parentheses.

$$X^2 = 4.245 \quad p = .037 \quad q = -.361$$

TABLE VI  
CHI-SQUARED VALUE FOR CHILD'S AND MOTHER'S DICTIONARY

CHILD'S DICTIONARY	MOTHER'S DICTIONARY		TOTALS
	LOW	HIGH	
LOW	28 41.8% (34.55) *	38 62.3% (31.45)	66
HIGH	39 58.2% (32.45)	23 37.7% (29.55)	62
TOTALS	67	61	128

\*Expected frequencies in parentheses.

$$X^2 = 5.375 \quad p = .019 \quad q = -.394$$

TABLE VII  
TWO-WAY ANALYSIS OF VARIANCE FOR CHILD'S DICTIONARY

SOURCE	DEGREES OF FREEDOM	MEAN SQUARES	F	p
Race	1	1852.883	1.501** 1.553***	p > .05 p > .05
Sex	1	6364.664	5.311** 5.334***	.01 < p < .05 .01 < p < .05
Race x Sex	1	855.919	.716*	p >> .05
Error	124	1195.960		
Total	128	1239.153		

\*F-test for interaction.

\*\*One-way F-test for race or sex.

\*\*\*Main effects F-test by race or sex.

Clearly in this case interaction is not significant. When interaction is not significant it is often helpful to use the main effects F-test, which will demonstrate where the differences do occur. The main effects test by race is not significant, which implies that after the variation between the sexes was removed, child's dictionary was equal across the race categories. Conversely the main effects test by sex is significant, which implies that after removal of race variation, differences between the sex categories still existed. The one-way F-tests show approximately the same conclusions, an insignificant F for race implies that knowledge of race does not explain or account for an important amount of the variation, while a significant F for sex implies, once again, that by sex there is a difference in child's dictionary. Of course one must also note the relatively small amount of variation that is even accounted for, which suggests that other variables are highly important considerations in the attempt to understand the mother-child conversational relationship. A means table (Table VIII) allows a subjective interpretation for the present additivity.<sup>1</sup> By inspection one can see that this does hold for this example, except over-additivity seems to be occurring for white males as their mean is a little too low, again suggesting other influences are operating.

In examining the means table (Table IX) one can see that across categories there is very little difference in degree<sup>2</sup> of diversity for

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<sup>1</sup>By a means comparison one would expect females to have larger scores than males simultaneously with whites larger than blacks, if additivity is present. If interaction occurs, this ordering will not exist.

<sup>2</sup>Diversity ranges from zero to one, with zero implying that the same word is used over and over, while a ratio of one implies every word used is unique. The equilibrium score may vary from zero to one if the mother's score is the larger, and may vary from one to a theoretical infinity if the child's is the larger. If the equilibrium score is near one this implies a sort of balance in the conversation.

TABLE VIII  
MEANS TABLE FOR CHILD'S DICTIONARY

	MALE	FEMALE	TOTALS
Black	111.82	120.32	115.94
White	113.81	133.28	123.55
Totals	112.80	126.90	

TABLE IX  
MEANS TABLE FOR DIVERSTITY AND EQUILIBRIUM

VARIABLE	RACE		SEX		ALL
	BLACK	WHITE	MALE	FEMALE	
Child Diversity	.461	.451	.468	.447	.458
Mother Diversity	.353	.377	.362	.369	.365
Equilibrium Dictionary	1.032	.827	.804	1.059	.929
Equilibrium Words	1.121	.763	.656	1.237	.942
Total Observations	64	64	64	64	128

children; each using approximately two words for every unique word while mothers use approximately three words for every unique word. This difference between mother and child diversity is consistently statistically significant across all the measured categories, which implies that mothers, although they tend to talk more than the children, use less variety in their speech. A reason, perhaps, is that in these conversations the mothers try and direct the children to varied topics, and by doing so the mothers may use similar sentences, such as, What did you..?, while the child was free to respond in many ways. Or it could mean that the mothers have reached a plateau in word development, relying on the same words over and over, while the child is still experimenting and learning new phrases, etc. Again examining Table IX, one does find differences across categories for the equilibrium variable. Although, using a t-test, none of the differences are statistically significant, they do provide information concerning direction. Under the categories black and female the child has a slightly higher dictionary and uses a few more total words than the mothers while the whites and males tend to use less total words and have a lower dictionary. This occurrence suggests a relationship between the females and their mothers as has been suggested before. Consequently, an analysis of variance was calculated for each of equilibrium dictionary and equilibrium words by race and sex. The homogeneity of variance assumption was tested finding large statistical differences<sup>3</sup> across both variables, so the performance of an analysis of variance is questionable but the  $t_1$  and  $t_2$  values were approximately equal which implies that the variance differences are of little conse-

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<sup>3</sup> $p < .001$  for all cases.

quence. The results of the various F-tests in Tables X and XI show no significant difference at the traditional level of .05, implying that race and sex are not extremely important variables when discussing equilibrium ratios, furthermore the test indicated that other variables should be researched.

