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THE INFLUENCE OF SPEAKER DIALECT AND SEX ON PERSUASION, CREDIBILITY, AND

STEREOTYPIC ATTRIBUTION

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

MICHAEL GERARD RYAN

Norman, Oklahoma

1972

THE INFLUENCE OF SPEAKER DIALECT AND SEX ON PERSUASION, CREDIBILITY,

AND STEREOTYPIC ATTRIBUTION

APPROVED BY

DISSERTATION COMMITTEE

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INTRODUCTION

This study was designed to answer the following research question: What influence does dialect English speech have on persuasive interaction with standard American listeners. To answer this question, this experimental study measured the influence of dialect operationalized as foreign accented English speech on stereotypic attribution, speaker credibility, and persuasive effect controlling for possible variance due to the sex of the speaker. As predicted, there was a significant difference between listener reactions to standard and dialect English speech.

Subjects drawn from the population of interdisciplinary and social science courses at Oklahoma College of Liberal Arts reacted to a persuasive message encoded by a male and female in standard English, French accented English, and Spanish accented English. The data were analyzed by a series of three by two analyses of variance and directional t tests where appropriate. Multiple and partial correlation techniques were used as post hoc analytical tests.

The analysis of the data offered evidence for the hypotheses predicting differential reactions to foreign and standard English speech. It was concluded that standard English speech elicits more positive stereotypic attribution and credibility than dialect English speech, that Spanish accented English speech elicits more positive stereotypic attribution, credibility, and persuasion than French accented English speech. Finally, a dialect by sex interaction exists

in respect to stereotypic reactions. The study concludes with a series of proposals for future research.

CHAPTER 1

RATIONALE AND HYPOTHESES

The long history of immigration to North America has led to the existence of multiple foreign accented English dialect groups in the United States. The adoption of the English language characterized the assimilation patterns of these new Americans, and their English speech retained the vocal characteristics of their native tongue. The process continues today and one may discover German dialects of English, Italian dialects of English, French dialects of English, and Spanish dialects of English within the United States.

The function of dialects in the communication setting is a socially meaningful question for speech communication researchers. The responses to vocal patterns due to varying dialects and their role in the process of persuasive communication is the primary focus of this study. More specifically, we asked the following research question: What influence does dialect English speech have on persuasive interaction with standard American English auditors? The study investigated the relationship between dialect and persuasion, dialect and credibility, and dialect and attribution with sex of the speaker as an added experimental condition.

The research question for this study grew from the investigations of several speech communication researchers such as Harms (1961, 1963),

Williams (1970), and Moe (1972) who investigated the influence of
dialects on the process of communication. The work of psycholinguists
such as Lambert, Hodgson, Gardiner, and Fillenbaum (1960), Preston
(1963), and Larimer (1972), and sociolinguists such as Labov (1966)
and Buck (1968) also contributed to the formulation of this project.

The immediate motivation of the research question lay in the
writer's previous efforts to explicate the relationship between
dialect and consequent credibility and stereotypic attribution[1] as
well as a subsequent factor analytic investigation of dialect induced
credibility ratings.[2] In a study which served as a pretest to this
present project, this writer reported that Southwestern American sub-
jects attributed higher expertise ratings to a female speaker's French
accented English guise than to her standard American English guise
while the same subjects attributed lower dynamism ratings to a second
speaker's Spanish accented English guise than they did to her standard
American English guise. Further unreported post hoc credibility item
analysis across the four treatment conditions revealed the fact that

[1]For additional information, see Michael G. Ryan, "Stereo-
types, Credibility, and Foreign Accented English Speech," Paper
presented at the Annual Meeting of the Speech Communication Associa-
tion, Chicago, December, 1972; Abstracted by Research in Education
June, 1973 and available from ERIC on microfiche or hardcover,
#CS500 142 and ED072 494.

[2]For additional information, see Michael G. Ryan, "The Factor
Structure of Credibility Reactions to Standard and Foreign Accented
English Speech," Paper presented to Prof. H. Wayland Cummings,
Department of Speech Communication, University of Oklahoma in partial
fulfillment of the requirements of the course: Theories of Measure-
ment, April, 1973.

listeners' reactions on 12 of the 18 scales reached significance offering the following profile: Listeners viewed the speaker's French accented English guise as more qualified, expert, reliable, and intelligent than her standard American English guise. On the other hand, listeners viewed the second speaker's Spanish accented English guise as more timid, hesitant, passive, weak, and unqualified than her standard American English guise, although they did rate the Spanish guise as nicer, friendlier, and more honest. The study demonstrated that dialect, operationalized as foreign accented English speech, differentially influenced the credibility reactions to dialect speakers.

The writer submitted the credibility reactions of standard American English listeners to standard and foreign accented English dialect speech to a factor analysis with a varimax rotation. Certain alterations took place in the factor structure of reactions to speakers using standard English and foreign accented English modes of speech: (1) the dynamism factor disappeared and the authoritativeness factor gained a negative valence when the first speaker switched from her standard English to her Spanish accented English guise; and (2) the authoritativeness factor adopted a negative sign while the character factor adopted a positive sign when the second speaker switched from her standard English guise to her French accented English guise. These findings demonstrated that dialect influences credibility. Dialect also influences stereotypic trait attribution as the Ryan (1972) study revealed that subjects rated a female speaker as shorter, less good

looking, and less self confident when she used a Spanish accented English guise than when she used a standard American English guise.

These two studies addressed the research question adopted for this present research project. However, the answers provided by these two studies labored under two limitations: (1) the scope of the studies provided only limited answers and (2) the studies had flaws. In reference to the first limitation, the studies described only the relationship between female dialect speech and attributed credibility and stereotypes. The studies failed to treat the relationship between dialect and persuasion as well as the possible interactive influence of the sex of the dialect speaker on listeners' reactions. Addressing the second limitation, Cegala (1972) criticized the sample size and alpha level used to interpret the analysis of variance of repeated measures used in the Ryan (1972) study while Mehrley (1972) argued that the repeated measures design of the same study lowered the probability of tapping the extant difference in listeners' reactions to dialect speech. Moreover, a larger sample size in the writer's second study would have led to more confidence in its factor analytic results.

The findings of these two studies served as the direct motivation for this project which sought to replicate the above mentioned findings on credibility and stereotypic trait attribution to foreign accented English dialect speakers. In addition, this study extended the investigation into the relationship between dialect and persuasion controlling for the influence of sex on persuasion, credibility, and attribution.

