

THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

LANGUAGE VARIATION AND SUCCESS
IN THE SYSTEM OF CRIMINAL JUSTICE

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

by

MICHAEL G. PARKINSON

Norman, Oklahoma

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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Background	
This section describes the interest of legal scholars in speech, and the interests of communication scholars in law and the solution of the communication problems associated with the practice of law. The argument is developed that the weaknesses in existing research has led to the legal profession's lack of recognition of research produced by communication scholars. The general research question is presented.	
Conceptual Bases	
This section introduces the trial as an exercise in persuasion and develops credibility and social mediation as conceptual bases for investigation of the trial situation. Five propositions are advanced.	
II. RESEARCH DESIGN AND EXPECTATIONS	24
Hypotheses	
Nine hypotheses are offered.	
Data Gathering	
Characteristics of the data and the techniques used to identify and gather the data are discussed.	
Variables and Operationalizations	
The criterion and predictor variables are identified and described.	
III. ANALYSES	46
Factor Analysis of SLCA Variables	
Procedures used to reduce the 102 variables of SLCA are reported and the resulting factors are described.	
Reliability of Hyper-Correct Grammar and Polite Forms	
The results of correlations between individual coders is reported and discussed.	
Hypothesis Tests	
Statistical tests of each of the individual hypotheses and results of those tests are presented.	

IV. DISCUSSION OF RESULTS	61
Propositions	
This section discusses the results of hypothesis testing in light of the conceptual rationale and propositions developed in Chapter One.	
Interpretations for the Legal Practitioner	
Characteristics of speech style demonstrated by successful trial participants are discussed and traits of successful courtroom speech described for prosecution attorneys, defense attorneys and accuseds. Also, traits of successful courtroom speech in rural and urban settings are described.	
Implications for Future Research	
Strengths and weaknesses of the methodology are reviewed and proposals for future research pursuing the area of courtroom speech are offered.	
REFERENCES	79
APPENDIX: Tables	89
Table I - Operationalization of Statement	90
Table II - Coding Protocol and Coder Training	92
Table III - Operationalization of Question Line	94
Table IV - Listing of SLCA Variables	96
Table V - Factor Analysis of SLCA Data	100
Table VI - Pearson r Correlations for Hyper-Correct Grammar and Polite Forms	102
Table VII - Multiple Discriminant Analysis Based on Prosecution Attorneys: Groups = Acquittal/Conviction	103
Table VIII - Multiple Discriminant Analysis Based on Defense Attorneys: Groups = Acquittal/Conviction	104
Table IX - Multiple Discriminant Analysis Based on Accuseds: Groups = Acquittal/Conviction	105
Table X - Two-Way Analysis of Variance: Defense Attorneys and Accuseds	106
Table XI - Two-Way Analysis of Variance: Prosecution Attorneys and Judges	110
Table XII - Two-Way Analysis of Variance: Defense Attorneys and Judges	113
Table XIII - Multiple Discriminant Analysis Based on All Attorneys: Groups = Successful/Unsuccessful	116

Table XIV - Multiple Discriminant Analysis
Based on All Successful Trial Partici-
pants: Groups = Rural/Urban 117

LIST OF FIGURES

Figure I - Predictor Variables 45
Figure II - Speech Style Characteristics 73

CHAPTER I

INTRODUCTION

From their beginning the systematic study of speech and the practice of legal litigation have been intertwined. The knowledge generated by research in communication and the speaking skills which are the traditional focus of our discipline still have important potential for practical application in the oral presentations of the courtroom. This dissertation investigates the value of communication research and speech skills to practitioners in the legal profession. The general purpose is to identify characteristics of speech behavior which co-occur with success in actual criminal trials.

Background

Members of the legal profession recognize the importance of speech skills in their success. Harley's 1975 survey of practicing attorneys indicated that they spend the bulk of their time in communicative activities. Her research also indicates that the vast majority of attorneys recognize the importance of their persuasive speaking skills. Fourteen years earlier, McBath (1961) also reported a nationwide survey of attorneys which indicated their recognition of the

importance of well developed speaking skills. A number of professional law journals have also described the importance of speech skills; and some have argued the inclusion of training to develop these skills within law school curricula. The Journal of Legal Education in 1967 published an article lamenting lawyer/client communication problems which might be ameliorated if attorneys had better developed speech skills. The article further argued that one of the primary tasks of legal education was teaching the aspirant attorney to "talk like a lawyer" (Probert, 1967). The American Bar Association commissioned studies in 1953 and 1954 which included explorations of the importance of speech skills for attorneys (Balustein, 1954; Harno, 1953), and several professional law journals have implied the profession's recognition of the importance of speech skills by arguing for the inclusion of speech training in pre-law curricula (Cantrall, 1952; Green, 1948; Grills, 1952; Harno, 1948; Roberts, 1950; Vanderbilt, 1952). Student division law journals also have recently published articles on the importance of speech skills. Barrister, the journal of the young lawyers' section of the American Bar Association, published a report of the results of a National Science Foundation investigation of legal speech (O'Barr, 1976), and Juris Doctor has reported on the application of anthropological linguistic techniques to an investigation of American attorneys by Laura Nader (Marks, 1977). Bishin and Stone (1972), in a textbook used in law schools, have described the legal method

as the art of argument and even describe law itself as a linguistic phenomenon.

While legal scholars have expressed an interest in the value of speech skills, some speech and communication scholars have expressed a reciprocal interest in applying their research and skills to practical problems in human communication. Although moving away from an emphasis on forensic oratory, contemporary research has applied communication and linguistic investigative techniques to such practical professional communication problems as legal litigation and the practice of medicine. Adler (1977), in a recent issue of Human Communication Research, has synthesized such pragmatically oriented research. He argues that research designed to improve the actual practice of communication deserves greater attention than it has received from communication scholars. Further evidence of this interest in pragmatically oriented communication research can be seen in several recent studies in the Journal of Communication exploring health care problems which result from poor communication (Fuller, 1973; Larson, 1969; Walker, 1973). More directly applicable to the research at hand is research which addresses the speech of legal practice. Apfelbaum (1954) and Jones (1964) in two separate articles in Today's Speech have explored the lawyer-client conference and the impact of legal jargon on a jury's decisions. Dissertations produced by students of communication have also applied concepts from persuasion research to the courtroom environment

(Deutsch, 1970; Bonner, 1954; Foston, 1969; Fontes, 1975; Hansell, 1963). This literature indicates that the discipline of communication has maintained some interest in the principal problems of human communication as those problems are reflected in the trial setting.

Despite the historical precedent and the potential benefits of well developed speech skills for attorneys, most law schools have severely limited speech training. As early as 1925, Smith produced a survey of law schools indicating that most had eliminated training in public speaking. Koegel (1951) and Williams (1955) found that the trend to reduce speech training for attorneys had continued. If legal scholars recognize the importance of speaking skills and communication scholars are interested in improving the practice of communication, one might reasonably ask: why has there been a consistent decrease in the amount of speech training within law schools? One possible explanation is that, while the legal community recognizes the importance of their speech skills, they do not look upon the discipline of communication as a source of input in the development of those skills. In other words, the products of our research may not be considered by the legal practitioner, or one training legal practitioners, as appropriate to their needs.

To date the most fully developed exploration of courtroom speech has been conducted by the Duke University Law and Language Project. Using the tools of linguistics and social

psychology, the members of the Duke Project have identified several characteristics of witness speech which correlate with laboratory subjects' evaluation of witness credibility, attractiveness and honesty¹ (O'Barr, 1976; Lind, 1977; O'Barr, 1977; O'Barr, 1974; O'Barr, 1975; Johnson, 1975; Conley, 1975; Lind, 1976; Conley; 1976). These reports also produced reasonably detailed descriptions of language behaviors that coincide with witness sex and status. However, the design of even this massive investigative effort leaves room for improvement. The Duke Project dealt only with reactions to witness speech, and the techniques used to identify and describe the verbal behaviors that were the focus of the Duke investigation were somewhat intuitive. Publications by the Duke Project do not report their technique for operationalizing or measuring subject speech behaviors except to assert that testimony was ". . . analyzed by a team of investigators trained in linguistics, anthropology and law" (Lind, 1977, p. 6). Such techniques are invaluable in the initial exploration of useful variables, but they render replicability and the generation of specific rules for courtroom behavior impossible. Further, although the Duke Project gathered an impressive quantity of courtroom speech for their investigations, the actual experimental investigations for listeners' reactions to variations in that speech was based on only four speech samples. These four

¹For a more complete description of the language variables and characteristics used by the Duke Project see Chapter 2.

samples represent two transcripts that were altered to produce four speech samples which demonstrate extremes in rates of production of the subject speech behaviors.²

Reactions to these four speech samples were tested using undergraduate laboratory subjects. Laboratory subjects have often proven useful in the initial exploration of communication phenomena. However, in an exploration of courtroom speech, questions concerning an individual's impact upon trial outcome could be more effectively investigated using some measurement of the reactions of actual judges and juries. Since judges and juries are the source of trial decisions, attempts to generalize from populations as unlike them as undergraduate laboratory subjects seem questionable.

Rhetorical criticism has also been used in the analysis of oral argument in the courtroom and has demonstrated some success in describing characteristics of arguments in several cases of historical and social significance (Dickens, 1971; Strother, 1963; Schwartz, 1966; Deutsch, 1970). Other rhetorical critics have focused upon the oral performances of a single noteworthy litigant (Thomas, 1962; Hawkins, 1975; Williams, 1959) or upon some element of the trial situation (Hansel, 1963; Bonner, 1954; Fontes, 1975). These efforts, however, have been restricted to investigation of the impact of rhetorical devices, approaches taken in the opening and closing arguments, or the overall strategy of the trial. The

²The subject speech behaviors are listed in the discussion of the Duke Project variables in Chapter 2.

critical analyst has been limited because the traditional techniques of critical analysis depend heavily upon the availability of extended uninterrupted discourse produced by the subject of investigation. These techniques require the critic to either limit his focus to an extremely limited sample of speech or to approach his analysis with broad conceptualizations. During an actual trial, extended discourse of the type required for rhetorical criticism is usually produced only during the opening and closing arguments and these make up only a portion of the verbalizations in most cases. The restriction of investigation to lengthy utterances precluded analysis of the often abbreviated questions and answers of courtroom examination and testimony which comprise the bulk of verbalizations in most trials. Although rhetorical analyses have addressed the overall theme or strategy of presentations, they have not dealt with the specific verbal behaviors demonstrated in a trial.

Current research and theory in communication suggest that speech skills probably affect judge and jury perceptions of speakers and thus impact upon trial outcome. In fact, specific rhetorical and linguistic studies describe the behaviors of attorneys and witnesses which co-occur with perceptions and/or success. However, each of the applicable studies and the entire body of applicable research fails to deal with the needs as perceived by the legal profession. Therefore, this dissertation will test the potential of our discipline

to make practical contributions to the study of courtroom practice. More specifically, this study will use the tools of communication and linguistics to address the question:

What behaviors,³ if any, manifest in the speech of attorneys and their clients, co-occur with success in a criminal trial?

The study addresses its research question within a design which incorporates the pragmatic concerns of the criminal lawyer. The pragmatic impositions to be made on this study's design include: (1) the analysis of data which reflects actual courtroom behavior--not only the arguments and summations which have been the foci of most previous research, but also the exchange of questions and responses which characterize courtroom testimony; (2) the evaluations of verbal behaviors by judges and juries rather than by rhetorical critics or laboratory subjects; and (3) a large sample of trial situations which parallel the actual experiences of a practicing attorney. This research will focus upon records of verbal behaviors drawn from actual criminal trials. It will include as its criterion variable the evaluations of that behavior by judges and juries, and it will draw its data from a large sample of trial situations. It will also incorporate in its analysis linguistic techniques similar to those used successfully by the Duke Project and a computer based content analytic

³Obviously no investigation can address all possible speech behaviors. The language variations (speech behaviors) selected for this investigation are described in Chapter 2.

system.⁴ The linguistic techniques of the Duke Project will be modified to include specific operationalization of variables. This will advance those research designs by providing for replicability. The inclusion of a detailed content analytic system will permit the analysis of speech behaviors in even the most terse utterances and, therefore, alleviate one of the restrictions experienced by the rhetorical critic.

Conceptual Basis

Within the adversary judicial system of the United States, a trial is a contest judged largely upon the persuasive ability of the two litigants. Each of the opposing sides attempts to persuade an audience to adopt their view of the questions at bar. Within this environment, the intrinsic merits of any case are mediated by the persuasive impact of the messages which present the case and the persuasive skills of the individuals who present them. Gottfredson, in a review of the criminal justice system, pointed out that in a trial "decisions cannot be made about individuals, but only about information about individuals. . ." (1975, p. 68). Information about individuals is only available to a trial's decision makers via the persuasive messages they are presented.

⁴Both the analysis techniques of the Duke Project and the computer based content analysis system (Syntactic Language Computer Analysis) are discussed in detail in Chapter 2.

From the laboratory and investigations outside the courtroom, ample evidence indicates the potential influence which speech behaviors have upon those persuasive messages and therefore upon trial outcome. The most readily apparent theoretic support for the assertion that speech behaviors will correlate with trial outcome is found in investigations of ethos or source credibility. Research in this area indicates that some variations in speech behavior correspond with the amount of credibility an audience confers upon a speaker and that the possession of that credibility by a speaker corresponds positively with his ability to persuade the audience. The following section reviews the research in the area.

Despite its attractive simplicity, however, the relation between credibility and persuasion is not linear. Several investigations have demonstrated that credibility is mediated by the audience's perception of their relationship to the speaker and by differences in audience value systems. A subsequent section reviews research in social mediation.

Credibility. Extensive literature identifies the positive relationship between ethos or source credibility and a speaker's ability to persuade an audience. Several of these studies, particularly applicable to the courtroom milieu, have described relationships between credibility and persuasive impact. Hovland and Weiss (1951) found that

sources assumed to be highly credible by the experimenters were judged more trustworthy by subjects and that subjects demonstrated greater attitude change after exposure to messages produced by high credible sources. However, they found that over time the impact of the source's credibility was severely reduced. The decisions of judges and juries are usually made almost immediately after the conclusion of the source's message. Therefore, this " sleeper effect " should not impact upon the research at hand. Rosenbaum and Lewin (1968) also demonstrated that high credible sources are best able to alter an audience's attitude toward another person.

In a criminal trial where the question at bar is usually the veracity of the defendant's assertion of his innocence the ability to alter attitudes toward that person gives an advantage to either side. Sigall and Helmreich (1969) found that in situations of high stress relevant credibility is influential in altering audience perceptions. Assuming that a jury's awareness of the penalties the defendant may suffer as a result of their decision leads them to experience stress, Sigall and Helmreich further substantiate the importance of credibility for a trial's participants.

Warren (1969) produced research still further supporting the assertion that the merits of a case are mediated by the credibility of those presenting the case. He found that a high credible source can secure more subject attitude change

than can a low credible source using the same evidence.

McCroskey and Dunham (1966) reported two experiments which suggest that a trial participant may be quickly afforded high credible status. They found that completely unknown tape-recorded speakers were seen as higher than neutral in credibility when introduced by a professor in an academic environment. Thus, an introduction by an attorney or judge probably has the same impact upon a previously unknown speaker in a courtroom environment.

Although substantial evidence indicates that credibility impacts upon persuasive ability, to understand that impact fully one must recognize the multidimensionality of the phenomenon labeled credibility. Aristotle described ethos as a multidimensional phenomenon and identified the component dimensions of good sense, good moral character and goodwill (trans, Roberts, 1954). The multidimensional nature of credibility has been supported by contemporary factor analyses. Berlo and Lemert (1961) used semantic differential scales to identify the three factors of competence, trustworthiness and dynamism. McCroskey (1966) produced research which contradicts the three dimensional nature of credibility. He reported on seven separate experiments using several different combinations of speaker introductions and subject reaction scales. As a result of this investigation, McCroskey argued that credibility was accurately described (at least statistically)

as a two dimensional phenomenon. The two dimensions identified by McCroskey were "authoritativeness" and "character".

McCroskey, with Jensen and Todd (1972, 1973), later produced research which identified five dimensions of source credibility. These five dimensions are: "competence", "character", "composure", "sociability", and "extroversion". This research suggests that the dimension of "competence" contributes most to variance in a receiver's judgments of a source's credibility.