Table XII presents the results of the examination of references to others and self by name. Under all conditions, or categories, self-name reference by either mother or child is rare, which is understandable for, according to Mead, after the concept of self is developed the pronouns "I" and "me" replace name references quite often. Although name references are not extremely common for any category, and none of the mean differences for mother or child are significant, there are some interesting differences occurring. Over all categories except other references by mother, blacks use slightly more name references than whites; female children use slightly more name references to family and others than male children while the mothers in talking with male children use more of these references than the mothers in talking with female children; city location does not seem to make much difference as the mean variation oscillates back and forth leaving little room for generalizations. After combining the pronoun references to others with these findings, one may be able to make some kind of conclusion, but at this point the references are not frequent enough nor differ substantially enough to assume any major effect on the mother-child conversational relationship concerning these independent variables. It does so happen that even with the relatively small frequencies, mother and child differ significantly at various points. The difference between mother references to others and child references to others for blacks is significant using the t-test<sup>4</sup>, family reference differs between male child and

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<sup>4</sup>t = 2.19, .02 < p < .05.

TABLE X  
TWO-WAY ANALYSIS OF VARIANCE FOR EQUILIBRIUM DICTIONARY

SOURCE	DEGREES OF FREEDOM	MEAN SQUARES	F	p
Race	1	1.342	1.965**	p > .05
			1.997***	p > .05
Sex	1	2.074	3.064**	p > .05
			3.016***	p > .05
Race x Sex	1	.073	.108*	p >> .05
Error	124	.677		
Total	127	.688		

\*F-test for interaction.

\*\*One-way F-test for race or sex.

\*\*\*Main effects F-test by race or sex.

TABLE XI  
TWO-WAY ANALYSIS OF VARIANCE FOR EQUILIBRIUM WORDS

SOURCE	DEGREES OF FREEDOM	MEAN SQUARES	F	p
Race	1	4.118	.943** .954***	p >> .05 p >> .05
Sex	1	10.811	2.505** 2.504***	p > .05 p > .05
Race x Sex	1	3.221	.745	p >> .05
Error	124	4.326		
Total	128	4.367		

\*F-test for interaction.

\*\*One-way F-test for race or sex.

\*\*\*Main effects F-test by race or sex.



TABLE XII

## MEANS TABLE FOR NAME REFERENCES

VARIABLE	RACE		SEX		CITY		TOTAL
	BLACK	WHITE	MALE	FEMALE	MEMPHIS	TULSA	
Child							
Self References	.17	.02	.12	.06	.14	.05	.09
Family References	3.60	2.45	2.76	3.29	2.51	3.53	3.02
Other References	3.65	2.56	2.79	3.44	3.29	2.92	3.11
Mother							
Self References	.45	.48	.33	.60	.42	.52	.47
Family References	4.37	3.42	4.33	3.44	3.35	4.45	3.90
Other References	2.26	2.61	2.86	1.94	2.72	2.09	2.41
Total Observations	64	64	64	64	64	64	128

mother<sup>5</sup>, and finally, other references differ significantly for female children and mothers<sup>6</sup>. Overall, mothers use family references more often than references to friends or acquaintances but children tend to refer slightly more often to others than to family, which is possibly due to abundant school and neighborhood friends who are very important to them at this time.

In Table XIII the high frequency words are displayed. The first column (1-2 children) represents the idiosyncracies of the conversations. In other words depending on the topic, the child may use the word dollar over and over, while other children never use the word at all. The second column (3-19 children) begins to represent the words used most often in adult speech. The final column is also similar to the words used most frequently in adult conversation, except "yea" which is perhaps a uniqueness to children's speech or to this sample. Nevertheless the children at this age are at least approximating high frequency words found in adult speech patterns.

#### Pronouns

The most common pronouns and their average use for both mother and child are reported in Table XIV. Over all the categories of children the most commonly used pronoun is "I", clearly establishing self as actor in the conversation. As one can see, the white female child uses the pronoun "I" more frequently than the others but the two male groups

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<sup>5</sup>t = -2.35, .01 < p < .02.

<sup>6</sup>t = 2.36, .01 < p < .02.

TABLE XIII  
HIGH FREQUENCY WORD LISTS\*

NUMBER OF CHILDREN USING WORD			
1-2		3-19	20-
about	nine	a	
all	no	in (F)**	and
be	of	it	the (F)
digging	oh	know	to (F)
dollars	one	like (F)	yea
down	other	that	
four	out	then (F)	
friend	said	uh-hu	
go	swim	what	
going	some	yes (F)	
had	sometimes		
have	there		
how	thing		
hu	two		
hundred	up		
hu-uh	want		
is	was		
make	went		
mame	when		
name	where		

\*Word used ten or more times within the five minutes of conversation.

\*\*High frequency for females or combined males and females only.

TABLE XIV

## AVERAGE PRONOUN FORMS PER DYAD BY RACE AND SEX

	I	ME	YOU	THEY	THEM	WE	US	SHE/HE	HER/HIM
Black									
Female Child	15.3*	2.6	5.0*	2.2	.7	7.4	.8	3.0	1.1
Mother	5.5	2.4	41.0	1.2	.9	3.0	.4	3.5	1.1
Male Child	12.7*	1.7	2.4*	1.5	.9	4.3	.6	2.9	.6
Mother	3.6	3.4	39.8	1.8	1.0	3.3	.3	3.7	1.1
White									
Female Child	19.6*	1.6	4.8*	1.8	.9	6.4	.5	3.4	1.3
Mother	5.4	1.2	36.7	3.2	1.0	4.6	.5	4.8	1.7
Male Child	13.8*	.9	3.8*	3.3	1.1	3.2	.3	3.3	.7
Mother	5.2	2.2	35.0	5.2	1.5	5.0	.3	4.6	1.4