The question arose: Why examine the effects of dialect speech
on Americans? At least three strong answers to the question exist.
Numerous dialect groups reside in the United States, including socio-
economic dialect groups, regional dialect groups, racial dialect groups,
and foreign accented English dialect groups (Chicanos and Acadians).
Americans interact with these dialect groups often in face-to-face
persuasive situations. Moreover, foreign travel and travel within
the United States brings Americans in contact with various other
language and dialect groups. Finally, mass communication theorists
and advertisers have a practical interest in the reactions of the
American population to dialects used over the national media. Thus,
this project will have practical consequences for the interaction of
majority code speakers with minority code speakers on an interpersonal,
small group, public speaking, and mass communications level.

Dialect and Trait Attribution

A number of studies have manipulated spoken dialect and measured
the traits attributed to dialect speakers by auditors. Attribution
applies to the "process whereby people attribute characteristics,
intentions, feelings, and traits to the objects of their social world
(Kanouse, 1972, p. 47)." The theory rests on the following three
assumptions:

I. The individual attempts to assign a cause for important
instances of his behavior and that of others; when ne-
cessary, he seeks information that enables him to do so.

II. His assignment of causes is determined in a systematic manner.

III. The particular cause that he attributes for a given event has important consequences for his subsequent feelings and behavior. The 'meaning' of the event and his subsequent reaction to it are determined to an important degree by its assignment of cause (Jones, 1972, p. ix).

Attribution refers to the assignment of both descriptive and causal attributes to the events in the social environment.

Dialect, on the other hand, refers to the variations in the phonological and syntactic patterns commonly associated with sub-groups within one language community. American English includes socio-economic dialect groups, regional dialect groups, racial dialect groups, and foreign accented English dialect groups. The universal finding suggests that dialect influences directly the qualities attributed to a speaker. Indirectly, there is a value in this study based on the foreign language and ethnic dialect research and from the socio-economic dialect research. Consequently, a review of the literature on accents, dialects, and foreign languages follows.

Accent Research. Two projects manipulated foreign accented English dialect and measured the attributed traits. Subjects rated Jewish accented English speakers lower on the dimensions of height, appearance, and qualities of leadership than the same person using standard English speech (Anisfeld, Bogo, and Lambert, 1962). Likewise, subjects rated a female speaker as being shorter, less good looking, and less self confident when she used a Spanish accented English guise than when she used

a standard English guise (Ryan, 1972).

Language and Ethnic Dialect Research. Hebrew listeners rated speakers' Arab guise lower than their Hebrew guise and the results reversed for Arab listeners. Altered reactions also evolved when the switch involved a change from Sephardic to Ashkenazic style Hebrew for israeli listeners (Lambert, Anisfeld, and Yeni-Koshiam, 1965). In an ethnic dialect study Tucker and Lambert (1969) compared the effects of southern American style English speech to what the linguists call "Standard Network Style" English and found that the Southern Negro had more favourable impressions of speakers who used standard English speech.

Socio-economic Class Dialect Research. A person's speech carries class markers as reported by Putnam and O'Hern (1955), Harms (1961, 1963), and Labov (1966). Williams (1970) revealed that semantic differential type responses of school teachers to children of varying social and ethnic dialects factored into two dimensions: the confidence-eagerness dimension and the ethnicity-non-standardness dimension. He concluded that teachers made serious judgments on factors such as speech and appearance. Several others have tested the accuracy of social class attribution based on vocal cues. Putnam and O'Hern (1955), Harms (1961, 1963), and Moe (1972) conclude that most listeners can correctly place a speaker into his social class.

Dialect and Source Credibility

Recent literature has offered several definitions of credibility

most of which shared Aristotle's awareness that credibility represents several dimensions. Factor analytic techniques have revealed the following dimensions of credibility and these may serve as a conceptual definition of the construct: agreeableness, extroversion, emotional stability, conscientiousness and culture (Norman, 1963); character and authoritativeness (McCroskey, 1966); objectivity (Whitehead, 1968); and similarity (Cronkhite, 1969). Various kinds of dialect can influence credibility including socio-economic, regional, ethnic and foreign accented dialects. Harms (1963) reported a significant correlation between status and credibility ratings attributed to speakers as did Moe (1972) in a replication of the Harms study. American English has several regional dialects. Burk (1968) found that college students in Montana could identify six of these and Toomb, Quiggins, Moore, MacNeill, and Liddell (1972) compared five of them. They found that subjects in Illinois rated the New York dialect higher on dynamism and lower on sociability than the General American, Northeastern, and Southeastern dialects. Of the five, the Southern dialect was rated lowest on composure and competence. Competence also distinguished speakers of standard American English from speakers of ethnic dialects of American English.

A speaker's voice can carry ethnic correlates as the previous section of the review of literature has suggested. These ethnic markers influence the credibility attributed to a speaker perceived to be a member of an ethnic group (Buck, 1968). Buck found that both black and white listeners rated standard English speakers higher on the

credibility dimensions of trustworthiness and competence than identifiable Negro speakers.

Finally, evidence from the Ryan (1972) study leads to the prediction that foreign accented speech will influence the credibility attribution in this present study. Specifically, French accented English speech should elicit higher authoritativeness and dynamism ratings than Spanish accented English speech.

Dialect and Persuasion

Persuasion refers to the act of manipulating symbols so as to produce changes in the evaluative or approach-avoidance behavior of those who interpret the symbols (Cronkhite, 1969). Anderson (1972, p. 218) views persuasion as "a process of interpersonal communication in which the communicator seeks through the use of symbols to affect the cognition of a receiver and, thus, affect a voluntary change in attitude".

Little research focuses on the influence of dialect on persuasion. The above mentioned research about the influence of dialect on attribution and credibility suggests that majority language code members may tend to hold their own speech patterns in higher esteem and attribute more credibility to their speech than they attribute to minority code speech. It follows that majority code members (i.e. standard American English speakers) should elicit more persuasion than minority code members (French or Spanish accented English speakers). Among the minority codes, Ryan's (1972) findings suggest that French accented English

speech should prove more persuasive than Spanish accented English speech since the former elicited higher expertise ratings than the latter.

Sex and Attribution

Perhaps Addington (1968) has provided the most extensive description of the attributed qualities of male and female speech. He manipulated the breathiness, tenseness, thinness, flatness, throatiness, nasality, orotundity, pitch, and rate of male and female speakers and charted the reactions of auditors. For example, listeners perceived breathy male voices as youthful and artistic while they perceived breathy female voices as feminine, beautiful, polite, effervescent, and shallow. He concluded that "vocal manipulations of females were more effective in altering personality ascriptions than were those of males (p. 495)." The attributed qualities of male and female dialect speakers are treated below.

