

# LIDEARY Michigan State University

This is to certify that the

thesis entitled

Negotiation Competence: Interpreting

Situational Differences in Code Choice

presented by

Mary E. Diez

has been accepted towards fulfillment of the requirements for

Ph.D. degree in Communication

Wajo

**O**-7639

MSU is an Affirmative Action/Equal Opportunity Institution





RETURNING MATERIALS:
Place in book drop to remove this checkout from your record. FINES will be charged if book is returned after the date stamped below

|         | stamped below. |  |  |  |
|---------|----------------|--|--|--|
| 7721991 |                |  |  |  |
| 354     |                |  |  |  |
|         |                |  |  |  |
|         |                |  |  |  |

# NEGOTIATION COMPETENCE: INTERPRETING SITUATIONAL DIFFERENCES IN CODE CHOICE

Ву

Mary E. Diez

## A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Communication

1983

Copyright by Mary E. Diez
• 1983

#### ABSTRACT

# NEGOTIATION COMPETENCE: INTERPRETING SITUATIONAL DIFFERENCES IN CODE CHOICE

By

#### Mary E. Diez

The study of negotiation competence as a specific subcategory of communicative competence encompasses both interpretation and production of interaction within specific situations of group agreement-making. This dissertation focuses on the ability of native speakers of English to draw upon their awareness of ranges of communicative code choice to make distinctions between interactions typifying contrasts in bargaining situations.

The ability involved in negotiation competence is conceptualized as involving three types of interaction work. Coherence work establishes the connectedness of interaction, defining the degree to which assumptions can be shared or need to be explicitly stated. Distance work creates relational aspects of the interaction, specifying goal definitions, role relationships, and social parameters. Structuring work involves larger exchange patterns within the interaction, specifying the processes of interaction as managed by the group, e.g., turn-taking procedures and acceptable means of proposal formulation. The sets of rules proposed for each type of work specify a range of communicative code choices, including linguistic and nonlinguistic elements of interaction.

An empirical study involving three excerpts of competitive bargaining interaction between two teams and three excerpts of cooperative caucus interaction within teams (both produced by professional bargaining agents of the Michigan Education Association in role-playing sessions) is reported. Subjects (n = 252), nested in a 2 x 3 factorial design, either viewed a videotape, listened to an audiotape, or read a written transcript of one of the six excerpts. All responded to 60 items on the Interpretation of Interaction Scale.

The hypothesis that there would be significant differences between the two types of interaction, regardless of the media condition, was supported by the responses to the scale items related to distance work. Responses to the items related to coherence and structuring work were less clear, suggesting that observers are less conscious of differences in connection-making and structuring, at least as related to the bargaining situation. Some differences related to structuring were found by medium, but these were unrelated to situation.

The final discussion draws together the findings of this study with previous studies of production, suggesting implications for further research.

#### **ACKNOWLEDGMENTS**

I am grateful to a number of people who have contributed to my growth as a scholar and professional woman. First of all, I thank my parents, who encouraged and valued education, and the School Sisters of St. Francis, particularly the sisters of the Western Province and of Alverno College, who have supported and challenged my growth for 25 years.

I am also indebted to the faculty at Michigan State University, who have served as a composite model of scholar-ship and professionalism and who helped me to develop critical conceptual and research skills in communication. I especially thank the members of my doctoral committee: Dr. William Donohue, Dr. Donald Ellis, Dr. Judee Burgoon, and Dr. Ellen Strommen. I would also single out for special thanks Dr. Carol Scotton in linguistics and Dr. Frederick Erickson in anthropology.

To my classmates and friends in the department and in the Women's Research Group on campus, I am grateful to have been able to share ideas and to dispute the nature and methodology of the behavioral sciences with you. To the people at St. John's Student Parish, particularly my roommate Jarrett DeWyse, I am grateful for the opportunity to have been part of the St. John's community.

Finally, to Louis Diaz at the Michigan Education Association, my thanks for the videotape of bargainer training sessions used in this dissertation.

## TABLE OF CONTENTS

| Chapter |   | Page   |
|---------|---|--|
| I       | THEORETICAL DISCUSSION OF COMMUNICATIVE COMPETENCE AND SITUATED CODE CHOICE   | 1  |
|         | Overview  | 1<br>3<br>5<br>7   |
| II      | A SET OF RULES FOR NEGOTIATION COMPETENCE   | 9  |
| III     | Three Types of Interaction "Work" in Negotiation  | 10<br>11<br>15<br>19<br>23<br>25                         |
|         | Criteria for Sample Interactions Information Conditions Hypotheses and Research Questions Method Sample Design Procedure Analysis Results Hypotheses and Research Question 3 Research Questions 1 and 2 | 29<br>32<br>33<br>35<br>35<br>35<br>35<br>38<br>43<br>43 |

| IV      | DISCUSSION  | OF THE  | INTERPRETATION                          | STUDY                                   | 51  |
|---------|-------------|---------|---|---|-----|
|         |             |         | • | • | 51  |
|         |             |         | stion 1:                                |   |     |
|         |             |         | from Written I                          | nformation                              | 55  |
|         |             |         | stion 2:                                | _                                       |     |
|         | Proj        | ecting  | from Audio Inf                          | ormation                                | 56  |
|         |             |         | Noncommon Items                         |   |     |
|         |             |         |   | • • • • • • • • • • • • •               | 57  |
|         | Resear      | ch Que  | stion 3:                                |   |     |
|         | Comp        | arison  | s across Media                          | • • • • • • • • • • • • • • • •         | 60  |
| v       | TMPLICATION | S FOR ' | THE CONTINUED S                         | TUDY                                    |     |
| •       |             |         | MPETENCE                                |   | 64  |
| APPE    | ENDICES     |         |   |   |     |
|         | APPENDIX A  |         | ten Transcripts                         |   |     |
|         |             | Exc     | cerpts 1-6                              | • • • • • • • • • • • • •               | 71  |
|         | В           |         | rpretation of I                         |   |     |
|         |             |         | ale Questionnai                         |   |     |
|         |             |         | dia Conditions                          |   | 88  |
|         | C           |         | all Factorial D                         |   |     |
|         | _           |         | splay                                   |   | 103 |
|         |             |         |   |   |     |
| T. T ST | OF PEFFENC  | FC      |   |   | 105 |

## LIST OF TABLES

| Table |  | Page |
|-------|--|------|
| 1.    | Summary of Findings about Code Choice in Two Bargaining Interaction Situations (Diez, 1983a) | 26   |
| 2.    | Factor Analysis: Common Scale Items  | 39   |
| 3.    | Factor Analysis: Total Scale Items   | 40   |
| 4.    | Summary Table: Analysis of Variance with Distance as Criterion Variable                      | 44   |
| 5.    | Summary Table: Analysis of Variance with Stucturing as Criterion Variable                    | 46   |
| 6.    | Summary Table: Analysis of Variance with Coherence as Criterion Variable                     | 48   |
| 7.    | t-Tests on Noncommon Items, Significance Tests by Medium (DF = 82)                           | 50   |
| 8.    | Overall Factorial Design Display   | 103  |

#### CHAPTER 1

# THEORETICAL DISCUSSION OF COMMUNICATIVE COMPETENCE AND SITUATED CODE CHOICE

#### Overview

How native speakers of a language develop not only the grammar and lexicon of that language, but also learn to interpret and produce language appropriate to specific culturally defined situations has been the object of much study in recent years. Under the heading of "communicative competence" (Hymes, 1972), this language ability has been studied particularly in relationship to its development in children (Cook-Gumperz, 1977; Keenan, 1974). Also of interest to sociolinguists, however, has been the examination of communicative competence as an adult skill, for example, in the subtle meanings conveyed in bilingual or multilingual societies through the use of code-switching (Blom & Gumperz, 1972; Scotton & Ury, 1977). While Labov (1972) studied phonemic variation within a single language community, few studies have addressed the situational variation of broader aspects of code choice within specific, culturally defined situations (see, however, Diez, 1983a, 1983b). Language researchers have called for an extension of the examination of variation in code choice in order to specify how the interaction of situational factors and speaker goals is reflected in the production of interaction appropriate to the situation and focused on the speakers' mutual interaction work (Brown & Fraser, 1979; Hymes, 1974).

This study is an attempt to extend the examination of communicative competence in a particular type of interaction within a speech community: inter-organizational and intra-organizational negotiation. Diez (1983a), using a discourse analytic approach to naturalistic interaction, identified three kinds of interaction work involved in these two types of negotiation interaction and proposed rules to for code choices at poles of a competitiveaccount cooperative continuum. The rules for coherence work, distance work, structuring work, and however, restricted to the areas observed in the written transcripts and audiotapes of the interactions. This study extends those rule sets to include nonlinguistic elements in the three types of work.

In another study Diez (1983b) examined the production of the two types of negotiation interaction, coding utterances for speakers in three separate group training sessions involving inter-organizational and intra-organizational bargaining. The aspects of the rule sets tested included differences in coherence work (measured in lexical and structural complexity), distance work (as indicated by markers of formality/informality or power/solidarity) and structuring work (especially examined in turn-taking). A discriminant analysis which included structural complexity,

syntactical complexity, vocabulary difficulty, and "listenability" showed that the two situations were significantly
different, and the analysis successfully classified 77% of
the cases. This analysis supported several of the coherence
and distance rules. Other comparisons, using analysis of
variance, gave partial support to specific aspects of other
distance and structuring rules. Because only those aspects
of the recorded interaction that could be objectively coded
were included, the rule sets need to be further tested.

The present study probes the interpretation aspects of communicative competence related to the two types of interaction. It hypothesizes about native speakers' use of communicative code choice information in various channels in order to make sense of variations in the interaction in the two types of negotiation situations. Specifically, this "making sense" includes awareness of the interaction as differentially focused on mutual or competing goals, i.e., recognizing the situational differences created by the two types of interaction.

# Importance of the Question

Understanding adult communicative competence as the ability to produce and interpret situated language requires systematic examination of how the same speakers make adjustments in their code choices in different situations and how other speakers interpret those adjustments. While there is general agreement that situations are marked by

differences (both linguistic and nonlinguistic) in interaction, there has been little empirical testing of that proposition.

With the previous work (Diez, 1983a, 1983b), this study addresses another neglected area in the study of interaction: situations that occur as interactions between groups and within groups. Giles (1979) notes that most of the research on the relationship between person and situation has been in one-to-one exchanges. Perhaps the emphasis is a result of the ease of control in study of one-to-one interaction; perhaps it is because most small group research has not yet moved in the direction of language variation as a focus. Combining the two, however, is important because of the pervasiveness of the small group context and because of the power of language to create relationships of one type or another (see Ryan & Giles, 1982).

Aside from the more general question of adult communicative competence, the study of code choices in the two types of negotiation settings fills a gap in the literature concerning negotiation. Most research in negotiation within the disciplines of economics and social psychology has controlled or even eliminated communication processes in order to test for other factors (for a review of this literature, see Putnam & Jones, 1982a). From a communication perspective, it seems apparent that a clear understanding of the process of negotiation or agreement-making is tied to understanding the interactants' communicative behavior (Donohue, 1978), both in production and interpretation of code choice.

This understanding, in turn, may contribute to our understanding of the impact of communicative choices on other agreement-making situations.

# Theoretical and Conceptual Issues

If communicative competence is the ability to produce and interpret situated language (Hymes, 1972), then "situation" is an important notion in its study. While recognizing the controversies surrounding the "definition of the situation," this study will not address the degree to which the situation exists in the explicit consciousness of inter-Rather, situation will be defined as a set of elements that, by convention, operate to make a given interaction type recognizable -- both to interactants and to observers -- as one type of interaction rather than another. Drawing from discussions of situation by Argyle (1981), Avedon (1982), Hymes (1967), and Levinson (1978), four elements that appear consistently will be used to define situation for the purposes of this study. These elements comprise the set of goals, roles, defined structures, and topical restrictions proper to an interaction and have been shown to be related in specific ways to the negotiation context (Diez, 1983b). In focusing the question of the effect of situation on communicative code choice, the main proposition guiding this work is that the interrelationships among aspects of communicative code choice vary depending on specific constraints embedded in these four elements of a given situation.

While this study is based on the assumption that linguistic code choices are a powerful source of meaning in negotiation interaction, a second assumption is that code choices in negotiation are multichanneled, including both linguistic and nonlinguistic elements. While researchers have focused on one or the other set of elements as primary in more general studies outside the situation of negotiation, proponents of neither the linquistic focus nor the nonverbal focus would argue that any channel carries the total sum of communicative information in Extending Mehrabian's (1972) idea of a "display package" to include linguistic elements seems to be an appropriate way to conceptualize the way the variety of code choices work together. Such a view is consistent with Owsley and (1982) notion that Scotton's communicative competence includes a component "which can sum incidences of related features and evaluate them as percentages in relation to some probability framework." Thus, while the study looks at specific aspects of code choice, an operating assumption is that these choices are part of a total "gestalt" created by the sum of all code choices in the available channels.

A final conceptual element is the type of interaction focused on in this study: negotiation. Researchers have brought a variety of foci to negotiation research, but common to all are elements of the situation described above. Of particular importance is goal, generally seen as falling along a continuum from relatively more competitive to

relatively more cooperative (Bartos, 1974; Hagburg & Levine, 1976; King & Glidewell, 1980; Zartman, 1977), with negotiation that takes place in the middle of the continuum, seen as a "mixed-motive interaction" with elements of both (Beisecker, 1970; Schelling, 1960; Walton & McKersie, 1965). In relationship to goal, researchers have also focused on degree of conflict and ways of handling conflict (Chertkoff & Esser, 1976; Swingle, 1970), and on restrictions in the possible resolution of conflict, e.g., zero-sum versus non-zero-sum "games" (Roth & Malouf, 1979; Schelling, 1960).

Another aspect that often combines elements of role and defined structures is the "setting" of the negotiation, e.g., inter-organizational (Druckman, 1977; Hagburg & Levine, 1976; Spector, 1977; Walton & McKersie, 1965), intra-organizational (Walton & McKersie, 1965), international politics (Schelling, 1960), and even interpersonal problem solving (Fisher & Ury, 1981). Common to all is the sense that, in the process of negotiation, the interactants create or affirm relationships that fall (or move) along a continuum from high conflict orientation (e.g., "distributive," "confrontational," or "competitive") to low conflict orientation (e.g., "integrative," "cooperative," "collaborative"), and that they arrive at decisions as mutual outcomes.

#### Definition of Negotiation Competence

Combining this composite definition of negotiation as a range of outcome-determining behavior along a continuum from

relatively more competitive to relatively more cooperative goal orientation, with Hymes's (1972) notion of communicative competence, a definition of negotiation competence can be proposed as

the ability of adult speakers to distinguish and to draw upon a continuum of communicative code choice in order to interpret and to create or affirm both the relationships between interactants and the limits of their mutual decision-making processes.

This definition extends the earlier one in Diez (1983a) by including elements of interpretation as well as of production. Clearly, while interpretation is implied in production, as a preliminary to knowing what can appropriately be produced, the two skills are analytically separate components of communicative competence. Having proposed this conceptualization of negotiation competence, the next task is to clarify more specifically what is involved in that ability through the use of a set of rules to capture the sense of a native speaker's tacit knowledge of the structuring of interaction as negotiation.

#### CHAPTER II

#### A SET OF RULES FOR NEGOTIATION COMPETENCE

Communicative competence, the culturally determined ability to use language functionally, in ways appropriate to situations, is part of the native speaker's tacit knowledge. Moreover, it is an ever-increasing capacity, through which an adult speaker is able to adapt to requirements of new situations, adding to his/her repertoire of social behavior. "Rules" are conventionally used by ethnomethodologists and conversational analysts to attempt to describe the organization of this tacit knowledge (Erickson, 1982). Rules (also called "norms" or "principles") are a means of accounting for how the interactants' knowledge allows for the social organization of interaction. Most researchers recognize that, however the knowledge of communicative competence is structured in the speaker-listener's cognitive equipment (as schemata, for example), it is a flexible tool, open to ongoing refinement through experience and able to combine rules for the very complex work of creating interaction with others (see, for example, Erickson, 1982; Mehan, 1979).

Because the definition of negotiation competence implies interaction taking place along a continuum, the proposed rules are defined for the extreme ends of that continuum. Of course, while much of interaction is conducted more

toward the center, the argument is that movement toward either pole is interpreted by speaker-listeners out of their tacit awareness of what choices and shifts in choice communicate about the relationships being created. Rules, then, are a kind of "interpretative standard." The more talk is like either extreme condition of the continuum as represented in the rule set, the more it will be interpreted as that extreme. Similarly, when only partial signals are available, those which are present provide an interpretive frame, setting expectations about what is not available.

# Three Types of Interaction "Work" in Negotiation

Language scholars and social scientists have suggested various ways of dividing up language function in order to increase our understanding of it. Halliday (1973), for example, identifies ideational, interpersonal, and textual features as essential divisions. Others reflect only the first two -- seen as content and relational aspects -- in their own terminology (Ruesch & Bateson, 1951; Watzlawick, Beavin & Jackson, 1967; Clark & Clark, 1977). Fewer, however, have shared Halliday's interest in the "textual," although conversation/discourse analysts have begun to explore questions of coherence in the text created in talk (Ellis, Hamilton & Aho, 1983).

In an earlier study, Diez (1983a) combined a review of negotiation and language literature with an examination of three sets of naturalistic interactions, viz., inter-group bargaining sessions and intra-group caucuses produced in

training exercises for experienced bargainers of Michigan Education Association. Setting aside the specific content of the interactions (Halliday's ideational function), she proposed a conceptualization of three kinds of interaction work exemplified in the interactions, work that clear contrasts between the two situations. "Coherence work" related to much of what Halliday discusses in terms of his "textual" function. "Distance work" paralleled the interpersonal/relational categories in other schemes. A new category, specific to the nature of the interaction as an ongoing group process was also proposed --"structuring work." This category included the means that interactants use to regulate and direct larger "chunks" of interaction and the ongoing patterns of organizing the interactions. Following a brief review of the earlier study, each type of work will be expanded to include nonlinquistic elements from the relevant literature and the set of rules proposed by Diez (1983a) will be extended to include those elements.