\*Mother-child differences at  $p < .001$ .

are the lowest, suggesting that some special relationship exists between female children and their mothers. In each case the child uses the pronoun "I" significantly more often than the mother, with the reverse situation occurring for the pronoun "you"; mothers use "you" significantly more often than the children. For the children the combined usage of self-reference pronouns exceeds the usage of all other pronouns, again suggesting the primacy of self in the conversation. Self-reference pronouns are followers in usage by specific other, immediate other and generalized other references. The child's infrequent use of immediate other pronouns is in congruence with the Peevers and Secord (1973) research which concluded that a child of this age has a low level of awareness for the individual with whom interaction is taking place. However, an examination of the mother's pronominal usage shows a substantially different pattern. Possibly due to the nature of the situation, the mother's pronominal references to immediate other is by far the most common; all attention is focused on the child, especially by the black mothers. Reference to immediate others are followed in frequency by references to self, specific others and generalized others.

"The ordering of the personal pronoun set into a scale based on interactive remoteness from a verbal emitter source, and on the extension from individual to group reference provides a measure of social projection" (Allen and Guy, forthcoming). According to their results, when this measure was applied to natural conversation the pattern was suitably described by the contagious Poisson projection. The evidence points to the centrality of the actor, strong association with the immediate other, less concern with surrounding society, and relatively less concern with we-groups. Therefore, on the basis of their findings, the contagious

Poisson was applied to the mother-child data yielding the results that are found in Table XV. The fit was extremely poor with a chi-squared value of  $46^+$ . In order to understand what went wrong with the ordering, the mother-child pronominal references were compared with the pronominal references of the college student population; a comparison with what is assumed to be the adult pattern (see Table XVI). The order of frequency of pronoun use for the college students was self, immediate other, specific other, and finally, generalized other, with pronouns occurring about one in every ten words. The mother-child conversational pattern varies markedly from this pattern. First of all, in the conversation, pronoun use is approximately 40% greater, almost one in seven. The children do maintain a high rate of self references but the rest of the pattern differs between males and females as well as with the adult pattern. The mother's self reference is very low and the immediate other very high, which is in opposition again to the adult pattern previously described. This discrepancy could be the result of the situation in which the child is the central actor. In other words, the conversation is such that reciprocity is not a predominant concern; the focus is on the child and the child's activities rather than the mother's involvements, which are essentially ignored, but this is possibly an accurate reflection of conversational patterns in situations less contrived.

The grammatical form of the pronoun may provide further insights into the conversational relationship of the mother and child. In general, the person indicated in the nominative case is the source of action or actor, while the complementary function, that of target or recipient of action, is appropriate for the accusative form. When categorizing pro-

TABLE XV  
 A CONTAGIOUS POISSON PREDICTION OF PRONOMINAL  
 REFERENCE DISTRIBUTION FOR CHILD

PRONOMINAL REFERENCE	OBSERVED	PREDICTED
I	344	311.1
3RD	207	253.7
WE	117	138.2
YOU	89.9	62.8
THEY	49.0	25.7

Alpha: .95                       $\chi^2 = 46.22$

Beta: .32                        Df: 4

TABLE XVI

## PRONOMINAL REFERENCE IN COLLEGE STUDENT AND MOTHER-CHILD CONVERSATIONS

PRONOMINAL REFERENCE	COLLEGE STUDENT CONVERSATION*		MOTHER-CHILD CONVERSATION			
	MALE	FEMALE	MALE	FEMALE	MOTHERS OF MALES	MOTHERS OF FEMALES
Self	47**	48	80	71	25	21
Immediate Other	24	28	18	19	89	71
Specific Other	12	12	38	32	26	18
Generalized Other	<u>12</u>	<u>12</u>	<u>14</u>	<u>23</u>	<u>10</u>	<u>6</u>
Pronouns/1000 Words	95	101	150	145	150	116
Total Dyads	148		128			

\*Allen and Guy forthcoming.

\*\*Reference rate per 1000 words.



nominal reference as either nominative or accusative and examining the data from this perspective, one finds a substantially higher proportion of nominative cases as reported in Table XVII. As expected from the previous findings, the preference for nominative over accusative is greater with the children, especially white children, than for the mothers; although, mothers do also show a preference for the nominative case. For the children the greatest difference is found when referring to self, which implies that when a self-reference is made, it is the source of action. The mothers' tend to be more apt to use self as both subject and object. The other pronouns involved in the conversation seem to be more balanced for both mother and child, perhaps due to the lesser frequency of use.

#### Narrative and Response Modes

As has been defined in the preceding chapter, the narrative mode is conceived as a conversational situation in which the actors are participating in activity characterized by an exchange of information. Each actor, in a somewhat equal distribution, is contributing to the information stream. Conversely, the response mode is characterized by a lack of information exchange. The conversation is dominated by one person or the conversation becomes a question-answer period, with little reflexive sharing of information. These categories seem to be viable distinctions for mother-child conversation as most of the conversations were either of the narrative or response mode with few cases (14 of 128) being considered a balance of the two modes. In fact these distinctions tend toward mutual exclusiveness as the average breakdown, for example, black contained 65% of the conversations as either totally narrative or totally

TABLE XVII

## RATIO OF NOMINATIVE TO ACCUSATIVE FORM OF PRONOUNS

RATIO	BLACK				WHITE			
	FEMALE	MOTHER	MALE	MOTHER	FEMALE	MOTHER	MALE	MOTHER
I/Me	5.9	2.3	7.5	1.1	12.2	4.5	15.3	2.4
We/Us	9.2	7.2	7.2	11.0	12.8	9.2	10.7	16.7
They/Them	3.1	1.3	1.7	1.8	2.0	3.2	3.0	3.5
She, He/Her, Him	2.7	3.2	4.8	3.4	2.6	2.8	4.7	3.3
Total/Total	5.4	2.8	5.7	2.1	7.4	4.1	7.9	3.6

response. The complete distribution can be seen in Appendix E.