Whitehead (1968) used responses to high and low credible sources on 65 semantic differential scales by only 152 subjects to identify the four factors of "trustworthiness", "competence", "dynamism", and "objectivity". Of these four, "trustworthiness" accounted for the most variance. Schweizer and Ginsbury (1966) also identified multiple dimensions of credibility they called "trustworthiness", "expertise", and "speaking technique". They, like Whitehead, found that "trustworthiness" accounted for the majority of variance in the credibility of a speaker. Several different systems have been used for labeling the components of credibility; however, it seems apparent that they all, at least, include the three notions of character (trustworthiness), competence (expertise), and composure (dynamism or speaking technique).

In an adversary trial system, the attorney or witness who the judge or jury decides is most trustworthy will have an advantage over those seen as less trustworthy. The litigant

whose legal skills are seen as superior has a similar advantage over one who is seen as less competent. Despite the significance indicated for the dimensions of trustworthiness and competence (Ostermeier, 1954; Grunner, 1967; Berscheid, 1969; Griffin, 1967; McGuire, 1969), intuition indicates that variations in speech behavior will impact most strongly upon the credibility dimension of composure (dynamism or speaking skill). This intuition is supported in research by Schweitzer (1970). He found that altering the style of delivery of an oral message only generated significant differences in the dimension of dynamism.

Although intuition and some research indicates that variations in verbal behavior impact most strongly upon the dimension of composure, research has identified verbal behaviors which correspond with the dimensions of trustworthiness and competence or with overall judgments of credibility. Schweitzer (1970), for example, did find that when the actual wording of the message introduction was altered a significant difference in audience perceptions of trustworthiness could be generated. Bochner and Bochner (1973) were also able to identify significant differences in the dimension of trustworthiness which correspond with status dialect alterations. Of particular relevance to the study at hand, the status dialect alterations were operationalized using high and low status lexical substitutions and high and low status grammatical forms. Both the lexical and grammatical alterations were

controlled to avoid semantic variation. Mulac's Dialect Attitudinal Scale has been used successfully to demonstrate that listeners attribute such characteristics as literacy, professional role (white and blue collar), and social status based upon variations in subjects' phonetic, lexical, and grammatical choices (Mulac, 1976). Miller, Maruyama, Beaber and Valone (1976) found that subjects altered judgments of a speaker's competence when the only difference between stimuli was speech speed. Sereno and Hawkins (1967) and Miller and Hewgill (1964) found that variations in non-fluencies correlated with judgments of both competence and dynamism. Harms (1959) also found that subjects can identify status from a speaker's verbal behavior and that their judgments of credibility correlate positively with those status identifications.

Using more discourse oriented analysis, Rosenthal (1971), Baker (1965) and Wheelless and McCroskey (1973) correlated verbal behavior with total assessment of credibility. Rosenthal developed a system for classifying discourse according to its specificity and used judgments based on that system to successfully predict credibility. Baker found that the extent of message organization correlated with credibility. Baker operationalized disorganization as the presence of statements by the source which indicated poor preparation or poor organization and operationalized message organization using the absence of these cues. Wheelless and McCroskey found significant differences in message perception which

correspond with alterations in syntactic choices such as antithesis syntax (the use of semantic opposites in close grammatical proximity) and the repetition of words and phrases. More recently evidence of the impact of speech behavior upon credibility can be found in a review by Giles and Powesland (1975). They summarized several studies which indicate that evaluations of speaker characteristics such as competence and social attractiveness are influenced by variations in speech behaviors. These studies were all based upon phonological variations in speech style such as regional and class related dialects.

In summary: A criminal trial is, at least in part, a contest in persuasion; credibility impacts upon the ability to persuade; and speech behaviors impact upon credibility. Therefore, speech behaviors may impact, at least indirectly, upon trial success. A litigant whose verbal behaviors inspire the judge or jury to confer credibility upon him will probably have a greater chance of success in a trial than his less credible counterpart. Combining these observations with the general question of this dissertation leads to the proposition:

- P₁ Some characteristic(s) of verbal behaviors demonstrated by a trial participant to the trial's decision makers (the judge and jury) will co-occur with the success of that participant.

Social Mediation: While extensive literature supports the impact of credibility upon persuasive ability, additional research also suggests that perceptions of credibility are

mediated by the social values of the receiver. Research by Hurt and Wheelless (1975), for example, indicates that before an audience is persuaded by a speaker they must not only perceive that the speaker possesses some component of credibility, but they must also place a value upon that component. An audience may uniformly perceive a speaker as highly competent, but unless they place a value upon competence, they will not be easily persuaded by that speaker. This interaction between audience value and source characteristic seems particularly important in an investigation of reactions to courtroom speech. Because a judge or jury may place different levels of importance upon an attorney's competence or trustworthiness, we may find grossly different levels of credibility associated with the same speaker by different decision makers within the trial. This suggests that the relationship advanced in Proposition One (P_1 above) will vary with audience values; therefore, the characteristics of verbal behavior which co-occur with success, if any, may vary from audience to audience.

In addition to this interaction between audience values and perceived credibility, an audience's willingness to confer credibility upon a speaker seems also to be mediated by their perceptions of that speaker's attractiveness and his homophily with the audience itself. The relationship between manifest speech behaviors of a source and this interaction between persuasive ability, attractiveness and homophily

can best be explicated by addressing separately each of its component relationships: (1) actual similarity in speech co-occurs with perceived similarity (homophily), (2) homophily co-occurs with attractiveness, and (3) homophily and attractiveness co-occur with persuasive ability.

The first component relationship, that actual similarity in speech co-occurs with homophily, is supported by research in the field of sociolinguistics. Crockett and Levine (1967) found that friends demonstrate greater similarities in speech behavior than do randomly selected individuals from the same geographic regions. Several scholars in anthropology have also described co-located but identifiably distinct cultural groups who maintained their individual cultural identity via speech behaviors (see, for example, Bauman, 1974; Gumperz, 1972). Other studies have identified similarities in speech which correspond with professional identifications. Each of these studies asserts that an initial step in the adoption of a professional identity is the adoption of that profession's "dialect" and that the identity of "profession member" is communicated to others in the same profession via the use of the profession's "dialect" (Elkin, 1946; Parkinson, 1976; Pease, 1967; Simpson, 1967; Zurcher, 1967; Shuy, 1973; Merton, 1957). In addition to research which identified speech similarities which correspond with social, cultural and professional similarities the inverse relationship has also been described. Studies frequently conclude that individuals perceive speakers of dialects unlike their own as

socially or attitudinally unacceptable (see, for example: Delia, 1972; Mulac, 1976; Whitehead, 1972).

The second relationship, that homophily co-occurs with attractiveness, is supported in research by Rogers and Bhowmik (1971). They identified a positive relationship between perceived similarities and audience tendency to like or be attracted to a speaker. Gregor (1967) also has identified a negative correlation between unattractiveness and homophily.

The closely related third relationship, that attractiveness and homophily co-occur with persuasive ability, is supported by research on public conformity by Zimbardo (1965) and Smith (1965). Both identified a positive relationship between an audience's perception of the attractiveness of a speaker and that speaker's ability to persuade them. Winthrop (1956) found a high association between the similar characteristic of pleasantness and persuasiveness; and Benedict (1958), in research on social status, found that favorableness toward a speaker was inversely related to the social distance between that speaker and the subject. In three separate works on the diffusion of innovation, Rogers has described the importance of homophily in the diffusion process. He argues that individuals most able to persuade their audience are homophilous with them (Rogers, 1969; Rogers and Shoemaker, 1971; Rogers, 1972).

While similarity does appear to have a positive impact on a speaker's ability to influence an audience, some research indicates that the relationship between similarities in speech

behavior and the ability to influence is not as simple as it initially appears. Aronson, Willerman and Floyd (1966) and Festinger (1966) indicate that audiences are most influenced by individuals who are somewhat superior to themselves in demonstrated oral competence, but not by those whose competence far exceeds their own. Similarly, Rogers has described what he calls optimal homophily. He argues that an individual, in order to have maximum persuasive ability, must be similar to his audience in most respects but superior in one component of credibility, usually competence (Rogers and Shoemaker, 1971; Rogers, 1972). Although some efforts have been made to identify the specific characteristics of an optimum level of perceived competence, they have been restricted by the complexity of the task which includes identification of interactions between audience values, credibility and homophily (Addington, 1965; Anapol, 1970; Bettinghaus, 1964; Bowers, 1964; Bunn, 1964; Constans, 1954; St. other, 1961).

Efforts to identify optimal homophily in the courtroom are complicated still further by the fact that the status and prestige of a speaker may impact positively upon persuasiveness and negatively upon homophily. This observation is based on the assumption that most jurors will perceive an attorney as a high status individual and that the high status associated with the profession will impact positively upon the persuasiveness of the individual attorney. For most jurors

the same attorney will be seen as heterophilous because his profession and status are quite different from their own; this heterophily may impact negatively upon his persuasiveness. Rarick (1962) found that high prestige sources can create more subject attitude change than low prestige sources, if the level of homophily is held constant. Within the speech environment of the courtroom, the complexity of the relationship between similarity and influence seems apparent. For most jurors, the trial is an alien experience, and they are forced to make judgments concerning the relative status and role of the participants with the limited data presented to them during the course of a trial. Because the bulk of data presented for jury analysis is the verbal behavior of the trial participants, the jurors will probably make judgments of relative power, control, status and role based upon those observable behaviors. These judgments will obviously impact upon their assumptions concerning the competence of the participants as well as the importance of their messages.

In summary, the impact of credibility is mediated by the social values of the audience, by the audience's perception of their similarity to the message source, and by the audience's perception of a source's prestige, status or role. Applying these interactions to the general question of this dissertation leads to four additional propositions.

- P₂ Similarities between the speech behaviors of trial participants who are cooperating in the presentation of a case will co-occur with their success in the trial.

This proposition would hold if homophily and attractiveness are positively influenced by similarities in speech behavior and if homophily and attractiveness lead to better cooperation in the preparation and presentation of a case.

- P₃ Similarities between a trial participant's speech and that of the judge will co-occur with the success of that participant.

This proposition is based on the observation that for most naive jurors the most readily observable symbol of competence and importance within the courtroom environment is the judge and the assumption that they will perceive others who speak like the judge to be similarly competent and prestigious.

- P₄ The characteristic(s) of speech behavior which co-occur with trial success will be different for each of the trial roles.

This proposition is based on the observation that both persuasiveness and judgments of prestige and status are influenced by a source's role.

- P₅ The characteristic(s) of speech behavior which co-occur with the success of a participant in a trial will vary with differences in values held by the trial's decision makers and their perceptions of the participants homophily.

This proposition would hold if a difference in listener values corresponds with either a difference in the speech characteristics which influence credibility or a difference in the audiences' susceptibility to persuasion by a credible source.

Each of these propositions suggests possible relationships between the verbal behaviors of a trial's participants and the trial's outcome. In the following chapters specific hypotheses based upon these proposed relationships will be described and tested.

CHAPTER II
RESEARCH DESIGN AND EXPECTATIONS

The verdict of a criminal trial provides a useful operationalization of the persuasive success of the trial's participants. This operationalization and the public nature of trial records facilitates testing of the propositions developed in Chapter One. This chapter identifies specific hypotheses which address the propositions, describes variables to be used as measures of speech style, and presents a technique for gathering data.

Hypotheses

To address the propositions advanced in the preceding chapter, nine hypotheses will be tested.

- H₁ The speech style demonstrated by prosecution attorneys in trials which result in conviction will differ, beyond random expectations, from the style demonstrated by prosecution attorneys in trials which result in acquittal.¹
- H₂ The speech style demonstrated by defense attorneys in trials which result in acquittal will differ, beyond random expectations, from that demonstrated by defense attorneys in trials which result in conviction.

¹Possible interactions between these hypotheses are discussed later in this chapter. Style is operationally defined in the section on predictor variables; see p. 36.

- H₃ The speech style demonstrated by accuseds in trials which result in acquittal will differ, beyond random expectations, from the style demonstrated by accuseds in trials which result in conviction.
- H₄ The relationship between the speech styles of the accused and defense attorney in trials which result in acquittal will differ, beyond random expectations, from that demonstrated by the accused and defense attorney in trials which result in conviction.
- H₅ The relationship between speech styles of the judge and prosecution attorney in trials which result in conviction will differ, beyond random expectations, from that demonstrated between the judge and prosecution attorney in trials which result in acquittal.
- H₆ The relationship between speech styles of the judge and defense attorney in trials which result in acquittal will differ, beyond random expectations, from that demonstrated between the judge and defense attorney in trials which result in conviction.
- H₇ The relationship between speech styles of the judge and accused in trials which result in acquittal will differ, beyond random expectations, from that demonstrated between the judge and accused in trials which result in conviction.
- H₈ The speech style demonstrated by prosecution attorneys in trials which result in conviction and defense attorneys in trials which result in acquittal will differ, beyond random expectations, from the style demonstrated by prosecution attorneys in trials resulting in acquittal and defense attorneys in trials resulting in conviction.
- H₉ The speech style demonstrated by successful trial participants, including prosecution attorneys, defense attorneys and accuseds, in trials conducted in urban courts will differ, beyond random expectations, from the speech style demonstrated by successful trial participants in trials conducted in rural courts.

The first three hypotheses will be used to assess P_1 . If each of these holds, it would suggest that some component, or some components, of speech style co-occurs with trial outcome and implies that the verbal behavior has had an impact upon the persuasiveness of the trial's participants.

The fourth hypothesis is designed to assess P_2 . The advancement of H_4 is stimulated by the observation that the defense attorney and accused must work together in the creation of the trial defense presentation. H_4 is intended as a test of the possible effect which verbal similarities have upon the effectiveness of that joint effort.

The fifth, sixth and seventh hypotheses directly address P_3 by exploring the relationship between the speech of the judge and the three other trial principals. The use of three separate hypotheses (H_1 , H_2 , and H_3) to treat co-occurrences between speech style and trial outcome will permit assessment of P_4 . Each of these hypotheses addresses a different trial role and they can be used to identify characteristics of successful courtroom speech for each of these roles.

The last hypothesis, H_9 , is intended to indirectly address P_5 . The proposition was based on the assertion that audience values would mediate the credibility of a speaker and that similarity between the speaker and his audience would facilitate persuasion. Since no direct measure of audience type, audience values or speech patterns is practical in this

study, the assumption will be made that juries drawn from rural districts will differ in values and speech behavior from those drawn from urban districts.

All nine of these hypotheses rest on the assumption that if verbal behaviors have no bearing on trial outcome they will be randomly distributed across the acquittal and conviction conditions or the rural and urban trials. Therefore, any consistent differences identified should be the result of some relationship between speech styles demonstrated and the trial's outcome.

Data Gathering

Data for this investigation must conform to the restriction of pragmatic applicability which the study imposes upon itself. These pragmatic impositions include:²

- 1) The analysis must include representations of verbal behavior as it actually occurs in the courtroom.
- 2) The analysis must include the evaluations of verbal behaviors by the judges and juries.
- 3) The analysis must include a sample of trial situations which parallel the actual experience of a practicing attorney.

²See Chapter I, section entitled "Background", p. 1.

To insure that the investigation's hypotheses were tested using data that reflected verbal behavior as it actually occurs in the courtroom, transcripts were drawn from the proceedings of actual criminal trials. Because courts maintain transcripts of trials only if the decision of a lower court has been appealed, the only practical source of the large sample of transcripts required is an appeals court's records. In Oklahoma, transcripts of all appealed criminal cases are centrally filed with the Clerk of the Oklahoma Court of Criminal Appeals. Therefore, transcripts used in this study were drawn from the files of that office. To test the hypotheses and include evaluations by judges and juries, an equal number of cases resulting in acquittal and conviction were needed. These cases also had to represent a wide range of crimes and geographic areas.

Although the actual transcripts were drawn from the files of the Clerk of the Oklahoma Court of Criminal Appeals, the indexing system of those files was not adequately detailed for use in the actual identification of subject cases. The files, which include over 10,000 cases, are indexed only by defendant names and docket numbers; no index by characteristics of the individual cases exists. Because of this severely limited indexing, it was necessary to identify subject cases by reviewing a synopsis of each case appealed in Oklahoma since 1907. These synopses are available in the Pacific Reporter (1907-1977). Using the review of the Pacific Reporter and a

survey of cases cited in Oklahoma Statutes which detailed appeals procedures, it was possible to identify nineteen cases appealed from acquittal which were appropriate for inclusion in the study design. A case appealed from conviction was selected which most nearly approximated each of these acquittal cases in class of crime, geographic location of trial and date of trial. Transcripts of each of these thirty-eight trials were then drawn from the Clerk of the Oklahoma Court of Criminal Appeals.