#### Coherence Work

Diez (1983a) argues that coherence work in interaction is related to the goal position of the interactants relative to each other. The more they share common goals, as well as common background assumptions, the less need they will have to make explicit what those goals and assumptions are. In terms used by Halliday and Hasan (1976), the "given" information will tend to be both assumed and clear to the inter-

actants, and anything "new" will be interpreted within their shared context. Thus, coherence work is often short-cut in cooperative interaction, following Grice's (1975) maxim of quantity: Don't say more than is necessary for the particular exchange.

When goals are not shared, or indeed are competing as in zero-sum-game bargaining, then the need to make explicit links is created and coherence work is elaborated. Competitive bargainers cannot afford to be equivocal, lest the other side interpret their point to the other side's advantage. And, in competitive settings, argument cannot easily stand on shared assumptions; even "given" information will be stressed to highlight the fact that both sides need to recognize it as a basis for agreement. Grice's maxim is still met, because the situation, the particular exchange, defines differently what is necessary in the way of linking and clarifying activity.

For linguistic choices, the impact was clear in the analysis of the naturalistic group exchanges (Diez, 1983a) and in the literature on language variation. Specifically, links between ideas, and between "given" and "new" information will be more explicit in competitive interaction and less explicit in cooperative interaction. The impact on length of utterance and type of reference is detailed in the rule set for each.

Extending the expectations to nonlinguistic elements requires finding the correlates of explicit connections,

definitions and stress. In American English, for example, prosody is an essential paraverbal carrier of connections and stress, part of the redundancy built into speech along with gestures and head movements (Bennett, 1982). Although most of the literature on the use of the vocal channel has been done in dvadic interaction, some expectations for coherence work in group interaction that could be drawn include differences in the two situations in use of voice. When making connections clear for an audience that cannot be assumed to share one's own position, speakers will likely assume a firm, definite, and emphatic voice tone (Brandt, 1980; Costanzo, Markel, & Costanzo, 1969). In contrast, the literature suggests that tentativeness in the vocal channel would be expected when brainstorming or working out a position -- combining with the linguistic structure element of leaving sentences unfinished.

In other nonlinguistic channels, power-seeking /enacting situations are usually marked by threatening or imposing eye contact; in contrast, eye contact is more "friendly" in more cooperative or neutral settings (Druckman, Rozelle, & Baxter, 1982; Henley, 1977). The impact of gesture is likely two-fold: Given the shared understandings, the interactants in a cooperative setting would be more likely than those in the competitive setting to gesture in place of words (for they can count on being able to say, implicitly, "You know what I mean"). And the cooperative group's gestures can be less controlled, for Goffman's (1959)

observations about "back region" behavior would apply. Just as their words can be irrelevant at times, they may show less control in nonverbal behavior as well. The competitive group, as "front region" actors in Goffman's terms, would be likely to be more careful in creating their body appearance and using body position and gesture to emphasize the seriousness of their arguments.

In summary, the expectations are that the nonlinguistic expressions will reinforce the coherence work of the linguistic channel, creating synchrony in verbal, paraverbal, and extraverbal elements. The creation of a gestalt impression is an important factor in the reality of how these elements work together in interaction, but it makes their separation difficult. Thus, while the rules attempt to describe an analytical separation, they are not intended to suggest that any one channel may be interpreted without the functioning of the others being taken into account.

Two rule sets, one for each extreme position on the negotiation continuum, are proposed for coherence work:

Rule Set C<sub>1</sub> COHERENCE WORK RULES: Negotiation

Interaction at the Competitive Pole

If P (one negotiator or side) cannot assume knowledge on the part of O (the other negotiator or side) or if P does not want to allow O to redefine equivocal statements

- 1) P will specify clearly what is "given" and what is "new" by structuring utterances with clear referents and explicit relationships
- 2) P will tend to encode longer utterances
- P's sentence structure will be, grammatically, both complex and complete
- 4) P's vocal tone will be firm, definite, and emphatic

5) P's gestures, body movement, and vocal stress will be used to identify connection points and major ideas in P's position

Rule Set C<sub>2</sub> COHERENCE WORK RULES: Negotiation

Interaction at the Cooperative Pole

If P (one speaker on a given side) can assume both shared goals and shared frameworks for processing information on the part of Q (another speaker on the same side)

- 1) P will tend to leave connections implicit
- 2) P will use deictic references
- 3) P will tend to encode shorter utterances
- 4) P's sentence structure will often be elliptical or incomplete
- 5) P's vocal tone will indicate some tentativeness when making suggestions (especially during brainstorming stages of discussion)
- 6) P's voice will trail off, leaving utterances unfinished
- 7) P will at times gesture in place of words
- 8) P's gestures and body movement or posture may include undirected or uncontrolled elements

## Distance Work

Distance work is closely tied to goal orientation of the interactants; given shared and collaborative goals, interactants will be relatively closer and reflect that psychological nearness in a variety of ways. Competitive goal orientations, in contrast, will be expressed in increased distance between the sides. While clearly parallel to what others have called the interpersonal function (Halliday, 1973) or relational information (Watzlawick et al., 1967), distance work in group settings is not simply interpersonal; it involves the relationships between roles, positions, and/or group identities as well. Diez (1983a) specified three kinds of distance work characterizing exchanges in the naturalistic interactions she examined. Each can be seen to

have nonlinguistic correlates of the aspects identified in the earlier rule set for distance work.

Psychological distance, following Mehrabian's (1966, 1967; Wiener & Mehrabian, 1968) work on verbal immediacy, is created by the relative directness of reference in inter-Diez notes the differences in teachers union spokespersons' language when referring to the other side as "you" versus "the school board." The latter is both more indirect and more formal, a second indicator of psychological distance. Formality and complexity of language and sentence structure tend to create greater distance; informality and shared jargon minimize distance. Based on Mehrabian's (1971, 1972) work in exploring psychological distance involving nonlinguistic features of interaction, the expected correlates of increased linguistic distance would be relatively erect posture, indirect body orientation (including artifactual barriers like tables, books and papers), the absence of touching, and serious or hostile (as opposed to friendly) eye contact. Those behaviors relating to increased linguistic closeness would be relatively relaxed posture, directness of body orientation, more friendly eye contact, and the possibility of some touching (e.g., a slap on the back, a punch as part of a joking exchange). Restrictions against touching generally in group interaction, however, would be likely to apply in both interaction settings.

Social distance, or the creation of relative formality /informality, is indicated in the verbal channel by some of the same behaviors that do coherence work. Both Joos (1962) and Gregory and Carroll (1978) link greater social distance with increasingly complex vocabulary and sentence structure. And Goffman (1959) notes that the use of humor, vulgarity, slang and personal reference differentiates what he calls "front region" and "back region" behavior -- only in the latter, informal, setting are these forms expected. Nonlinguistic correlates of social distance work are parallel to the expectations for coherence work. More controlled, firm vocal tone would be expected in the creation of social distance in the competitive situation. The greater freedom of the cooperative setting is expected to allow "looser" speech patterns, with less attention to precision (for some aspects of articulation differences, for example, The same freedom allows for occasional Trager, 1958). irrelevancy and inattention, manifested in the verbal channel in topic and in body movement in relaxation of social constraints, for example, on the use of adaptors (Goffman, 1959).

Finally, role distance adds a dimension of power/solidarity, cued in linguistic choices by the use of indirect versus direct forms. As noted in Diez (1983a), role distance is also cued by the relative use of back-channels and other supportive cues. Withholding reinforcement is seen as a cue of a power differential being

recognized or created; increased supportive cues -- verbal, vocal, and nonverbal -- create an increased sense of solidarity.

general, a review of the literature relating nonverbal behavior and relational messages indicates that nonlinguistic correlates of linquistic distance probably include manipulation of physical distance (see, inter alia, Burgoon, 1978; Burgoon & Hale, 1981) use of artifacts (Burgoon & Saine, 1978; Sommer, 1969), body Henley, 1977; Kendon, position (Burgoon, 1978; 1970: Scheflen, 1973), and gestures and facial expression (Burgoon & Hale, 1981; Burgoon, Buller, Hale, & DeTurck, 1982). of these code choices may be involved in the production of distance work. Again, however, it is the gestalt impression of a variety of factors that appears to do the distance work in interaction. So, while the rules suggest specific means, they are not intended to suggest that these means operate independently or that they are unaffected by other cues. Rather, the cues operate in concert to produce the sense of distance between interactants.

Again, two rule sets, one for each extreme position on the negotiation continuum, are proposed for distance work:

Rule Set D<sub>1</sub> DISTANCE WORK RULES: Negotiation

Interaction at the Competitive Pole

If P wants to establish a differential power relationship with  ${\bf O}$ 

P will use linguistic forms to differentiate between P and O (e.g., by using forms that impose obligations on O while maintaining P's rights)

- P will use less supportive language and fewer supportive signals in the exchange (e.g., backchannels, head nods, eye contact)
- 3) P will use more technical and formal vocabulary in the exchange
- 4) P will use indirect references to both P and O as teams
- 5) P will minimize direct body positions and gestures of inclusion toward O
- 6) P will maximize the use of controlling or "power" indicators (e.g., body position, eye contact, use of artifacts for separation or distinction)
- 7) P will use a controlled vocal tone

Rule Set D<sub>2</sub> DISTANCE WORK RULES: Negotiation

Interaction at the Cooperative Pole

If solidarity and shared goals are salient to  ${\tt P}$  and  ${\tt Q}$  in the situation

- P and Q will use linguistic forms that emphasize co-action and co-responsibility
- P and Q will use supportive language and frequent signs of support (e.g., backchannels, nods, smiles, friendly eye contact)
- 3) P and Q will use informal vocabulary, including humor and vulgarity as acceptable choices
- 4) P and Q will use more direct references to each other and about O
- 5) P and Q will orient toward one another in body position, eye contact, and gestures
- 6) P and Q will create an atmosphere of friendly interaction through their nonlinguistic behavior choices, e.g., laughter, relaxed body positions, relaxed vocal tone, and the possibility of physical contact
- 7) P and Q will show variation in attentiveness to one another, occasionally segmenting into subgroups engaging in separate (and possible nontask focused) exchanges

# Structuring Work

Differences in group interaction related to structuring work are embedded in the differing goals of the two types of interaction and in the presence or absence of constraints on the form (i.e., the degree of "definedness" of structure) of each type. Structuring work, as described by Diez (1983a) involves larger patterns of exchange than those considered

by most discourse analysts. It specifically relates to the process of interaction as managed by the group, including allocation of floor time, procedures for turn-taking, types of appropriate speech acts, and means of proposal formulation and adjustment.

Diez noted a basic difference in turn-taking patterns in the two types of negotiation situations, impacting the definition of "the floor" in the two situations. Competitive interaction was marked by relatively smooth turntaking, with sides alternating in fairly fixed fashion. Sides took lengthy turns at certain times in the interaction -- for example, when presenting a series of proposals or responding to a set of proposals that had been offered. The cooperative interaction, in contrast, at times appeared to be a "free-for-all," with all the speakers talking at once, overlapping in turns, or finishing each other's sentences. Diez likened the cooperative interaction to Edelsky's (1981) description of "shared floor" interaction. Of course, not all parts of the cooperative interaction followed this pattern; given the goal of setting a strategy for the intergroup negotiation, the group had relatively long periods of more "regular" allocation of the floor as well.

Clearly, these differences in ordering of the floor have implications for any expectations about turn-taking signals. Once again, more controlled and careful voice and gestural cues in inter-organizational or "front region" interaction will be used to maintain the order appropriate to that

setting. Expected signals will more likely follow patterns described in Duncan (1972). The overlaps in the intraorganizational or "back region" situation will constitute a different set of signals -- indicating synchrony of thought and action as well as of the relaxation of constraints present in the more formal situation (see related discussions in Kendon, 1982; West & Zimmerman, 1982). The cooperative group interaction structuring work, while tacitly clear to the participants, would probably be read by outside observers as "chaotic," but Edelsky (1981) points to its sui generis order.

inter-organizational negotiation is Because between teams, it is a planned activity for the most part. nature of the exchange requires position or proposal making, questioning, and repositioning as essential activities. Paramount in the inter-organizational distributive bargaining setting is the goal of managing information and its exchange in a way that will bring maximum benefit to one's own side (Donohue & Diez, 1983). Thus, the careful ordering of turn-taking is linked with the planned nature of questioning and proposal making in moving the interaction in the direction of the group's goals. Not surprisingly, many of the expectations of the coherence work rules for this kind of negotiation also bear upon structuring work rules (see Keenan, 1978). The nonlinguistic cues will likely include aspects of voice and gesture that also contribute to a sense of control and orderly procedure.

The unplanned or "planning" nature of intra-organizational exchange creates a more diffuse, divergent structure, reflected in the more simple coherence work rules first of all. In larger structures, the same speech acts present in more competitive interaction, especially questioning and proposing, will also function, but they will be interpreted differently in integrative intra-organizational bargaining, given the group's shared goal orientation. combined with the tentative, "planning" signals of the interaction will be a sense that questions are attempts to share mutually beneficial information and that proposals are on the floor as shared formulations. Thus, while cooperative interaction will appear spontaneous, it will also be unclear (or less clear) where the "flow" is going, providing another contrast with the more structured situation of inter-organizational bargaining.

The rules proposed for structuring work combine expectations based on goal orientation and defined structures in each of the two negotiation situations.

Rule S<sub>1</sub> STRUCTURING WORK RULES: Negotiation
Interaction at the Competitive Pole

- A. If P wants to manage information in the exchange such that maximum information is elicited from O
  - 1) P will use multiple question forms
  - 2) P will follow answers to O's questions with their own questions
  - 3) P will maintain clear turn sequences with O

- 4) P's overall demeanor will indicate the "planned" nature of the interaction as well as his/her seriousness
- B. If P's purpose is to win as many arguments for proposed actions as possible and to accept as few of O's proposals as possible
  - 1) P will avoid tentative expressions
  - 2) P will conclude utterances firmly
  - 3) P will not accept interruptions from O
  - 4) P's manner will be formal and businesslike
- Rule S<sub>2</sub> STRUCTURING WORK RULES: Negotiation

Interaction at the Cooperative Pole

- A. If P and Q are focused on planning their joint strategy with relationship to O
  - P and Q will use brief and varied utterance types
  - 2) The flow of the interaction will appear unplanned and spontaneous
  - 3) P and Q's talk will be characterized by talkovers and interruptions
  - 4) P and Q will at times talk at the same time about the same idea
- B. If P is open to Q's modification of proposed actions or statements
  - 1) P will encode utterances with tentative expressions and expressions of solidarity with Q
  - 2) P will leave utterances unfinished to invite completion by Q
  - 3) P will allow Q to interrupt
  - 4) P's demeanor will be informal and relaxed

#### Rules: Mechanisms for Interpretation and Production

While these rule sets are proposed as descriptive of negotiation interaction at the opposing poles of more competitive and more cooperative interaction, it must be noted that they represent a theoretical view of probable interaction at those poles, and not in general. As noted by Putnam and Jones (1982b), inter-organizational bargaining

can and must be integrative as well as distributive if groups are ever to come to agreements. There is, in the most basic sense, a necessary "cooperation" if groups are to produce interaction at all. Yet, in terms of a competitive bargaining team's overall goals in a zero-sum-game situation, these rules will guide the teams' mutual structuring of the interaction as competitive.

Similarly, intra-organizational bargaining does not occur solely at what the rules describe as the cooperative pole. There can be extremely tense and serious moments and periods of conflict in intra-group bargaining, particularly when the group is working out a plan or a decision in which personal ideas or positions become competitive. Yet, again, the overall description of a group who share goals and are engaged in attaining mutually beneficial outcomes will reflect interaction in the direction of the behaviors described for the cooperative pole.

Indeed, the conception of there being two poles of interaction is the mechanism that allows us to describe what is happening when a basically collegial group shifts toward a situation of conflict or when a group engaged in distributive bargaining shifts in the final stages of agreement-making toward a consensus. The rules function as a standard against which speakers can interpret sets of behavioral cues.

# Tests of the Rules Sets as Production Mechanisms

In previous research, the three sets of rules have been tested in relationship to the production of interaction as negotiation along the continuum from relatively more cooperative to relatively more competitive. Diez's study (1983b), for example, was an attempt to carefully analyze elements of the production of negotiation interaction, particularly in relationship to lexical and structural complexity, indications of solidarity, and turn-taking. In general, the findings of that study provided initial support for a number of elements in the rule sets. Table 1 summarizes the findings of Diez (1983b) in relationship to specific rules.

In other studies related to aspects of structuring work, Donohue, Diez and Hamilton (1983) provided an analysis of competitive negotiation interaction strategies. Their findings indicate that bargainers use both responses to others' utterances and cues intended to constrain the others' next utterance in order to manage information, position the issues in negotiation, and narrow the range of options for settlement. While these researchers have not extended this work to the more cooperative situation, they do note (as do Putnam & Jones, 1982b) that these patterns shift as the bargainers enter into more integrative phases of the negotiation.

Table 1.