Narrative and response modes categorized by race and by sex may be examined in Table XVIII. Once again the distribution displays a strong tendency toward the fully narrative or fully response modes. A combination of the first two mode categories and a combination of the last two modes provide a clearer presentation of this mode analysis. Blacks and males show approximate distributions of those conversations narrative in nature and those whose character is response, while whites and females show a great discrepancy of these modes. Categorization with race and sex combined (Table XIX) provides still sharper distinctions, for now black males drop very low in percentage of narrative conversations, black females and white males show similar percentages, with white females having a very high percentage of narrative conversations. This finding was somewhat strengthened by examination of words per minute per child, which also showed black males the lowest and white females the highest. This suggests (even though the average difference is relatively small) that the conversations for white females were characterized by a faster flow of words, whereas the conversations between black males and their mothers contained more pauses, hesitations, etc., perhaps less integration is found in these cases. One final categorization was made by city and sex. The results of this delineation are somewhat disturbing in that they show a distinct mode difference between males and females in Memphis which is also different from the Tulsa males and females (see Table XX). This is disturbing because in drawing the sample it was assumed city made no difference, an assumption which appears to be valid until now. Statistically, this difference is explained by the fact that the Memphis sample contained both the extreme male case (black males)

TABLE XVIII

## NARRATIVE AND RESPONSE MODES CATEGORIZED BY RACE AND SEX

MODE	BLACK	%	WHITE	%	MALE	%	FEMALE	%
Narrative	20	31	29	45	16	25	33	52
Narrative--Response	6	9	12	19	11	17	7	11
Equal	9	14	5	8	8	13	6	9
Response--Narrative	7	11	6	9	7	11	6	9
Response	22	34	12	19	22	34	12	19
Totals	64	100	64	100	64	100	64	100
Total Narrative*		40%		64%		42%		63%
Total Response**		45%		28%		45%		28%

\*First two modes combined.

\*\*Last two modes combined.

TABLE XIX

## NARRATIVE AND RESPONSE MODES CATEGORIZED BY RACE AND SEX COMBINED

MODE	BLACK MALE	%	BLACK FEMALE	%	WHITE MALE	%	WHITE FEMALE	%
Narrative	7	22	13	40	7	28	20	63
Narrative--Response	4	13	2	6	7	22	5	16
Equal	5	16	4	13	3	9	2	6
Response--Narrative	3	9	4	13	4	13	2	6
Response	13	40	9	28	9	28	3	9
Totals	32	100	32	100	32	100	32	100
Total Narrative*		35%		46%		50%		79%
Total Response**		49%		41%		41%		15%
Words/Minute/Child		46.76		58.99		51.84		62.34

\*First two modes combined.

\*\*Last two modes combined.

TABLE XX

## NARRATIVE AND RESPONSE MODES CATEGORIZED BY CITY AND SEX COMBINED

MODE	TULSA MALE	%	TULSA FEMALE	%	MEMPHIS MALE	%	MEMPHIS FEMALE	%
Narrative	10	31	10	31	6	19	23	72
Narrative--Response	6	19	5	16	5	16	2	6
Equal	3	9	4	12	5	16	2	6
Response--Narrative	3	9	4	12	4	12	2	6
Response	10	31	9	28	12	38	3	9
Total	32	100	32	100	32	100	32	100
Total Narrative*		50		47		35		78
Total Response**		40		40		50		15

\*First two modes combined.

\*\*Last two modes combined.

and the extreme female case (white females), which created the large differences, but the substantive explanation is not clear and will be discussed in the concluding chapter.

#### Summary

The following paragraphs provide a brief recapitulation of the findings related to the three sections of this exploratory research project.

First of all, evidence was provided to show that statistically significant differences did occur for dictionary ( $p < .05$  and  $p < .01$ , respectively) between children and between mothers when sex of the child was a controlling variable. Although the correlation coefficient between mother and child on dictionary was not considered substantial, a chi-squared value for each of total words and dictionary did lend support to this finding of differences ( $p < .04$  and  $p < .02$ , respectively). An analysis of variance for child's dictionary with independent variables of race and sex continued to show support for sex differences. Although explained variation was very small, the one-way F-test did show significance. This suggests that in explaining variation in dictionary, race was of little use and sex, although statistically significant, is of little use as well, which implies a search for other variables.

Considering the variables of equilibrium and diversity, a comparison of means showed children using slightly more unique words per total words than mothers; one out of two and one out of three, respectively. Black children and females showed a ratio greater than one on equilibrium dictionary and words in comparison to their mothers, which is to say, the children had a greater frequency of unique words and of total words.