Because each of these transcripts was several hundred pages long, analysis of the entire body of available speech behavior was impractical. To reduce the volume of data a systematic sampling procedure was applied.³ Seven segments of twenty statements were drawn from each of the thirty-eight trials. For the purposes of identifying data samples in this study, statements were defined as individual occurrences of uninterrupted speech and were operationalized by dividing the transcript's corpus at each reporter note indicating a new speaker.⁴ The seven segments drawn from each case were:

- (1) the first twenty statements of the accused,
- (2) the last twenty statements of the accused,
- (3) the first twenty statements of the defense attorney,
- (4) the last twenty statements

³ Initially a random sampling procedure was attempted which would have provided for greater generalizability of these results. However, restrictions in the research situation made the application of that procedure impractical.

⁴ For an example of this statement operationalization see Table I, Operationalization of Statement.

of the defense attorney, (5) the first twenty statements of the prosecution attorney, (6) the last twenty statements of the prosecution attorney, and (7) the first twenty statements of the trial judge, or the entire corpus of the judge's speech if he made fewer than twenty statements in the trial. The resulting 266 samples of twenty statements each compose the actual data for analysis.

Although this sampling procedure significantly shortened the body of speech behaviors for analysis, the samples of twenty statements each proved long enough to facilitate the application of all proposed techniques for the measurement of speech behaviors. The segments identified ranged from 150 to 750 words.

Sampling procedures based on word counts, sentences and phrases were rejected because at least one potentially useful variable was lost. Basing the sample length on number of statements made by the subject of investigation makes sample length largely dependent upon characteristics of that subject's own speech behaviors. Using the number of statements to define the samples, therefore, permits inclusion of measures of verbosity in the analysis.

The decision to use two samples from the two attorneys and the accused drawn from the beginning and end of the trial was made because the speech environment changes dramatically for all three of these participants over the course of a trial.

Prosecution precedes defense and examination precedes cross-examination. Therefore, early in the trial the prosecution attorney will be examining his own, presumably friendly, witnesses while the defense attorney will be cross-examining these opposition witnesses. Late in the trial this relationship will be reversed with the defense attorney examining his own witnesses and the prosecutor cross-examining defense witnesses. The testimony of the accused follows a similar pattern. His early testimony is solicited by and delivered to his defense counsel while cross-examination by the prosecution attorney forms his later testimony. Even cursory review of trial transcripts indicates differences in speech behaviors demonstrated when attorneys are examining their own witnesses and when those same attorneys are cross-examining opposition witnesses. These same, or similar, differences are manifest in the testimony of the accused while responding to examination and cross-examination. While this sampling procedure limits generalizability, it does insure that the variations over the course of each trial will be included in the analysis. The decision to use only one sample from the judge is based on two considerations. First the judge's role does not appear to undergo the dramatic changes which characterize the other trial participants. Second, in most subject trials, the jurist produced fewer than the forty statements needed for the creation of two dichotomous samples.

The use of official transcripts of appealed criminal trials carries with it two concomitant problems. First, the generalizability of the results of the investigation is reduced. The transcripts on file with the Clerk of the Oklahoma Court of Criminal Appeals only represent trials which were appealed within the state. Combining this limitation with the restrictions necessitated by the technique of sample selection, the subject population is severely limited. Thus, in a statistical sense, the population to which these findings may be generalized is the first and last twenty statements of criminal cases appealed in Oklahoma. However, my subjective review of several hundred criminal trial transcripts, including many from other states, revealed virtually no difference between the transcripts analyzed and those of other trials, nor any difference between the speech patterns found in the first and last twenty statements of a transcripts and the speech patterns found in the remainder of the document.

The second problem associated with the use of official criminal trial transcripts is an artifact of the technique used to create those transcripts. All of the subject transcripts are the product of court reporters who vary in their skill and accuracy. However, these deviations are not as significant as the omission of paralinguistic variations and the omission of all but the most gross non-verbal communicative behaviors. Although court recorders are not charged with the authority or responsibility to edit transcripts, they do punctuate the transcripts and are on occasion instructed by the

presiding judge to eliminate lengthy legally objectionable testimony or arguments. Judge Storkham, in a dissenting opinion in Carpenter v Davis, emphasized the potentially significant impact of recorded alterations of trial proceedings; he noted how the simple removal of a comma from trial transcript could have changed the result of an appeal (435 S.W.2d 382).

Despite their weaknesses, recorded trial transcripts do have two important advantages. They are available and they do reflect the content of actual courtroom speech. In many trials unofficial recording devices are prohibited and the time needed to gather adequate data from accessible proceedings would render the research impractical. Further, despite the anticipated inaccuracies of transcribed material described above, two separate studies have found almost identical evaluations of speakers based upon audio recordings and evaluations of those same speakers based upon transcribed speech samples. Mulac, in factor analyses of subjects' responses on his dialect attitude scale, found stable factor structures across responses to messages presented in several different media. These media included two forms of written transcripts as well as both audio and video recorded speech samples (Mulac, 1976). Even more directly applicable to this study, the Duke Law and Language Project compared subjects' reactions to audio recordings of witness testimony and transcripts made by court reporters of that same testimony. Their

findings suggest that the vast investment in time and expense needed to secure audio recordings would not be justified when transcripts appropriate for study are on public file. The Duke Project, in fact, reported that when they compared the results of subjects' evaluations of written testimony to subjects' evaluations of audio recorded testimony they found: "The response of the participants in the transcript experiment showed no major differences from those observed in the corresponding conditions of the tape experiment" (O'Barr, 1977, p. 14).

Variables and Operationalizations

Criterion Variable. The criterion variable, trial outcome, is divided into the two nominal categories of acquittal and conviction. Conviction and acquittal are operationalized as the decision of the district court where the transcribed trial or hearing occurred rather than upon the ultimate result of any appeals. No attempt is made to measure the actual guilt or innocence of the accuseds.

Alternative operationalizations of trial outcome considered and rejected included length of sentence and the result of appeals. Each of these was rejected because it is the product of a judge's, or judges', evaluation of material beyond the testimony and arguments available for analysis. Sentences are based, in part, upon the judge's review of a background investigation which is not a part of the trial transcripts. Appeal decisions are often based upon written arguments not

completely represented in the available transcripts. Further, appeal decisions are usually made by jurists not present during the actual trial who may not have been exposed to the subject speech data.

Predictor Variables. This research attempts to identify characteristics of speech style which co-occur with the criterion variable of trial outcome. A number of authors have described difficulties encountered in operationalizing the variable of speech style. This difficulty is, in large part, the result of the use of the word "style" to refer to virtually all characteristics of speech and the investment of academic camps in disparate definitions of the word. For example, style has been defined as variations in rate of production of traditional grammatical elements (Blankenship, 1962); as paralinguistic and lexical variations (Ragsdale, 1970); and as variations in the amount of abstractness (Shamo, 1972).

Despite the fact that style may be profitably operationalized in several different ways, the transcripts which are the raw data in this investigation restrict the options for operationalization. The transcripts do not contain adequate information to make phonological, paralinguistic or non-verbal analysis possible. However, this loss does not severely hamper the investigation. DeVito, who recognized the difficulties encountered in attempts to operationalize style, has produced a comparison of techniques for operationalization which range from phonetic variations, through morphological differences

to syntactic analysis. He argues that the range of choices for the speaker becomes greater and therefore styles become more easily identified in systems based upon the coarser elements of lexical or syntactic variations (DeVito, 1967). Further, research by Gunderson and Hopper indicates that the non-verbal components of delivery style have little impact upon audience perceptions of speaker credibility (Gunderson, 1976). Assuming that the arguments and findings of DeVito, and Gunderson and Hopper are accurate, the syntactic, lexical and discourse data which are available within the transcripts should be adequate for an operationalization of attorney, accused and jurist speech styles.

No attempt is made here to operationalize style in all its variations. However, the word "style" will be used to collectively label those characteristics of speech behavior selected for this analysis. Style, here, will include several variables selected for their appropriateness to the questions at hand and their applicability to the available data. The speech behavior variables to be used to operationalize style in this study include: (1) variables used in the Duke project's analysis of witness speech, (2) variables used successfully by this author in previous research on legal speech, (3) discourse variables which address strategies of questioning, and (4) variables identified by the Syntactic Language Computer Analysis program.

The Duke Law and Language Project has been successful in "correlating" several speech behaviors with subject's evaluation of witness testimony. The variables they have used include: (a) power speech, (b) narrative testimony, and (c) perseverance in simultaneous speech.

"Power speech" was operationalized by borrowing from Lakoff's description of female "mode of speech" (Lakoff, 1973; Lakoff, 1975). This female mode of speech was designated powerless speech.

According to Lakoff this mode of speech involves use of intensifiers ("so," "very," "too," as in "I like him so much."), empty adjectives ("divine," "charming," "cute," etc.), hyper-correct grammar (bookish grammatical forms), polite forms, gestures, hedges ("well," "you know," "kinda," "I guess," etc.), rising intonation and a wider range of intonational patterns . . ." (Lind 1977, p. 7).

Investigations by the Duke Project have identified several relationships between power speech and witness characteristics. Interestingly, sex seems to be only one of several characteristics which interact with powerless speech, and female witnesses do not consistently produce speech in this "female mode." A far more consistent predictor of the power of a witness's speech was his or her social position in relation to the court (Lind, 1977). Of course, the components of gestures and intonation cannot be used in this investigation because of the restrictions of the data. However, the components of intensifiers, empty adjectives, hyper-correct grammar, polite forms and hedges can be measured for inclusion in the consideration of style. Intensifiers, empty adjectives

and hedges will be measured using word and phrase lists.⁵ Hyper-correct grammar and polite forms defied reduction to a simple word or phrase list and had to be operationalized using judgments of the raters. Therefore, three independent raters were used to measure these variables and inter-rater reliability measures applied to the results of those measurements.⁶

The speech style variable of narrative testimony was operationalized by the Duke Project as ". . . the length of a witness's response to the lawyer's questions " (Lind, 1977, p. 10). However, reports by the Duke group do not detail exactly how "length" was defined. In this investigation, narrative testimony will be measured as the total number of words in the twenty statement sample. The Duke Project Reports use arguments based on publications on trial tactics (Keeton, 1973; Morrill, 1971) and attribution theory (Jones, 1965) to support their assertion that more narrative testimony will be evaluated most favorably. However, in their investigations the Duke Project did not produce statistical confirmation of that hypothesis (Lind, 1977).

⁵See coding protocol and description of rater training in Table II, Coding Protocol and Coder Training. Because of their low frequency, empty adjectives were eliminated from the analysis.

⁶Financial limitations prevented the incorporation of more than three independent raters. See protocol and description of rater training in Table II, Coding Protocol and Coder Training.

While the Duke Project did use the variable of perseverance in simultaneous speech, the fact that they used only witness speech in their analysis eliminated from consideration one of the most frequent situations in which simultaneous speech occurs. Witnesses and attorneys who are questioning them rarely interrupt one another. However, an attorney will frequently interrupt his opposition with an objection. In the Duke Project's Reports, they describe simultaneous speech as: "One of the most characteristic aspects of . . . hostile exchanges . . ." (Lind, 1977; p. 17). They further assert that hostile exchanges between an attorney and witness occur infrequently. A review of the data for this dissertation suggests that hostile exchanges between witnesses and attorneys occur infrequently, that occurrences are almost always in the cross-examination of opposition witnesses, and that such hostile exchanges are not at all uncommon between prosecutors and defense attorneys when discussing objections to questioning protocol. Samples drawn from both the beginning and end of each transcript will include situations in which both attorneys are questioning opposition witnesses. These samples should, therefore, provide examples of simultaneous speech. Occurrences of perseverance in simultaneous speech will be operationalized by counting court reporter notes on transcripts indicating interruptions by the subject and by counting incomplete words or phrases which

precede the subject's sample statements.⁷

In previous research on legal profession-specific speech by this author, several variables have been identified which co-occur with legal training, favorable evaluation of law school examinations and discussions involving legal professional topics. These variables include: (a) non-assertive speech, (b) legal jargon, and (c) speech complexity. The variable of non-assertive speech is so similar to the variable called "hedge" in the Duke Project's analyses that it will not be analyzed separately.

Speech complexity has been used to differentiate between novice and experienced law students (Parkinson, 1976) and it has been found to co-occur with successful law school examinations (Parkinson, 1977). In previous investigations, this variable was operationalized using counts of words per sentence (Parkinson, 1976a, 1976b; Parkinson & Gorcyca, 1977). Therefore, it is so similar to the variable of narrative testimony which is measured using statement length that it will not be included in this study.

While the manifestation of legal jargon failed to differentiate between novice and experienced law students (Parkinson, 1976), the occurrence of legal jargon was a successful indicator of high evaluations of law school tests (Parkinson,

⁷See coding protocol in Table II, Coding Protocol and Coder Training.

1977) and has been used to successfully differentiate law students from other graduate students (Parkinson & Gorcyca, 1977). In this investigation, legal jargon will be operationalized using a count of words and phrases appearing in Black's Law Dictionary (Black, 1968).

The pattern in which an attorney elects to question a witness is a potentially significant component of his speech style; to assess this potentiality, a discourse analysis of questioning behavior will be included in this study. A review of the subject transcripts suggests two components of questioning behavior which may prove fruitful. These are duration of questioning line and questioning specificity. The duration of a questioning line refers to the number of questions an attorney uses to secure testimony from a witness on a single topic.⁸ Variations in this behavior range from a single question to elicit lengthy narrative to many questions, each eliciting only a terse statement, to secure the same information. Duration of questioning line will be operationalized as the mean number of questions per topic and it will be measured by hand counting questions which refer to previous responses by a witness. These "lines of questions" can move a witness toward more specific or detailed comments or they can generate more general information. Question specificity

⁸For an example of question lines, see Table III, Operationalization of Question Lines.

will be measured by hand counting the number of question lines which elicit increasingly detailed information on the topic and the number of such question lines eliciting more general information on the topic.

In addition to those variables of speech behavior which are specifically related to investigations of legal speech, speech style components will also be operationalized using Syntactic Language Computer Analysis (SLCA). Developed by Cummings and Renshaw (Cummings, 1970; Cummings & Renshaw, 1976), SLCA is a computerized content analysis system which produces counts of lexical variables from key-punched message input. These counts are combined by SLCA to produce ninety-nine index scores and three variable totals all of which are products of the speaker's syntactic speech behavior.

Three units are basic to the system: subject signs, connectors and limiters. Subject signs, nouns, are classified as primitive, without modifiers, or defined, with one or more modifiers; and as either afferent, capable of being sensed, or efferent, not capable of being sensed. Connectors, verbs, are also classified as primitive or defined and are further divided based on tense, voice and relationships indicated. Limiters are identified as either afferent or efferent. Table three contains a further list and description of the SLCA output variables.

Cummings and Wright (1977) analyzed over 200 messages with SLCA and submitted the data to a principal components

solution followed by a varimax rotation. The result of that analysis was a reduction of the original 102 variables to thirty-seven variables including eight factors. Most studies using SLCA to date have used either the full 102 variable output or the thirty-seven variables obtained in that reduction. The over 250 messages, samples, in this investigation will be subjected to a similar factor analysis and the results of that manipulation will be used to define the specific variables or factors to be drawn from SLCA for inclusion in the consideration of "style".

Because of the sensitivity which 102 categories provide, its ability to deal with terse or interrupted verbiage, and its orientation to lexical variation, SLCA is ideally suited for the proposed research. Its sensitivity has been demonstrated in several studies which have distinguished a number of encoder characteristics. For example, Gorcyca, Kennan, Stich and Cummings, in three studies, identified discriminant functions that correctly classified 68.18% to 71% of male and female encoded messages (Gorcyca, 1977; Gorcyca, 1976; Gorcyca, Kennan & Stich, 1976). Gorcyca (1976) also found that males use slightly more afferent words and afferent subject limiters than do females. Parkinson and Dobkins (1977) have identified SLCA index scores which correlate with membership in a prison inmate training group, and Cummings and Wright (1977) found SLCA scores that distinguish field dependent and independent subjects.