SUMMARY OF FINDINGS ABOUT CODE CHOICE IN TWO BARGAINING INTERACTION SITUATIONS (Diez, 1983b)

| Results and Significance | .000<br>saults:  |               | 26 100.  |                  | 11                          | .001                              |
|--------------------------|--|---------------|--|------------------|-----------------------------|-----------------------------------|
| nd Sign                  | = .15<br>= 568.65, p < .000<br>assification Results<br>77% of the cases<br>correctly classified                |               | = 223.297, p < .005  |                  | )0. > q                     | 25, p <                           |
| sults a                  | <pre> λ = .15  χ² = 568.65, p &lt; .000  Classification Results: 77% of the cases</pre>                        |               | $F = 223.297$ , p < .001 $x^2 = 32.3$ , p < .005           |                  | = 6.49, p < .001            | F = 496.725, p < .001             |
| Re<br> Re                | ~ Σ  |               | F ×  |                  | is<br>t                     | ĮŦ                                |
| Test Used                | Discriminant<br>Analysis   |               | Analysis of<br>Variance<br>Chi-squared                     |                  | t-test of means             | Analysis of<br>Variance           |
| Variables Tested         | Structural Complexity<br>Syntactical Complexity<br>Gunning's Fog Index<br>Listenability Index                  |               | Presence/absence<br>backchannels<br>socio-centric<br>terms |                  | Mean length of<br>utterance | Presence/absence<br>talkovers     |
| COHERENCE WORK           | Measures of lexical and syntactical complexity clearly distinguish the inter-organizational and intra-settings | DISTANCE WORK | Measures of relative<br>solidarity of group<br>members     | STRUCTURING WORK | Measures of allocation of   | means of transition (turn-taking) |

Donohue and Diez (1983) examined specific speech acts in relationship to the management of information in distributive bargaining. Their findings suggest that bargainers use questions and directives to gain and maintain interaction rights and to impose obligations on their opponents. Finally, Diez (1982) compared specific speech act forms in the two types of bargaining interaction and found significant differences in the use of directives, providing some support for the aspects of the rule set related to speech act choice. She also noted that these choices were patterned in ways that clearly defined relational messages, a distance work function.

The previous studies focused on aspects of negotiation competence related to the production of negotiation interaction in one or both of the extreme situations. If negotiation competence is marked by the ability to both produce and interpret interaction appropriate to a range of bargaining behavior, then the rule set also needs to be tested through an examination of the responses of native speakers to paradigm examples of these types of interaction (i.e., examples of behavior close to the poles identified as cooperative and competitive). Such a test is provided in the experimental study described and analyzed in the following chapters.

#### CHAPTER III

# A STUDY OF THE INTERPRETATION OF NEGOTIATION INTERACTION

Using the expanded rule sets proposed in Chapter II, the following study was undertaken as a test of the rules proposed for negotiation competence in relationship to the interpretation of interaction. Interpretation of human interaction is a process that operates on a multitude of simultaneously occurring behaviors in real time. It can be conceptualized as an ongoing "gestalt" process, with interactants responding to and reflexively creating meaning through choices in multiple communicative modes. Returning to the image of a continuum, this interpretive process may be envisioned as a rapid-fire "summing" procedure, adding all the behavioral indicators together and placing the total along the continuum as a way of inferring what kind of interaction is being created. In the mutually constitutive work of interactants, the production process draws upon the same standard, as interactants make choices that affirm the situational definition or attempt to shift aspects of the current definition. It is thus hard to separate the two skills of interpretation and production; in actual interaction the work guided by interactants' communicative competence occurs so quickly that it is never totally conscious.

In order to provide interpretation as an interactant's skill, however, aspects may be separated out experimentally, recognizing that the result may approximate but not reproduce what actually happens within interactants in real time experience of interaction. For such examination to be useful, specific requirements must be met in any experimental study of interpretation skill as part of a speaker's negotiation competence. First, any study of interpretation of interaction in the two situations of contrast -- relatively more competitive and relatively more cooperative goal oriented interaction -- would need to establish a priori that the target interactions represented examples of situations of those two types. Second, such a study would need to be able to examine the use of limited code choice information as an interpretive standard in the assessment made by observers of that interaction.

# Criteria for Sample Interactions

In order to examine whether native speakers recognize the differences in situations based on the behaviors present in the interaction, criteria to determine clear examples of relatively competitive and relatively cooperative interaction need to be identified and met by any sample interaction. For purposes of testing interpretation skill, it is important that

- 1) the situations be of group interaction
- 2) the speakers represent the same general speech community as the observers
- 3) the same speakers be involved in all the sample (to eliminate idiosyncratic speech differences that might confound the results)

4) the interaction be as close to the poles of competitive and cooperative goal-orientation as possible, representing the four situation-defining elements of goals, roles, defined structures, and topical constraints

These criteria were met in the use of excerpts from simulated negotiation interactions produced in a training session conducted by the Michigan Education Association as an in-service, yearly training session for their regular, professional bargaining staff. The session consisted of a two-day bargaining marathon to reach agreement on a contract dispute that was actually negotiated in a different state. As a result the bargaining parameters were quite realistic. Both sides of the case (management and union) were negotiated by union people role-playing their respective sides, five members on a side. The participants, five men and five women, included persons of varied ethnic and racial background, similar to the background common in urban areas of Michigan. Thus, the interactions met the first three criteria.

Fulfilling the last criterion, these interactions represented exchanges characteristic of the two poles of the continuum described in the rule sets. Interactants in the inter-organizational setting were directed to try to get the best possible set of outcomes for their side, thus building in a strong competitive goal definition of the situation. In the intra-organizational sessions, caucuses among members of a single side, the interactants had the common goal of planning their strategy to achieve the common goal. Thus,

these sessions tended toward the cooperative pole. role-playing situations to examine interaction may be problematic, e.g., if the impact of constituent responses or long-term effects constrain the possible use of behaviors. But it can be argued that role-playing situations are particularly appropriate for establishing the goal orientation of samples of interaction. First, because the interactions were produced as training sessions, including explicit directions about what the goals were to be, we may have confidence that they represent a negotiation activity type, as identified by those directions. Second, while many exchanges of naturalistic bargaining in actual contract talks are complicated by relationships outside the bargaining table (e.g., a history of past exchanges or relationships with constituents), these role-played interactions are relatively "clean." Factors that may alter interaction patterns in unpredictable ways are removed by the roleplaying activity while still preserving the formal constraints of the bargaining situation. Third, these interactions nonetheless represent "real" bargaining behavior because the interactants, as professional bargaining staff who have acted out this type of group interaction before, are creating a situation that is familiar both in the issues to be discussed (or topical constraints) and in the manner of relating to others in the roles that are embedded in the situation.

# Information Conditions

Given situations that can confidently be identified as paradigm examples of the two types of goal orientation in negotiation situations, the second requirement is to separate out the information used by observers to interpret the interaction. Generally, observers in naturalistic negotiation interaction are able to work from "complete" interaction information; they not only have contextual background information, but they can draw upon full sensory information. While previous studies have examined only the written mode record of interactions (Diez, 1982; Donohue & Diez, 1983; Donohue et al., 1983), only the audio mode (Putnam & Jones, 1982b), or a combination of the written and audio modes (Diez, 1983b), observers of interaction usually work out meaning from visual information as well. Since it is becoming more and more clear that the written mode creates a different sort of "text" (see Ong, 1982), any study of interaction should extend the stimuli used to the audio and visual modes.

The present study uses the same excerpts of the simulated negotiation interaction in video, audio and written conditions, to examine the degree to which the amount and kind of code choice information affects the observers' ability to interpret the same interaction. For the more limited information conditions, it also examines how accurately the observers can predict what would be appropriate behavior in the missing channels. Thus, one question of

interest is whether the rules as an "interpretive standard" operate not only to make sense of the information present in the recorded interaction, but also serve as an interpretive frame, "filling in" aspects of interactive work unable to be directly observed.

It should be noted, however, that even in the video condition, no observers in this study have access to as much information as actual participants would have had. Due to college students' limited experience with formal collective bargaining as a specific subsituation within negotiation contexts, they are lacking some essential contextual information in all three situations. Moreover, the video condition is mediated, effectively removing the feedback present between interactant as producer and interactant as observer for the respondent as observer. And the video condition is also limited by the camera's choice of frame at any given moment, recording only part of what could have been seen by an interactant free to orient at will to various aspects of the total scene. (For discussions of the limitations of video recordings, see Erickson, 1982; Grimshaw, 1982).

# Hypotheses and Research Questions

Based on the definition of negotiation competence as the ability of adult speakers to both interpret and produce interaction appropriate to a range of negotiation situations along a competitive-cooperative continuum, and on the rule sets described for interaction work, the following hypotheses are proposed:

Hypothesis 1: Observations of communicative code choice elements made by respondents reading transcripts of inter-organizational and intra-organizational negotiation interaction will differ significantly in the two situational conditions.

Because this condition will have the least information available, a research question is proposed to examine what expectations these observers have about the missing code choice information.

Research Question 1: Will projections of behavior not observed also distinguish between the two conditions?

For the audio condition, the hypothesis and research question proposed are:

Hypothesis 2: Observations of communicative code choice elements made by respondents listening to transcripts of inter-organizational and intra-organizational negotiation interacation will differ significantly in the two situational conditions.

Research Question 2: Will projections of behavior not observed also distinguish between the two situational conditions?

And finally, for the video condition:

Hypothesis 3: Observations of communicative code choice elements made by respondents viewing video-tapes of inter-organizational and intra-organizational negotiation interaction will differ significantly in the two situational conditions.

While hypothesizing the differences for each medium, the study will investigate another research question regarding the relationships among the three conditions.

Research Question 3: What will be the relationship, if any, between the three conditions? E.g., will they be parallel in their observation and prediction of negotiation behavior in the two situational conditions? Will the fuller information of the video condition, for example, be more useful to observers in identifying differences between the two types of interaction? Or will the interpretive framing of

the situation as a particular kind of negotiation allow for accurate projection of the "display package" regardless of the amount and kind of information?

# METHOD

# Sample

Two hundred and fifty-two undergraduate volunteers were randomly assigned to one of the three media conditions, and to one of the situation/excerpt conditions within the medium. The volunteers were drawn from various undergraduate courses at Michigan State University and an equal number of male and female students were included in the sample.

# Design

A three (media condition) by two (inter- or intraorganizational situation) factorial design, with three
stimulus excerpts nested within situation, was used to test
the proposed hypotheses. The use of three excerpts for each
situation was included as a random variable, to guard
against any findings being the result of the specific
messages of a given excerpt of interaction. The responses
of 252 subjects, 84 per medium (42 per situational condition
and 14 per excerpt), assured a power of .80 (Cohen & Cohen,
1975).

#### Procedure

Selection of subjects. Students in undergraduate courses were recruited as volunteers; each received extra credit for their participation. Participants were randomly assigned to the experimental conditions. There were an

equal number of male and female students assigned to each cell.

Selection of stimuli. Using videotapes of interaction produced at training sessions for professional bargaining staff of the Michigan Education Association, three excerpts approximately five minutes in length were chosen for each of the two situations. The selection criteria included the following:

- The excerpt constitutes an "episode" within the larger interaction, i.e., the topic of its discussion is able to be followed without seeing the earlier parts of the videotape
- 2) The camera work allows for observers to see the nonverbal behavior of most of the participants in the interaction
- 3) The sound track of the video is relatively clear
- 4) The excerpt does NOT include "out of role" behavior (e.g., the role-playing participants talking about the role-play as role-play, or about their "other identities" in contrast to the activity of the role-play)

After selection of the six excerpts, audio tapes and written transcripts of each were prepared. Care was taken in determining the form of the written transcripts to indicate where in a current speaker's utterance another speaker began. The six written excerpts are included in Appendix A.

Measures. Observations by the participants were made through the use of a set of Likert-type scales, intended to tap their interpretation of the interaction. These Interpretation of Interaction Scale items were constructed using the rule set generated in Diez (1983a), with the additions of nonlinguistic elements as discussed in Chapter II. The scales used in each media condition are the same for items

not including direct observation of vocal or visual cues. In the audio and written media conditions, the words "I imagine that" were inserted before measures that the participants in those conditions could not have observed directly. The use of this means of extrapolation allows for some examination of the degree to which partial information may be used by interactants to project expectations in keeping with some interpretive frame. See Appendix B for the scale items for each condition.

Specific Instructions. For each group of participants (all 14 in the case of the written mode for each message condition, groups of 7 at a time for the audio and video modes), the experimenter explained that they were to view/listen to/read an excerpt from a group interaction, using the following directions:

"You are going to view/listen to/read a short excerpt of a group interaction. It is not the entire tape/transcript of this group's meeting, and it begins when the meeting is already in progress. After you view/listen to/read it, you will be asked to fill out a questionnaire about your sense of the meeting, so we ask that you view/listen to/read carefully. You will not be asked about factual details of the topics under discussion."

When the stimulus had been presented, the experimenter gave instructions on filling out the scales, using the following script:

"Here are a number of statements to be used in judging the interaction that you have just viewed/ listened to/read. Please circle the number from 1 to 7 that best reflects your opinion. For instance, if you strongly agree with a statement, circle a 1. If you disagree somewhat strongly, circle a 6 and so on. If you are neutral or not sure, circle a 4. Please do not leave any blank."

When the questionnaires had been collected, the experimenter debriefed the participants about the purposes of the experiment and asked for their cooperation in not talking about the procedures to anyone else, since the experiment was conducted over the period of a week.

### Analysis

Principal components factor analysis with varimax rotation was used to identify clusters of items in the Interpretation of Interaction Scale. Three criteria were used to determine the number of factors to be used in the analysis. To be included, factors had to

- 1) have eigenvalues greater than 1
- 2) account for at least 10% of the common variance
- 3) met the scree test for the total number of factors.

Thirty-one items were recoded before the factor analysis was conducted to make all the items equivalent on the 1 - 7 scale. The expected direction for items related to the cooperative situation was toward 1 and that for items related to the competitive situation was toward 7.

Because the measures in the scales included both identical items across media conditions (36 items) and items which differed in their use of "I imagine that" with behaviors not able to be directly observed in audio and/or written conditions (24 items), two separate factor analyses were conducted. In both, there emerged a clear pattern of three factors, shown in Table 2 and Table 3. For the first and largest factor, the two analyses produced quite similar results. Items loading highly on this factor, distance,

Table 2.

Factor Analysis: Common Scale Items

| SCALE ITEM                          | FACTOR 1  | FACTOR 2 | FACTOR 3 |
|-------------------------------------|-----------|----------|----------|
| 1. Eager to cooperate               | .65987    | 02635    | 17476    |
| 2. Turns short                      | 27713     | .16033   | 05137    |
| <pre>3. (Thoughts unclear)*</pre>   | 11390     | .61884   | .05579   |
| 4. Interchange friendly             | .72753    | .04115   | 09368    |
| 5. (Interchange like debate)        | .62248    | .12491   | .11389   |
| 6. (Topic clear)                    | 01770     | .61212   | .06865   |
| 10. Interactants on same side       | .73925    | .08690   | .02530   |
| 12. Control was in group            | .16445    | .07540   | 21846    |
| 13. (Wanted different outcome       | s) .45246 | .09089   | .06153   |
| 14. Vocabulary easy                 | .03786    | 36225    | .41868   |
| 16. (In conflict)                   | .49016    | .03222   | .14328   |
| 17. Sentences left unfinished       | .02108    | .59402   | 17359    |
| <pre>19. (Interchange formal)</pre> | .52090    | .34750   | .04438   |
| 20. Flow of talk unclear            | 08426     | .62918   | 14529    |
| 21. Um hum or "Yes"                 | .12580    | .42858   | 25375    |
| 24. Same goals                      | .63143    | .07401   | 06094    |
| 27. Supportive of each other        | .69634    | 08475    | 14394    |
| 28. (Turns long)                    | .28583    | .19118   | 06503    |
| 31. (Vocabulary difficult)          | .03610    | .14660   | .68021   |
| 32. (Followup on comments)          | 16484     | .13322   | .24924   |
| 34. Simple sentences                | .13116    | 12899    | .53722   |
| 36. (Each wanted to control)        | .44703    | 17721    | .19442   |
| <pre>39. (Complex sentences)</pre>  | .20643    | 01074    | .57434   |
| 40. United in what wanted           | .65718    | 01911    | .01360   |
| 41. (Careful in speech acts)        | .16188    | .60511   | .15886   |
| 42. (Divided into sides)            | .70582    | .14937   | 01198    |
| 43. Repeated each other's work      | ds .01710 | .07957   | 01875    |
| 45. (Tried to put each other        |           |          |          |
| on the spot)                        | .65814    | .03269   | .25080   |
| 47. Wanted same outcomes            | .71801    | .15324   | 01975    |
| 50. Spontaneous in speech act       | s .36268  | .49621   | 06213    |
| 51. (Hostile or unfriendly)         | .75444    | .00454   | .01824   |
| 54. (Not cooperative)               | .74353    | 11177    | 05125    |
| 55. (Thoughts complete)             | .07254    | .74191   | 11313    |
| 57. (Like debate)                   | .64411    | .03639   | .16155   |
| 58. (Careful in word choice)        | .19756    | .69433   | .28634   |
| 60. Spontaneous                     | .33950    | .43711   | 08180    |
| Percentage of variance              |           |          |          |
| accounted for                       | 58.4      | 28.8     | 13.6     |

<sup>\*</sup>Items recoded with reverse values are enclosed in parentheses

Table 3.