Sex and Persuasion

Despite the obvious ease with which this variable can be manipulated in experimental research, the number of studies which measure the influence of sex on persuasion is minimal. Janis and Field (1955) note the cultural stereotyping of the male and female roles in western society and one can observe that this stereotyping places the male in the role of persuader more often than not. Despite the cultural stereotype, neither Haiman (1949) nor Bostrom and Kemp (1969) found any significant

main effect due to sex in persuasion situations. The direction of
Bostrom and Kemp's results, although non-significant, indicates that
the male may be more persuasive than the female and, consequently,
this study made similar predictions. This prediction relates to stan-
dard American English speakers only as research cited below suggests
the existence of a sex by dialect interaction.

Dialect, Sex and Attribution

Both dialect and sex apparently should influence attribution. The
literature cited above suggests that standard English speech should
elicit more positive stereotypic traits than foreign accented English
speech and that males should elicit significantly more positive reactions
than females. However, a sex-by-dialect interaction appears to in-
fluence minority code trait attribution. Both majority and minority
linguistic codes rate minority code female speakers more positively
than minority code male speakers. Three studies attest to the positive
stereotypic ratings elicited by the French or French accented English
female speaker (Lambert, Hodgson, Gardiner, and Fillenbaum, 1960;
Preston, 1963; Larimer, 1972).

Preston demonstrated that subjects rated French Canadian female
speakers as generally more confident, intelligent, and ambitious than
English Canadian females. Larimer compared Canadians' reactions to 12
accents and female French accented English speech rated higher than 10,
falling just short of the rating attributed to the Oxford English accent.

Each of these studies reported extremely low ratings for the French accented English male's speech. The author analysed each dimension of the stereotype scale used in the Ryan (1972) study and the yet unreported findings indicate that certain aspects of speaker's stereotypic ratings actually improved when the female speaker switched from standard English to a French accented English mode of speech. This result may relate to Larimer's (1972) conclusion that a definite accent-by-sex interaction exists, with male minority group members being rated lower than female minority group members. He suggests that females are more mobile and easily assimilated in majority language code groups than male minority group members and thus elicit more positive reactions. Intercultural marriage rates reported in the Report of the Royal Commission on Bilingualism and Biculturalism (1969) tend to support Larimer's hypothesis.

Dialect, Sex and Credibility

The influence of dialect and sex on credibility has been treated above. The research literature suggests that standard English speech elicits higher credibility ratings than dialect speech. The literature also leads to a possible prediction that male speech will elicit higher credibility than female speech. No study has directly investigated the interaction potential of these two independent variables. However, two projects did treat ethnic names and sex (Andersen and MacNeill, 1972; Frageman and Andersen, 1973). These results suggest

that the dialect-by-sex interaction also may exist in reference to credibility. The pair of studies used parallel procedures to test the credibility of male and female names respectively. Male ethnic names negatively influenced the competence and character dimension of attributed credibility while female ethnic names failed to influence credibility. They concluded that strong ethnic stereotypes did not exist for women's names and that the results support the claims of many women that their role is narrowly and perhaps universally defined. The trend of the results in these two studies suggests that female minority code speech will elicit less negative credibility ratings than male minority code speech.

Dialect, Sex and Persuasion

The literature reviewed above suggests that majority language code members should persuade more auditors than minority language code members. American listeners are attuned to the persuasive appeal of members of standard American English and should react to foreign accented persuasive strategies stereotypically and less positively. Ryan's (1972) findings suggest that American listeners should react in a more receptive manner to the persuasive advances of French accented English speech than Spanish accented English speech. Finally, male standard American English should elicit more positive reactions than female standard American English. The ability of female minority code speakers to elicit positive stereotypes and credibility reactions

suggested that minority code females would prove more persuasive than males.

Perhaps the several conceptual threads comprising the forgoing rationale and review of the literature can be joined to form a conceptual framework. The theoretical and research literature supports the argument that dialect English speech may lower the stereotypic trait attribution, the credibility, and the persuasive effect of a speaker. Moreover, the sex of the dialect speaker may also influence the quality of the auditors' reactions such that female dialect speech will elicit more positive reactions than male dialect speech. This overview can serve as the basis for the following hypotheses section.

Hypotheses

The review of the literature suggests the conceptual framework for three sets of research hypotheses which we will generally categorize as the attribution hypotheses, the credibility hypotheses, and the persuasion hypotheses. Each of these parallel sets includes eight hypotheses, some of which are non-directional while others are directional. The non-directional hypotheses (a and b of each set) reflect the literature which suggests that American listeners will respond differently to dialects of English as well as the sex of the speaker. Specific research projects reviewed above also provide the bases for the directional predictions found in certain hypotheses (c, d, e, f, g, and h of each set). These directional hypotheses predict that

female French accented English dialect speech will elicit more positive

reactions than the remaining dialect-sex treatments.

Attribution Hypotheses. Based on the writer's conclusions from

the literature review, the following set of attribution hypotheses

were advanced:

H_{1a} There will be a significant difference in stereotypic attribution between dialect English speech and standard American English speech.

H_{1b} There will be a significant difference in stereotypic attribution between male and female speech.

H_{1c} There will be significantly more positive stereotypic attribution to standard American English speech than to French accented English speech.

H_{1d} There will be significantly more positive stereotypic attribution to standard American English speech than to Spanish accented English speech.

H_{1e} There will be significantly more positive stereotypic attribution to French accented English speech than to Spanish accented English speech.

H_{1f} There will be significantly more positive stereotypic attribution to male standard English speech than to female standard English speech.

H_{1g} There will be significantly more positive stereotypes attributed to female French accented English speech than to male French accented English speech.

H_{1h} There will be significantly more positive stereotypic attribution to female Spanish accented English speech than to male Spanish accented English speech.

Credibility Hypotheses. Based on the writer's conclusion from

the literature review, the following credibility hypotheses were ad-

vanced:

H_{2a} There will be a significant difference in the credibility effects between dialect English speech and standard American English speech.

H_{2b} There will be a significant difference in the credibility effects between male and female speech.

H_{2c} There will be significantly more positive credibility elicited by standard American English speech than French accented English speech.

H_{2d} There will be significantly more positive credibility elicited by standard American English speech than by Spanish accented English speech.

H_{2e} There will be significantly more positive credibility elicited by French accented English speech than by Spanish accented English speech.

H_{2f} There will be significantly more positive credibility elicited by male standard American English than female standard American English speech.

H_{2g} There will be significantly more positive credibility elicited by female French accented English speech than by male French accented English speech.

H_{2h} There will be significantly more positive credibility elicited by female Spanish accented English speech than by male Spanish accented English speech.