An analysis of variance table showed no significant explanation of variance (at the traditional level of .05) by race or sex when considering the variables equilibrium dictionary and equilibrium words.

A comparison of means of various name references reveals little statistically significance, but does produce some quite strong tendencies. Mothers consistently refer to family more often than to others while children reverse this situation, self-reference by name is very rare, and the categories of race, sex, and city do little to explain the differences that did occur between children.

The analysis of high frequency words showed that the children's lists were similar to the high frequency lists found in adult speech with "and", "the", "to", and "yea" being most frequent. Also, female children tended to use a more diversified sample of high frequency words than males.

The tabulation of average pronoun use per dyad by race and sex exemplifies some conclusive differences between mother and child. Over all the categories, children use substantially more "I's" than mothers while mothers' use more "you's", with white females being the highest among the children and mothers of the black females being the highest among the mothers. For children, self-reference pronouns were the most frequent, followed by specific other, immediate other, and generalized other references, while for the mothers, immediate other is the most frequent followed by self-references, specific other and generalized other references. Neither of the orderings fit the contagious Poisson distribution which was suggested by a contagious Poisson fit to college student pronoun use. A comparison with the college sample showed mother-child conversation to include a higher rate of pronoun use per



1000 words; 150 compared to 95 for males and 145 to 101 for females. The males and females in the mother-child sample consistently used more pronouns than the college students over all the types except immediate other, while the mothers used less self-references or generalized other references and more immediate or specific other references.

When considering the ratio of nominative to accusative form of pronoun use, children, especially white children, showed a greater preference for nominative case than the mothers who also displayed this same preference. Children tend to use the self as subject only while the mothers are more apt to use self as both subject and object.

Comparison of narrative and response modes detail several significant findings. The conversations of whites and females are more often of the narrative type (64% and 63% respectively), while blacks and males show no significant preference. A further breakdown revealed white female conversations as highly narrative (79%), black male conversations as predominately response with black females and white males displaying similar characteristics which lack significant preferences for either mode. When the categories of city and sex were combined, striking differences were again recorded; Memphis females were highly narrative in character and Memphis males were more of the response mode. The conversations of males and females in Tulsa were quite similar in modes and between the extremes of the male and female conversations in Memphis.

## CHAPTER VI

### CONCLUSIONS, LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

#### Conclusions

##### Vocabulary

Relying on the conclusions from an indepth study of conversational patterns, Allen and Guy (1974) have suggested that, at least for a college age population, homogeneous dyads exhibit a higher level of conversational bonding than heterogeneous dyads. This conclusion, for female-female dyads in mother-child conversation, seems to be supported, at least to some extent. When discussing dictionary and total words, the members of the homogeneous dyads more nearly approximate each other than in the heterogeneous dyads, which implies more bonding according to Allen and Guy. Furthermore, this seems to suggest that females have, at this stage, a more highly developed sense of linguistic self, as they, conversationally, exhibit more equality in the relationship. In other words mothers and daughters have expressed a greater sense of companionship than mothers and sons and at the same time exhibit more variety in the context.

The equilibrium variable, although not displaying substantial differences between dyads, did lend support to the above contention of greater bonding. Black and female dyads had an equilibrium ratio closer

to one than the other dyads, and in these dyads the children used, on the average, slightly more words and unique words than the mothers. This finding again suggests more balance or bonding in these specific dyads and consequently implies a more equal relationship of mother to child. Of course, in all the findings the fact that many more variables are operating in the dyadic conversations than homogeneity is made evident. For example, the analysis of variance tests show how little race and sex really explain of the variation between dyads, which merely points out the complexity of this conversational process.

The analysis of name references produced some interesting conclusions. Within the conversation mothers seem to express a greater interest in the family and what involves the family, while the children tend to be more concerned with friends and others at school. This finding could be the result of the situation contrived, as the study was explained as one primarily concerning the child. In other words mothers may have taken the initiative and asked the child about friends and school thereby forcing them into this usage of names. Only occasionally did a child inquire about the mother and her acquaintances; although this inquiry did increase when mothers worked away from the home. Females, undoubtedly due to the socialization process in this culture, more nearly approximated their mother's use of family references than any other group, although blacks tended to use more name references overall. In conclusion, the vocabulary analysis points to a possible, unique relationship between mother and daughter which suggests a greater conversational equality; a higher level of linguistic self development and a greater conversational bonding.

Pronouns

The importance of the individual self in the early development of social self seems well established in the literature, with Bain and Cooley observing pronoun use as an indicator of this development. Consequently, it is assumed that the child's use of personal pronouns in the conversational stream will reflect an emphasis and awareness of the self as actor. This assumption is supported in that the most commonly used pronoun for the children is "I", clearly establishing self as actor. Piaget (1926) goes on to suggest that with increased age a child will develop a capacity to comprehend a point of view of the other. This contention should be supported in pronoun use, and is to some extent exhibited in the conversations. Children do not show in their speech a great consideration for others, neither immediate nor generalized; whereas mothers show a concern for others immediate to them but not in general. In other words in support of Piaget's contention, mothers should have exhibited a greater use of generalized other pronouns in relation to the children, something which did not occur. In fact the mother seems to forget herself, directing all attention and concern to the child, which works to enhance the egocentric character of the conversation. In this case, homogeneity of the dyad does not seem to make very much difference as males and females exhibit approximate distributions of pronoun use. The difference definitely occurs between mother and child. The ratio of nominative to accusative forms only serves to expound upon the centrality of the child, as in every instance the child is more apt to be the source of action to a greater extent than the mother.