# Factor Analysis: Total Scale Items

| SCALE ITEM                   | FACTOR 1   | FACTOR 2 | FACTOR 3                                |
|------------------------------|------------|----------|---|
| 1. Eager to cooperate        | .60757     | 01153    | .25596                                  |
| 2. Turns short               | .25702     | .15104   | .17076                                  |
| 3. (Thoughts unclear)*       | 08938      | .61977   | 07330                                   |
| 4. Interchange friendly      | .73593     | .02329   | .16468                                  |
| 5. (Interchange like debate  |            | .14908   | 06883                                   |
| 6. (Topic clear)             | 00073      | .58068   | 06750                                   |
| 7. Voices friendly/relaxed   | .65148     | 08389    | .07189                                  |
| 8. (No touching)             | .22205     | .22518   | .06730                                  |
| 9. (Spoke slowly/deliberate  |            | .55446   | .16309                                  |
| 10. Interactants on same sid |            | .09784   | .02677                                  |
| ll. (Talked like politicians |            | .24297   | 35880                                   |
| 12. Control was in group     | .11639     | .06397   | .26039                                  |
| 13. (Wanted different outcom |            | .07178   | 08093                                   |
| 14. Vocabulary easy          | .06495     | 33109    | 20976                                   |
| 15. Gestured in place of wor |            | .13295   | .33460                                  |
| 16. (In conflict)            | .47906     | .04960   | 14633                                   |
| 17. Sentences left unfinishe |            | .59192   | .20178                                  |
| 18. Talked like friends      | .58858     | .20635   | .19933                                  |
| 19. (Interchange formal)     | .59144     | .36074   | .00255                                  |
| 20. Flow of talk unclear     | 10550      | .59682   | .14249                                  |
| 21. Um hum or "Yes"          | .09855     | .47002   | .35553                                  |
| 22. Relaxed posture/movement |            | .08626   | 02914                                   |
| 23. All said same thing at o |            | .40207   | .43102                                  |
| 24. Same goals               | .60246     | .07360   | .13806                                  |
| 25. (Voices carefully        | ••••       | ••••     | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| controlled)                  | .01305     | .54485   | 04020                                   |
| 26. (Gestures controlled)    | 09477      | .34524   | 36573                                   |
| 27. Supportive of each other | .67636     | 10312    | .23844                                  |
| 28. (Turns long)             | .25695     | .19789   | .23642                                  |
| 29. Left end of turns hangin |            | .65520   | .21833                                  |
| 30. Nodded supportively      | .31331     | .17390   | .36301                                  |
| 31. (Vocabulary difficult)   | .07561     | .17856   | 52607                                   |
| 32. (Followup on comments)   | 13328      | .12973   | 39494                                   |
| 33. (Eye contact cold)       | .62102     | .20708   | .15460                                  |
| 34. Simple sentences         | .14340     | 07611    | 27401                                   |
| 35. Appeared warm/friendly   | .78840     | .09599   | .14468                                  |
| 36. (Each wanted to control) | .46418     | 19055    | 25716                                   |
| 37. (Stress on important wor | ds) .04245 | .13171   | 38228                                   |
| 38. Eye contact relaxed/     | •          |          |   |
| friendly                     | .78459     | .12641   | .05071                                  |
| 39. (Complex sentences)      | .22213     | .00588   | 24529                                   |
| 40. United in what wanted    | .61950     | 04259    | .08968                                  |
| 41. (Careful in speech acts) | .18066     | .59649   | 10528                                   |
| 42. (Divided into sides)     | .66538     | .15999   | .04104                                  |
|                              |            |          |   |

\*Items recoded with reverse values are enclosed in parentheses

Table 3 (cont'd)

| 43. Repeated each other's we | ords .03003 | .08350 | .17475 |
|------------------------------|-------------|--------|--------|
| 44. Excited, talked at once  | .08896      | .48337 | .56365 |
| 45. (Tried to put each other | r           |        |        |
| on the spot)                 | .68599      | 01698  | 21458  |
| 46. (Appeared formal/stiff)  | .66973      | .24200 | 07295  |
| 47. Wanted same outcomes     | .61296      | .07203 | .09743 |
| 48. (Ends turns decisively)  | .18235      | .60249 | 03470  |
| 49. (Voices tense)           | .43686      | .44485 | 18742  |
| 50. Spontaneous in speech a  | cts .35395  | .47881 | .13589 |
| 51. (Hostile or unfriendly)  | .78311      | 02477  | .07363 |
| 52. Hesitated or stumbled    | 08954       | .63457 | 01468  |
| 53. (Tension in posture)     | .65456      | 02186  | 09870  |
| 54. (Not cooperative)        | .73734      | 12062  | .08583 |
| 55. (Thoughts complete)      | .05621      | .74569 | .13536 |
| 56. Gave support signals     | .40064      | .15131 | .31266 |
| 57. (Like debate)            | .64263      | .03970 | 13774  |
| 58. (Careful in word choice  | .22846      | .67669 | 23637  |
| 59. (Interruptions angry)    | .60379      | 13954  | 19305  |
| 60. Spontaneous              | .33463      | .41846 | .13693 |
|                              |             |        |        |
| Percentage of variance       |             |        |        |
| accounted for                | 67.0        | 21.7   | 11.3   |
|                              |             |        |        |

were measures related to goal relationships between interactants (e.g., items related to cooperation, being on the "same side" of the issues, relative amount of conflict, likeness to debate, etc.) and measures related to affective aspects (e.g., relative friendliness, formality and expression of supportiveness). These items loaded consistently on distance in both analyses. In the total item analysis, the distance factor accounted for 67% of the variance; in the common item analysis, this factor accounted for 58.4% of the variance. In the common item analysis, coefficient alpha for the 17 items loading on the distance factor was .92.

For the other two factors, structuring and coherence, there was some overlapping, with a few items loading on one

factor in the common items analysis and on the other in the total items analysis. In general, however, structuring was defined by measures related to relative spontaneity (e.g., the interactants' care in choice of speech acts and wording), clarity of direction (e.g., in the flow of the interaction and the completeness of sentences), and verbal back-In the total item analysis, floor issues also channels. loaded on this factor (e.g., the degree to which speakers all talked at once). In the total item analysis, the structuring factor accounted for 21.7% of the variance; in the common items analysis, this factor accounted for 28% of Coefficient alpha reliabilities for the ten the variance. items included in this factor in the common items factor analysis was .83.

The factor defining the third set of items, coherence, was limited to elements of vocabulary and sentence structure in the common items analysis (e.g., relative difficulty of vocabulary and complexity of sentences). Items appearing in the total item analysis included other coherence work descriptions like "Speakers followed up on each other's comments." But key coherence work expectations like length of utterance did not load clearly on any factor in either analysis. In the total item analysis, the coherence factor accounted for 11.3% of the variance; in the common item analysis, this factor accounted for 13.6% of the variance.

The coefficient alpha reliabilities for the four items included in this factor in the common items analysis was only .70.

Factor scores from the common items factor analysis were computed, producing three scores per respondent and preserving the variation present from all 34 common items on each factor. Because the use of factor scores in the analysis made the three dependent variables necessarily orthogonal, three separate analyses of variance were computed. With excerpt-stimulus nested within situation and situation crossed with medium, the model is

$$Y_{ijk} = \mu + \alpha_i + \beta_j + (\alpha\beta)_{ij} + \gamma_{k(j)} + (\alpha\gamma)_{ik(j)} + \epsilon_{ijk}$$

Since the random variable excerpt-stimulus is nested within situation,  $\beta_j$  is tested against  $\gamma_{k(j)}$ . The appropriate error term for  $\alpha_i$  and  $(\alpha\beta)_{ij}$  is the residual of the Medium X Situation two-way table,  $(\alpha\gamma)_{ik(j)}$ , which is the interaction effect of  $\alpha_i$  and  $\gamma_{k(j)}$ ;  $(\alpha\gamma)_{ik(j)}$  and  $\gamma_{k(j)}$  are tested against the within-cells error term.

#### Results

# Hypotheses and Research Question 3

Hypotheses 1, 2 and 3 predicted differences between situational conditions in the observations made about communicative code choice by respondents in each medium. The summary for distance as the criterion variable (Table 4)

Table 4

Summary Table: Analysis of Variance with Distance as Criterion Variable

| SOURCES OF VARIATION SU            | SUM OF SQUARES | DF  | MEAN SQUARE | Ĺτι      | SIGN. OF F |
|------------------------------------|----------------|-----|-------------|----------|------------|
| Constant                           | 0              | 1   | 0           |          |            |
| Situation                          | 92.18670       | ٦   | 92.18670    | 76.10292 | .001**     |
| Medium                             | 3.58431        | 2   | 1.79215     | 3.29823  | 060.       |
| Medium X Situation                 | .14873         | 7   | .07436      | .13686   | .874       |
| Stimulus within Situation          | 4.84537        | 4   | 1.21134     | 2.18435  | .071       |
| Medium X Stimulus within Situation | 4.34695        | ھ   | .54337      | .97983   | .452       |
| Residual (Within Cells)            | 129.76596      | 234 | .55456      |          |            |
|                                    |                |     |             |          |            |

\*\*p < .01

reveals a significant main effect for situation (p < .001). Neither medium nor any of the interaction terms was significant. Since the significance level of medium was .09, deviation contrasts were used to probe the effect of that independent variable. In a series of contrasts computed, none of the three estimated parameters for the media conditions was significantly different from the grand mean or from either of the others, indicating that situation accounts for the variance in observations of code choices related to distance. This supports hypotheses 1, 2 and 3 and it provides a partial answer for research question 3: There appear to be no differences among media in the identification of communicative code choice elements related to distance work.

For the second factor, structuring (Table 5), there were no significant main effects and no interaction effect for medium and situation. Both interactions including the nested random variable, stimulus excerpt, were significant.

Due to the empty cells present, the parameters of these interaction effects were not estimable (Hull & Nie, 1981) and could not be probed through the use of contrasts. (See Table 8 in Appendix C for the overall factorial design display, including the means for each factor by situation and medium). Probing the effects for medium, however, revealed a significant contrast between the written condition and the grand mean (p < .007), but no significant contrasts for the audio (p = .076) or video (p = .166) conditions. Helmert

Table 5

Summary Table: Analysis of Variance with Structuring as Criterion Variable

| SOURCES OF VARIATION               | SUM OF SQUARES | DF MI | DF MEAN SQUARE | દય      | SIGN. OF F |
|------------------------------------|----------------|-------|----------------|---------|------------|
| Constant                           | 0              | 1     | 0              |         |            |
| Situation                          | 33.42107       | 7     | 33.42107       | 5.81377 | .073       |
| Medium                             | 10.82596       | 7     | 5.41298        | 4.05113 | .061       |
| Medium X Situation                 | 7.32761        | 7     | 3.66381        | 2.74203 | .124       |
| Stimulus within Situation          | 22.99440       | 4     | 5.74860        | 9.94154 | *          |
| Medium X Stimulus within Situation | 10.68932       | ∞     | 1.33617        | 2.31074 | .021*      |
| Residual (Within Cells)            | 135.30824      | 234   | .57824         |         |            |
|                                    |                |       |                |         |            |

\*p < .05

contrasts indicated differences between written and audio (p = .007), written and video (p = .012), but not between audio and video (p = .773). Thus, while the analysis of variance with structuring as the criterion variable does not lend support to the hypotheses, the deviation contrasts provide some information for Research Question 3: There is an indication of differences between media in relationship to structuring work.

For the third factor, coherence (Table 6), there were no significant main effects and no interaction effect for Again, while both interactions medium and situation. including the random nested variable, stimulus excerpt, were significant, the presence of empty cells precluded estimation of the parameters of these interaction effects; no contrasts were able to be computed. (Again, see Table 8 in Appendix C for cell means by factor). Deviation contrasts indicated no significant differences between any medium and the grand mean, and no contrasts between media were found using Helmert contrasts. The analysis of variance with coherence as the criterion variable thus provides no support for the three hypotheses. And, with regard to Research Question 3, there appear to be no clear contrasts among media related to coherance work.

# Research Questions 1 and 2

Research Questions 1 and 2 addressed the 24 items not included in the common item analysis. Since a factor analysis conducted with the sample size of 84 for each

Table 6

Summary Table: Analysis of Variance with Coherence as Criterion Variable

| SOURCES OF VARIATION SUM           | SUM OF SQUARES | DF  | MEAN SQUARE | Ēų      | SIGN. OF F |
|------------------------------------|----------------|-----|-------------|---------|------------|
| Constant                           | 0              | ٦   | 0           |         |            |
| Situation                          | 1.00039        | -   | 1.00039     | .20262  | .676       |
| Medium                             | 13.32092       | 7   | 6.66046     | 4.08950 | 090.       |
| Medium X Situation                 | .77223         | 7   | .38612      | .23707  | .794       |
| Stimulus within Situation          | 19.74887       | 4   | 4.93722     | 8.10578 | * 0        |
| Medium X Stimulus within Situation | 13.02940       | Φ   | 1.62867     | 2.67391 | **800*     |
| Residual (Within Cells)            | 142.52893      | 234 | .60910      |         |            |
|                                    |                |     |             |         |            |

\* p < .05

<sup>\*\*</sup> p < .01

medium would not produce stable factors, a series of t-tests for each medium, including all 24 noncommon items, was conducted. Because the items were all coded to reflect higher values as expected for negotiation at the competitive pole and lower values expected for negotiation at the cooperative pole, one-tailed t-tests were used. The alpha level was protected by computing the critical value of p at (.05/24), p = .002.

As shown in Table 7, not all items were significant in distinguishing the two types of negotiation situations. items failed to produce a significant difference regardless of medium (#11, #15, #26, #37, #59). Of the 19 items for which a significant difference in the expected direction was found in one or more of the media conditions, 11 were correctly predicted by the written medium respon-Of the items remaining in the audio medium condition, respondents identified ten for which they had information in the audio channel (and identified them in the expected direction) and predicted nine (all but one of the remainder) in the expected direction. In the video condition, where respondents all the information had possible in mediated observation, only ten of the 19 were identified as distinguishing the two situations, but all ten were in the expected direction.

Table 7

t-Tests on Noncommon Items

Significance Tests\* by Medium (DF = 82)

| ITEM   |                         | WRITTEN       | AUDIO                 | VIDEO |
|--------|-------------------------|---------------|-----------------------|-------|
|        |                         | 1             |                       | 1 0   |
|        | Voices triendly/relaxed | * <000.       | *0000                 | .0055 |
| œ      | š                       | .001*         | .015                  | .256  |
| •<br>6 | slowly                  | *0003         | <b>*</b> 000 <b>*</b> | *000* |
| 11.    | d like                  | 900.          | .120                  | .455  |
| 15.    | estured in place o      | .369          | .103                  | .380  |
| 18.    | like                    | <b>*</b> 000° | <b>*</b> 000 <b>*</b> | *000* |
| ä      | 3tr                     | •004          | *000*                 | .0035 |
| m      | ame thing               | .367          | *0000                 | *0000 |
| Ŋ      | Ö                       | .152          | *0000                 | .0055 |
| ø      | 8                       | .360          | .483                  | .105  |
| σ      | ш                       | .0015*        | <b>*</b> 000 <b>*</b> | *0000 |
| 30.    | d supportively          | .0165         | .0015*                | .022  |
| 33.    | (Eye contact cold)      | *000*         | *000                  | *0000 |
| 35.    | dd                      | *000°         | *000                  | *000* |
| 37.    | on important            | .191          | • 500                 | .177  |
| ω      | \                       | <b>*</b> 000° | *000*                 | *000* |
| 44.    | ,                       | .083          | *000                  | *000* |
| 46.    |                         | *000*         | *000*                 | *000* |
| 48.    |                         | .013          | *000*                 | .0025 |
| 49.    | (Voices tense)          | 600.          | *000*                 | *000* |
| 52.    | sit                     | .045          | *0000                 | .088  |
| 53.    | ni no                   | .001*         | • 0005                | .0125 |
| 56.    | ve suppor               | *000          | *0000                 | .705  |
| 59.    | (Interruptions angry)   | .003          | .0115                 | •003  |
|        |                         | :             |                       |       |

p < .002 \*adjustment to protect alpha level: \*\*reverse coded

#### CHAPTER IV

#### DISCUSSION OF THE INTERPRETATION STUDY

# Hypotheses

Hypotheses 1, 2 and 3--that, regardless of medium, observations of communicative code choice elements made by respondents reading, listening to or viewing sample excerpts of inter-organizational and intra-organizational negotiation interaction will differ significantly in the two situational conditions--were supported by the findings of this study in relationship to the distance factor, but not in relationship to the factors of structuring and coherence. How can this discrepancy be explained? First of all, the rule sets were described for the overall pattern of skill involved in negotiation competence, which includes both production and interpretation aspects. For interpretation, it is likely that the most salient aspect is not the means by which one's fellow interactants communicate the definition of the situation -- but that definition itself, particularly as it relates to mutual goals and role expectations. Distance work, as proposed in the rule sets, as well as defined by the items loading on the distance factor in this experiment, is focused on the importance of goals and role relationships as embedded in situation. Thus, it is not surprising that effect of distance shows up so strongly in the the observations of respondents to the excerpts of interaction in contrasting goal-oriented situations. The fact that situation accounts for the variation in interpretation of distance, regardless of the medium, attests to the importance of the link between situation and distance work in the interpretation process. Thus, given the results of this study, one might argue that goal and goal-appropriate relational information constitute the major interpretive standard for observers in making sense of situated differences in interaction.

Nonetheless, the findings of this study require an accounting of the poor showing of structuring and coherence as factors available to observers/interactants in the interpretation of interaction. First, it may be argued that the effect of an observer's awareness of distance work as the important defining element obscures the means by which that definition is achieved in structuring and coherence work. If the process of interpretation of interaction is a kind of gestalt impression, then individual aspects of the ongoing interaction may not be available to the consciousness of observer/interactants. The nature of the gestalt is to put together a number of elements operating at once; thus the overall distance work impression is the salient interpretive measure.

Second, the fact that observers interpreted the situations as different in their creation of distance regardless of any effect for media, may indicate that, with regard to the interpretation of distance, the effects added by more channels of information are simply redundant, again indicating the strength of the basic distance-creating factors. The strength of the finding for distance may account for the absence of other interpretive effects.

Nonetheless, the results also point to the differences between media in structuring aspects of interpretation. The contrast of the written medium with the grand mean and the lack of such a contrast for audio and video conditions indicates some recognition of the presence of a written-oral contrast as part of interactants' interpretive equipment (Ong, 1982). As will be discussed in relationship to the non-common item findings, there are specific aspects of the requirements of each medium that may be operative in an observer's ability to extract information from that medium, particularly regarding structuring work.

The experiment reported here does not provide the "best test" of observers' ability to detect structuring work in interaction. The brief excerpts, each five minutes or less, did not provide the sense of the larger patterns over the course of the interaction between or among the teams. Thus, observers would not have been able to assess the impact of some structuring moves. Moreover, each observer saw only one of the excerpts; without the comparison between several excerpts of these interactants or the experience of a larger chunk of the total interaction, they may have had no baseline from which to assess the relative impact of structuring

moves (for a discussion of the need for comparison in the assessment of structuring, see Erickson & Shultz, 1981).

As a check on the validity of the Interpretation of Interaction Scale, ten students who were unable to be scheduled for the experiment itself were asked to view, listen to or read two of the excerpts, one from the more competitive negotiation situation and one from the more cooperative. In their "free comparisons" of the interaction in the two situations, some structuring observations came through quite clearly, indicating that the sort of information used in applying an interpretive standard related to structuring requires the ability to compare interaction moves.