Persuasion Hypotheses. Based on the writer's conclusion from the review of the literature the following persuasion hypotheses were advanced:

H_{3a} There will be a significant difference in persuasive effects between dialect English speech and standard American English speech.

H_{3b} There will be a significant difference in persuasive effects between male and female speech.

H_{3c} There will be significantly more persuasive effect due to standard American English speech than to French accented English speech.

H_{3d} There will be significantly more persuasive effect due to standard American English speech than to Spanish accented English speech.

H_{3e} There will be significantly more persuasive effect due to French accented English speech than to Spanish accented English speech.

H_{3f} There will be significantly more persuasive effect due to male American English speech than to female American English speech.

H_{3g} There will be significantly more persuasive effect due to female French accented English speech than to male French accented English speech.

H_{3h} There will be significantly more persuasive effect due to female Spanish accented English speech than to male Spanish accented English speech.

Summary

This research rationale and review laid the conceptual framework for an investigation into the influence of dialect on intercultural communication. The research question asked: What influence does dialect English speech have on persuasive interaction with standard American auditors? The study sought to determine the influence of dialect on persuasion and its related variables, credibility and stereotypic attribution. Chapter I has offered the rationale for three sets of hypotheses based on an investigation of the theory and research in the area. Chapter II will describe the methodology for testing these hypotheses.

CHAPTER II

METHODOLOGY

In the first section of this proposal a rationale was developed for the prediction that standard American English speech would elicit more positive stereotypes, higher credibility ratings and cause more persuasion than foreign accented English dialect speech. This section of the proposal develops the procedures, design, variables, and methods of analyses used in testing the three sets of research hypotheses advanced in the first section of the report.

Procedures

Subjects. The subjects (n=140) were students enrolled in the interdisciplinary and social science courses at Oklahoma College of Liberal Arts during the fall semester of 1973. Generalizability of the results of this experimental study is limited to statements about the population of students in the interdisciplinary and social science courses at Oklahoma College of Liberal Arts from which the sample was taken.

Sampling Procedure. Seven classes from the population of interdisciplinary and social science courses were randomly selected for this study. Six randomly chosen classes of the seven received the experimental manipulations while the seventh class served as a control group. A one way ANOVA over the pretest attitude means served as the

randomization check. In addition, the homogeneity of variance assumption was checked utilizing the F-Max test statistic. Had either of these tests achieved significance ($p < 0.05$) the sample would have been rejected and a new sample drawn.

Testing Procedure. Prior to the actual experiment a pilot study was conducted to select a topic for the experimental messages. Students enrolled in one section of the basic communication (social sciences) course responded to eight topics using semantic differential scales measuring attitudes (Appendix B). A histogram was used to determine the topic to which pretest subjects had the most neutral reaction and this topic was used in the experimental message. This criterion allowed attitude change to occur in either the direction advocated by the message or in a direction opposed to the one advocated.

For the actual experiment, subjects received a demographic questionnaire (for purposes of replication; see Appendix A) and an attitude pretest (Appendix B) at the beginning of each experimental session. The experimenter (a senior student who was unaware of the predictions of this study) collected both the questionnaire and the pretest before commencing the manipulation.

The manipulation involved operationalization of a treatment audio tape played at 3.5 IPS and at standard volume setting on a Wollensak portable tape recorder. The experimenter then distributed a response booklet, including an attitude shift ballot (Appendix B),

a credibility scale (Appendices D, E, F, and G) and an attribution scale (Appendices H, I, J). Upon completion of the scales, the experimenter expressed gratitude for their cooperation and promised to return for debriefing.

Dependent Variables

Three dependent variables were used in this study: attribution, credibility, and persuasion. More extensive operational definitions of these variables follow.

Attribution. By definition attribution refers to the application of traits to the objects of our social world. Accordingly, subjects responded to a five-item stereotypic trait scale (Lambert, Hodgson, Gardiner and Fillenbaum, 1960; Anisfeld, Bogo, and Lambert, 1962; Anisfeld and Lambert, 1964; and Gardiner, Wonnacott, and Taylor, 1968; Ryan, 1972). The scale has been used to measure reactions of auditors to both French and Spanish accented English speech and recommends it-self for the purposes of this study. It was especially appropriate for this project as this study and its pretest (Ryan, 1972) were designed as tests of the generalizability of the Canadian findings of the Lambert research team.

The items on the trait scale included those items which loaded on stereotypic factors underlying standard accented English speech (Appendix H), French accented English speech (Appendix I), and Spanish accented English speech (Appendix J) in a prior study (Ryan, 1973).

Correlations among the three operationalizations of attribution

($r_{\text{English-French}}$ = .76; $r_{\text{English-Spanish}}$ = .64; $r_{\text{French-Spanish}}$ = .78) indicated that a comparability existed between the scales. This process yielded scale items of high power and reduced the chances of concept-scale interaction factors which more than compensated for any lack of comparability among the sets of scale items.

The stereotypic scale items adopted the form of seven response option semantic differential type scales. Positive and negative poles were randomly ordered to avoid left or right response bias. Coding ranged from negative to positive such that a score at the negative pole received a numerical value of one and a score at the positive pole received a numerical value of seven. The attribution score of each subject under each treatment condition was summed prior to analysis yielding a range of possible scores from five to 35.

Credibility Scale. The credibility scales used in this study included items which factored into a character and an expertise dimension (McCroskey, 1966) and a dynamism dimension (Berlo, Lemert, and Mertz, 1969). McCroskey reported a Hoyt internal consistency correlation of .93 for the expertise dimension and a correlation of .92 for the character dimension. The semantic differential expertise dimension correlated .85 with the expertise dimension on a Likert-type credibility scale while the semantic differential character dimension correlated .87 with the character dimension of a Likert-type credibility scale. Subjects received nine seven-response option

semantic differential type scales which measured the character, expertise, and dynamism of the speaker. The positive and negative dimensions of the items were randomly altered to avoid potential left or right response bias.

In an effort to increase reliability and to avoid concept-scale interaction, the credibility scale items used to react to different dialects were specially selected by factor analytical techniques (Ryan, 1973). Thus, the scale which subjects used to react to standard English speech included items which loaded heavily on the factors underlying credibility reactions to standard English speech (Appendix E). Likewise, the scale which subjects used to react to French accented English speech included items which loaded heavily on the factors underlying credibility reactions to French accented English speech (Appendix F). Finally, the scale which subjects used to react to Spanish accented English speech included items which loaded heavily on the factors underlying credibility reactions to Spanish accented English speech (Appendix G). Correlations among the three operationalizations of credibility $(r_{English-French} = .95; r_{English-Spanish} = .92; r_{French-Spanish} = .97)$ indicated a high comparability among the scales. This process yielded scale items of high power and reduced the chances of concept-scale interaction, factors which more than compensated for any lack of comparability among sets of scale items.