In conclusion, the analysis of pronoun use tends to support the arguments of Piaget, Cooley and especially Mead. The "I" is the source of action and appears, at least linguistically, to have developed to a stage in which the individual as subject now dominates the child's speech; especially for white children which may indicate the influences of family structure and culture bias. The child is aware of the objective self (as evidenced by the use of the pronoun "me") but does not show a preference to be in that role. On the other hand, in terms of development, the mother may actually be encouraging the child to be expressive of self as creative, active, and energetic, while discouraging the child to be passive and accepting and therefore relying too heavily on the mother for social guidance.

#### Narrative and Response Mode

Riegel (1976) points out that a dialogue is characterized by an alternating exchange of information; the minimum response is incorporating only that which immediately precedes it while the maximum occurs when each utterance reflects the basic theme or topic of the conversation. This thinking, translated to mother-child conversation, provides an insight into the conversational relationship of mother and child. It is assumed that mother and child conversing in a response mode would be minimally involved, whereas the sustained narrative mode would exhibit maximum involvement or stronger conversational bonding. Approaching the conversational data from this perspective one finds surprising occurrences, and perhaps the most convincing of the entire project. The two modes appear as viable indices in conversation analysis as they do point to the extremes of exchange, for the predominance of conversations fall

at one end or another. Once again, white females by far outdistance the others in terms of exchange in the conversational relationship, which implies a higher degree of bonding between mother and female child. At the other end are found black males who exhibit the minimum of involvement. As a high percentage of black mothers work outside the home, this could be some indication as to why the conversational relationship was lacking. Of course, the fact is that the mothers work would have to affect their relationship with their daughter as well, but perhaps the influence of homogeneity to some extent counterbalances this occurrence. Although this is a sweeping generalization, perhaps the unfortunate antagonism which exists between males and females is taught at an early enough age that mothers then can communicate much better with their daughters than sons. Also, if mother and son cannot communicate well, what kind of implication might this have for communication with teachers who are predominantly female.

#### Integration

I believe this research endeavor has been successful in terms of pointing out relationships, or lack of them, between mother and child, as well as how these relationships can be more fully understood or examined through conversation analysis. For the vocabulary and mode sections of examination, a uniqueness between mother and daughter, especially in white dyads, was indicated. The vocabulary analysis pointed out that a higher degree of bonding seemed to be occurring in homogeneous dyads, while the mode analysis definitely pointed to some discrepancies between sexes. Pronoun use did confuse the issue of bonding slightly in that it showed a lack of reciprocity in recognition of each other,

but this could also be interpreted as enhancing the issue of bonding in that both actors (although one as subject and one as object) pointed to the centrality of the child. The pronoun analysis did indeed lend support to the crux of Mead's theory of self development, as this development is reflected in communication patterns.

#### Limitations and Suggestions

I feel the biggest limitation of this study is the fact that the data are collected from only five-minute conversations; only five minutes in the life of the person's conversational relationships. I do agree that this sample is probably indicative to a great extent of the conversational relationship between mother and child at other times, but one is limited in ability to generalize beyond the scope of the conversation per se. Tendencies may be pointed out, trends examined and variables tested, but the full relationship between mother and child is, and as has been evidenced, very complex, much beyond the extent of five minutes. I do feel this type of analysis is valuable, but it could produce greater results if conversations were taped over an extended period of time. In some instances the mother and child were very much at odds with each other, possibly producing a conversation lacking in its usual character. In other words, some particular participants were caught at a bad time to be taped. For example one young man had just finished carving on his mother's countertop just prior to our arrival. Needless to say, the conversation was at best strained. Extended tapings would also be advantageous in illustrating the process of linguistic self development instead of assuming it exists from a one point in time contact. I also feel the study was limited in that the father was

essentially ignored. If the fathers had been taped as well, the homogeneity assumption could be more adequately examined and the influence of the father in social self development could be illustrated, for both males and females.

Another limitation or perhaps a suggestion for future research is that a relationship is more than conversation; it involves doing as well and not only non-verbal behavior but action too. Therefore I think a combination of conversation analysis and behavior analysis would be highly valuable as a key to understanding the relations of parents to children as they develop linguistically and socially.

I sustain the contention that this research has achieved its goal which was to point out the relationship of certain variables in mother-child conversation. Race does not seem to directly affect the relationship, nor does city location. Sex type may affect the relationship in an indirect manner, i.e., whether a homogeneous or heterogeneous dyad is created by the two actors. Also pronoun and mode analysis do seem to be viable in terms of understanding the development and sustenance of a relationship as the child's ability or willingness to carry out an involved conversational relationship with another may have future implications for performance in school. Future research should aim not only at the conversations at home but at school as well, perhaps correlating conversational ability with reading and writing skills. It would seem that there may be some interesting findings there.

Another suggestion for future research could be a comparison across social class. Do these same relationships appear to exist in upper classes as well as the working class? What similarities or differences exist for children who come from one parent homes? What about compari-



sons across age categories; could process be observed if children at all ages were taped? What is the effect of strong relationships with grandparents or siblings instead of the parents? Do these relationships provide the same channels for linguistic growth? The list is seemingly endless. This research has stimulated to mind an abundance of future searches with always the goal in mind of further understanding the infinitely complex interactions of people.