Coherence work is probably the most tacit of the three factors when probed as part of the interpretive skill of negotiation competence. In the rule sets, most of what is described as coherence work is employed in the service of creating the goal definition of the interaction situation, for example the use of technical or formal word choice is at once more explicit in defining connections and more distancing in creating relationships. Here again, interpretation of the <a href="end-was-quite-clear">end-was-quite-clear</a> in the results of the study, while awareness of the <a href="means-may-have-been-eclipsed">means-may-have-been-eclipsed</a>.

But the experiment itself may have made it difficult to assess the impact of coherence work as an interpretive standard. One of the important aspects of the coherence work rule description is the awareness of the presence or

of shared assumptions as contributing to the absence production/interpretation of coherence work in interaction. While interactants themselves could be expected to assess those assumptions and perhaps to evaluate the impact of coherence work related to the context, observers of an interaction would be at a disadvantage. Again, having noninvolved observers view brief excerpts in medias res obviated any awareness of this type of background knowledge. And the topic -- school board and teachers union issues -may have further constrained the ability of observers to interpret coherence-making work. Thus, the experiment did not provide a suitable test of the use of coherence work as an interpretive standard.

# Research Question 1: Projecting from Written Information

Research Question 1 asked how well the written medium encodes information for interpretation. An examination of the 11 items identified as distinguishing the two situations in the predicted direction (p < .002) gives some limited evidence for an interpretive frame, particularly if distance work is seen as the source of that frame. Nine items included descriptors that marked the predictions as clearly or implicitly relational, thus connected to the other distance work observations in the common item analyses. For example, in the written condition, observers "imagined that" to a greater degree in the cooperative situation than in the competitive situation, voices would be friendly, interactants would talk like friends, their eye contact would be

warm, their appearance would be warm and friendly, they would touch each other, and they would give support signals. For two items the frame extended to items not specifically tied to relational terms — that interactants in the cooperative situation would not use slow and deliberate speech, and that they would leave the ends of their turns hanging.

In this analysis of projected items, <u>goal</u> appears to be key in the interpretation of interaction, given the written medium condition, but there is some indication that an overall interpretive frame has been applied to these responses as well.

# Research Question 2: Projecting from Audio Information

Research Question 2 asked how the added information of the audio channel might affect interpretation, particularly in predicting nonobserved items. Of the 19 items left after the five items nonsignificant throughout had been eliminated, 18 significantly distinguished the two situations in the audio condition. Of these 18, however, ten were responses to observed behavior, all related to the vocal channel. For example, the respondents who operated with audio channel information distinguished the two situations as differing in the presence/absence of tension, deliberation, or friendliness of the vocal channel and in relative hesitation, tentativeness, and overlap of utterances.

In aspects projected to the visual channel, differences which followed expectations of the rule sets included the relative relaxation of posture and movement, degree of warmth of eye contact, and overall warmth and supportiveness communicated visually. The lone nonsignificant item related to touching, where responses appeared random.

Only in this medium did items without some reference to relational outcomes (e.g., "friendly") indicate that observers could identify patterns consistently parallel to the expectations of coherence and structuring work (e.g., in items related to deliberateness, tentativeness and overlap). Perhaps the focusing of attention on the vocal channel required by that medium created clear impressions for observers; for whatever reason, these data appear to support the inference that an interpretive standard is being used to project nonobserved behavior.

# Analyses of Noncommon Items across Media

Finally, the puzzling results of the video medium set of noncommon items give additional information about the written and audio conditions. While the most information relative to those two other conditions was available in this condition, responses to only ten of the 19 items distinguished significantly between the two situations. Of interest are the nine items which significantly distinguished situational differences in the audio condition but failed to do so in the video condition. Four are items in which the vocal channel is focused: Friendliness and

relative control of voices, amount of hesitation in speech, and relative definiteness in turn endings. Four related to the information present only in the video channel: relative relaxation in posture and movements, and use of nods and other supportive signals.

In ll items, however, observers in the video condition agreed with observers in the audio condition, ten of them identifying significant situation differences. Interestingly, these items represented relational information (e.g., talked like friends, eye contact warm), coherence information (e.g., relative deliberateness of speech) and structuring information (e.g., floor descriptions like "talked all at once").

The fact that items identified or predicted in the audio condition should conform to the rule expectations in more cases than those same items in the more informative video condition is puzzling at first. However, it may best be accounted for in noting that the audio condition provided a clear focus on one channel, allowing use of the interpretive frame to predict unobserved behaviors. The video condition requires harder work on the part of the observers, or at least provides them with more information to deal with, so that, if another channel is given primary focus, important cues related to the audio channel may be missed. In any case, the overlap in more than half the items argues for some consistency in the pattern, if not for the unambiguous application of a single interpretive standard.

Again, some attention should be paid to the limits of this study in probing interpretive skill of observers. One potential problem is clear in an examination of the items which were neither identified nor projected in any medium in the way predicted by the rules sets. Five items failed to distinguish between the two situations in any medium; two related to gestures, one to stress on important words, one to characterization of the interaction as like that of politicians, officials or professors, and one to the interruptions as angry.

That these fail across all three media conditions is interesting. For those related to gesture and voice (where the items appeared random), perhaps the explanation is found in the group setting of the interactions; perhaps the respondents interpreted "gestures" and especially "controllgestures" as appropriate only to public speaking situations. Or perhaps "control" is too strong a term, implying a denial of the use of other, more natural qestures. Similarly, perhaps the identification of stress was interpreted in such varying ways (from the normal stress of emphatic speech to the histrionic stress of orators) that any distinctions were wiped out. These items need to be recast in other terms before one might evaluate whether the tacit knowledge implied in the rule set has really been tested. Both gesture and vocal stress operate as naturally redundant in conversational speech (Bennett, 1982), and both are treated as mechanisms of oratory in other settings. The results may reflect such a confusion of standards for these observers. The item "Interactants talked like politicians, officials or professors" was intended to be a contrasting item with "Interactants talked like I would in a group of friends." The clear results for the latter indicate something wrong with the phrasing of "talked like politicians ..." Finally, while "interruptions as angry" followed the expected pattern, the scores were not strong enough to meet the adjusted alpha requirement.

In summary, regarding Research Questions 1 and 2, there are only seven of 24 items that vary in the same way across all three conditions, giving very limited support to the notion that the items not present as information still follow the patterns of conditions of more information, and hence of the rule set. However, those items which do not follow such a pattern raise questions both about the ability of observers to project nonobserved characteristics of interaction and about the degree to which specific items in the rule sets represent the tacit knowledge of interactants.

# Research Question 3: Comparisons across Media

Research Question 3, concerned with the differences between and among media, was tested by the three analyses of variance using the factor scores from the common items analysis, as well as by the findings of the t-tests of noncommon items in each medium. First of all, sufficient information to distinguish between relatively more competitive and

relatively more cooperative negotiation interaction is clearly there in each of the media when distance is used as the criterion variable. Nor are there any significant differences for media in relationship to distance. These data provide evidence for a consistent standard by which observers of stimulus exerpts of the two types of interaction are able to interpret that interaction on a set of scales reflecting distance work elements.

The media, however, as demonstrated in both the analysis of variance using structuring as the criterion variable and deviation contrasts for medium in that analysis, as well as the noncommon items analysis, appear to provide different problems for the observer making an interpretation. The written medium clearly provides a sense of the goal definition of the situation (seen in the distance analysis), but with regard to structuring, something is different with the written medium in comparison to the other two. Most of the significant predictions in the noncommon items are tied to distance cues as well.

The audio medium appears to focus attention on the vocal channel. It was most consistent of the three media in identification and prediction of behaviors as expected by the rule sets for structuring. The video medium, while providing the fullest information of the three media, did not provide observers with as clear a picture of the

interaction as the audio medium. This may mean that the movement of structuring work is harder to "track" when there is more information to take in.

The analysis of variance with coherence as the criterion variable provided almost no clear conclusions, except that the mechanisms of coherence work are not consciously monitored as part of the observer/interactant's interpretation process. Perhaps more than the others, coherence rules are recognized only in the breach — they are so taken for granted as working along with other aspects of the creation of the definition of the interaction that only if something goes very wrong do we as interactants consciously attend to them at all (see Cook-Gumperz, 1975; Erickson & Shultz, 1981, 1982).

In looking at the findings as a whole, another observation or conclusion may be made. The three kinds of work involved in creating negotiation appear to operate in very different ways. If there is an interpretive standard applied by interactants to determine what the goal definition and role relationships of an interaction are in an ongoing way, it is the distance work rules which provide the mechanism to do so. Structuring work, present in the larger patterns of the interaction may do so as well, but this was not adequately tested in this study. What is clear, however, is that structuring work is sensitive to the degree to which different media provide information and to the differing processes that interactant/observers bring to

these differences in "text." Finally, the absence of clear findings for coherence work may be seen as an argument for its embeddedness in the overall patterns of interaction — limited in its conscious interpretation by observer/interactants unless some problematic or troublesome breach of expected patterns occurs.

#### CHAPTER V

## IMPLICATIONS FOR THE CONTINUED STUDY OF NEGOTIATION COMPETENCE

The conceptualization of negotiation competence as the ability of adult speakers to distinguish and to draw upon a continuum of communicative code choice in order to interpret and to create or affirm both the relationships between interactants and the limits of their decision-making processes highlights the dual nature of this ability. Like other human abilities, this competence is both tacit and explicit, both unconscious and conscious in its functioning in day to day interaction. Like other human abilities, too, it may be partially or fully developed, applied carefully and consistently or misapplied.

The specification of the kinds of negotiation work and the rule sets for interaction at poles of a negotiation continuum can allow researchers to probe the functioning of this ability and come to better understand its operation in communicative processes. This is important not only in providing a deeper sense or understanding of how communication functions in everyday situations, but also in allowing for development of ways to assist persons who have not developed or have not sufficiently refined their ability to make their way in these everyday situations (see Argyle, 1980).

To be helpful in either way, however, the rule sets must be tested and refined, reflecting more closely whatever is that internal standard by which competent members of the speech community interpret and produce situated interaction. How well do the proposed rules for distance work, structuring work and coherence work reflect that standard?

Three studies related to the production of negotiation interaction provide some initial support for the rule sets described for negotiation work. Diez (Table 1, 1983a) examined the talk produced in three different negotiation interaction role-playing sessions, including both interorganizational and intra-organizational group interactions. Her results confirmed that lexical and structural factors distinguish between the kinds of talk produced in the two situations, across three sets of individuals involved in the interactions. While primarily providing support for the coherence work rules, these differences positively reflected rule patterns related to distance work as well. Her analysis of two structural factors -- turn-taking and backchannelling -- also provided initial support for the distance and structuring rules involved. While the items for distance work specifically related to pronoun use were unable to produce such clear differences, the support of the formality/informality distinction provided by the lexical and syntactic structural measures was positive.

Taken together, Donohue et al. (1983), Diez (1983) and Putnam and Jones (1982b) provide positive support for the structuring work rules about differences in choice of speech acts and in ordering of speech tactics into strategies in distributive and integrative bargaining settings. While more needs to be done to probe the differences in this larger organizational patterning of interaction, the initial results provide positive impetus to continue such work.

The study reported in Chapters II - IV suggests that, to observers, the rules for distance work are of primary importance in the interpretation of interaction along the continuum described. Regardless of the medium involved, observers identified the two situations as significantly different in relationship to distance work, based responses to scales that tapped their observations communicative code elements. This may mean that, in these situations at least, distance work or relational information is most salient to persons viewing others in interaction settings. And, although structuring and coherence work did not contribute significantly to those perceived differences, it may be that the elements identified in the production study as markers both of coherence and distance are perceived primarily in regard to their relational impact.

The examination of the items NOT observed in the written and audio conditions, moreover, provides some support for the notion that these rule sets operate as a "frame" or a set of expectations about what goes together in interaction

settings. Nine of the items not included in the written and eight of the items not included in the audio stimulus excerpts as available information nonetheless followed the expected pattern for contrasting the two situations.

Overall, there is reason to continue to pursue examination of the proposed rule sets related to the conceptualization of negotiation interaction work at two poles of a continuum. The rule sets are theoretically useful in describing the tacit knowledge of competent adult speakers in relationship to a specific type of group interaction. There are implications as well, however, for the practice of interaction and for the development of more sensitive and effective interaction skills. A really competent interactant not only recognizes that there are these polar positions that help to define interaction — he or she is able to use that knowledge to engage in and to guide interactions in effectively shaping and meeting group goals.

For example, while the continuum presents interaction as having two poles, interactants commonly realize and need to be increasingly aware of the need for interaction at any point on the continuum to involve some level of cooperation. The "rules" of turn-taking described for dyadic interaction (e.g., Sacks, Schegloff & Jefferson, 1974) and applicable as well to most formal exchanges are an orderly production mechanism, but one that works only when all interactants "cooperate." In the debriefing, some of the respondents noted that cooperation seemed to be a hallmark of the

interactants in the competitive situation. When questioned about what they meant, these respondents explained that the interactants were very polite in letting each other speak. In the cooperative negotiation interaction condition, in contrast, some respondents indicated that the talk-overs and interruptions of shared floor interaction appeared very impolite and, hence, uncooperative to them. Fortunately, the sense of "cooperative" as primarily relating to group goal sharing was reflected in sufficiently unambiguous statements in other scale items. But the confusion indicates not only the complexity involved in the multiple levels of interpretation possible, but also the potential for "flawed" interaction if persons respond to "appropriate" behaviors as "inappropriate."

The need to include an element of multiple-leveled interpretation is clear in another aspect of the interaction typical of negotiation settings. A skill not explicitly reflected in the rule sets but characteristic of effective interactant's ability to combine rules, is the ability to disagree about issues without creating relational messages of hostility. This, too, became clear in debriefing remarks of respondents. Some identified the interaction at the cooperative pole as being marked by conflict between interactants. Here it became clear that, as the interactants in the more cooperative situation hammered out their group position by suggesting and testing ideas, they were interpreted as being in conflict, or even hostile toward one

another. This suggests that part of the skill required of a competent negotiator is the ability to distinguish differences of position that are at the heart of the goal-oriented relationship among interactants from those that are on the surface. Particularly important is to be able to recognize that these surface disagreements are actually in the service of the larger, shared-goal agreement.

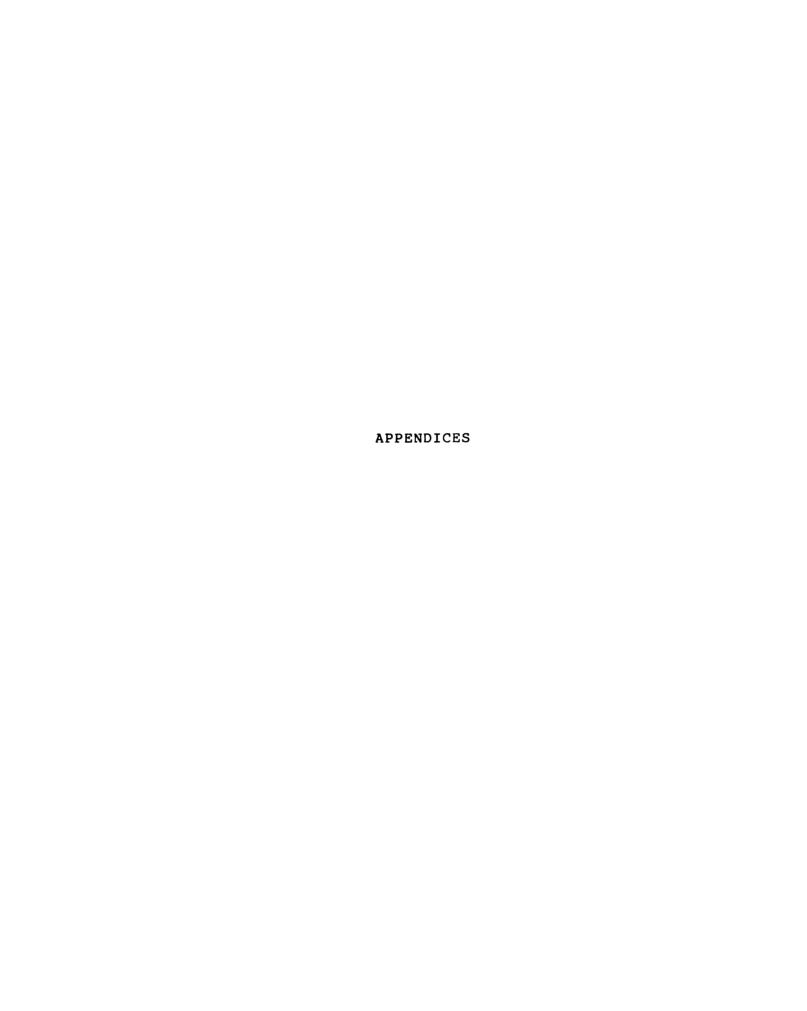
Recent work by O'Keefe and Delia (1982) suggests the importance of recognizing situated interaction as involving multiple goals. They particularly point to situations that involve social influence processes — a category clearly including negotiation interaction. Such a perspective is needed in order to probe how the competent negotiator is able to recognize the multiple levels of interaction work that contribute to the ongoing definition of the situation and the progress of interactants in mutual decision-making processes.

Besides consideration of multiple goals in interaction, there are other extensions needed in pursuing further tests of the notion of negotiation competence and the rule sets proposed here. Further study, for example, should involve more naturalistic interaction settings. While, for the purposes of this experiment the role playing situations were quite useful, study must be extended to situations complicated by ongoing relationships and expectations about the long-term effects of the interaction. In such cases, the

need for multiple perspective-taking will certainly mark the effective interactant.

Finally, further work must attempt to get closer to the interpretations made by the interactants themselves. While interactants operate to a degree on the same observed behaviors that observers (like the respondents in this study) have access to, the interactants in a given situation have the invaluable resource of knowing the contextual information that frames the interaction (see Gumperz, 1982). A combination of using observers' judgments and interactants' own commentary in viewing completed interaction has been shown to be effective in work by Erickson (1982; see also Erickson & Shultz, 1981, 1982) in counseling interviews. Such a procedure would extend the findings of this study and add to the test of the rules as interpretive standard.