Coding ranged from negative to positive such that a score at the positive pole received a numerical value of seven. The credi-

bility scores of each subject under each treatment condition were summed prior to analysis yielding a range of possible scores from nine to 63.

Persuasion. Speech communication researchers have operationalized persuasion as change scores on both shift-of-opinion ballots (Woodword, 1928), and attitude scales (Monroe, 1937). This research project adopted semantic differential type attitude ballots used by Miller and McGraw (1969). Subjects evaluated the topic on the following four seven-response option scales in the pretest: good-bad, valuable-worthless, important-trivial, and wise-foolish (Appendix B). The same scales were used in the attitude post test (Appendix C).

Coding ranged from negative (1) to positive (7) such that a subject's pre and post test scores might range from four to 28. A subject's persuasion index was the difference between his pre and post test scores.

The Independent Variables

Dialect. Adopting the matched guise technique (Lambert, Hodgson, Gardiner, and Fillenbaum, 1960), one trilingual male and one trilingual female instructor from the University of Oklahoma encoded a two minute persuasive speech three times. First, each instructor encoded the stimulus speech in standard English; then, in French accented English, and finally, in Spanish accented English. This process yielded six experimental variations of the message: one standard

English male presentation, one standard English female presentation,
one French accented English male presentation, one French accented
English female presentation, one Spanish accented English male pre-
sentation, and one Spanish accented English female presentation.

In order to assure the reliability of the treatments, several
students from the research population rated each foreign-accented
English dialect tape on two six response option semantic differential
type scales. The first scale was anchored by the concepts 'standard
English' with a coded value of one and by 'French' (or Spanish)'accented
English' with a coded value of six. The second scale was anchored
by the concept 'not identifiable' valued at one and 'identifiable'
valued at six. A critical mean value of 4.5 was required on each
scale measuring the reaction to each treatment tape. The standard
0.80 criterion correlation was used for evaluating the result of
Spearman rank order coefficient between the accent scale and the
identifiability scale reactions to each accent. Stimulus tapes which
failed to meet the criteria were re-recorded and retested. The six
treatment tapes were of a three-minute duration at 3.5 IPS utilizing
a Wollensak portable tape recorder.

Analysis of the Data

One of the three experiments in this study used a before-after
design and the remaining two studies used an after-only design. The
persuasion experiment used the former design while both the attribution

and credibility experiments used the latter design. The before-after design was chosen for the persuasion experiment as it offered more control in answering the most significant part of the research question and avoided bias due to weak randomization. The after-only designs were adopted for the attribution and credibility studies in an effort to lower error due to subject fatigue and sensitivity to scales.

The attitude opinion ballot served as the pretest; dialect and sex of the speakers served as the treatments and the shift of attitude ballot served as the post test for the persuasion study. The control group received only the attitude pretest and post tests. The dialect and sex of the speaker served as the treatments and the credibility scale served as the post test for the credibility study. Likewise, the dialect and sex of the speaker served as the treatments, and the attribution scale served as the post test for the attribution study.

A two factor (3 x 2) analysis of variance was used to test the main effects of dialect and sex predicted in hypotheses H_{1a}, 1b, H_{2a}, 2b, and H_{3a}, 3b on attribution, credibility, and persuasion. Directional t tests were used to test for the simple effects predicted in hypotheses: H_{1c-h}, H_{2c-h}, and H_{3c-h}. The .05 level of significance was used for interpretation of all statistical results of this study.

Further post hoc analyses were conducted on the data in order to further explicate the research question. Attribution and credibility served as predictor variables and persuasion served as the criterion variable in a series of multiple and partial correlation

analyses within dialect groups.

Summary

This chapter has described the methods, processes, and techniques for testing the three sets of hypotheses advanced in Chapter I. The author has described the population sampled, defined the dependent and independent variables, explained the manipulation procedures, and previewed the analytical techniques for this study. It will be remembered from Chapter I that the research question was: What influence does dialect English speech have on persuasive interaction with standard American English auditors? The hypotheses offered should represent at least a constructive beginning to the answer of this question.

CHAPTER III

RESULTS AND DISCUSSION

The research question for this project sought to determine the influence of dialect English speech on communicative interaction with Americans. This chapter reports some answers to that research question, and discusses those results in light of both the research hypotheses and the rationale upon which those hypotheses rest. The chapter will be divided into two sections: the first section reports on the results of a series of pretests prior to the actual experiment and the second section reports and discusses the results of those statistical procedures used to test the research hypotheses.

Pretest Results

The series of pretests included an investigation into the choice of an appropriate topic, a determination of the reliability of the experimental manipulations, and an investigation into the distribution of the pretest attitude scores. Eight topics were tested prior to the choice of the concept "computer" for the experimental message. Several respondents from the sample reacted to various versions of the treatment tapes prior to the choice of reliable stimuli. Finally, both a one-by-seven analysis of variance and an F-Max test statistic determined that the distribution of the pretest attitude scores met

assumptions of the mathematical models underlying the statistical tests of the hypotheses.
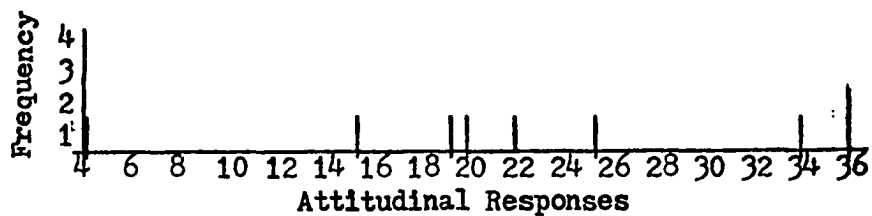
Topic Choice. Respondents reacted to a series of eight concepts on semantic differential type scales in order to determine a neutral-positive topic with a normal distribution of audience reactions. Of the eight topics tested, the topic "computer" elicited reactions from members of the sample most closely fitting the specified criteria (neutral-positive and normal distribution; Table 1). Six of the remaining seven topics were positively skewed and were rejected. The seventh was extremely leptokurtic.