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## APPENDIXES

APPENDIX A

EXAMPLE LETTER TO MOTHER

Dear Ms. \_\_\_\_\_

We would like to tell you about our research on the effect of mother-child conversation on the child's progress in school. Most school authorities believe that the child learns to listen and to talk from talking with his mother, and that his pattern of conversation with mother affects his later success in school. We plan to measure the effect of mother-child conversation before school on the child's school progress at the end of the first grade. Oklahoma State and Memphis State Universities are supporting this research.

The study will include only first-born children aged 5 to 6 who will enter the first grade this September. We would like your permission to include your oldest child in the study. This would require about 15 minutes of your time, at your convenience, sometime in June of this year, and about 15 minutes in June of next year. If you take part, my assistant, Mrs. Jackie Howsden will come to your home to explain the recorder to your child. She will then start the recorder on the kitchen table, and then leave for about five minutes while you sit and talk with your oldest. If you have younger children, she will babysit them during this time. Then she will return and play back the recording with both of you to write down anything she can't understand. She will then give your child a small gift.

Children enjoy this experience, and mothers find it quite interesting. If you complete the second conversation recording, we will be happy to give you a copy of our research article when it is published. I think you would find it especially interesting if you and your child had been in the project.

Please return the enclosed card indicating whether you would like to participate, and Jackie Howsden will contact you in a few days. Also indicate whether you would like us to give you a copy of our research article.

Very sincerely,

Donald E. Allen  
Professor and Acting Head

jr



APPENDIX B

RECORDING SHEET AND PERMISSION FORM

Child \_\_\_\_\_ Birthday \_\_\_\_\_ Sex F M  
Mother \_\_\_\_\_ Age \_\_\_\_\_ Work 0 1 B W  
Father \_\_\_\_\_ Job \_\_\_\_\_  
Type Work \_\_\_\_\_  
Address \_\_\_\_\_  
Other family members at home: Boys \_\_\_\_\_ Girls \_\_\_\_\_ Adults \_\_\_\_\_  
First Grade Teacher \_\_\_\_\_ B W  
First Grade School \_\_\_\_\_

	Date	Tape	Counter	Initials
First Recording	_____	_____	_____	_____
Second Recording	_____	_____	_____	_____
Teacher Recording	_____	_____	_____	_____

School Progress

Reading \_\_\_\_\_  
Numbers \_\_\_\_\_  
Writing \_\_\_\_\_  
Participation \_\_\_\_\_

CONDITIONAL PERMISSION

I authorize the teacher to grade my child's progress in reading, numbers, writing, and participation for this research on Conversation Effects, on condition that my name and my child's name will remain confidential.

Signed: \_\_\_\_\_ Date \_\_\_\_\_

APPENDIX C

EXAMPLE OF A CODED CONVERSATION

CARD

0163 211 51 EAN= FOR THE ONE THEY BUS-TED? 1 YES. UH-HU\* 4 OH= 1 THEY HAD TO STICK T  
 0164 211 52 HAT ONE BACK DOWN IN THERE. 4 UH-HU\* 1 UH-HU\* 4 DID YOU GO DOWN TO DA-VID  
 0165 211 53 'S HOUSE TO-DAY? 1 YEA\* 4 WHAT DID YOU ALL DO DOWN THERE? 1 NO-THING. HE  
 0166 211 54 WAS OUT THERE PLAY-ING BALL. AND SOME-THING HAP-PENED TO THE BIKE AND B  
 0167 211 55 UST-ED IT. 4 UH-HU\* 1 SO/ 4 OH= DAD-DY SAID HE WAS GO-ING TO GO OUT THER  
 0168 211 56 E TO-MOR-ROW. AND TRY TO FIND THAT+ THAT/ SPOKE WRENCH AND FIX YOUR BI-CY  
 0169 211 57 CLE SO YOU DON'T HAVE TO BE RID-ING THEIRS. 1 OH= GOOD= 4 BUT YOU BET-TER  
 0170 211 58 TELL THEM NOT TO RUN IN-TO YOUR BI-CYCLE+AND BU/ AND TEAR IT UP. BE-CAUS  
 0171 211 59 E IF THEY DO THEY'RE GO-ING TO HAVE TO PAY FOR IT. 1 IF THEY DO IT ONCE  
 0172 211 60 MORE I'M GO-ING TO BUST THE YOU KNOW WHAT OUT OF THEM. 4 NO\* YOU'RE NO  
 0173 211 61 T GO-ING TO HIT AN-Y-BO-DY. 1 I'LL BUST THEM. 4 JUST TELL THEM NOT TO BE  
 0174 211 62 RUN-NING IN-TO YOUR BI-CYCLE. BE-CAUSE YOU'RE/ 1 IF THAT DON'T WORK I'M  
 0175 211 63 GO-ING TO BUST THEM. 4 NO\* YOU'RE NOT GO-ING TO DO THAT. 1 UH-HU\* 4 HU-UH  
 0176 211 64 \* BE-CAUSE YOU KNOW WHAT STEVE'S GO-ING TO DO TO YOU. HE'LL JUMP ON YOU  
 0177 211 65 AND BEAT YOU UP. 1 AND I'LL BUST THE YOU KNOW WHAT OUT OF HIM. 4 OH= NO\*  
 0178 211 66 NOW YOU DON'T WANT TO DO THAT. 1 I'LL BUST EV-ER-Y ONE OF THEM UP. 4 UH-  
 0179 211 67 HU\* YOU'LL BE RUN-NING HOME CRY-ING. I KNOW IT. 1 I'M GO-ING TO BUST TH  
 0180 211 68 EM. 4 YEA\* 1 THEY GO-ING TO BREAK IT. I'M GO-ING TO BUST THEM UP FOR IT.  
 0181 211 69 4 NO\* JUST DON'T LET THEM RUN IN-TO YOU. WHEN YOU ALL START RID-ING YOU  
 0182 211 70 ALL JUST STAY A-WAY FROM THEM SO THEY DON'T RUN IN-TO YOU. 1 BUT/ 4 YOU K  
 0183 211 71 NOW= WHEN YOU RIDE JUST SPACE YOUR-SELF OUT. YOU+ WALK/ RIDE O-VER HERE.  
 0184 211 73 LET THE O-THER ONE RIDE O-VER THERE. 1 YEA\* UH-HU\* 4 YOU KNOW= RIDE ONE  
 0185 211 73 BE-HIND THE O-THER. 1 YEA\* TRY/ TRY/ AND CHUCK WOULD TRY TO DO ONE OF T  
 0186 211 75 HOSE THINGS TO ME. AND I'D HOP ON ONE OF THOSE THINGS AND TEAR OUT AF-TER  
 0187 211 75 HIM. 4 UH-HU\* 1 AND I'D/ AND I'D BE COM-ING BACK BY THE BACK WHEEL. AND  
 0188 211 76 HE'D GO ON. 4 UH-HU\* BUT I'D CROSS TO HIM. AND HE'D+ HA-HA-HA-HA-HA& S  
 0189 211 77 TART HOL-LER-ING. BE-CAUSE/ BE-CAUSE I'D JUST A-BOUT RUN O-VER HIM. 4 WE  
 0190 211 78 LL= DON'T DO THAT. IF YOU/ IF YOU KEEP YOUR BI-CYCLE AND DON'T TEAR IT U