Clearly, negotiation as practiced by interactants is a multifaceted, complex skill. Yet the fact that people routinely do it and do it well makes it an appropriate target of study for researchers interested in the processes of communication. This study is a beginning contribution to the necessary exploration of how the interpretation and production of negotiation interaction functions within the larger ability of the native speaker to use his/her language.



# APPENDIX A

Written Transcripts of Excerpts 1-6

#### Excerpt 1: Written Transcript

This brief segment of group interaction was recorded and then transcribed. It is not the entire transcript of this group's meeting. Read it through once, carefully, and then respond to the questions which you will be given.

(FORMAT NOTE: Each speaker's turn is indicated by their letter, e.g. A, B, C. If they began after a pause, the transcript records their turn beginning at the left-hand margin. If they began while another was still speaking, the transcript indicates where the overlapping began with a \*.)

- A. Would you indicate to us the number ... hopefully a little tighter than 5 to 10 for the teachers that would be interested in the alternative career leave? Would you please indicate where these teachers are on the salary schedule?
- B. Most of them are at the top step, ten.
- A. The alternative career teachers ... not the retirement folks.

\*B. Yea,

I think that in both areas they are at the top step.

\*A. Very

top?

- \*B. Because they are the people that would have other spouses that have other jobs, that might want to try a new career and could survive. The younger teachers couldn't survive even if they took advantage of it. They don't have enough money from a second income.
- A. Well, I don't think you know that for sure, Mr. Giffin, and I

\*B. We have

done a survey, like I said, and we got some indication that some people will take advantage of it.

- A. They're at the top?
- B. They are basically people near or at the top of the schedule.
- A. O.K. Now you've gone to near or at the top. I need to know if they're at the top, are they at \$19,500 or \$15,500 or \$16,500 to \$18,500?
- B. They are at the last 3 to 4 areas, yes, and basically they are all at the top step.
- A. I would like to know exactly where they are, that is what I am asking you.
- B. O.K., we'll, we'll
  - \*A. I'm not asking you for names, I'm asking you for numbers.

- B. We'll try to provide you with that information in the future.
- Another piece of information we may need is a, D. O.K. after the caucus, is the actual numbers that are retire ... that are going to take advantage of the early incentive, and I think the reason for that is that it is very important in deciding and developing the budget. We cannot place in any budget which the state is going to review a line item that would say "we think that 5 teachers are going to take advantage of our incentives." Clearly it must be a red or black budget, and only a black budget is legal. And if we had those numbers that would help in providing money for those salary increases you're requesting. So we need to know how many teachers in fact are going to take advantage of the early incentives.
- B. We understand that. We'll try to provide you with that information.
- C. I have two questions. One of your alternative career leave ... is that locked into three total or can a person take less than 3 years?
- E. We're talking about um, maximum of ... that's a good question, a good point, we're talking about a maximum of three years, o.k.
- C. But they could take less than three years.
- E. Yes. One or two or three, o.k.
- C. Second question is the only amount that you've given us in regard to possible funds in our budget is about a little \$76,000. Did you have any other areas to where you felt we could deal with changing or making adjustments in our budget besides that, because \$76,000 really doesn't go anywhere in comparison to what you're asking.
- B. I'm the one that made the indication to that amount of money. All we are indicating is that, at this point, is that the budget can be shifted. That responsibility is yours. We're sure that if you take a close look at it you can find other areas where the budget can be shifted. We don't think it's necessarily either our responsibility or our prerogative to tell the board how they ought to, you know, where every dollar ought to go. We're not going to play that game. We feel that the board, in taking a close look at the budget, can find other funds. But that is something you're gonna have to
- A. I think that we've indicated to you, Darrell, that we're down to the bare bones as far as the budget is concerned, in looking a deficit in the face, uh, the board has looked at alternatives to this budget, and I believe my earlier statement was, that we're willing to listen to any creative solutions to the money problem that the E.A. has ... and we are looking in the face of a, a reduction in staff, and also a budget deficit of \$683,000. I think I've made that quite clear to you, we don't see where there can be any other adjustments at

- this point other than reduction of staff, and that's why we are here ... to see where or what it is you think can be done to find some more money. That's why we're listening to you now.
- We do have some other proposals that will be coming up В. which we hope, that will assist in gaining, not necessarily gaining money for the district but reducing the amount of money that has to be paid out. As we progress, we'll get through to them. We ... we already ... to answer your question, Michelle, we have pointed out to the board that we think that in light of the fact of 25 less teaching staff that certainly we don't need the same number of dollars in all other areas of the budget. And yet we've looked at the budget and that is the case. And I think that the board has to look at those priorities. And uh, yes, we're gonna provide you with all the information that we can but in the same time, the board has to take a look at some of the information that we've given 'em here today and determine whether or not it's valid, etc., and whether or not some changes can be made in that area. And I'd like to have Linda give you some other information, of some things in the budget that we've taken a look at, along that line.

#### Excerpt 2: Written Transcript

This brief segment of group interaction was recorded and then transcribed. It is not the entire transcript of this group's meeting. Read it through once, carefully, and then respond to the questions which you will be given.

(FORMAT NOTE: Each speaker's turn is indicated by their letter, e.g. A, B, C. If they began after a pause, the transcript records their turn beginning at the left-hand margin. If they began while another was still speaking, the transcript indicates where the overlapping began with a \*.)

- We think that it's only fair that teachers be observed over an extended period of time, and not the hit and miss kind of thing. And that regard, that the 45 minutes of observation be accomplished in one period. Although we recognize that this cannot always be done, we do suggest that no observation period be less than 15 minutes in duration. So we have flexibility there, and we're saying that we'd like to see it done in one setting, but if that isn't possible, that you set a minimum period for the observation to occur. So either 45 minutes or two separate segments or three segments of time for observation. That the first observation must be made thirty days prior to the final or the written evaluation. This to prevent administrators from coming in the last day of the semester and, and seeking to evaluate a teacher. And considering the unusual circumstances of that, we've found several cases, teachers have called, they're concerned that the administrator waits to the very end of the year and then comes in to do the evaluation when the board has a policy that books must be collected by a certain date, the report cards are due by a certain date, and pretty much in the second semester of the year, a lot of the actual teaching process has already taken place prior to the collection And we think that it's unfair, too, for of the books. an administrator to come.
  - \*B. How many incidences of those do we have out of 375 teachers?
- C. As far as we're concerned, if we have one incident, that is significant.
- B. Have we had one incident?
- A. Yes, we have.
- D. One incident? Who was the administrator? Yes, we need to know that, because if that's clearly a problem, then we need to deal with that administrator.
- A. Based on the calls we've received ...

\*B. You said one incident! Now you say calls.

\*C. What

I said was, is that one call, one problem in this area, is significant ...

- \*B. I asked you how many problems we have had in this area. And if you don't know, please say you do not know.
- A. O.K. It just does not matter.
  - \*B. It matters to us! Yes, it does matter to us, because if it is of significance that if, if administrators are going in the last day of school and evaluating teachers, and teachers are in effect not doing any teaching at the time, but collecting books and making preparations for the check-out, then we need to know how many of those, or how system-wide that is.
- A. I think you can go back and look at the dates of your evaluations and gain that information.
- B. No, we want that information from you. You indicate that it's a problem, and we need that information from you, so please provide it after the next caucus.
- A. O.K. We will see if we can't get that ...

\*B. We can't judge if it's

a problem or not if we don't know.

C. We're telling you that it is indeed a problem ...

\*D. And we need

some data to support that

- \*E. Excuse me, we reached that conclusion after surveying our people in the buildings and we did have one teacher in one elementary building that, who specified that problem. That's the only one that brought it to our attention. We are aware of that one; we have no way of knowing if it happened to anyone else. No one mentioned it or brought it up.
- B. Thank you. And we're taking your word for it, if this has been a problem. But if the problem is that the administration is not doing their job, then the board of education, if we're not aware of that, we've got a lot of administrators out there to deal with. Our question is, who are they?
- E. And we're not aware if it's board policy, for example, that the evaluations be done by a certain time or not. It did become a problem in at least one instance that we are sure of. And we have no interest in getting into personalities.
- B. No, that's not our interest either. Our interest is dealing with problems.

\*A. But you're

asking who is the person

B. And if not dealing with problems, and if we have an administrator out there not doing his job, we'd want to be aware of it. We're not going to allow you to deal with the problem in an evaluation procedure -- which is our job. And it's our job. That may be a widespread, which is the indication that we're getting, but that this is a problem, not that we have had an incident. An incident does not indicate a problem. It indicates an incident.

- E. Let me reiterate. We can't, you know, we don't ... we don't evaluate your administrators, we're not going to point fingers at people, but we do represent 375 teachers. They perceive this to be a big problem. We said it from the beginning, that it's a priority, and they've said it to us in many different ways -- in the surveys, through our discussions in bargaining, prior to our presenting this proposal on this to you and so forth. We just want to again reiterate to you that this is a priority.
- F. I don't want to get into a discussion on priority or otherwise, because that's ... but could you furnish for us the models you used to come up with that procedure? Whose models are you putting that procedure on?
- A. I don't understand what you're asking.
- F. Basically, there are several evaluation models, and that's one reason why consultants are used.

\*E. Let me answer that

\*F. And it may

not be an appropriate model for our kind of organization.

\*E. Let me interrupt. The answer is that it's ... we, it's our proposal based on the problems that we perceive in this schoool district. We developed the model ourselves. We have not taken it from other sources.

F. Well, I understand it was done on research. And that's basically what I'm asking, what research data have you used?

\*E. But we

have taken what we feel will solve the problems in the district and developed our own proposal.

- B. Do you have people who are educated highly in the areas of personnel and knowing how to fit systems to organizations? Is that what you're telling us?
- E. Will you run that by me again?
- B. I mean, you develop a model for evaluation, which is a management function, and that does come under the area of personnel.
- E. What we would
  - \*B. You're not going to share how that model developed?
- E. No, no, I just shared ... I just shared with you that we took that and developed it ourselves from what we felt as a team, based on our surveys and what the input was that came in to us, was a problem in our present evaluation system. And we feel that since we have 375 members to evaluate that certainly is something that ought to be a concern of ours. Because our members' livelihood is on the line. Nothing is more serious than evaluation.

#### Excerpt 3: Written Transcript

This brief segment of group interaction was recorded and then transcribed. It is not the entire transcript of this group's meeting. Read it through once, carefully, and then respond to the questions which you will be given.

(FORMAT NOTE: Each speaker's turn is indicated by their letter, e.g. A, B, C. If they began after a pause, the transcript records their turn beginning at the left-hand margin. If they began while another was still speaking, the transcript indicates where the overlapping began with a \*.)

- A. Well, I'm gonna, Darrell is gonna make a new proposal to you. And I just wanted to preface that.
- Fist of all, I'm gonna couch my words very carefully, so I want you to listen. We do understand the financial status of the district. And I will be very blunt. view your proposal of 3% and then laying off teachers right and left as a total slap in the face. We've been trying to find ways to move. Yes, we very much do have room to move in our salary proposal; we will not tie that salary proposal to the massive layoffs that you say are necessary. We do not believe that those layoffs are necessary. I have a salary proposal to you, for you, and I want you to read very carefully what we are trying to tell you. What you see there is not much. What we see before us on your proposal is not much. We want to settle this contract, but as long as the board insists on insulting the teachers of this district with that type of a salary proposal we are headed for war. neither side wants that. We do not want to be forced into taking any kind of drastic action. However, we may be forced into that posture if we do not see some realistic movement on the part of this board very, very If we do in fact see realistic movement on the part of this board, that is not an insult to the integrity of the 375 teachers of this district, we are willing to bargain and you will find our salary proposal also headed into the area of reality. 3% is not going to do it. Just like lopping off \$25, off our first proposal is not going to do it. And I'm not going to say anything more.
- B. Thank you. I hope you listen very carefully also ... That is, I think you've missed the point, and that is, number one, we agree with you that 3% is an insult. Agreed. At the same time we think that the 3% offered by the board is a ridiculous offer, we also think you deserve more. But given our priorities and that percent, there is no other way to get it out of the budget than to layoff staff.
- C. Then perhaps you ought to rearrange your priorities.
- B. Now listen. The insult to the teachers of this district

is not by the board of education, but by the negotiating team of the teachers. And when they decide to get off their high horse of not wanting to do our job, when we're asking them to take a shot at it ... There may be money in that budget to provide for the salary increases without reducing staff. But as long as the negotiating team for the teachers takes the position that they are not willing, for whatever reason, to do our job, when we are willing to listen to a counter budget proposal, that's their problem. We agree that 3% is an insult, we agree that you deserve more, and we think that your teachers deserve the kind of representation that would be willing to give the proposal to the board which they are willing to listen to. And until you're willing to do that, we've set our priorities, and we are willing to talk about the raises, but the cuts in the budget will come from the teaching staff. And we don't have anything else to say.

### Excerpt 4: Written Transcript

This brief segment of group interaction was recorded and then transcribed. It is not the entire transcript of this group's meeting. Read it through once, carefully, and then respond to the questions which you will be given.

(FORMAT NOTE: Each speaker's turn is indicated by their letter, e.g. A, B, C. If they began after a pause, the transcript records their turn beginning at the left-hand margin. If they began while another was still speaking, the transcript indicates where the overlapping began with a \*.)

- A. Unless, I suggest that unless you pass this proposal, then we'll put it in your handwriting.
- B. Any effort to notify a member of a bargaining team concerning the permissive
   \*C. Any effort

\*D. Any attempt

B. nature of his or her fly shall be denied to the chief spokesperson

\*D. Shall be

directed to

\*C. Shall be

directed to

- B. Oh, directed to. . . who wrote this?
- A. I did.

\*B. Did you write this? You're awful.

C. This is my suggestion, Phyllis, that we take and come up with a package

\*A. We must

- C. a package of the proposal together, but have the entire cost of that package with Kay's suggestion, that it's done with the layoff of staff, combined with the layoff of staff.
- B. That, that's been our original intention . . . all the time
- A. Stay with that until they decide to reduce the budget. And if they don't, then whatever package that we finally deal with will be funded by the layoff of staff. And we know that we already have to, what, layoff 9 or 22

\*B. 11

\*C. 11

A. Eleven just for the current budget. So we'll take it, we'll come to an agreement. We'll package them and that will be at the expense of staff. And if they have another suggestion, that's fine. We'll listen to it.

\*C. No, 16. We've

got to layoff 16 teachers to balance, in order to balance the budget.

\*B. To balance?

- C. In order to balance the budget.
- A. We can come up with an agreement on all the items, and

we can go through all the regular, you know, negotiations, and then that will be totally funded by layoffs.

\*B. B y

the layoff of staff.

\*C. Right

A. And then they have a legitimate choice. They can either accept that or reject that.

\*D. Yeah.

B. What if we use their ... Excuse me. In an effort that we made an attempt to cut the budget, what if we use their budget cuts, or part of them? And then layoff staff

\*C. Well, you

accepted them, but as you told them ...

A. I agree, though. That's good, 'cause if we accept what they said, then we can really show our intent.

\*D. But you can't \*B. But \$283,000?

C. Could part of our rationale be that we're going to look to the consultant relative to making some recommendations about class size? That, since we're going \$150,000, class size ought to be at

\*B. I don't think we should deal with the rationale.

A. I think we should muddy the water ...

\*D. No rationale, we're just keeping things the way it is, and taking away their big fear

\*B. Yeah, yeah. We don't have to deal with rationale ... we ... we're trading off our evaulation language for the \$150,000 we're going to give them when we cut

\*C. Yeah, it seems like we're paying to buy language
\*B. Yes, but it's costing them teachers
\*C. But we're still

not going to have a balanced budget ...

\*A. Yes we will! We're going to cut staff to have a balanced budget.

\*C. We're gonna

give 'em their money, cut staff and we'll

B. We're gonna cut staff ... and one of the cuts we're gonna make is that they requested -- is gonna be our consultant ... we're making a concession

\*A. It's against the law

not to have a balanced budget

- B. And that's gonna keep them from having to lose more teachers than they would have
- D. And it gives us our proposal on evaulation.
- C. Considering their evaluation procedure also has ... but we weren't gonna give them that anyway. But was an ultimate, the grievance procedure, now how many grievance procedures do you know where you can grieve procedure but you can't grieve content. And they're talking about grieving everything, which, in the darn thing and how it's done.

- B. Oh, we have grieved content before and won
  - \*A. With just cause

\*C. Yeah

- B. Yeah ... I'm talking about if well, Mariann needs a little bit of help with this \*C. Oh, no
- B. No, O.K., no, that's O.K.
- C. I'm talking about these petty kinds of things that people do

\*B. O.K. \*A. A n d

you should come out with the fly gloves

C. But I think the whole thing with that language is ... the fact that you are retaining a major management right and you're putting the association back into its, quote, place. Not being able to tell management what they can do

\*B. N o t

being able, what they can do, how they can evaluate.

- A. I'm hungry
  - \*C. And that's more important ... we're not willing to
- B. That's more important to do than the money. That's right, that \$150,000 is nothing compared to keeping those rights.
- D. Well, let's go eat now and then meet back here at 7:00.

\*B. Yes

\*C. Good, now

I can take my aspirins.

#### Excerpt 5: Written Transcript

This brief segment of group interaction was recorded and then transcribed. It is not the entire transcript of this group's meeting. Read it through once, carefully, and then respond to the questions which you will be given.

(FORMAT NOTE: Each speaker's turn is indicated by their letter, e.g. A, B, C. If they began after a pause, the transcript records their turn beginning at the left-hand margin. If they began while another was still speaking, the transcript indicates where the overlapping began with a \*.)