Dialect Pretests. Respondents reacted to the four dialect versions of foreign accented English speech in a pretest designed to determine the identifiability of the dialects. Respondents rated each of the foreign accented English dialect audio tapes on two six-item semantic differential type scales anchored respectively by the adjectives 'French (or Spanish) Accented Standard English', and 'identifiable'-'non-identifiable'. Coding ranged from 'Standard English' and 'non-identifiable' (1) to 'accented' and 'identifiable' (6). Mean accent and identifiability ratings of 4.5 and Spearman rank order coefficients of 0.80 between the two scales were adopted as criteria. It should be noted that some tapes did not meet these criteria and the new recordings were tested. Different intact groups were used for re-testing and this yielded different sized respondent groups.
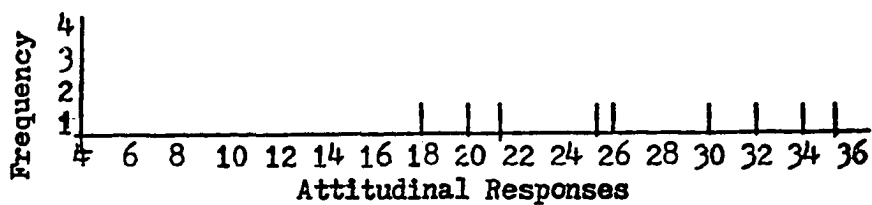
TABLE 1

HISTOGRAMS DESCRIBING THE REACTIONS OF MEMBERS OF THE SAMPLE TO TOPICS

1-a. COMPUTER

Attitudinal Responses

1-b. EXPORTS

Attitudinal Responses

1-c. DICTIONARY

Attitudinal Responses
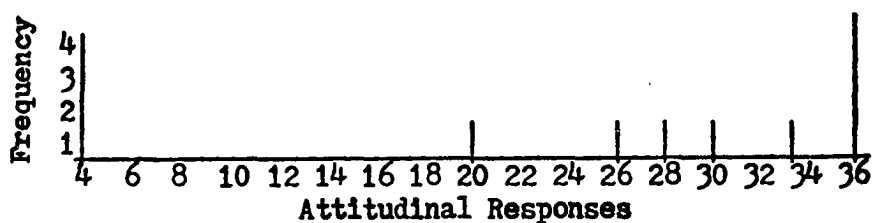
1-d. BOOK PUBLISHING

Attitudinal Responses
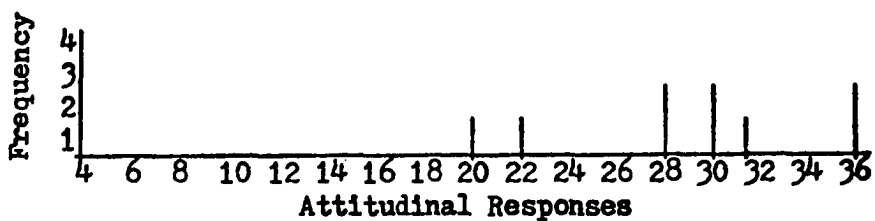
1-e. MODERN FURNITURE
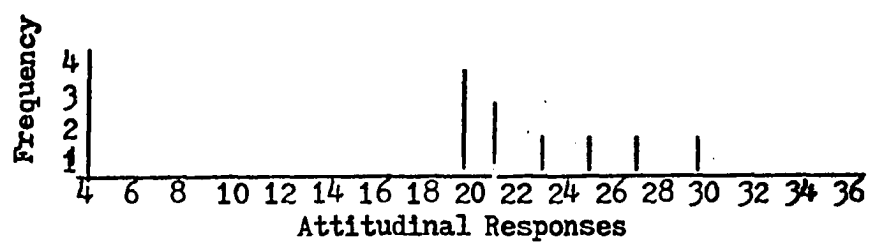
1-f. TEACHING MACHINES
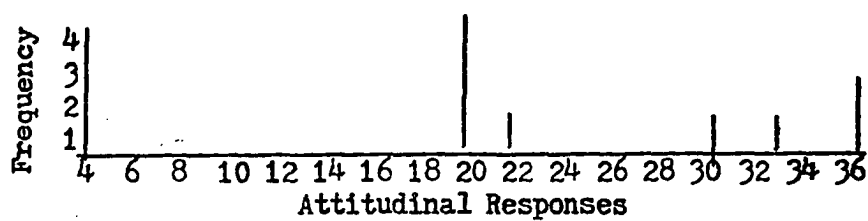
1-g. MEDICAL INSURANCE
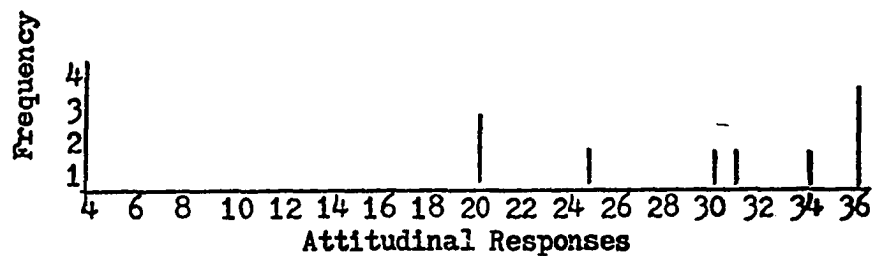
1-h. TELEVISION NEWS
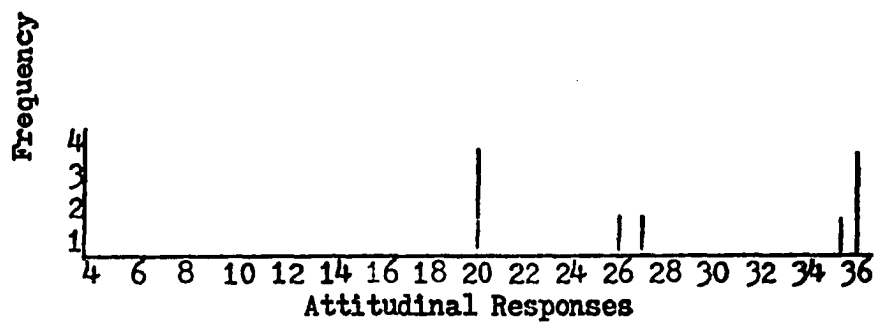
TABLE 2

PRETEST TO DETERMINE THE IDENTIFIABILITY OF DIALECT TREATMENTS

ACCENT GROUP	ACCENT MEAN	IDENTIFIABILITY MEAN	SPEARMAN ρ	N
FRENCH MALE	5.8	6	0.996	6
FRENCH FEMALE	5.7	4.9	0.938	11
SPANISH MALE	5.7	6	0.957	7
SPANISH FEMALE	5.7	5.1	0.936	7

TABLE 3

ONE BY SEVEN ANALYSIS OF VARIANCE OF PRETEST ATTITUDE SCORES

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-RATIO
BETWEEN	46.49	6	7.75	0.53
WITHIN	1958.40	133	14.72	
TOTAL	2004.89	139		