In summary, several different relationships between verbal behaviors and trial outcome have been proposed. Nine hypotheses have been advanced which address those proposed relationships, and a technique for securing the data to test these hypotheses has been described. Although not exhaustive, a diverse collection of component variables will be used in the operationalization of courtroom speech style. These variables were drawn from several sources and selected because of their applicability to the data available. The following figure provides a graphic representation of the variables to be included in this study.

Figure I

Predictor Variables:

The Components of Courtroom Speech Style

Source	Variable	Measurement Type	
Duke Project	Direct Speech	Intensifiers	Word Count
		Hedges	Word and Phrase Count
		Hyper-Correct Grammar	Judges Ratings
		Polite Forms	Judges Ratings
	Narrative Testimony	Word Frequency	
	Perseverance in Simultaneous Speech	Number of Interruptions Noted by Court Reporter	
Author's Previous Research	Legal Jargon	Words and Phrases in <u>Black's Law Dictionary</u>	
Discourse Analysis (applicable only to attorneys' speech: H ₁ , H ₂ , H ₈ , H ₉)	Duration of Questioning Line	Mean Number of Questions Addressing One Topic	
	Questioning Specificity	Frequency of Increasing Specificity and Frequency of Increasing Generality Question Lines	
SLCA	102 Variables (See Table IV)	See Table IV	

CHAPTER III

ANALYSES

In the preceding chapter nine hypotheses were advanced and a methodology for gathering data to test those hypotheses was proposed. In this chapter statistical manipulations applied to the data are reported. These procedures are presented in three sections. The first section describes the factor analysis used to reduce the 102 variables obtained from SLCA to fourteen factors. This section also provides a brief description of each of the factors. The second section describes and discusses the reliability test applied to the variables "hyper-correct grammar" and "polite forms." The third section describes the statistical tests used to assess each of the hypotheses offered in Chapter Two.

To facilitate statistical analyses a key-punched data field was generated for each subject speech sample. This data field consisted of three general sets of information. The first of these sets included an indication of the subject trial's outcome, the location of the speech sample within the trial, the geographic location of the trial and the role of the transcribed participant. Second, each data field included

measures of the predictor variables listed in Chapter Two. These predictor variables include (a) word counts and rater judgments of power speech indicators, entered as actual word counts of intensifiers, empty adjectives and hedges, and rater judgments for hyper-correct grammar and polite forms; (b) counts of perseverance in simultaneous speech; (c) legal jargon; (d) questioning lines, entered as the mean number of statements per question line and total number of question lines; and (e) questioning specificity, entered as separate frequency counts of specific and general questioning lines. Index scores for each of ninety-nine SLCA variables and total frequencies for three additional SLCA variables are the third set of information in each data field.

Factor Analysis of SLCA Variables

The results of the SLCA of all subject speech samples were subjected to a frequency count and those with zero frequency were eliminated from further consideration. The remaining 59 SLCA variables were subjected to a principal components factor solution followed by a varimax rotation. This resulted in a reduction of the 102 variables to 14 usable factors. A variable is included in a factor only if it correlates 0.6 or higher with the factor but less than 0.4 on any other factor. See Table V for a detailed description of the results of the factor analysis.

Factor one includes the SLCA variables ClP (primitive

connectors), LS1A (afferent subject limiters), IT (transitive indicative connectors), ACTC1 (action connectors) and PRIM (unmodified subject words and connectors). This factor has been labeled simple action language because its component variables suggest unmodified descriptions of actions in simple sentences.

Factor two includes the SLCA variables N1T (negated transitive action connectors), NClP (negated primitive connectors) and NCl (total negative connectors). This factor has been labeled negation action language because each of its component variables involves the negation of connectors and one of the three component variables incorporates the negation of connectors describing actions.

Factor three includes the SLCA variables LC1E (total modifiers of efferent connectors) and EFF (total efferent subject words and limiters). This factor has been labeled abstract language because its component variables are measures of verbiage which has no sense-oriented referent.

Factor four includes the SLCA variables SPR (present tense subjunctive connectors), NSPR (negated present tense subjunctive connectors), and NST (negated transitive subjunctive connectors). This factor has been labeled conditional language.

Factor five includes S1P (total unmodified subject words), S1A (total afferent subject words), and S1 (total

subject words). This factor has been labeled simple subject language for two reasons: (a) each of its component variables includes a count of subject words, and (b) two of the three component variables suggest that these subject words are not complicated by modification or association with non-sense-oriented referents.

Factor six includes the SLCA variables IPA (indicative past connectors), TTO (subject words referring to receiver), and ClPA (past tense connectors). The coding of messages for SLCA requires reconstruction of interrogatives as indicatives, and the bulk of statements which include such a reconstructed past tense indicative and a reference to the receiver are part of an attorney's interrogation of a witness. Therefore, factor six has been labeled interrogation language.

Factor seven includes the SLCA variables IEXT (total connectors associating a subject sign with a demonstrative) and NISXT (total negative indicative connectors associating a unit sign with a demonstrative). This factor has been labeled demonstrative language.

Factor eight includes the SLCA variables ICl (total indicative connectors) and NICT (negated indicative comparison connectors). This factor has been labeled indicative language.

Factor nine includes the SLCA variables ICP (comparison spatial connectors) and NICP (negated indicative spatial comparison connectors). Factor nine has been labeled space relationship language.

Factor ten includes the SLCA variables ICS (indicative comparison subset connectors) and NICS (negated indicative comparison subset connectors). This factor has been labeled comparison subset language.

Factor eleven includes the SLCA variables SFU (future subjunctive connectors) and ClFU (total future tense connectors). This factor has been labeled future language (conditional).

Factor twelve has been eliminated from consideration because none of its component variables met the 0.6/0.4 purity criterion.

Factor thirteen includes the SLCA variable RCl (intransitive connectors) and IR (intransitive indicative action connectors). This factor has been labeled intransitive action language.

Factor fourteen includes the SLCA variables of ART (total articles) and PREP (total prepositions). Because these component variables suggest grammatically complete sentences, this factor has been labeled complete speech language.

Factor fifteen contains the SLCA variable IFU (total indicative future connectors). This factor has been labeled future language (indicative).

In addition to the fourteen factors described above, the SLCA variables SS (self references), AFF (total afferent words) and Tot-3 (total words) were retained in the analysis. Self-references were retained because they seem the conceptual

reciprocal of factor six (interrogation language). While much of an attorney's speech involves asking witnesses questions about themselves, much of the accused's speech involves answering questions about himself. Similarly, afferent words were retained because they seem the reciprocal of factor three (abstract language). The absence of abstractness in a subject's speech might be measured as an increase in the afference of the speech. Total words were retained because they offer a measure of verbosity needed to operationalize the variable "narrative testimony."

Reliability of Hyper-Correct Grammar and Polite Forms

Pearson r correlation statistics were calculated to assess the consistency of judgments of hyper-correct grammar and polite forms. For each of these two variables, a Pearson r was calculated for each possible pair of judges. The correlations produced by these manipulations are reported in Table VI. The calculations for polite forms produced Pearson r values ranging from 0.767 to 0.976. From these statistics, it is apparent that the judges' ratings of polite forms are reasonably consistent. Therefore, polite forms were calculated for further analysis as the mean score produced by the three judges.

Correlations produced by hyper-correct grammar ranged from 0.104 to 0.975. Because correlations between judges one and two, and two and three were quite low (0.104 for judges

one and two and 0.127 for judges two and three), interviews were conducted with the judges who coded hyper-correct grammar. These interviews revealed that the second judge had included in his ratings counts of titles such as "sir" and "Mr." The Pearson r for the two remaining judges who had not included titles in their ratings was 0.975. Therefore, hyper-correct grammar is treated as two separate variables in subsequent analyses. Hyper-correct grammar/titles is the rating by that judge who included counts of titles in his judgment of hyper-correct grammar and hyper-correct grammar/2 is the mean rating of the remaining judges.

Hypotheses Tests

- H_1 The speech style demonstrated by prosecution attorneys in trials which result in conviction will differ, beyond random expectations, from the style demonstrated by prosecution attorneys in trials which result in acquittal.

A Multiple Discriminant Analysis (MDA) using all predictor variables was calculated to divide the speech samples secured from prosecution attorneys into groups based on acquittal and conviction. This calculation was based upon a total N of 48. There were twenty-two prosecution attorneys in the acquittal group and twenty-six in the conviction group. One discriminant function was obtained with an eigen value of 0.79626 and a canonical correlation of 0.666. A chi-square test of the significance of Wilks' Λ was 24.6 ($p < 0.002$; $df=8$). The predictor variables included in the discriminant

function and their standardized discriminant coefficients are reported in Table VII. Using those coefficients as an indicator of the relative importance of the variables, it is apparent that factor eleven (future language/conditional) is the most important in defining the function. Other variables in the function include factor six (interrogation language), factor eight (indicative language), factor ten (comparison subset language), factor fifteen (future language/indicative), polite forms, hyper-correct grammar/2, and tot-3 (narrative testimony or verbosity). The hypothesis was supported by results which showed that 77.30 percent of the acquittal group was correctly classified. Overall, 77.08 percent of the cases were correctly classified. A z test of significance applied to this classification rate produced a z value of 3.809 ($p < 0.0001$).

H₂ The speech style demonstrated by defense attorneys in trials which result in acquittal will differ, beyond random expectations, from that demonstrated by defense attorneys in trials which result in conviction.

A MDA using all predictor variables was calculated to divide the speech samples secured from defense attorneys into groups based on acquittal and conviction. This calculation was based on a total N of 48. There were 22 defense attorneys in the acquittal condition and 26 defense attorneys in the conviction group. One discriminant function was obtained with an eigen value of 0.637 and a canonical correlation of 0.624.

A chi-square test of the significance of Wilks' Lamda was 20.44 ($p < 0.015$; $df=9$). The predictor variables included in the discriminant function and their standardized discriminant coefficient are reported in Table VIII. Using those coefficients as an indicator of the relative importance of the variables, it is apparent that factor one (simple action language) is the most important in defining the function. Other variables in the function include factor three (abstract language), factor six (interrogation language), factor seven (demonstrative language), factor thirteen (intransitive action language), factor fourteen (complete speech language), AFF (words with sensual referents), jargon, and frequency of specificity question lines. The hypothesis was supported by results which showed that 77.3 percent of the acquittal group was correctly classified, and 84.60 percent of the conviction group was correctly classified. Overall, 81.25 percent of the cases were correctly classified. A z test of significance applied to this classification rate produced a z value of 4.84 ($p < 0.00003$).

H₃ The speech style demonstrated by accuseds in trials which result in acquittal will differ, beyond random expectations, from the style demonstrated by accuseds in trials which result in conviction.

An MDA using all predictor variables was calculated to divide the speech samples secured from accuseds into groups based on acquittal and conviction. This calculation was based on a total N of 25. There were eight accuseds in the acquittal

condition and seventeen in the conviction group. One discriminant function was obtained with an eigen value of 0.725 and a canonical correlation of 0.648. A chi-square test of the significance of Wilks' Lamda was 11.78 ($p < 0.048$; $df=5$). The predictor variables included in the discriminant function and their standardized discriminant coefficients are reported in Table IX. Using those coefficients as an indicator of the relative importance of the variables, it is apparent that polite forms is the most important in defining the function. Other variables in the function include factor seven (demonstrative language), factor nine (space relationship language), factor fourteen (complete speech language), and SS (references to self). The hypothesis was supported by results which showed that 100 percent of the acquittal group and 76.50 percent of the conviction group were correctly classified. Overall, 84.00 percent of the cases were correctly classified. A z test of significance applied to this classification rate produced a z value of 2.18 ($p < 0.0146$).

- H₄ The relationship between the speech styles of the accused and defense attorney in trials which result in acquittal will differ, beyond random expectations, from that demonstrated by the accused and defense attorney in trials which result in conviction.

Twenty-eight independent two-way analyses of variance were calculated addressing the interaction between role (defense attorney or accused) and trial outcome (acquittal or conviction). Each of these ANOVAs used one of the predictor

variables as its dependent variable. This procedure supported the hypothesis by identifying statistically significant interactions between role and trial outcome for the variables factor seven (demonstrative language), SS (references to self), and AFF (total afferent words). Significance of the interaction effects for each of these variables were: factor seven, $p < 0.047$; SS, $p < 0.027$; and AFF, $p < 0.038$. A complete ANOVA table for each dependent variable tested is included in Table X.

- H₅ The relationship between speech styles of the judge and prosecution attorney in trials which result in conviction will differ, beyond random expectations, from that demonstrated between the judge and prosecution attorney in trials which result in acquittal.

Twenty-eight additional two-way analyses of variance were calculated addressing the interaction between role (prosecution attorney or judge) and trial outcome (conviction or acquittal). As in the test of H₄, each of these ANOVAs used one of the predictor variables as its dependent variable. This procedure supported the hypothesis by identifying a statistically significant interaction between role and trial outcome for the dependent variable factor one (simple action language). Significance of the interaction effect was 0.044. With a significance criterion of 0.05, random chance could produce a significant effect for one of each twenty variables tested. Therefore, this hypothesis is accepted only with a substantial caveat. A complete ANOVA table for each dependent variable is included in Table XI.

- H₆ The relationship between speech styles of the judge and defense attorney in trials which result in acquittal will differ, beyond random expectations, from that demonstrated between the judge and defense attorney in trials which result in conviction.

The same procedure applied to H₄ and H₅ was used to address the interaction between role (defense attorney or judge) and trial outcome (acquittal or conviction). This procedure supported the hypothesis by identifying a statistically significant interaction between role and trial outcome for the dependent variable factor one (simple action language). Significance of the interaction effect was 0.022. As was the case with H₅, acceptance of this hypothesis is somewhat tenuous, because only one of 28 ANOVAs performed was significant. A complete ANOVA table for each of the dependent variables is included in Table XII.

- H₇ The relationship between speech styles of the judge and accused in trials which result in acquittal will differ, beyond random expectations, from that demonstrated between the judge and accused in trials which result in conviction.

None of the twenty-eight two-way ANOVAs calculated to address the interaction between role (accused or judge) and trial outcome (acquittal or conviction) produced statistical significance for the interaction effect. Therefore, H₇ is rejected.

- H₈ The speech style demonstrated by prosecution attorneys in trials which result in conviction and defense attorneys in trials which result in acquittal will differ, beyond random expectations, from the style demonstrated by prosecution attorneys in trials resulting in acquittal and defense attorneys in trials resulting in conviction.

The speech samples produced by prosecution attorneys and defense attorneys were recoded to create two groups of samples. The first group, labeled successful attorneys, included prosecution attorneys in trials which resulted in conviction and defense attorneys in trials which resulted in acquittal. The second group, labeled unsuccessful attorneys, included prosecution attorneys in trials resulting in acquittal and defense attorneys in trials resulting in conviction. An MDA using all predictor variables was calculated to divide these samples into groups based upon success. This calculation was based on a total N of 108. There were 48 successful attorneys and 60 unsuccessful attorneys. One discriminant function was obtained with an eigen value of 0.231 and canonical correlations 0.433. A chi-square test of the significance of Wilks' Lamda was 21.377 ($p < 0.002$; $df=6$). The predictor variables included in the discriminant function and their standardized discriminant coefficients are reported in Table XIII. Using those coefficients as an indicator of the relative importance of the variables, it is apparent that factor thirteen (intransitive action language) is most important in defining the function. Other variables in the function include factor seven (demonstrative language), factor eight (indicative language), factor eleven (future language/conditional), tot-3 (narrative testimony or verbosity), and total number of statements in question lines. The hypothesis was supported by results which showed that 64.6 percent of the successful and

73.30 percent of the unsuccessful attorneys were correctly classified. Overall, 69.44 percent of the cases were correctly classified. A z test of significance applied to this classification rate produced a z value of 3.43 ($p < 0.0005$).

H₉ The speech style demonstrated by successful trial participants, including prosecution attorneys, defense attorneys and accuseds, in trials conducted in urban courts will differ, beyond random expectations, from the speech style demonstrated by successful trial participants in trials conducted in rural courts.