- A. Should we ... should we at this time, tell 'em, is this the time right now to, on workload, to say "Look, we can live with the present contract language and pupil-teacher ratio and the duty free lunch hours"? Is this the time to do it? On workload? The only reason we did this is because we felt they were gonna come in with something less and we wanted current conract.
- D. They are agreeing, they are agreeing to a committee, and \*B. I n reduction in staff, isn't that where the committee comes in?
- D. Yeah, in the reduction of staff, and we wanted to know assignments.
- B. Why? We want something definite on this.
- A. No, but we can't agree to this proposal at all. I'm just saying, can we say on 1 and 2 and 3 in our proposal that we'll go back to the current pupil-teacher ratio of approximately 32 to 1 and we'll live with the duty free lunch time as it is, one hour, uh, fifty minute, period divided between 25 minutes for lunch and 25 minutes of duty free time?
- D. They haven't spoken to that, so I would assume that ... we wanted to go back to the original contract.
- A. Yeah, that all, the reason we made a proposal, in case they did.
- D. So if they haven't spoken to that, then we go back to status quo.
- A. Should I explore that one when they come in? Or should we package that with the reduction of staff language? "We'll give up this if you'll give up that"?
- D. Well, we could do that
  - \*B. We're, with reduction of staff

\*A. All we want is the status

quo on 4.1 and 4.4

- B. Well, reduction of staff needs to be spoken to, I mean, there is nothing in writing that says that seniority prevails, or this
  - \*A. No, it's an absolute biggie

\*B. And having that committee and allowing someone to sit there and say that doesn't do

anything unless it's written down

\*A. Not that bullshit proposal. Ain't no way that we can accept that.

- В. So I'm saying should I back off on this, back off on this now, or should I wait?
- C. I'd wait
  - \*A. And explore it with them?
- В. Make them respond to it.
- Well, Trav, get a reading for us on this staff reduction thing. If they would be willing to divide this issue into the committee being, speaking totally to assignments
  - \*A. Here you go, Bob, that's part of the thing I was gonna give you. This is just a copy. Just go back and make them answer to our reduction of staff proposal. Just tell them that there won't be any settlement till we get some answers on that!
- Well, it's upsetting that they did not respond to some В. of the issues. It makes it really hard to put them together. You know the package that \*C. Yeah
  - we had outlined.
- В. I think what I'll tell them is this. How about this, Α. Bob? I want to say, all right, the workload provisions, the provisions on ... Our proposal on workload, we're willing to look at some of the current contract, and the pupil-teacher ratio, 'cause we know you have a problem with the money. We're, want to look at return to the previous contract and the duty free lunch time and split it between the 25 minute lunch and the 25 minutes duty

\*B. Status quo \*A. And as

long as we can, you can, satisfactorily, we can satisfactorily resolve the reduction of staff proposal that we gave you.

\*B. And we can work from that, find where the problems are.

See, where we're at Α.

> \*B. What are the problems that they have with the language we gave them?

Yeah, O.K. Α.

free

If they're with the substance of it, or just some minor part? Because there is no indication

Yeah, O.K. Can \*A. O.K. you send them a message when you give them the salary? Send them

\*B. I sure as hell intend to send 'em a really strong message that "Hey, there ain't gonna be no contract, folks ... unless your get off you bullshit proposals ..."

\*D. No problem

It seems that it is something that we all are assuming, В. that everyone would understand, that people aren't gonna teach, reduce 25 more staff, and take on that whole load for a 3% increase in pay?

A. Bullshit. We might as well be walking; it's good exercise.

\*B. The people are, first of all, they're gonna be learning that there's gonna be another major reduction

\*D. I don't think we have to buy into that reduction
B. I don't buy into it, but I'm saying that, you know, that
no matter what we agree to in wages, the board is gonna
have the ability to reduce staff

\*D. Um hum, I think

\*B. They are

\*A. They have that

now.

B. They have that now. And so just settling for some kind of a salary proposal of the 3% or something is not gonna guarantee that that's not gonna happen.

\*D. Um hum

\*A. Exactly

B. There are no guarantees in that area.

#### Excerpt 6: Written Transcript

This brief segment of group interaction was recorded and then transcribed. It is not the entire transcript of this group's meeting. Read it through once, carefully, and then respond to the questions which you will be given.

(FORMAT NOTE: Each speaker's turn is indicated by their letter, e.g. A, B, C. If they began after a pause, the transcript records their turn beginning at the left-hand margin. If they began while another was still speaking, the transcript indicates where the overlapping began with a \*.)

- C. Number three. All evaluations and/or observations shall be conducted by the teacher's immediate supervisor, and/or the administrator who is familiar with the teacher's work. Number four. All evaluations shall be based on valid criteria for evaluating professional persons' performance. And, Number five. That says that in the event that the teacher feels his/her evaluation is incomplete or unjust, within two weeks following the conference with the principal, he/she may put his/her objections in writing and have them attached to the evaluation report place in the personnel file.
- D. Do you want to throw in something there, something there just sets of bells right away ... and that's the word "valid criteria." Have no idea what that means.

\*B. As estab-

lished by who?

- D. Maybe we want to throw in a committee to establish what exactly constitutes valid criteria.
- C. Well, I figured to leave it ambiguous, because then it opens the door in a grievance procedure for the burden of proof to be on the board to prove valid criteria.

\*D. No, no,

because

\*B. I f

the board sets a policy and establishes that

\*D. A grievance

procedure isn't gonna take care of that

- C. O.K., what do you want me to do, eliminate it?
- D. No, no, the language is

\*C. "Cause it says

\*A. "All evaluations shall be based upon valid criteria as established by professional committee

B. Professional study committee maybe

\*A. Professional study

committee made up of

B. Three administrators and three teachers ... five teachers

\*A. Fine, three

administrators and three teachers

\*D. 379 teachers and one

administrator

\*B. Teachers and janitors

\*A. Yeah,

yeah. All will be based upon valid criteria as established by a professional study committee made up of three teachers and three administrators ... and we can put what's his name on there -- Joe Schmo

D. Joe Schlemiel

\*B. What was the guy?

\*C. Bernie, Bernie can be on the committeee

\*A. Yeah, Bernie's

a good ol' boy. Put Bernie on there and let him get charged up

\*D. Give him

something to do

B. They have a real concern, you know, the management rights, that whole ... but I think that since we're dealing with all board members, I think that that's gonna be too burning, it's gonna set them on fire or anything

\*A. Well,

we can back off

- B. It doesn't sound like it's attacking their rights.
- A. We could even put six teachers, three administrators, and three board members on there, if that's their concern.
  - \*C. O.K., O.K. By a special study committee of three board representatives and three teachers. O.K. What I said, uh, arguing number five and then number six, is "all final evaluations are subject to all levels of the grievance procedure, up to and including binding arb." O.K. So I came down off of observations being grievable, to just final evaluations being grievable

\*D. Well, you have to understand that what you would arbitrate would be procedure, not content.

\*A. We could try it.

- C. We don't have to tell them that.
- A. Well, look, if we get binding arb, you know, if we get binding arb, we're gonna be able to evaluate that anyway. Do we even want to put that in there? Auto\*B. Pressure
- (A.) matically arbitable?
- C. O.K. So scratch this?
- A. Yeah
  - \*B. Yeah, the part about submitting to binding arb
- C. O.K. But we, you sure we don't need to say that, 'cause that's one of their priorities, to get to make it grievable.
- A. No, no because we are going to insist on binding arbitration. As the final step. And if we don't include it from the binding arbitration clauses, which we haven't and they haven't, they haven't added any

inclusions to the binding arb \*D. Exclusions

- A. Exclusions, I'm sorry. It's automatically in, unless it's excluded.
  - \*D. There's a difference
- B. Look, we're not going to get anywhere; I don't think they're gonna.
  - \*A. No, no. I don't think they're gonna. I don't see any hope. Period.
- D. I don't either. We're so damn far apart.

## APPENDIX B

Interpretation of Interaction Scale Questionnaires for Three Media Conditions

#### Group Communication Study

#### Instructions

On the next four pages are a number of statements to be used in judging the interaction you have just viewed. Please circle the number from 1 to 7 that best reflects your opinion. For instance, if you strongly agree with a statement, circle a 1. If you disagree somewhat strongly, circle a 7, and so on. If you are neutral or not sure, circle a 4. Please do not leave any items blank.

- 1. The interactants seemed eager to cooperate with each
   other.
   Strongly agree: 1 2 3 4 5 6 7 : Strongly disagree
- 2. On the average, the individual turns at talk were relatively short. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 3. The speakers' thoughts appeared clear and complete. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 4. The interchange seemed friendly.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 5. The interchange was like a debate -- one side versus the other.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 6. The topic of the discussion was always clear.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 7. The interactants' voices were friendly and relaxed. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 8. There was no touching among interactants.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 9. The speakers often spoke slowly and deliberately. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 10. The interactants appeared to be on the same side of the issues.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 11. The interactants talked like politicians, officials, or
   professors.
   Strongly agree: 1 2 3 4 5 6 7 : Strongly disagree

- 12. Control of the discussion seemed to be more in the group than in any one speaker.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 13. The interactants wanted different outcomes.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 14. The vocabulary used was easy to understand.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 15. The speakers sometimes gestured in place of words. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 16. The interactants seemed to be in conflict.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 17. Many sentences seemed to be left unfinished.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 18. The interactants talked like I might in a group with friends working on a task.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 19. The interchange seemed formal or distant.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 20. The flow of talk was hard to follow.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 21. The speakers often broke in with "um hm" or "yes" while another spoke.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 22. The speakers were relaxed in their posture and movements.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 23. At times, the speakers all said the same thing "at once."

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 24. The interactants shared the same goals.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 25. The interactants' voices were carefully controlled. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 26. The interactants' gestures were controlled, used to emphasize important points.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 27. The speakers seemed supportive of each other.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

- 28. On the average, the turns at talk were relatively long.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 29. The speakers often left the end of their turns hanging. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 30. The speakers nodded supportively when others spoke. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 31. The vocabulary used was college-level or above.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 32. Speakers followed up on each other's comments.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 33. The speakers' eye contact was cold and distant.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 34. The speakers used simple sentences.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 35. Overall, the interactants appeared warm and friendly toward each other.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 36. Each speaker seemed to want to control the talk.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 37. The speakers used stress on important words.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 38. The speakers' eye contact was relaxed and friendly. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 39. The speakers used complex or difficult sentences.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 40. The interactants seemed united in what they wanted. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 41. Speakers seemed to be careful in their choice of questions or comments.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 42. The interactants seemed divided into "sides."
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 43. The interactants repeated each other's words or ideas. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 44. The speakers at times were excited, all talking at once about the same idea.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

- 45. The interactants tried to put each other on the spot. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 46. Overall, the interactants appeared formal and stiff. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 47. The interactants wanted the same outcomes.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 48. The speakers ended each turn decisively or firmly.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 49. The interactants' voices were tense and controlled. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 50. Speakers seemed spontaneous in their choices of questions or comments.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 51. The speakers seemed to be hostile or unfriendly.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 52. The interactants often hesitated or stumbled in their speech.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 53. There was a certain tension in the interactants' posture and movements.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 54. The interactants did not appear cooperative.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 55. The speakers' thoughts were clear and complete.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 56. The interactants gave many support or agreement signals to each other.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 57. This activity seemed more like a debate than a discussion.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 58. The interactants were careful in their choice of words. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 59. When the interactants interrupted each other, they seemed angry.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 60. The interchange seemed spontaneous.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

Finally, we would like some additional information about yourself. Please circle the appropriate response as it pertains to you.

- 61. Are you male or female? 1) male 2) female
- 62. Do you belong to organizations or groups that meet on a regular basis?
  - 1) No, I belong to no groups
  - 2) Yes, 1-5 groups

  - 3) Yes, 6-10 groups4) Yes, more than 10 groups

| 63. | What | is | your | age | to | the | nearest | year? |  |
|-----|------|----|------|-----|----|-----|---------|-------|--|
|-----|------|----|------|-----|----|-----|---------|-------|--|

- 64. What is your GPA? \_\_\_\_\_
- 65. What is your major? \_\_\_\_\_

(Audio Medium)

#### Group Communication Study

#### Instructions

On the next four pages are a number of statements to be used in judging the interaction you have just viewed. Please circle the number from 1 to 7 that best reflects your opinion. For instance, if you strongly agree with a statement, circle a 1. If you disagree somewhat strongly, circle a 7, and so on. If you are neutral or not sure, circle a 4. Please do not leave any items blank.

- 1. The interactants seemed eager to cooperate with each
   other.
   Strongly agree: 1 2 3 4 5 6 7 : Strongly disagree
- 2. On the average, the individual turns at talk were relatively short. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 3. The speakers' thoughts appeared clear and complete. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 4. The interchange seemed friendly.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 5. The interchange was like a debate -- one side versus the other.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 6. The topic of the discussion was always clear.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 7. The interactants' voices were friendly and relaxed. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 8. I imagine that there was no touching among interactants. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 9. The speakers often spoke slowly and deliberately. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 10. The interactants appeared to be on the same side of the issues.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 11. The interactants talked like politicians, officials, or
   professors.
   Strongly agree: 1 2 3 4 5 6 7 : Strongly disagree
- 12. Control of the discussion seemed to be more in the group than in any one speaker.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

- 13. The interactants wanted different outcomes.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 14. The vocabulary used was easy to understand.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 15. I imagine that the speakers sometimes gestured in place of words.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 16. The interactants seemed to be in conflict.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 17. Many sentences seemed to be left unfinished.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 18. The interactants talked like I might in a group with friends working on a task.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 19. The interchange seemed formal or distant.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 20. The flow of talk was hard to follow.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 21. The speakers often broke in with "um hm" or "yes" while another spoke.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 22. I imagine that the speakers were relaxed in their posture and movements.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 23. At times, the speakers all said the same thing "at once."

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 24. The interactants shared the same goals.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 25. The interactants' voices were carefully controlled. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 26. I imagine that the interactants' gestures were controlled, used to emphasize important points.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 27. The speakers seemed supportive of each other.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 28. On the average, the turns at talk were relatively long. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

- 29. The speakers often left the end of their turns hanging. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 30. I imagine that the speakers nodded supportively when others spoke.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 31. The vocabulary used was college-level or above.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 32. Speakers followed up on each other's comments.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 33. The speakers' eye contact was cold and distant.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 34. The speakers used simple sentences.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 35. Overall, I imagine that the interactants appeared warm and friendly toward each other.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 36. Each speaker seemed to want to control the talk.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 37. The speakers used stress on important words.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 38. I imagine that the speakers' eye contact was relaxed and friendly.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 39. The speakers used complex or difficult sentences.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 40. The interactants seemed united in what they wanted. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 41. Speakers seemed to be careful in their choice of questions or comments.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 42. The interactants seemed divided into "sides."
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 43. The interactants repeated each other's words or ideas. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 44. The speakers at times were excited, all talking at once about the same idea.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 45. The interactants tried to put each other on the spot. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

- 46. Overall, I imagine that the interactants appeared formal and stiff.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 47. The interactants wanted the same outcomes.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 48. The speakers ended each turn decisively or firmly. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 49. The interactants' voices were tense and controlled. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 50. Speakers seemed spontaneous in their choices of questions or comments.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 51. The speakers seemed to be hostile or unfriendly.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 52. The interactants often hesitated or stumbled in their speech.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 53. I imagine that there was a certain tension in the interactants' posture and movements.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 54. The interactants did not appear cooperative.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 55. The speakers' thoughts were clear and complete.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 56. I imagine that the interactants gave many support or agreement signals to each other.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 57. This activity seemed more like a debate than a discussion.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 58. The interactants were careful in their choice of words. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 59. When the interactants interrupted each other, they seemed angry.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 60. The interchange seemed spontaneous.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

Finally, we would like some additional information about yourself. Please circle the appropriate response as it pertains to you.

- 61. Are you male or female? 1) male 2) female
- 62. Do you belong to organizations or groups that meet on a regular basis?
  - 1) No, I belong to no groups
  - 2) Yes, 1-5 groups
  - 3) Yes, 6-10 groups
  - 4) Yes, more than 10 groups

| 63. | What | is | your | age | to | the | nearest | year? |  |
|-----|------|----|------|-----|----|-----|---------|-------|--|
|-----|------|----|------|-----|----|-----|---------|-------|--|

- 64. What is your GPA? \_\_\_\_\_
- 65. What is your major? \_\_\_\_\_

(Written Medium)

## Group Communication Study

## Instructions

On the next four pages are a number of statements to be used in judging the interaction you have just viewed. Please circle the number from 1 to 7 that best reflects your opinion. For instance, if you strongly agree with a statement, circle a 1. If you disagree somewhat strongly, circle a 7, and so on. If you are neutral or not sure, circle a 4. Please do not leave any items blank.

- 1. The interactants seemed eager to cooperate with each
   other.
   Strongly agree: 1 2 3 4 5 6 7 : Strongly disagree
- 2. On the average, the individual turns at talk were relatively short.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 3. The speakers' thoughts appeared clear and complete. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 4. The interchange seemed friendly.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 5. The interchange was like a debate -- one side versus the other.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 6. The topic of the discussion was always clear. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 7. I imagine that the interactants' voices were friendly and relaxed.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 8. I imagine that there was no touching among interactants. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 9. I imagine that the speakers often spoke slowly and deliberately.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 10. The interactants appeared to be on the same side of the issues.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 11. I imagine that the interactants talked like politicians,
   officials, or professors.
   Strongly agree: 1 2 3 4 5 6 7 : Strongly disagree
- 12. Control of the discussion seemed to be more in the group than in any one speaker.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

- 13. The interactants wanted different outcomes.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 14. The vocabulary used was easy to understand.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 15. I imagine that the speakers sometimes gestured in place of words.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 16. The interactants seemed to be in conflict.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 17. Many sentences seemed to be left unfinished.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 18. I imagine that the interactants talked like I might in a group with friends working on a task.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 19. The interchange seemed formal or distant.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 20. The flow of talk was hard to follow.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 21. The speakers often broke in with "um hm" or "yes" while another spoke.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 22. I imagine that the speakers were relaxed in their posture and movements.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 23. I imagine that, at times, the speakers all said the same thing "at once."