TABLE 4

F-MAX TEST STATISTIC BETWEEN TREATMENT AND CONTROL GROUP MEANS ON PRETEST

ATTITUDES TOWARDS THE COMPUTER

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-RATIO
BETWEEN	25.60	1	25.60	2.35
WITHIN	407.90	38	10.73	
TOTAL	433.50	39		

The French accented English male dialect elicited a mean rating
of 5.8 on the accent scale and mean rating of six on the identifiabi-
lity scale. The scores were submitted to Spearman's coefficient of
rank order correlation and a correlation of 0.996 (n=6) emerged
(Table 2). The French accented English female dialect elicited a
mean accent rating of 5.7 and mean identifiability rating of 4.9. The
scores were submitted to a Spearman's correlation coefficient and a
correlation of 0.938 (n=11) emerged. The Spanish accented English
male dialect elicited a mean accent rating of 5.7 and a mean identi-
fiability rating of six. The Spearman correlation coefficient was
0.975 (n=7). The Spanish accented English female dialect elicited a
mean accent score of 5.7 and a mean identifiability rating of 5.1. The
Spearman coefficent was 0.936 (n=7).

Randomization Checks. A one-by-seven analysis of variance and
an F-Max test statistic were used to determine whether the assumption
underlying the analysis of variance model were met. The one-by-seven
analysis of variance tested the random assignment to groups assumption
and the F-Max test statistic checked the homogeneity of variance
assumption. The one-by-seven analysis of variance did not reach signi-
ficance (F = 0.526; df = 6, 133; p > .05; see Table 3). The F-Max
test statistic determined that the groups did not vary signifi-
cantly (F-Max = 2.384; df = 7, 19; p > .05; see Table 4). Thus, both
the random assignment to groups assumption and the homogeneity of

variance assumption of the mathematical model were met. Therefore, any significant differences obtained in the experiment likely are not due to differences before the manipulation.

Results and Discussion of Statistical Tests of the Research Hypotheses

Chapter I proposed three sets of research hypotheses and the statistical analyses have offered evidence for the acceptance of some of those hypotheses and have failed to offer evidence for the acceptance of other hypotheses. The results of the first set of hypotheses will be presented followed by a discussion of those results. A similar pattern will be followed for the presentation and discussion of the second and third sets of hypotheses tests. By means of this process each set of results will be evaluated in light of current theory and research.

As a review for the reader, the first set of hypotheses predicted the influence of dialect and sex on attribution; the second set of research hypotheses predicted the influence of dialect and sex on credibility; and the third set of research hypotheses predicted the influence of dialect and sex on persuasion. Each set of parallel hypotheses began with two non-directional hypotheses followed, in turn, by a series of six directional hypotheses. The evidence relating to the attribution hypotheses will follow directly, followed by evidence relating to the credibility and persuasion hypotheses respectively.

Attribution Results. The data analyses support four of the

TABLE 5

TWO BY THREE ANOVA OF DIALECT AND SEX ON ATTRIBUTION

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-RATIO
BETWEEN	647.48	5	129.50	
DIALECT	343.36	2	171.68	7.92*
SEX	.40	1	.40	.02
DIALECT X SEX INTERACTION	303.72	2	151.86	7.00*
WITHIN	2471.86	114	21.68	
TOTAL	3119.35	119	26.21	

*p < .05

TABLE 6

t TESTS BETWEEN DIALECT GROUPS ON STEREOTYPIC ATTRIBUTION

GROUPS	MEAN$_1$	STANDARD DEVIATION	MEAN$_2$	STANDARD DEVIATION	t
ENGLISH-FRENCH	25.13	6.23	21.03	4.05	7.88*
ENGLISH-SPANISH	25.13	6.23	23.40	3.77	3.31*
FRENCH-SPANISH	21.03	4.05	23.40	3.77	4.56*

*p < .05

eight research hypotheses predicting the influence of dialect and

sex on stereotypic attribution.

The first hypothesis stated:

H_{1a} There will be a significant difference in stereotypic
attribution between dialect English speech and standard
American English speech.

In order to test this hypothesis, a three-by-two analysis of variance

was calculated on the influence of dialect and sex on attribution. The

dialect main effect was significant ($F = 7.92$; df = 2, 114; $p < .05$;

see Table 5). On the basis of this test, the null hypothesis was re-

jected, and the research hypothesis was accepted.

The second hypothesis stated:

H_{1b} There will be a significant difference in stereotypic
attribution between male and female speech.

In order to test this hypothesis, a three-by-two analysis of variance

was calculated on the influence of dialect and sex on attribution.

The sex main effect did not reach significance ($F = .02$; df = 1, 114;

$p > .05$; see Table 5). On the basis of this test, the null hypothesis

was not rejected.

The third hypothesis stated:

H_{1c} There will be a significantly more positive stereotypic
attribution to standard American English speech than to
French accented English speech.

In order to test this hypothesis, a t-test was used to compare reactions

to standard American speech and French accented English speech. The

t-test found a significant difference ($t = 7.88$; df = 78; $p < .05$;

see Table 6). On the basis of this test, the null hypothesis was re-
jected, and the research hypothesis was accepted.

The fourth hypothesis stated:

H_{1d} There will be significantly more positive stereotypic
attribution to standard American English speech than to
Spanish accented English speech.

In order to test this hypothesis, a t-test was used to compare the
attribution reactions to standard American English speech and Spanish
accented English speech. The t-test did not show a significant dif-
ference (t = 3.31; df = 78; $p >$ .05; see Table 6). On the basis of
this test the null hypothesis was not rejected.

The fifth hypothesis stated:

H_{1e} There will be significantly more positive stereotypic
attribution to French accented English speech than to
Spanish accented English speech.

In order to test this hypothesis, a t-test was used to compare the reac-
tions of auditors to French accented English speech and Spanish accented
English speech. The t-test found a significant difference in the
opposite direction (t = 4.56; df = 72; $p <$ .05; see Table 7). On the
basis of this test, the null hypothesis was not rejected.

The sixth hypothesis stated:

H_{1f} There will be significantly more positive stereotypic
attribution to male standard English speech than to
female standard English speech.