APPENDIX C (Continued)

0191 211 79 P THIS TIME WHEN WE GO WALK-ING A-ROUND THE BLOCK THIS TIME WE'LL GO DIF-  
0192 211 80 FER-ENT WAYS. YOU CAN RIDE YOUR BI-CYCLE. AND BR-IAN CAN RIDE THE TRI-CY  
0193 211 81 -CLE.1UH-HU\* 4 AND THEN WE CAN GO FAR-THER. AND YOU WON'T GET SO TIRED. I  
0194 211 82 UH-HU\* 4 AND THAT'LL BE MORE FUN. AND MAY-BE DAD-DY WILL GET SOME AIR I  
0195 211 83 N HIS BI-CYCLE TIRES. AND WHEN A-MAN-DA GOES TO SLEEP SOME-TIME THEN I C  
0196 211 84 AN RIDE DAD-DY'S BI-CYCLE. AND YOU CAN RIDE+YOUR TRI/ YOUR BI-CYCLE. AND  
0197 211 85 BRI-AN CAN RIDE HIS TRI-CY-CLE. AND WE CAN GO RID--NG A-ROUND THE BLOCK.  
0198 211 86 I IS-N'T THAT GOOD= 4 WELL= DAD-DY CAN STAY HERE AND TAKE CARE OF A-MAN-

APPENDIX D

EXAMPLE OF A SUMMARIZED VOCABULARY PRINTOUT

100

ACTIONS			SYLLABLES		WORDS		FREQUENCY		
			1	2	1	2	1	2	
SIMULTAN	0	0	0	0	0	0	0	0	103
ASSERT	0	0	189	125	148	93	41	20	103
LAUGH	0	0	0	3	0	1	0	1	103
SUPPORT	0	0	45	5	37	5	37	5	103
FRAGMENT	0	0	28	11	28	10	23	7	103
QUESTION	0	0	21	490	19	423	15	82	103
INTERJEC	0	0	1	13	1	13	1	13	103
TOTAL	0	0	284	647	233	545	117	128	103
SYL ACT1	198	28	2	4	0	0	0	1	103
SYL ACT2	469	60	16	2	1	0	0	0	103
SHARED LAUGHTER EPISODES=			0						
ACTOR1	DICTIONARY	93'	WORDS	233'	DIVERSITY	'399			
ACTOR2	DICTIONARY	129'	WORDS	548'	DIVERSITY	'235			
EQUILIBRIUM	DICTIONARY:	.721	EQUILIBRIUM	WORDS:	.425				

APPENDIX E

DISTRIBUTION OF NARRATIVE AND RESPONSE MODES BY RACE, SEX AND CITY

VARIABLE	MEMPHIS				TULSA			
	BLACK		WHITE		BLACK		WHITE	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Narrative	9	2	14	4	4	5	6	5
Narrative-Response	1	2	1	3	1	2	4	4
Equal	2	3	0	2	2	2	2	1
Response-Narrative	2	2	0	2	2	1	2	2
Response	2	7	1	5	7	6	2	4
Total	16	16	16	16	16	16	16	16

VITA<sup>2</sup>

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Candidate for the Degree of

Master of Science

Thesis: MOTHER-CHILD CONVERSATION: A STUDY OF DYADIC INTERACTION

Major Field: Sociology

Biographical:

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