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 24. The interactants shared the same goals.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 25. I imagine that the interactants' voices were carefully controlled.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 26. I imagine that the interactants' gestures were controlled, used to emphasize important points.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 27. The speakers seemed supportive of each other.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 28. On the average, the turns at talk were relatively long. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

- 29. I imagine that the speakers often left the end of their turns hanging.
  strongly agree: 1 2 3 4 5 6 7: strongly disagree
- 30. I imagine that the speakers nodded supportively when others spoke.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 31. The vocabulary used was college-level or above.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 32. Speakers followed up on each other's comments.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 33. I imagine that the speakers' eye contact was cold and distant.
  strongly agree: 1 2 3 4 5 6 7: strongly disagree
- 34. The speakers used simple sentences. strongly agree: 1 2 3 4 5 6 7: strongly disagree
- 35. Overall, I imagine that the interactants appeared warm and friendly toward each other.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 36. Each speaker seemed to want to control the talk.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 37. I imagine that the speakers used stress on important words.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 38. I imagine that the speakers' eye contact was relaxed and friendly.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 39. The speakers used complex or difficult sentences.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 40. The interactants seemed united in what they wanted. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 41. Speakers seemed to be careful in their choice of questions or comments.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 42. The interactants seemed divided into "sides."
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 43. The interactants repeated each other's words or ideas. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 44. I imagine that the speakers at times were excited, all talking at once about the same idea.

  strongly agree: 1 2 3 4 5 6 7: strongly disagree
- 45. the interactants tried to put each other on the spot. strongly agree: 1 2 3 4 5 6 7: strongly disagree

- 46. overall, I imagine that the interactants appeared formal and stiff.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 47. The interactants wanted the same outcomes.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 48. I imagine that the speakers ended each turn decisively or firmly.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 49. I imagine that the interactants' voices were tense and controlled.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 50. Speakers seemed spontaneous in their choices of questions or comments.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 51. The speakers seemed to be hostile or unfriendly.
  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 52. I imagine that the interactants often hesitated or stumbled in their speech.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 53. I imagine that there was a certain tension in the interactants' posture and movements.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 54. The interactants did not appear cooperative.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 55. The speakers' thoughts were clear and complete.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 56. I imagine that the interactants gave many support or agreement signals to each other.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 57. This activity seemed more like a debate than a discussion.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 58. The interactants were careful in their choice of words. Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 59. I imagine that when the interactants interrupted each other, they seemed angry.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree
- 60. The interchange seemed spontaneous.

  Strongly agree: 1 2 3 4 5 6 7: Strongly disagree

Finally, we would like some additional information about yourself. Please circle the appropriate response as it pertains to you.

- 61. Are you male or female? 1) male 2) female
- 62. Do you belong to organizations or groups that meet on a regular basis?
  - 1) No, I belong to no groups
  - 2) Yes, 1-5 groups
  - 3) Yes, 6-10 groups
  - 4) Yes, more than 10 groups

| 63. | What | is | your | age | to | the | nearest | year? |  |
|-----|------|----|------|-----|----|-----|---------|-------|--|
|-----|------|----|------|-----|----|-----|---------|-------|--|

- 64. What is your GPA? \_\_\_\_
- 65. What is your major? \_\_\_\_\_

## APPENDIX C Overall Factorial Design Display

Table 8

Overall Factorial Design Display

|         |                          |                                      | MEANS                      | OF FACTOR                  | R SCORES                    |
|---------|--------------------------|--------------------------------------|----------------------------|----------------------------|-----------------------------|
|         | NEGOTIATION              |                                      |                            | EXCERPTS                   |                             |
| MEDIUM  | SITUATION                | MEASURES                             | J                          | 2                          | ю                           |
| Written | Inter-<br>Organizational | Distance<br>Structuring<br>Coherence | .22472<br>.02349<br>.47933 | .73323<br>44145<br>.09482  | .52926<br>08962<br>09482    |
|         | Intra-<br>Organizational | Distance<br>Structuring<br>Coherence | 74077<br>42154<br>.14605   | 56289<br>51138<br>.03344   | 64730<br>31401<br>.30228    |
| Audio   | Inter-<br>Organizational | Distance<br>Structuring<br>Coherence | .74082<br>.23558<br>.59943 | .99519<br>.20470<br>.29613 | .59783<br>1.53078<br>80498  |
|         | Intra-<br>Organizational | Distance<br>Structuring<br>Coherence | 41397<br>62383<br>05447    | 33729<br>13445<br>.38272   | 57176<br>23016<br>.57523    |
| Video   | Inter-<br>Organizational | Distance<br>Structuring<br>Coherence | .68544<br>.32985<br>55940  | .69768<br>.10315<br>.16721 | .23931<br>1.38109<br>74038  |
|         | Intra-<br>Organizational | Distance<br>Structuring<br>Coherence | 43876<br>36293<br>26551    | 59851<br>16873<br>70707    | -1.13223<br>51054<br>.15438 |



## LIST OF REFERENCES

- Argyle, M., Interaction skills and social competence. In P. Feldman and J. Orford (Eds.), The social psychology of psychological problems. New York: John Wiley and Sons, 1980.
- Argyle, M., The experimental study of the basic features of situations. In D. Magnusson (Ed.), Toward a psychology of situations: An interactional perspective. Hills-dale, N.J.: Erlbaum, 1981.
- Avedon, E.M., The structural elements of games. In A. Furnham & M. Argyle (Eds.), The psychology of social situations. New York: Pergamon Press, 1981.
- Bartos, I.J., <u>Process and outcome of negotiation</u>. New York: Columbia University Press, 1974.
- Beisecker, T., Verbal persuasive strategies in mixed-motive interactions. Quarterly Journal of Speech, 1970, 56, 149-160.
- Bennett, A.T., Melodies bristling with change: prosody and understanding conversation. Sociological Methods and Research, 1982, 11, 195-212.
- Blom, J. & Gumperz, J., Social meaning in linguistic structures: Code-switching in Norway. In J. Gumperz & D. Hymes (Eds.), <u>Directions in sociolinguistics</u>. New York: Holt, Rinehart and Winston, 1972.
- Brandt, D.R., A systematic approach to the measurement of dominance in human face-to-face interaction. Communication Quarterly, 1980, 28, 31-43.
- Brown, P. & Fraser C., Speech as a marker of situation. In K. Scherer & H. Giles (Eds.), Social markers in speech. Cambridge: Cambridge University Press, 1979.
- Burgoon, J.K., A communication model of personal space violations: Explication and an initial test. Human Communication Research, 1978, 4, 129-142.
- Burgoon, J.K., Buller, D.B., Hale, J.L. & DeTurck, M.A., Relational messages associated with immediacy behaviors. Paper presented at the Annual Meeting of the International Communication Association, Boston, Massachusetts, 1982.

- Burgoon, J.K. & Hale, J.L., Dimensions of relational messages. Paper presented at the Annual Meeting of the Speech Communication Association, Anaheim, California, 1981.
- Burgoon, J.K. & Saine, T., The unspoken dialogue: An introduction to nonverbal communication. Boston: Houghton Mifflin, 1978.
- Chertkoff, J.M. & Esser, J.K., A review of experiments in explicit bargaining. <u>Journal of Experimental Social</u> Psychology, 1976, 12, 464-486.
- Clark, H.H. & Clark, E.V., <u>Psychology and language</u>. New York: Harcourt Brace Jovanovich, 1977.
- Cohen, J. & Cohen, P., Applied multiple regression/correlation analysis for the behavioral sciences. Hillsdale, N.J.: Erlbaum, 1975.
- Cook-Gumperz, J., The child as practical reasoner. In M. Sanches & B.G. Blount (Eds.), Sociocultural dimensions of language use. New York: Academic Press, 1975.
- Cook-Gumperz, J., Situated instructions: Language socialization of school age children. In S. Ervin-Tripp & C. Mitchell-Kernan (Eds.), Child discourse. New York: Academic Press, 1977.
- Costanzo, F.S., Markel, N.N., & Costanzo, P.R., Voice quality profile and perceived emotion. <u>Journal of Counseling</u> Psychology, 1969, 16, 267-270.
- Diez, M.E., The role of directives in the construction of negotiation and caucus interaction. Unpublished manuscript, Michigan State University, 1982.
- Diez, M.E., Negotiation competence: A conceptualization of the constitutive rules of negotiation interaction. Paper presented at the Annual Meeting of the International Communication Assocation, Dallas, Texas, 1983 (a).
- Diez, M.E., Situated code choice: An empirical examination of two types of bargaining interactions. Paper presented at the Annual Meeting of the Speech Communication Association, Washington, D.C., 1983 (b).
- Donohue, W.A., An empirical framework for examining negotiation processes and outcomes. Communication Monographs, 1978, 45, 247-256.
- Donohue, W.A. & Diez, M.E. Information management in negotiation. Paper presented at the Annual Meeting of The International Communication Association, Dallas, 1983.

- Donohue, W.A., Diez, M.E. & Hamilton, M., Development of a coding system to analyze naturalistic negotiation interaction. Unpublished manuscript, Michigan State University, 1983.
- Druckman, D., <u>Negotiations: Social-psychological perspectives</u>. Beverly Hills: Sage, 1977.
- Druckman, D., Rozelle, R.M. & Baxter, J.C., Nonverbal communication. Beverly Hills: Sage, 1982.
- Duncan, S.D., Jr., Toward a grammar for dyadic conversation. Semiotica, 1973, 9, 29-46.
- Edelsky, C., Who's got the floor? Language in Society, 1981, 10, 383-421.
- Ellis, D.G., Hamilton, M., & Aho, L., Some issues in conversation coherence. Human Communication Research, 1983, 9, 267-282.
- Erickson, F., Audiovisual records as a primary data source. Sociological Methods and Research, 1982, 11, 213-232.
- Erickson, F., & Shultz, J., When is a context? Some issues and methods in the analysis of social competence. In J.L. Green & C. Wallat (Eds.), Ethnography and language in educational settings. Norwood, N.J.: Ablex, 1981.
- Erickson, F., & Shultz, J., <u>The counselor as gatekeeper:</u>
  Social interaction in interviews. New York: Academic Press, 1982.
- Fisher, R. & Ury, W., Getting to yes. Boston: Houghton Mifflin, 1981.
- Giles, H., Sociolinguistics and social psychology: An introductory essay. In H. Giles & R. St. Clair (Eds.), Language and social psychology. Baltimore: University Park Press, 1979.
- Goffman, E., The presentation of self in everyday life. Garden City, N.Y.: Doubleday Anchor Books, 1959.
- Gregory, M. & Carroll, S., <u>Language and situation</u>. London: Routledge and Kegan Paul, 1978.
- Grice, H.P., Logic and conversation. In P. Cole & J. Morgan (Eds.), Syntax and semantics: Speech acts. New York: Academic Press, 1975.
- Grimshaw, A.D., Sound-image data records for research on social interaction. Sociological Methods and Research, 1982, 11, 121-144.

- Gumperz, J.J., The linguistic bases of communicative competence. In D. Tannen (Ed.), Analyzing discourse: Text and talk. Washington, D.C.: Georgetown University Press, 1982.
- Hagburg, E.C. & Levine, J.G., <u>Labor relations: An integrated</u> perspective. St. Paul: West Publishing Company, 1978.
- Halliday, M.A.K., Explorations in the functions of language. London: Edward Arnold, 1973.
- Halliday, M.A.K. & Hasan, R., Cohesion in English. London: Longmans, 1976.
- Henley, N.M., Body politics: Power, sex, and nonverbal communication. Englewood Cliffs, N.J.: Prentice-Hall, 1977.
- Hull, C.H. & Nie, N.H., SPSS Update 7-9: New Procedures and facilities for releases 7-9. New York: McGraw Hill, 1981.
- Hymes, D., Models of the interaction of language and social setting. Journal of Social Issues, 1967, 23, 8-28.
- Hymes, D., On communicative competence. In J. Pride & J. Holmes (Eds.), Sociolinguistics. London: Penguin, 1972.
- Hymes, D., Ways of speaking. In R. Bauman & J. Sherzer (Eds.), Explorations in the ethnography of speaking. Cambridge: Cambridge University Press, 1974.
- Joos, M., The five clocks. Supplement 22 to the <u>International</u> Journal of American Linguistics, 1962.
- Keenan, E.O., Conversational competence in children. Child Language, 1974, 1, 163-183.
- Keenan, E.O., Unplanned and planned discourse. <u>Pragmatics</u> microfiche, 1978, 3, 1, A3.
- Kendon, A., Movement coordination in social interaction: Some examples described. Acta Psychologica, 1970, 32, 100-125.
- Kendon, A., The organization of behavior in face-to-face interaction: observations on the development of a methodology. In K.R. Scherer & P. Ekman (Eds.), Handbook of methods in nonverbal behavior research. Cambridge:

  Cambridge University Press, 1982.
- King, D.C. & Glidewell, J.C., Dyadic bargaining outcomes under individualistic and competitive orientations. Human Relations, 1980, 33, 781-803.

- Labov, W., The social stratification of (r) in New York City department stores. In W. Labov (Ed.), Sociolinguistic patterns. Philadelphia: University of Pennsylvania Press, 1972.
- Levinson, S.C., Activity types and language. Pragmatics Microfiche, 1978, 3, 3.3.
- Mehan, H., <u>Learning Lessons</u>. Cambridge: Harvard University press, 1979.
- Mehrabian, A., Immediacy: An indicator of attitudes in linguistic communication. <u>Journal of Personality</u>, 1966, 34, 26-34.
- Mehrabian, A., Attitudes inferred from non-immediacy of verbal communications. <u>Journal of Verbal Learning and Verbal Behavior</u>, 1967, 6. 294-305.
- Mehrabian, A., <u>Silent messages</u>. Belmont, California: Wads-worth, 1971.
- Mehrabian, A., Nonverbal communication. Chicago, Aldine, 1972.
- O'Keefe, B.J. & Delia, J.G., Impression formation processes and message production. In M.E. Roloff & C.R. Berger (Eds.), Social cognition and communication. Beverly Hills: Sage, 1982.
- Ong, W.J., Orality and literacy: The technologizing of the word. New York: Methuen, 1982.
- Owsley, H. & Scotton, C.M., What's my line? Conversational expression of power by TV interviewers. Unpublished manuscript, Michigan State University, 1982.
- Putnam, L.L. & Jones, T.S., The role of communication in bargaining. Human Communication Research, 1982 (a), 8, 262-280.
- Putnam, L.L. & Jones, T.S., Reciprocity in negotiations: An analysis of bargaining interaction. Communication Monographs, 1982 (b), 49, 171-191.
- Roth, A.E. & Malouf, M.W.F., Game-theoretic models and the role of information in bargaining. Psychological Review, 1979, 86, 574-594.
- Ruesch, J. & Bateson, G., Communication: The social matrix of psychiatry. New York: W.W. Norton, 1951.
- Ryan, E.B. & Giles, H. (Eds.), <u>Attitudes towards language</u>
  variation: Social and applied contexts. Baltimore:
  Edward Arnold, 1982.

- Sacks, H., Schegloff, E., & Jefferson, G., A simplest systematics for the organization of turn-taking for conversation. Language, 1974, 50, 696-735.
- Scheflen, A.E., <u>How behavior means</u>. New York: Doubleday, 1974.
- Schelling, T.C., The strategy of conflict. Cambridge: Harvard University Press, 1960.
- Scotton, C.M. & Ury, W., Bilingual strategies: The social functions of code-switching. <u>International Journal of</u> the Sociology of Language, 1977, 13, 5-20.
- Sommer, R., <u>Personal space</u>. Englewood Cliffs, N.J.: Prentice-Hall, 1969.
- Spector, B.I., Negotiation as a psychological process. Journal of Conflict Resolution, 1977, 21, 607-618.
- Swingle, P., The structure of conflict. New York: Academic Press, 1978.
- Trager, G.L., Paralanguage: A first approximation. Studies in Linguistics, 1958, 13, 1-12.
- Walton, R.E. & McKersie, R.B., A behavioral theory of labor negotiations: An analysis of a social interaction system. New York: McGraw Hill, 1965.
- Watzlawick, P., Beavin, J.H., & Jackson, D.D., <u>Pragmatics of</u> human communication. New York: W.W. Norton, 1967.
- West, C & Zimmerman, D.H., Conversation analysis. In K.R. Scherer & P. Ekman (Eds.), Handbook of methods in non-verbal behavior research. Cambridge: Cambridge University Press, 1982.
- Wiener, M. & Mehrabian, A., <u>Language within language</u>: <u>Immediacy, a channel in verbal communication</u>. New York: Appleton-Century-Crofts, 1968.
- Zartman, I.W., <u>The negotiation process: Theories and applications</u>. Beverly Hills: Sage, 1978.

- Sacks, H., Schegloff, E., & Jefferson, G., A simplest systematics for the organization of turn-taking for conversation. Language, 1974, 50, 696-735.
- Scheflen, A.E., <u>How behavior means</u>. New York: Doubleday, 1974.
- Schelling, T.C., The strategy of conflict. Cambridge: Harvard University Press, 1960.
- Scotton, C.M. & Ury, W., Bilingual strategies: The social functions of code-switching. <u>International Journal of</u> the Sociology of Language, 1977, 13, 5-20.
- Sommer, R., <u>Personal space</u>. Englewood Cliffs, N.J.: Prentice-Hall, 1969.
- Spector, B.I., Negotiation as a psychological process. Journal of Conflict Resolution, 1977, 21, 607-618.
- Swingle, P., The structure of conflict. New York: Academic Press, 1978.
- Trager, G.L., Paralanguage: A first approximation. Studies in Linguistics, 1958, 13, 1-12.
- Walton, R.E. & McKersie, R.B., <u>A behavioral theory of labor</u> negotiations: An analysis of a social interaction system. New York: McGraw Hill, 1965.
- Watzlawick, P., Beavin, J.H., & Jackson, D.D., <u>Pragmatics of human communication</u>. New York: W.W. Norton, 1967.
- West, C & Zimmerman, D.H., Conversation analysis. In K.R. Scherer & P. Ekman (Eds.), Handbook of methods in non-verbal behavior research. Cambridge: Cambridge University Press, 1982.
- Wiener, M. & Mehrabian, A., <u>Language within language</u>:

  Immediacy, a channel in verbal communication. New York:
  Appleton-Century-Crofts, 1968.
- Zartman, I.W., <u>The negotiation process: Theories and applications</u>. Beverly Hills: Sage, 1978.