The recordings produced for H₈ were modified to incorporate speech samples drawn from accuseds. These modified recordings produced a group of successful trial participants which included only prosecution attorneys in trials resulting in conviction, defense attorneys in trials resulting in acquittal, and accuseds in trials resulting in acquittal. Speech samples from these successful trial participants were subjected to an MDA which attempted to classify the sampled into groups based on the rural or urban geographic location of the trial. This calculation was based on a total N of 56. There were 31 successful trial participants in the urban group and 25 successful trial participants in the rural group. One discriminant function was obtained with an eigen value of 1.332 and a canonical correlation of 0.756. A chi-square test of the significance of Wilks' Lamda was 40.212 ($p < 0.0001$; $df=13$). The predictor variables included in the discriminant function and their standardized discriminant coefficients are reported in Table XIV. Using those coefficients as an indicator of

relative importance of the variables, it is apparent that factor three (abstract action language) is the most important in defining the function. Other variables in the function include factor four (conditional language), factor five (simple subject language), factor seven (demonstrative language), factor eight (indicative language), factor nine (space relationship language), factor thirteen (intransitive action language), factor fourteen (complete speech language), polite forms, hyper-correct grammar/2, hedges, and tot-3 (narrative testimony or verbosity). The hypothesis was supported by results which showed that 87.10 percent of the urban trial participants and 92.00 percent of the rural trial participants were correctly classified. Overall, 89.29 percent of all cases were correctly classified. A z test of significance applied to this classification rate produced a z value of 8.29 ($p < 0.00003$).

Of the hypotheses offered only H_7 , which suggested that a relationship between the speech styles of judges and accusedswould co-occur with trial outcome, was not supported statistically. In the following chapter these results will be discussed, suggestions for application by the legal practitioner will be advanced, and potential future research will be proposed.

CHAPTER IV
DISCUSSION OF RESULTS

Chapter One developed five propositions; Chapter Two advanced nine hypotheses addressing those propositions and a methodology for studying them; and Chapter Three reported the results. In the first section of this chapter each of the original propositions will be discussed in light of the results of hypothesis testing. In the second section of this chapter the results of statistical manipulations used to test the hypotheses will be interpreted and traits of successful courtroom speech described. In the third section of this chapter future research will be proposed.

Propositions

The first proposition stated:

Some characteristic(s) of verbal behaviors demonstrated by a trial participant to the trial's decision makers (the judge and jury) will co-occur with the success of that participant.

This proposition was based on previous research and intuition which suggested that language behavior would impact upon credibility which, in turn, would impact upon trial outcome. The three hypotheses which were designed to test P_1 suggested differences in the speech style of prosecution attorneys (H_1),

defense attorneys (H_2), and accuseds (H_3) which correspond with different trial outcomes. The statistical confirmation found for these three hypotheses leads quantitative support to the relationship between language behavior, credibility and trial outcome.

The second proposition stated:

Similarities between speech behaviors of trial participants who are cooperating in the presentation of a case will co-occur with their success in the trial.

This proposition was advanced because optimal homophily may impact upon the cooperation necessary for a successful trial defense. H_4 which suggested an interaction between the speech styles of defense attorneys and their clients and trial outcome was statistically confirmed. Although the two-way analysis of variance used to test H_4 did identify significant interaction effects for three of the predictor variables, a study of the ANOVA tables and the means for each of the tested subject groups did not facilitate identification of an ideal or successful style relationship. Even if some relationship between speech styles of the defense attorney and accused could be found to co-occur with courtroom success, it is obvious that the relationship would not be based on simple similarity as was suggested in the second proposition. Successful attorney/accused dyads appear to be more similar to each other in the production of demonstratives and self references than are unsuccessful attorney/accused dyads. However, dyads

dissimilar in the production of sense-oriented (afferent) words are most successful. Similarity in courtroom verbal style is apparently not the key to understanding the attorney/client dyad and its success. Future investigations of this dyad should focus upon the pre-trial interviews between the defense attorney and his client. In these interviews, each is attempting to communicate with the other rather than with some third party.

The third proposition stated:

Similarities between a trial participant's speech and that of the judge will co-occur with the success of that participant.

This proposition was based on two notions: for most naive jurors the most readily observable symbol of competence and importance within the courtroom environment is the judge, and the jurors will perceive others who speak like the judge to be similarly competent and prestigious. The three hypotheses designed to test P_3 suggested an interaction between trial role and trial outcome. H_5 addressed the speech styles of judges and prosecution attorneys as they interacted with trial outcome. H_6 addressed the speech styles of defense attorneys and judges as they interacted with trial outcome. H_7 addressed the speech styles of judges and accuseds as they interacted with trial outcome. The analyses of variance calculated to explore H_7 failed to identify any significant interaction effect for any of the twenty-eight dependent variables tested, and the analyses of variance calculated to explore H_5 and H_6

only produced significant interaction effect for factor one (simple action language). When only one of twenty-eight dependent variables tested produces significance, one could reasonably question whether the relationship between the judge's speech and that of the attorneys significantly influences trial outcome. The failure of H_7 and the weak support identified for H_5 and H_6 offers a challenge to the intuitive notion advanced in P_3 . Contrary to findings reported by the Duke Project¹, it would appear that juries expect different verbal styles from the trial's participants and do not evaluate attorneys or accuseds based on the similarity of their speech style to that of the judge.

The fourth proposition stated:

The characteristic(s) of speech behavior which co-occur with trial success will be different for each of the trial roles.

This proposition was based on the observation that both persuasiveness and judgments of prestige and status are influenced by a source's role. The first, second, third, and eighth hypotheses addressed the fourth proposition. The first three hypotheses each explored the speech style and trial outcome for one of the trial participant roles, and the eighth explored attorney speech style and trial success for both prosecution and defense attorneys. A successful and unsuccessful speech style was readily identifiable for each trial participant;

¹See Chapters I and II for a description of the Duke Project's work.

however, there was virtually no overlap in the components of these successful styles. The variables which were included in the discriminant functions produced by tests of H_1 , H_2 , H_3 , and H_8 suggest that successful courtroom speech defies representation in a single model. Rather, the results of each of those tests suggest that a unique style is successful for each of the trial roles investigated here. Thus, P_4 appears to be accurate.

The fifth proposition stated:

The characteristic(s) of speech behavior which co-occur with the success of a participant in a trial will vary with differences in values held by the trial's decision makers and their perceptions of the participants homophily.

This proposition was based on the conceptualization of social mediation. If a difference in listener values corresponds with either a difference in speech characteristics which influence credibility or a difference in the audience's susceptibility to persuasion by a credible source, this proposition would hold. H_9 is intended to indirectly address P_5 . This last hypothesis suggested a difference between the speech styles of successful participants in trials conducted in rural and urban settings. The assumption was made that juries drawn from rural districts will differ in values and speech behaviors from those drawn from urban districts. While the ninth hypothesis did hold, there are a number of possible interpretations. The differences in successful rural and urban trial participants may not effect trial outcome but simply be

an artifact of the setting itself. Most attorneys and accuseds in rural trial settings are themselves apt to be from rural districts. Despite interpretation which questions P_5 , the results of H_9 do, at least indirectly, imply that a trial participant ought modify his verbal behavior when moving from a rural to urban setting.

Interpretations for the Legal Practitioner

The analyses reported in Chapter Three facilitate interpretations beyond the simple acceptance or rejection of the hypotheses and propositions. The patterns of style variables included in the discriminant functions can be used to produce guidelines or simplified descriptions of successful courtroom speech traits. Because the traits of successful courtroom speech vary with the trial participant's role, separate guidelines will be presented for the prosecution attorney, defense attorney and the accused. In addition, guidelines will be offered which address successful rural and urban courtroom speech.

Prosecution Attorney. Table VII includes the means for each predictor variable in the discriminant function for both successful and unsuccessful prosecution attorneys. These means indicate that the prosecution attorney whose trial ended in conviction manifested greater quantities of particular stylistic characteristics than did his less successful counterpart. The characteristics of successful prosecution speech

are: factor six (interrogation language), factor fifteen (future language/indicative), and Tot-3 (narrative testimony or verbosity). Characteristics of unsuccessful prosecution speech are: factor eight (indicative language), factor ten (comparison subset language), factor eleven (future language/conditional), polite forms, and hyper-correct grammar/2.

The standardized discriminant coefficient for these variables serves as a measure of their relative importance to differentiate between successful and unsuccessful prosecution speech. These coefficients indicate that factor eleven (future language/conditional) and factor fifteen (future language/indicative) are the most significant variables in this differentiation. All variables in the discriminant function are arrayed with their discriminant coefficients in Figure two, page 74.

When compared with unsuccessful prosecution speech, the stylistic components of successful prosecution speech urge verbal assertiveness. Certainly interrogation language and verbosity suggest an aggressive or forceful style. Although future language/indicative does not directly suggest assertiveness, when it is compared to the future language/conditional which is included in the unsuccessful prosecution speech, it is obviously the more assertive of the two. Further, several of the components of unsuccessful prosecution speech themselves

suggest an unassertive style: For example, Factor eight (indicative language) included as one of its two component variables (negation of indicative connectors). Also, hypercorrect grammar and polite forms are characteristics of what the Duke Project labeled "powerless speech."

Defense Attorney. Table VIII includes the means for each predictor variable in the discriminant function for both successful and unsuccessful defense attorneys. The characteristics of successful defense speech are: factor one (simple action language), factor three (abstract action language), factor six (interrogation language), factor thirteen (intransitive action language), jargon, and number of question lines with increasing specificity. Characteristics of unsuccessful defense speech are factor seven (demonstrative language), factor fourteen (complete speech language), and AFF (total words with sense-oriented referents).

The discriminant coefficients for these variables indicate that factor one (simple action language), factor thirteen (intransitive action language), factor fourteen (complete speech language), and AFF (total words with sense-oriented referents) are the most significant in differentiating between successful and unsuccessful defense speech. All of the variables in the discriminant function are arrayed with their discriminant coefficients in Figure two, page 74.

The stylistic components of unsuccessful defense speech suggest greater specificity than the successful defense speech. Demonstratives and the articles which are included in complete speech both suggest specific referents. Afferent or sense-oriented words also seem more specific than their efferent counterparts. The successful defense speech incorporates markers of less specificity and more abstraction. Simple action language, a component of successful defense speech, includes two markers of unmodified verbage. The absence of adverbs and adjectives indicates a lack of specificity. Abstract action language, intransitive action language, and jargon also suggest an element of referential abstraction in successful defense speech. The last characteristic of successful defense speech, number of question lines of increasing specificity, suggests that the successful defense attorney began his questioning in a less specific or more abstract frame than did his less successful counterpart.

Accused. Table IX includes the means for predictor variables in the discriminant function for both successful and unsuccessful accuseds. Characteristics of successful accused speech are factor seven (demonstrative language), factor nine (space relationship language), factor fourteen (complete speech languages), and polite forms. The only identified characteristic of unsuccessful accused speech is SS (references to self).

The discriminant coefficients for these variables indicate that polite forms is the most significant variable in differentiating between successful and unsuccessful accused speech. All of the variables in the discriminant function are arrayed with their discriminant coefficients in Figure two, page 74.

Two characteristics of successful accused speech, demonstratives and space relationships, suggest that specificity works to the advantage of the accused. Two other characteristics of successful accused speech and the one characteristic which corresponds with a lack of success indicate that deference or courtesy is an important component of successful accused speech. Obviously, polite forms are a marker of such deference. Also, speech formality is a marker of deference, and such formality would result in increased manifestation of the articles and prepositions measured by factor fourteen (complete speech language). References to oneself, a characteristic of unsuccessful accused speech, seems non-deferential.

Rural/Urban Trials. Table XIV includes the means for each predictor variable in the discriminant function which divided successful trial participants based on the rural or urban location of the subject trial. These means suggest that trial participants who are successful in rural areas manifest substantially different verbal styles than do participants

who are successful in urban areas. Characteristics of successful urban trial speech include factor four (conditional language, factor eight (indicative language), factor thirteen (intransitive action language), and factor fourteen (complete speech language). Characteristics of successful rural trial speech include factor three (abstract action language), factor five (simple subject language), factor seven (demonstrative language), factor nine (space relationship language), polite forms, hyper-correct grammar/titles, hyper-correct grammar/2, hedges, and Tot-3 (narrative testimony or verbosity).

The discriminant coefficients for these variables suggest that no variables dominate the discriminant function which differentiates between rural and urban speech. All variables included in the discriminant function are arrayed, along with their discriminant coefficients, in Figure two, page 73.

The distribution of conditional language, simple subject language, demonstrative language, indicative language, space relationship language, and intransitive action language suggests that successful urban trial speech is more abstract and less specific than its rural counterpart. However, the inclusion of abstract action language in the characteristics of successful rural trial speech and complete speech language in successful urban trial speech challenges the purity of the notion that successful rural trial speech is either more specific or less abstract than successful urban trial speech.

All measures of slower trial pace and greater courtesy included in the rural/urban discriminant function proved to be markers of successful rural trial speech. The use of polite forms, titles, hedging, hyper-correct grammar and verbosity all show substantially higher means in the successful rural trial speech.

Figure two, below, provides a graphic array of successful and unsuccessful speech characteristics. It also compares the characteristics of rural and urban trial speech. For each role, the speech style variables are arranged with those accounting for the most variance above ones which are less important in distinguishing between successful and unsuccessful speech.

Figure II

Speech Style Characteristics

	SUCCESSFUL		UNSUCCESSFUL	
	Variable	Stand. Disc. Coef.	Variable	Stand. Disc. Coef.
PROSECUTION SPEECH	Factor 15 (future lang/indicative)	0.543	Factor 11 (future lang/conditional)	-0.570
	Tot-3 (narrative testimony)	0.484	Factor 8 (indicative lang)	-0.410
	Factor 6 (interrogation lang)	0.455	Hyper-correct grammar/2	-0.255
			Factor 10 (comparison subset lang)	-0.237
			Polite Forms	-0.229
DEFENSE SPEECH	Factor 1 (simple action lang)	1.264	Factor 14 (complete spch lang)	0.939
	Factor 13 (intransitive action lang)	-0.896	AFF (total words w/sense oriented referents)	0.905
	Jargon	-0.511	Factor 7 (demonstrative lang)	0.470
	Factor 6 (interrogation lang)	-0.507		
	Question lines of increasing specificity	-0.269		
ACCUSED SPEECH	Polite Forms	0.695	References to Self	-0.548
	Factor 14 (complete spch lang)	0.502		
	Factor 7 (demonstrative lang)	0.449		
	Factor 9 (space relationship lang)	0.324		

Continued on following page

Also see Tables VII, VIII and IX for MDA results.

Figure II
Speech Style Characteristics
(continued)

	RURAL		URBAN	
	Variable	Stand. Disc. Coef.	Variable	Stand. Disc. Coef.
ALL SUCCESSFUL PARTICIPANTS	Factor 3 (abstract action lang)	-0.558	Factor 13 (intransitive action lang)	0.356
	Hedges	-0.513	Factor 4 (conditional lang)	0.273
	Tot-3 (narrative testimony)	0.424	Factor 14 (complete spch lang)	0.228
	Hyper-Correct Grammar/2	-0.409	Factor 8 (indicative lang)	0.226
	Hyper-Correct Grammar/Titles	-0.406		
	Factor 9 (space relationship lang)	-0.343		
	Factor 5 (simple subject lang)	-0.281		
	Factor 7 (demonstrative lang)	-0.250		

Also see Table XIV for MDA results.

Implications for Future Research

Weaknesses of this study which were discussed in Chapter Two included limited generalizability and the absence of paralinguistic behaviors in the transcripts used as data. The study's generalizability was restricted by both the selection of subject cases solely from appeals records and the use of a non-random sampling procedure within each trial transcript. In this investigation financial and other pragmatic considerations prevented gathering data from the entire population of criminal trials. However, future research could certainly improve upon the generalizability of this study by drawing speech samples from actual trials rather than appeals records. Further improvement could obviously be made by drawing samples from trials from a larger geographic area than the one state used here. If these samples were gathered using audio, or preferably video, recordings, the analyses could include the paralinguistic and kinesic components of delivery styles.

The difficulties of data gathering and absence of other careful empirical research restricted this investigation to an initial description of successful courtroom speech. Some of the findings identified by this analysis simply confirm intuitively obvious conceptualizations. This, however, is necessary to developing a careful, thorough empirical base for further investigations. Thus, despite its pragmatic

limitations, the study has provided insights and verifications of current knowledge or assumptions about courtroom speech styles and offers a useful stepping stone to future research.

A primary contribution this dissertation can make to the study of courtroom speech style is the quantification of several previously only intuitive or theoretic constructs. Speech style guidelines for three trial roles and for rural/urban trial settings were developed in this chapter. These guidelines can be combined with the means presented in Tables VI, VII, and VIII to produce specifically quantified descriptions of verbal behaviors which co-occur with success in the courtroom. The ability to describe and quantify the characteristics of successful courtroom speech facilitates their manipulation. The ability to manipulate courtroom speech style characteristics is particularly significant to any effort to demonstrate a causal relationship between speech style and trial outcome. The investigation presented in this dissertation merely identifies co-occurrences between trial outcomes and particular speech behaviors. This co-occurrence could be the product of several different relationships. Attorneys with particularly strong evidence may speak differently than those who feel their evidence is too weak for a courtroom victory. Individual trial participants may respond verbally to the reactions of judges or jurors who seem sympathetic or unagreeable.

In order to demonstrate that speech behaviors used in the courtroom actually impact upon trial outcome, experimental manipulation is essential and such an experimental exploration is the next logical step in this research. The traits of successful courtroom speech identified in this investigation will facilitate that experiment. Trial participants can be trained to produce the successful quantity of the appropriate verbal behaviors or scripts can be prepared manifesting successful courtroom speech. Although experimental manipulations of actual trials pose problems in both ethics and accessibility, the practice court cases pursued by many law schools could provide an avenue for experimental investigation of a causal relation between verbal behaviors and trial outcome. This investigation could be accomplished by presenting pairs of cases to the simulated juries used in practice courts. Within each case pair both trials would have to represent the same fact situation and present the same evidence in order to control for these variables. One trial in each of the experimental pairs would be presented with the prosecution attorney coached (or provided a script) to demonstrate successful speech and the defense attorney and accused coached in unsuccessful speech. The second trial in each of the experimental pairs would be presented with the defense attorney and accused coached in successful courtroom speech and the prosecution coached to demonstrate unsuccessful speech. With all variables other than speech style controlled, the juries' decision in these pairs of experimental trials could be compared to explore the causal effect of style on trial outcome.

In summary, this dissertation has explored the manifestations of a wide range of style characteristics in the speech of both successful and unsuccessful trial participants. The study has been successful in identifying style characteristics which co-occur with trial outcome for each of three primary trial participant roles. However, limitations of the investigation's generalizability make it impossible to completely assess its merit without additional research which further refines its findings.

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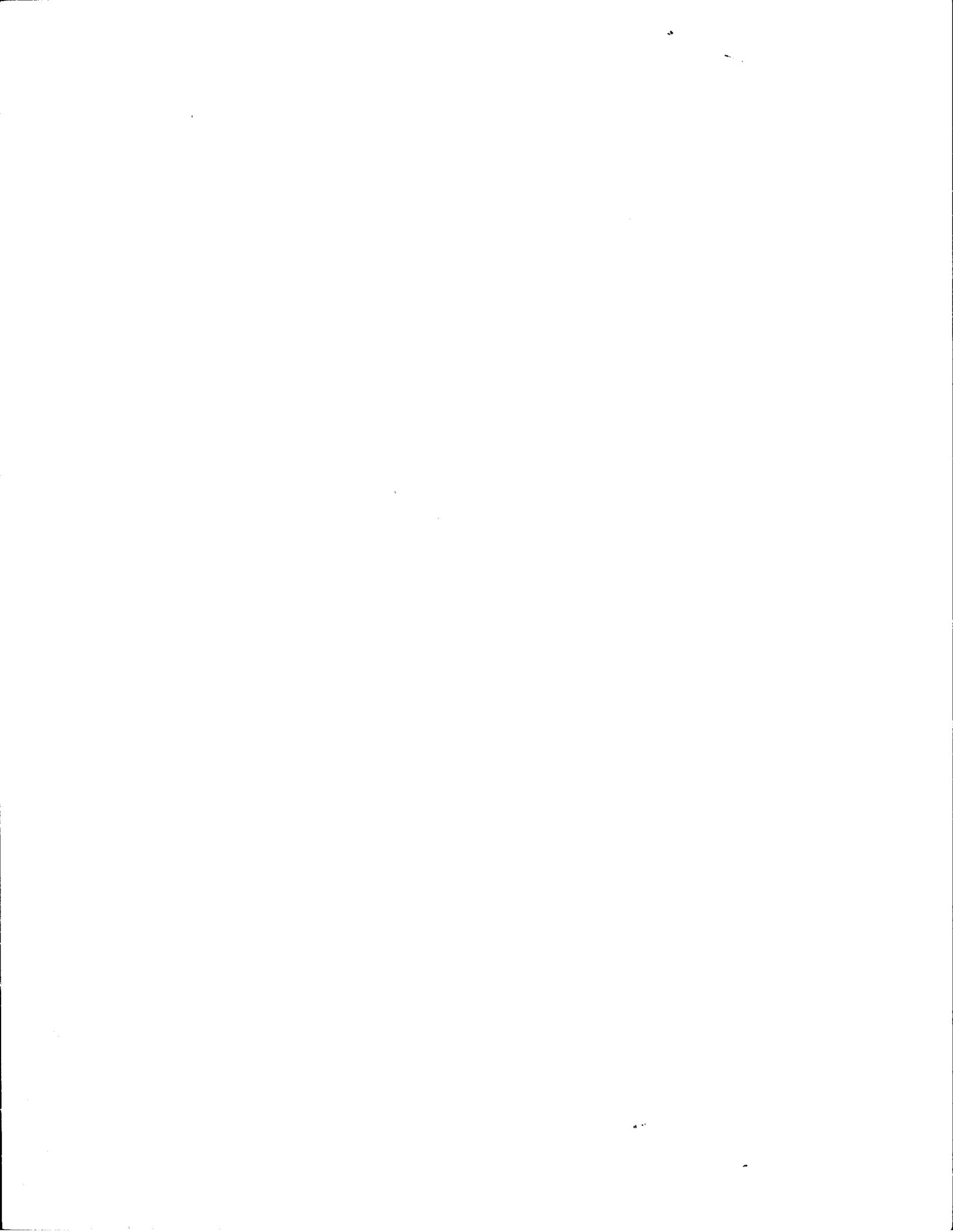
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APPENDIX

Tables

TABLE I

Operationalization of Statement

The following transcript segment from Thompson v. State (560 P2d 222) was divided into statements as indicated below.

BY MR. LANGLEY: Your Honor, may I request that Officer Devlin be excused from the rule to assist with the prosecution? He's not here right now but. . . .

BY MR. BIGGS: I don't know how he's going to assist if he's not here.

BY THE COURT: I don't know the witnesses. Do we have any witnesses or potential witnesses in the courtroom at this time?

BY MR. LANGLEY: No, Sir.

BY THE COURT: Then we would just take it up whenever your witnesses get here. If you have some special request then you may make that request at that time.

BY MR. LANGLEY: Your Honor, may I approach the Bench for one moment?

BY THE COURT: Yes.

Statements by Defense Attorney (Mr. Biggs)"

Statement #1: I don't know how he's going to assist if he's not here.

Statements by Prosecution Attorney (Mr. Langley):

Statement #1: Your Honor, may I request that Officer Devlin be excused from the rule to assist with the prosecution? He's not here right now but. . . .

Statement #2: No, Sir.

Statement #3: Your Honor, may I approach the Bench for one moment?

Statements by the Judge:

Statement #1: I don't know the witnesses. Do we have any witnesses or potential witnesses in the courtroom at this time?

Statement #2: Then we would just take it up whenever your witnesses get here. If you have some special request then you may make that request tat that time.

Statement #3: Yes.

A different segment from Thompson v State, below, shows how the more common discourse with witnesses was divided into statements.

BY MR. LANGLEY:

Q: Did you split the beer or one drink more than the other or. . . .

BY MR. BIGGS: If your Honor please, may I object at this time to counsel leading the witness. It's improper.

BY THE COURT: Sustained.

Q: What happened to the beer?

A: We both drank it.

Statements by Defense Attorney (Mr. Biggs):

Statement #1: If your Honor please, may I object at this time to counsel leading the witness. It's improper.

Statements by Prosecution Attorney (Mr. Langley):

Statement #1: Did you split the beer or one drink more than the other or....

Statement #2: What happened to the beer?

Statements by the Judge:

Statement #1: Sustained.

. TABLE II

Coding Protocol and Coder Training

All coders were first given the following protocol and asked to code seven data sets (one trial). Following this "pilot" coding, the results of each coder's efforts were screened and corrections were discussed with the coder before he proceeded with the data.

Hyper-Correct Grammar:

Bookish grammatical forms. Base your judgment on whether you would notice the statement as "unusual" or "artificial" within the formal environment of a trial. In particular note statements which are not consistent with the speaker's other behaviors.

Count the number of sentences in which these "hyper-correct" forms appear. Therefore, a three sentence string of hyper-correct forms is a count of 3, not 1. Note: sentence from one period to another.

Polite Forms:

Phrases which serve only to meet ritual obligations of courtesy (e.g., May it please the court) or which serve to modify a command to a request (e.g., may I object.)

Count the frequency of occurrence of such phrases or words.

Intensifiers:

The words "so" "very" "too" as in "I like him so much."
Count the occurrence of such words.

Hedges:

Words and phrases which serve to negate the otherwise assertive character of a statement. (e.g., "kind of" "I guess" "perhaps" "Maybe" "I don't know much about that but . . .")

Count the occurrence of such a word or phrase.

Legal Jargon:

Words and phrases appearing in Black's Law Dictionary. See attached word list. If you have a question about any word or phrase, ask me to look it up.

Count the number of occurrences of jargon, not the number of unique words or phrases.

Simultaneous Speech:

Number of times individual's statements are preceded by a reporter's note indicating an incomplete word or phrase OR reporter's indication of interruption by the speaker.

Count the number of occurrences of these phenomena.

Question Lines:

Count the number of questions delivered by attorneys or judges which address the same topic and record these in categories of increasing specificity (those lines of question in which each question asks for a more specific response than the one that preceded it), increasing generality, or neither increasing specificity or generality.

TABLE III

Operationalization of Question Line

The following segments from State v Buchanan (CRF-76-1757) are used to illustrate questioning lines.

BY MR. FLAUGHER:

Q: Who is we?

A: At that time we had in our group a new social worker named Tom Frazier who went with me to the home.

*1 Q: Where was it you went to?

A: We went to Villa Creek Apartments. I'm not sure of the exact address. It's up off of Midwest Boulevard in Midwest City.

*2 Q: Would it be correct if it's 1419 Midwest Boulevard?

A: Apartment 235.

Q: Very well, and would you describe what you did there. Please?

In this segment, the question line begins with the second question above (Marked *1) and ends with the third question (marked *2). In this case the question line was 2 questions.

The above should be coded in the length of question line as 2, and would also be entered in the count of specific question lines because it increases the specificity of the witness's testimony.

The following segment from the same trial illustrates general question lines.

BY MR. FLAUGHER:

Q: State your name for the jury, please.

A: Diane Beard.

*1 Q: Very well, what is your profession or occupation, please.

A: I'm a social worker with the Oklahoma Child Abuse Center, employed by the Division of Institutions, Social and Rehabilitative Services. . . .

*2 Q: Would you explain to the jury, please, what the function of your particular department is, that being the Child Abuse Center?

A: Yes Sir. We receive referrals of severe neglect and potential child abuse and we investigate these.

Q: Very well. Now, directing your attention to the 21st day of April, 1976, did you have occasion to receive a telephone call on that date from a Judy Cunningham?

In this segment, the question line begins with the second question above (marked *1) and ends with the third question (marked *2). In this case the question line was two questions long.

The above should be coded in the length of question lines as 2, and would also be entered in the count of general question lines because it increases the generality of the witness's testimony.

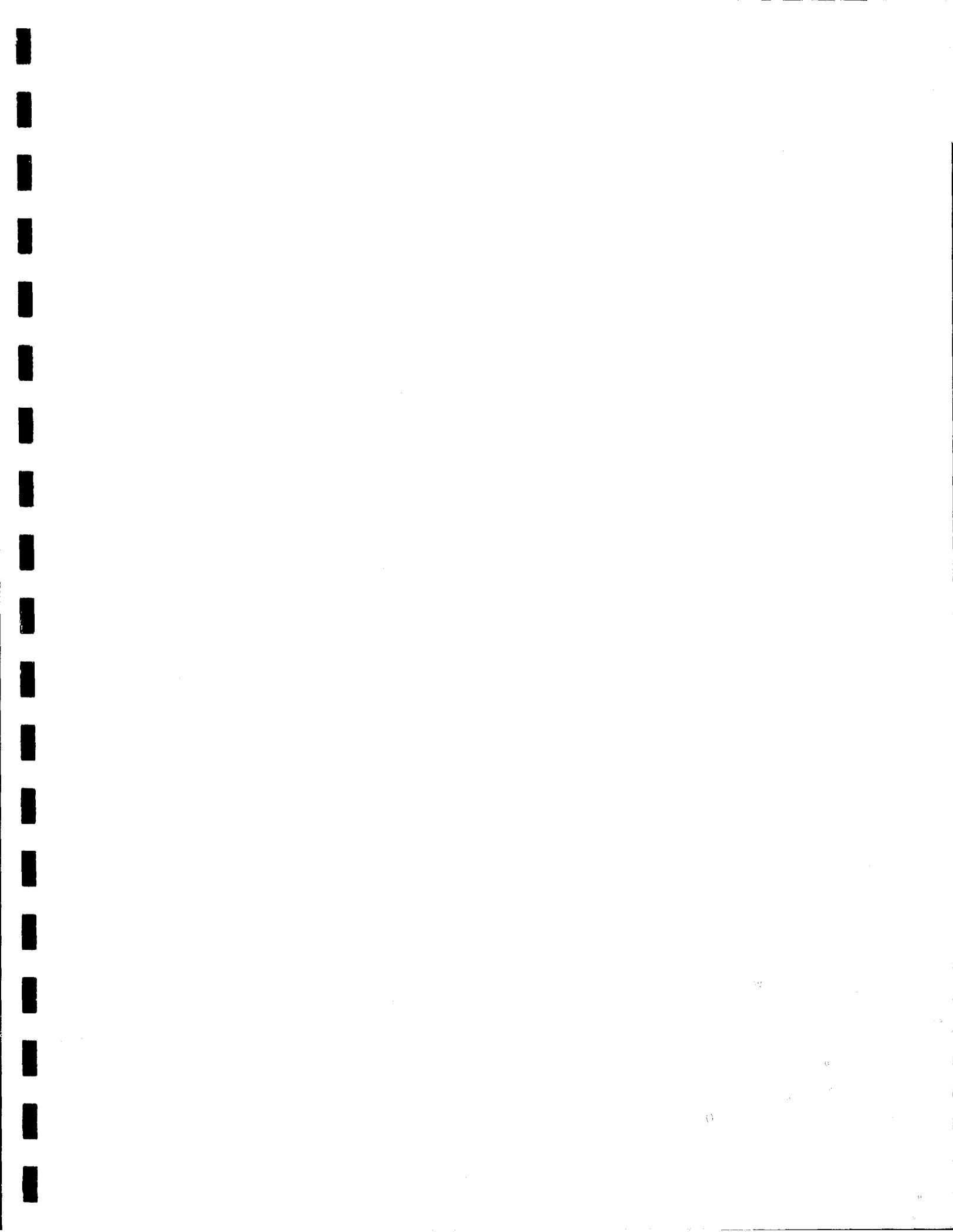


TABLE IV

Listing of SLCA Variables

100	TOT-1	TOTAL WORDS ENCODED
1	S1P	TOTAL SUBJECT WORDS WHICH HAVE NO MODIFIERS
2	S1D	TOTAL SUBJECT WORDS WHICH HAVE ONE OR MORE MODIFIERS
3	C1P	TOTAL CONNECTORS WHICH HAVE NO MODIFIERS
4	C1D	TOTAL CONNECTORS WHICH HAVE ONE OR MORE MODIFIERS
5	S1-A	TOTAL SUBJECT WORDS WHICH ARE JUDGED AFFERENT
6	S1-E	TOTAL SUBJECT WORDS WHICH ARE JUDGED EFFERENT
7	LS1-A	TOTAL MODIFIERS OF SUBJECT WORDS WHICH ARE JUDGED AFFERENT
8	LS1-E	TOTAL MODIFIERS OF SUBJECT WORDS WHICH ARE JUDGED EFFERENT
9	LCl-A	TOTAL MODIFIERS OF CONNECTORS WHICH ARE JUDGED AFFERENT
10	LCl-E	TOTAL MODIFIERS OF CONNECTORS WHICH ARE JUDGED EFFERENT
11	IPA	TOTAL CONNECTORS WHICH ARE INDICATIVE, PAST TENSE
12	IPR	TOTAL CONNECTORS WHICH ARE INDICATIVE, PRESENT TENSE
13	IFU	TOTAL CONNECTORS WHICH ARE INDICATIVE, FUTURE TENSE
14	ICE	TOTAL COMPARISON-EQUIVALENCE CONNECTORS
15	ICM	TOTAL COMPARISON-MORE/THAN CONNECTORS
16	ICS	TOTAL COMPARISON SUBSET CONNECTORS
17	ICP	TOTAL COMPARISON SPATIAL CONNECTORS
18	ICT	TOTAL COMPARISON TIME CONNECTORS
19	IADJ	TOTAL CONNECTORS ASSOCIATING SUBJECT SIGN WITH ADJECTIVE
20	IEXT	TOTAL CONNECTORS ASSOCIATING SUBJECT SIGN WITH DEMONSTRATIVES
21	IT	TOTAL ACTION CONNECTORS WHICH ARE TRANSITIVE, INDICATIVE
22	IR	TOTAL ACTION CONNECTORS WHICH ARE INTRANSITIVE, INDICATIVE
23	SPA	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, PAST TENSE
24	SPR	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, PRESENT TENSE
25	SFU	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, FUTURE TENSE
26	SCE	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, COMPARISON EQUIVALENCE
27	SCM	TOTAL CONNECTORS WHICH ARE SUBJECTIVE, COMPARISON MORE/THAN
28	SC3	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, COMPARISON SUBSET
29	SCP	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, COMPARISON SPATIAL
30	SCT	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, COMPARISON TIME

TABLE IV (continued)

31	SADJ	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, ASSOCIATING A SUBJECT SIGN WITH AN ADJECTIVE
32	SEXT	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, ASSOCIATING A SUBJECT SIGN WITH A DEMONSTRATIVE
33	ST	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, TRANSITIVE
34	SR	TOTAL CONNECTORS WHICH ARE SUBJUNCTIVE, INTRANSITIVE
35	NS1P	TOTAL PRIMITIVE SUBJECT WORDS NEGATED
36	NS1D	TOTAL DEFINED SUBJECT WORDS NEGATED
37	NIPA	TOTAL NEGATED CONNECTORS WHICH ARE INDICATIVE, PAST TENSE
38	NIPR	TOTAL NEGATED CONNECTORS WHICH ARE INDICATIVE, PRESENT TENSE
39	NIFU	TOTAL NEGATED CONNECTORS WHICH ARE INDICATIVE, FUTURE TENSE
40	NICE	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE INDICATIVE, EQUATING
41	NICM	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE INDICATIVE, MORE/THAN
42	NICS	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE INDICATIVE, SUBSET
43	NICP	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE INDICATIVE, SPATIAL
44	NICT	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE INDICATIVE, TIME
45	NIADJ	TOTAL NEGATED INDICATIVE CONNECTORS WHICH ASSOCIATE A UNIT SIGN WITH AN ADJECTIVE
46	NISX1	TOTAL NEGATED INDICATIVE CONNECTORS WHICH ASSOCIATE A UNIT SIGN WITH A DEMONSTRATIVE PRONOUN
47	NIT	TOTAL NEGATED ACTION CONNECTORS WHICH ARE TRANSITIVE
48	NIR	TOTAL NEGATED ACTION CONNECTORS WHICH ARE INTRANSITIVE
49	NSPA	TOTAL NEGATED PAST TENSE CONNECTORS WHICH ARE SUBJUNCTIVE
50	NSPR	TOTAL NEGATED PRESENT TENSE CONNECTORS WHICH ARE SUBJUNCTIVE
51	NSFU	TOTAL NEGATED FUTURE TENSE CONNECTORS WHICH ARE SUBJUNCTIVE
52	NSCE	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE SUBJUNCTIVE, EQUATING
53	NSCM	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE SUBJUNCTIVE, MORE/THAN
54	NSCS	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE SUBJUNCTIVE, SUBSET
55	NSCP	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE SUBJUNCTIVE, SPATIAL
56	NSCT	TOTAL NEGATED COMPARISON CONNECTORS WHICH ARE SUBJUNCTIVE, TIME
57	NSADJ	TOTAL NEGATED SUBJUNCTIVE CONNECTORS WHICH ASSOCIATE A UNIT SIGN WITH AN ADJECTIVE
58	NSEXT	TOTAL NEGATED SUBJUNCTIVE CONNECTORS WHICH ASSOCIATE A UNIT SIGN WITH A DEMONSTRATIVE PRONOUN
59	NST	TOTAL NEGATED CONNECTORS WHICH ARE SUBJUNCTIVE, TRANSITIVE
60	NSR	TOTAL NEGATED CONNECTORS WHICH ARE SUBJUNCTIVE, INTRANSITIVE

TABLE IV (continued)

61	NS1-A	TOTAL NEGATED SUBJECT WORDS WHICH ARE AFFERENT
62	NS1-E	TOTAL NEGATED SUBJECT WORDS WHICH ARE EFFERENT
63	NC1P	TOTAL NEGATED CONNECTORS WHICH ARE PRIMITIVE'
64	NC1D	TOTAL NEGATED CONNECTORS WHICH ARE DEFINED
65	NLS1-A	TOTAL NEGATED SUBJECT WORD LIMITERS WHICH ARE AFFERENT
66	NLS1-E	TOTAL NEGATED SUBJECT WORD LIMITERS WHICH ARE EFFERENT
67	NLC1-A	TOTAL NEGATED CONNECTOR LIMITERS WHICH ARE AFFERENT
68	NLC1-E	TOTAL NEGATED CONNECTOR LIMITERS WHICH ARE EFFERENT
69	AO	TOTAL SUBJECT WORDS WHICH REFER TO A SPECIFIC PERSON OR GROUP
70	GO	TOTAL SUBJECT WORDS WHICH REFER TO UNSPECIFIC PERSONS OR GROUP, I.E., THIRD PERSON PERSONAL PRONOUNS
71	S-S	TOTAL SUBJECT WORDS WHICH REFER TO THE SOURCE, I.E., FIRST PERSON PERSONAL PRONOUNS
72	T-O	TOTAL SUBJECT WORDS WHICH REFER TO THE RECEIVER, I.E., SECOND PERSON PERSONAL PRONOUNS
73	NAO	TOTAL NEGATED SUBJECT WORDS WHICH REFER TO A SPECIFIC PERSON OR GROUP
74	NGO	TOTAL NEGATED SUBJECT WORDS WHICH REFER TO UNSPECIFIC PERSONS, GROUPS, I.E., THIRD PERSON PERSONAL PRONOUNS
75	NS-S	TOTAL NEGATED SUBJECT WORDS WHICH REFER TO THE SOURCE, I.E., FIRST PERSON PERSONAL PRONOUNS
76	NT-O	TOTAL NEGATED SUBJECT WORDS WHICH REFER TO THE RECEIVER, I.E., SECOND PERSON PERSONAL PRONOUNS
77	ART	TOTAL ARTICLES
78	PREP	TOTAL PREPOSITIONS
79	OTH	TOTAL OTHER
80	COMP	TOTAL FREQUENCY OF COMPARISON CONNECTORS
81	ACTC1	TOTAL FREQUENCY OF ACTION CONNECTORS
82	IC1	TOTAL FREQUENCY OF INDICATIVE CONNECTORS
83	SC1	TOTAL FREQUENCY OF SUBJUNCTIVE CONNECTORS
84	TC1	TOTAL FREQUENCY OF TRANSITIVE CONNECTORS
85	RC1	TOTAL FREQUENCY OF INTRANSITIVE CONNECTORS
86	NC1	TOTAL FREQUENCY OF NEGATIVE CONNECTORS
87	AFF	TOTAL FREQUENCY OF AFFERENT SUBJECT WORDS AND LIMITERS
88	EFF	TOTAL FREQUENCY OF EFFERENT SUBJECT WORDS AND LIMITERS
89	L	TOTAL FREQUENCY OF LIMITERS
90	S1	TOTAL FREQUENCY OF SUBJECT WORDS

TABLE IV (continued)

91	C1PA	TOTAL FREQUENCY OF PAST TENSE CONNECTORS
92	C1PR	TOTAL FREQUENCY OF PRESENT TENSE CONNECTORS
93	C1FU	TOTAL FREQUENCY OF FUTURE TENSE CONNECTORS
94	PRIM	TOTAL FREQUENCY OF PRIMITIVE SUBJECT WORDS AND CONNECTORS
95	DEFD	TOTAL FREQUENCY OF DEFINED SUBJECT WORDS AND CONNECTORS
96	PC1	TOTAL FREQUENCY OF POSITIVE (NON-NEGATIVE) CONNECTORS
97	C1	TOTAL FREQUENCY OF POSITIVE AND NEGATIVE CONNECTORS
98	DEM	DEMONSTRATIVES
99	COLL	COLLECTIVES
100	TOT-2	TOTAL WORDS ENCODED LESS THE SUM OF ARTICLES, PREPOSITIONS, AND OTHER
101	TOT-3	TOTAL FREQUENCY OF SUBJECT WORDS, LIMITERS, AND CONNECTORS

TABLE V

Factor Analysis of SLCA Data

Variables included in factors	Factors Selected	Correlation between variable and factor selected	h^2
CLP	1	0.86153	0.96570
LSIA	1	-0.67883	0.92331
IT	1	0.90357	0.96980
ACTC1	1	0.91965	0.99241
PRIM	1	0.78354	0.98993
NIT	2	0.88443	0.96465
NCIP	2	0.84367	0.92264
NCl	2	0.91132	0.97816
LCIE	3	0.76191	0.83948
EFF	3	0.91070	0.96585
SPR	4	0.91884	0.90941
NSPR	4	0.92826	0.93165
NST	4	0.90369	0.90566
SlP	5	-0.91831	0.93962
SlA	5	-0.81082	0.95552
Sl	5	-0.85731	0.97187
IPA	6	0.90530	0.97349
TTO	6	0.65527	0.77580
ClPA	6	0.90638	0.97465
IEXT	7	0.95214	0.97991
NISXT	7	0.94982	0.97482
ICl	8	0.96842	0.98554
NICT	8	0.96772	0.98508
ICP	9	0.95945	0.96699
NICP	9	0.96484	0.96701
ICS	10	0.95537	0.94996
NICS	10	0.95331	0.95265
SFU	11	0.94298	0.95478
ClFU	11	0.71853	0.93749
IR	13	0.81553	0.93888
RCl	13	0.81437	0.94414
ART	14	0.62097	0.72023
PREP	14	0.72034	0.74238
IFU	15	0.66599	0.83058

TABLE V (continued)

Variance Explained and Eigenvalues for Selected Factors

Factor	Percent of Variance Explained	Eigenvalue
1	23.7	14.01199
2	11.2	6.59537
3	9.5	5.58155
4	7.4	4.36245
5	6.4	3.76309
6	5.3	3.10344
7	4.3	2.53604
8	3.5	2.04908
9	3.3	1.95612
10	2.9	1.73604
11	2.6	1.53493
13	2.1	1.25570
14	2.0	1.15053
15	1.9	1.09641

TABLE VI

Pearson r Correlations for Hyper-Correct Grammar
and Polite Forms

Judges	r	Polite Forms r^2	p
One & Two	0.767	0.588	0.00001
One & Three	0.976	0.952	0.00001
Two & Three	0.808	0.654	0.00001

Judges	r	Hyper-Correct Grammar r^2	p
One & Two	0.104	0.011	0.1059
One & Three	0.9748	0.950	0.00001
Two & Three	0.1268	0.0161	0.06421

TABLE VII

Multiple Discriminant Analysis Based on Prosecution
Attorneys: Groups = Acquittal/Conviction

Variables in Disc Funct	Standardized Disc Coef	Variable \bar{X} in Acquittal Group	Variable \bar{X} in Conviction Group
Factor Six (interrogation language)	0.45536	0.3103	0.3837
Factor Eight (indicative language)	-0.41001	0.0137	0.016
Factor Ten (comparison subset lang)	-0.23659	0.0324	0.0291
Factor Eleven (future language/ conditional)	-0.56993	0.0539	0.0354
Factor Fifteen (future language/ indicative)	0.54337	0.0073	0.0125
Polite Forms	-0.22865	3.1212	1.9103
Hyper-Correct Grammar/2	-.25498	1.2273	0.5000
Tot-3 (narrative testimony or verbosity)	0.48435	117.1364	126.1154
Centroids:			
Acquittal Group	-0.71623		
Conviction Group	0.60604		

TABLE VIII

Multiple Discriminant Analysis Based on Defense Attorneys: Groups = Acquittal/Conviction

Variables in Disc Funct	Standardized Disc Coef	Variable \bar{X} in Acquittal Group	Variable \bar{X} in Conviction Group
Factor One (simple ction language)	1.26431	1.4538	1.4274
Factor Three (abstract action language)	0.53567	0.2313	0.2095
Factor Six (interrogation language)	0.50700	0.3360	0.3286
Factor Seven (demonstrative language)	0.47041	0.364	0.0461
Factor Thirteen (intransitive action language)	-0.89587	0.2209	0.1767
Factor Fourteen (complete speech language)	0.93859	0.4248	0.4634
AFF (total words with sense oriented referents)	0.90501	0.4323	0.4681
Jargon	-0.51077	13.0455	12.2115
Question Lines of increasing specificity	-0.26855	0.4091	0.2308
Centroids			
Acquittal Group	-0.6695		
Conviction Group	0.5666		

TABLE IX

Multiple Discriminant Analysis Based on Accuseds:
Groups = Acquittal/Conviction

Variables in Disc Funct	Standardized Disc Coef	Variable \bar{X} in Acquittal Group	Variable \bar{X} in Convic- tion Group
Factor Seven (demonstrative language)	0.44895	0,0533	0.0250
Factor Nine (space relationship language)	0.32378	0.0196	0.0132
Factor Fourteen (complete speech language)	0.50196	0.3215	0.3030
References to Self	-0.54816	0.0987	0.2733
Polite Forms	0.69522	5.8750	2.9804
Centroids:			
Acquittal Group	0.92599		
Conviction Group	-0.43576		

TABLE X

Two-Way Analysis of Variance: Defense Attorneys and Accuseds
Independent Variables = Role (Defense Attorney and
Accused) and Outcome (Conviction and Acquittal)

Dependent Variable = Factor Seven

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	0.001	2	0.001	0.391	0.678
Outcome	0.000	1	0.000	0.061	0.805
Role	0.000	1	0.001	0.654	0.421
2-way inter- action out- come/role	0.005	1	0.005	4.091	0.047
Explained	0.006	3	0.002	1.627	0.192
Residual	0.091	69	0.001		
Total	0.098	72	0.001		

Dependent Variable = Self References

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	0.64	2	0.32	75.645	0.000
Outcome	0.009	1	0.009	2.049	0.157
Role	0.601	1	0.601	141.996	0.000
2-way inter- action out- come/role	0.022	1	0.022	5.188	0.027
Explained	0.622	3	0.221	52.136	0.000
Residual	0.292	69	0.004		
Total	0.594	72	0.013		

TABLE X (continued)

Dependent Variable = AFF (Total words with
sense-oriented referents)

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	0.113	2	0.057	4.885	0.01
Outcome	0.000	1	0.000	0.002	0.965
Role	0.112	1	0.112	9.630	0.003
2-way interaction outcome/role	0.052	1	0.052	4.481	0.038
Explained	0.165	3	0.055	4.75	0.005
Residual	0.799	69	0.012		
Total	0.964	72	0.013		

TABLE X (continued)

Dependent Variables with Non-Significant Interactions

	DF	Sum of Squares Factor 1	Sum of Squares Factor 2	Sum of Squares Factor 3	Sum of Squares Factor 4	Sum of Squares Factor 5	Sum of Squares Factor 6	Sum of Squares Factor 8
Main Effects	2	0.004	0.269	0.078	0.008	0.199	0.222	0.001
Outcome	1	0.000	0.000	0.001	0.022	0.001	0.000	0.000
Role	1	0.000	0.252	0.007	0.066	0.159	0.221	0.000
2-way inter- actions	1	0.065	0.026	0.018	0.001	0.026	0.008	0.000
Explained	3	0.069	0.295	0.096	0.010	0.225	0.230	0.001
Residual	69	4.732	1.009	0.407	0.179	2.031	2.584	0.030
Total	72	4.801	1.304	0.504	0.189	2.257	2.815	0.030

	DF	Sum of Squares Factor 9	Sum of Squares Factor 10	Sum of Squares Factor 11	Sum of Squares Factor 13	Sum of Squares Factor 14	Sum of Squares Factor 15	Sum of Squares Statement per Question line
Main Effects	2	0.001	0.004	0.005	0.029	0.315	0.000	68.606
Outcome	1	0.000	0.000	0.000	0.027	0.007	0.000	1.129
Role	1	0.000	0.004	0.005	0.000	0.315	0.000	63.987
2-way inter- actions	1	0.000	0.001	0.002	0.001	0.012	0.000	0.515
Explained	3	0.001	0.005	0.007	0.030	0.327	0.000	69.122
Residual	69	0.034	0.090	0.093	0.423	- .673	0.026	172.635
Total	72	0.035	0.095	0.100	0.453	0.001	0.026	241.756

TABLE X (continued)

	DF	Sum of Squares Polite Forms	Sum of Squares Hyper-Correct Grammar/ Titles	Sum of Squares Hyper-Correct Grammar/2	Sum of Squares Jargon	Sum of Squares Hedges	Sum of Squares Tot-3	Sum of Squares Interruptions
Main Effects	2	84.742	70.315	14.705	2,434.252	1.413	51281.7	4.891
Outcome	1	28.836	3.269	0.103	4.082	0.647	790.4	0.009
Role	1	66.042	69.826	14.668	235.689	0.577	47396.1	4.851
2-way interactions	1	20.428	0.096	0.056	4.630	3.298	185.6	0.062
Explained	3	105.170	70.412	14.761	2436.883	4.711	51467.4	4.954
Residual	69	686.547	641.663	135.293	6517.777	64.974	255952.7	103.019
Total	72	791.717	712.075	150.054	8954.590	69.684	307420.1	107.972

	DF	Sum of Squares Total Statements in Question Lines	Sum of Squares Number of Specific Question Lines	Sum of Squares Number of Number of General Question Lines	Sum of Squares Number of Question Lines/not Specific or General
Main Effects	2	187.2	1.865	0.289	5.672
Outcome	1	2.2	0.260	0.032	0.078
Role	1	179.327	1.410	0.277	5.320
2-way interactions	1	1.014	0.119	0.015	0.036
Explained	3	188.173	1.984	0.304	5.708
Residual	69	629.739	19.934	5.203	21.552
Total	72	817.912	21.918	5.507	27.260

TABLE XI

Two-Way Analysis of Variance: Prosecution Attorneys and Judges

Independent Variables = Role (Prosecution Attorney and Judge)

Outcome (Acquittal and Conviction)

Dependent Variable = Factor One (Acquittal and Conviction)

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	0.266	2	0.133	2.640	0.079
Outcome	0.181	1	0.181	3.595	0.062
Role	0.095	1	0.095	1.881	0.175
2-way interaction outcome/role	0.212	1	0.212	4.196	0.044
Explained	0.478	3	0.159	3.159	0.030
Residual	3.431	68	0.058		
Total	3.909	71	0.055		

3

TABLE XI (continued)

Dependent Variables with Non-Significant Interactions

	DF	Sum of Squares Factor 2	Sum of Squares Factor 3	Sum of Squares Factor 4	Sum of Squares Factor 5	Sum of Squares Factor 6	Sum of Squares Factor 7	Sum of Squares Factor 8
Main Effects	2	0.014	0.136	0.000	0.032	0.611	0.001	0.001
Outcome	1	0.004	0.032	0.000	0.006	0.054	0.000	0.000
Role	1	0.010	0.100	0.000	0.025	0.542	0.000	0.001
2-way interactions	1	0.008	0.007	0.000	0.020	0.012	0.001	0.000
Explained	3	0.022	0.143	0.000	0.052	0.623	0.002	0.002
Residual	68	0.469	0.503	0.005	1.041	1.754	0.051	0.017
Total	71	0.491	0.646	0.005	1.094	2.377	0.053	0.019

	DF	Sum of Squares Factor 9	Sum of Squares Factor 10	Sum of Squares Factor 11	Sum of Squares Factor 13	Sum of Squares Factor 14	Sum of Squares Factor 15	Sum of Squares SS
Main Effects	2	0.000	0.000	0.046	0.001	0.043	0.019	0.009
Outcome	1	0.000	0.000	0.005	0.000	0.006	0.000	0.004
Role	1	0.000	0.000	0.040	0.001	0.036	0.018	0.005
2-Way interactions	1	0.001	0.000	0.000	0.004	0.031	0.000	0.001
Explained	3	0.001	0.000	0.046	0.005	0.074	0.019	0.010
Residual	68	0.031	0.048	0.135	0.358	0.813	0.029	0.109
Total	71	0.032	0.049	0.181	0.363	0.887	0.048	0.119

TABLE XI (continued)

Dependent Variables with Non-Significant Interactions

	DF	Sum of Squares AFF	Sum of Squares Statement Per Question Line	Sum of Squares Polite Forms	Sum of Squares Hyper-Correct Grammar/ Titles	Sum of Squares Hyper-Correct Grammar/2	Sum of Squares Jargon	Sum of Squares Hedges
Main Effects	2	0.121	73.137	38.85	21.028	8.128	999.5	2.013
Outcome	1	0.006	1.192	12.442	4.013	6.35	7.28	1.172
Role	1	0.113	70.101	27.8	16.346	2.049	997.4	0.763
2-way inter- actions	1	0.002	1.003	5.074	0.915	0.619	18.86	0.128
Explained	3	0.122	74.14	43.925	21.943	8.747	1018.4	2.141
Residual	68	0.473	100.47	349.927	632.553	119.697	7430.6	115.355
Total	71	0.595	174.61	393.879	654.496	128.444	8448.9	117.496

	DF	Sum of Squares Tot-3	Sum of Squares Interruptions	Sum of Squares Number of Statements In Question Lines	Sum of Squares Specific Question Lines	Sum of Squares General Question Lines	Sum of Squares Question lines/Not Specific
Main Effects	2	181.8	1.690	315.02	4.383	1.014	8.921
Outcome	1	181.4	0.516	20.3	0.043	0.014	0.893
Role	1	0.019	1.234	288.2	4.3	0.989	7.806
2-way inter- actions	1	1196.1	0.241	10.234	0.158	0.007	0.177
Explained	3	1377.88	1.931	325.25	4.541	1.021	9.097
Residual	68	260820.1	45.721	644.7	36.57	10.97	36.88
Total	71	262197.94	47.653	969.9	41.11	12.00	45.99

TABLE XII

Two-Way Analysis of Variance: Defense Attorneys and Judges

Independent Variables = Role (Defense Attorney and

Judge) Outcome (Acquittal and Conviction)

Dependent Variable = Factor One (Simple action language)

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	0.112	2	0.056	0.989	0.377
Outcome	0.081	1	0.081	1.432	0.236
Role	0.035	1	0.035	0.616	0.435
2-way Interaction outcome/role	0.313	1	0.313	5.511	0.022
Explained	0.426	3	0.142	2.496	0.067
Residual	3.867	68	0.057		
Total	4.292	71	0.06		

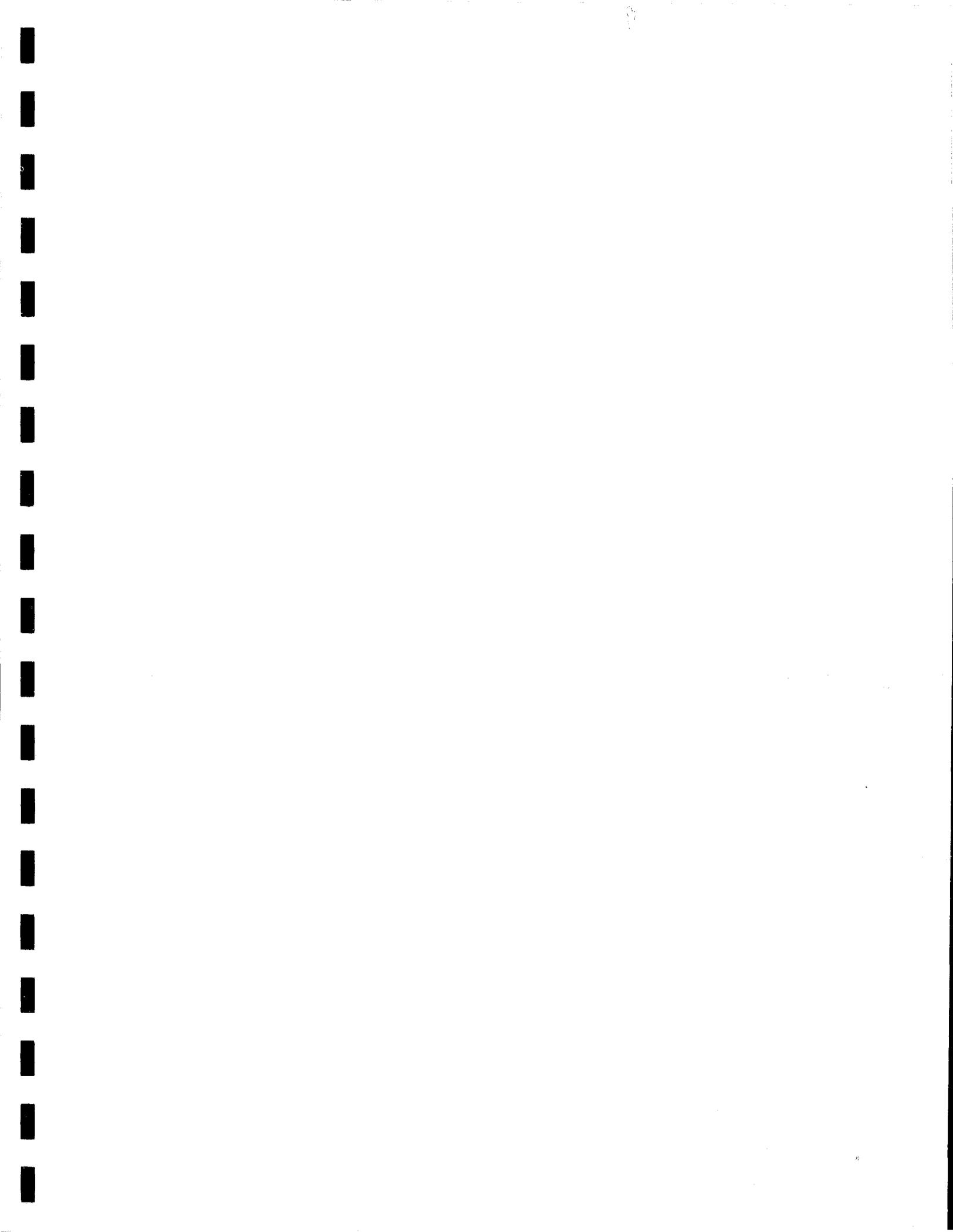


TABLE XII (continued)

Dependent Variables with Non-Significant Interactions

	DF	Sum of Squares Factor 2	Sum of Squares Factor 3	Sum of Squares Factor 4	Sum of Squares Factor 5	Sum of Squares Factor 6	Sum of Squares Factor 7	Sum of Squares Factor 8
Main Effects	2	0.004	0.145	0.000	0.053	0.454	0.001	0.000
Outcome	1	0.003	0.026	0.000	0.004	0.000	0.000	0.000
Role	1	0.001	0.115	0.000	0.048	0.453	0.001	0.000
2-Way inter- actions	1	0.000	0.009	0.000	0.022	0.003	0.002	0.000
Explained	3	0.004	0.154	0.000	0.076	0.456	0.004	0.000
Residual	68	0.329	0.528	0.006	0.866	2.438	0.068	0.024
Total	71	0.333	0.682	0.006	0.942	2.894	0.072	0.025

	DF	Sum of Squares Factor 9	Sum of Squares Factor 10	Sum of Squares Factor 11	Sum of Squares Factor 13	Sum of Squares Factor 14	Sum of Squares Factor 15	Sum of Squares SS
Main Effects	2	0.002	0.004	0.061	0.032	0.122	0.022	0.002
Outcome	1	0.000	0.000	0.001	0.024	0.048	0.000	0.001
Role	1	0.002	0.004	0.059	0.009	0.070	0.022	0.001
2-Way inter- actions	1	0.000	0.001	0.000	0.002	0.006	0.000	0.002
Explained	3	0.002	0.005	0.061	0.034	0.128	0.022	0.004
Residual	68	0.031	0.081	0.162	0.328	0.818	0.029	0.125
Total	71	0.034	0.086	0.223	0.363	0.946	0.050	0.129

TABLE XII (continued)

	DF	Sum of Squares AFF	Sum of Squares Statement per Question Line	Sum of Squares Polite Forms	Sum of Squares Hyper-Correct Grammar/ Titles	Sum of Squares Hyper-Correct Grammar/2	Sum of Squares Jargon	Sum of Squares Hedges
Main Effects	2	0.109	56.41	15.28	10.35	5.084	204.6	2.029
Outcome	1	0.012	1.094	2.834	6.178	0.022	0.366	0.668
Role	1	0.094	55.84	12.90	3.773	5.081	204.6	1.285
2-Way interactions	1	0.004	0.551	0.891	0.377	0.804	33.69	0.299
Explained	3	0.112	56.96	16.17	10.72	5.888	238.5	2.327
Residual	68	0.487	179.9	310.2	713.4	143.9	10634.8	88.002
Total	71	0.559	236.9	326.4	724.1	149.9	10873.3	90.33

	DF	Sum of Squares Tot-3	Sum of Squares Interruptions	Sum of Squares State-ments in Question Lines	Sum of Squares Specific Question Lines	Sum of Squares General Question Lines	Sum of Squares Question Lines/Not General or Specific
Main Effects	2	722.012	0.672	164.714	1.558	0.281	4.719
Outcome	1	604.651	0.442	2.252	0.385	0.031	0.025
Role	1	139.061	0.225	163.785	1.225	0.243	4.714
2-Way interactions	1	57.47	0.292	1.083	0.036	0.016	0.131
Explained	3	799.5	0.964	165.797	1.594	0.297	4.850
Residual	68	345347.0	118.536	637.072	20.85	5,203	22.496
Total	71	346126.5	119.50	802.869	22.444	5.50	27.319

TABLE XIII

Multiple Discriminant Analysis Based on All Attorneys:
Groups = Successful/Unsuccessful

Variables in Disc Funct	Standardized Disc Coef	Variable \bar{X} in Success- ful Group	Variable \bar{X} in Unsuccess- ful Group
Factor Seven (demonstrative language)	0.35310	0.0366	0.0383
Factor Eight (indicative language)	0.44513	0.0084	0.0151
Factor Eleven (future language/ conditional)	0.36125	0.0361	0.0510
Factor Thirteen (intransitive action language)	-0.72267	0.2013	0.1735
Tot-3 (narrative testimony or verbosity)	-0.48190	126.5208	119.55
Number of Statements in Question Lines	-0.39881	4.4792	2.7000
Centroids			
Successful Group	-0.48173		
Unsuccessful Group	0.38536		

TABLE XIV

Multiple Discriminant Analysis Based on All Successful
Trial Participants: Groups = Rural/Urban

Variables in Disc Func	Standardized Disc Coef	Variable \bar{X} In Urban Group	Variable \bar{X} in Rural Group
Factor Three (abstract action language)	-0.55833	0.1785	0.2407
Factor Four (conditional language)	0.27332	0.0073	0.0030
Factor Five (simple subject language)	-0.28056	0.5439	0.5875
Factor Seven (demonstrative language)	-0.25009	0.0359	0.0427
Factor Eight (indicative language)	0.22609	0.0081	0.0080
Factor Nine (space relation- ship language)	-0.34311	0.0152	0.0173
Factor Thirteen (intransitive action language)	0.35633	0.2167	0.1838
Factor Fourteen (Complete speech language)	0.22821	0.4198	0.3933
Polite Forms	-0.19989	2.3011	3.0933
Hyper-Correct Grammar/Titles	-0.40586	1.8226	3.6200
Hyper-Correct Grammar/2	-0.40858	0.3548	1.000
Hedges	-0.51274	0.2581	0.9400
Tot-3 (narrative testimony or verbosity)	0.42392	102.0645	141.000

Centroids:

Urban Group 0.67257

Rural Group -0.83400

END