In order to test this hypothesis, a t-test was used to compare the
attribution elicited by male standard English speech and female standard

TABLE 7

t TEST BETWEEN DIALECT-SEX GROUPS ON STEREOTYPIC ATTRIBUTION

GROUPS	MEAN$_1$	STANDARD DEVIATION	MEAN$_2$	STANDARD DEVIATION	t
ENGLISH MALE-FEMALE	27.35	4.99	22.90	6.54	6.04*
FRENCH MALE-FEMALE	19.50	3.07	22.55	4.32	4.14*
SPANISH MALE-FEMALE	22.90	4.00	23.90	4.28	1.36*

*p $<$ .05

English speech. A t-test found a significant difference ($t = 6.04$;
$df = 38$; $p < .05$; see Table 7). On the basis of this test, the null
hypothesis was rejected, and the research hypothesis was accepted.

The seventh hypothesis stated:

H_{1g} There will be significantly more positive stereotypes
attributed to female French accented English speech
than to male French accented English speech.

In order to test this hypothesis, a t-test was used to compare the
attribution elicited by female French accented English speech and male
French accented English speech. The t-test found a significant dif-
ference ($t = 4.14$; $df = 38$; $p < .05$; see Table 7). On the basis of
this test, the null hypothesis was rejected and the research hypothesis
was accepted.

The eighth hypothesis stated:

H_{1h} There will be significantly more positive stereotypic
attribution to female Spanish accented English speech
than to male Spanish accented English speech.

In order to test this hypothesis, a t-test was used to compare the
attribution elicited by female Spanish accented English speech and male
Spanish accented English speech. The t-test did not show a significant
difference ($t = 1.36$; $df = 38$; $p > .05$; see Table 7). On the basis of
this test, the null hypothesis was rejected.

Attribution Discussion. This study has demonstrated that one's
dialect influences the stereotypes attributed by listeners. Thus, stan-
dard English speech elicited significantly more positive stereotypes
than French and Spanish accented English speech. In turn, Spanish

accented English speech elicited significantly more positive stereotypes than French accented English speech. The negative stereotypes elicited by French and Spanish accented English speech appears to coincide with the stereotypic reactions of majority code members to minority code speech patterns in studies by Anisfeld, Bogo, and Lambert (1962), Lambert, Anisfeld, and Yeni-Koshiam (1965), Tucker and Lambert (1969), Williams (1970), and Williams, Whitehead, and Miller (1971).

The difference in the quality of stereotypic attribution between the Spanish and the French dialects deserves note. Contrary to prediction, the Spanish accented English dialect elicited significantly more positive reactions than did the French accented dialect. The prediction was based on Ryan's 1972 finding that French accented female speech elicited higher ratings on expertise, reliability, intelligence, and qualification than did the Spanish accented speaker who was perceived as timid, hesitant, weak, passive, and unqualified. These differences emerged only after item analysis and it should be noted that the study did not find any overall significant difference in stereotypic attribution between the two dialect groups.

A dialect-by-sex interaction similar to that found by Larimer (1972) appeared in respect to stereotypic attribution. According to Larimer, dialect-by-sex interaction exists in situations where male standard English speech elicits more positive stereotypes than female standard English speech, while female dialect English speech elicits more positive

stereotypic reactions than male dialect English speech. In this study, standard English male speech elicited significantly more positive stereotypic reactions than female standard English speech, while female French accented English speech elicited significantly more positive stereotypes than male French accented English speech. A similar non-significant relationship held between female and male Spanish accented English dialect speech.

Credibility Results. The data analysis offers evidence in support of four of the eight research hypotheses predicting the influence of dialect and sex on credibility.

The first hypothesis stated:

H_{2a} There will be a significant difference in the credibility effects between dialect English speech and standard American English speech.

In order to test this hypothesis, a three-by-two analysis of variance was calculated on the influence of dialect and sex on credibility. The dialect main effect was significant ($F = 18.00$; $df = 2$, 114; $p < .05$; see Table 8). On the basis of this test, the null hypothesis was rejected and the research hypothesis was accepted.

The second hypothesis stated:

H_{2b} There will be a significant difference in the credibility effects between male and female speech.

In order to test this hypothesis, a three-by-two analysis of variance was calculated on the influence of dialect and sex on attribution. The sex main effect was not significant ($F = .22$; $df = 1$, 111; $p > .05$;

TABLE 8

TWO BY THREE ANOVA OF DIALECT AND SEX ON CREDIBILITY

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-RATIO
BETWEEN	2112.89	5	422.58	
DIALECT	2001.33	2	1000.67	18.00*
SEX	11.95	1	11.95	.22
DIALECT X SEX INTERACTION	99.70	2	49.81	.90
WITHIN	6355.40	114	55.60	
TOTAL	8451.26	119	71.09	

*p $<.05$

TABLE 9

t TEST BETWEEN DIALECT GROUPS ON CREDIBILITY

GROUPS	MEAN$_1$	STANDARD DEVIATION	MEAN$_2$	STANDARD DEVIATION	t
ENGLISH-FRENCH	47.90	7.45	38.05	6.76	11.82*
ENGLISH- SPANISH	47.90	7.45	43.08	7.79	5.79*
FRENCH-SPANISH	38.05	6.76	43.08	7.79	6.00*

*p $<.05$

see Table 8). On the basis of this test, the null hypothesis was not rejected.

The third hypothesis stated:

H_{2c} There will be significantly more positive credibility elicited by standard American English speech than French accented English speech.

In order to test this hypothesis, a t-test was used to compare the credibility reactions of auditors to standard American English speech and French accented English speech. The t-test found a significant difference ($t = 11.82$; $df = 38$; $p < .05$; see Table 9). On the basis of this test, the null hypothesis was rejected and the research hypothesis was accepted.

The fourth hypothesis stated:

H_{2d} There will be significantly more positive credibility elicited by standard English speech than by Spanish accented English speech.

In order to test this hypothesis, a t-test was used to compare the credibility elicited by standard American English speech and Spanish accented English speech. The t-test did find a significant difference ($t = 5.7881$; $df = 38$; $p < .05$; see Table 9). On the basis of this test, the null hypothesis was rejected and the research hypothesis was accepted.

The fifth hypothesis stated:

H_{2e} There will be significantly more positive credibility elicited by French accented English speech than by Spanish accented English speech.

In order to test this hypothesis, a t-test was used to compare

the reactions of auditors to French accented English speech and Spanish

accented English speech. The t-test found a significant difference

in the opposite direction (t = 6.00; df = 72; p $<$.05; see Table 9).

On the basis of this test, the null hypothesis was not rejected.

The sixth hypothesis stated:

> H_{2f} There will be significantly more positive credibility
> elicited by male standard American English than female
> standard American English speech.

In order to test this hypothesis, a t-test was used to compare the credi-

bility elicited by male standard English speech and female standard

English speech. A t-test found a significant difference (t = 2.71;

df = 38; p $<$.05; see Table 10). On the basis of this test, the null

hypothesis was rejected and the research hypothesis was accepted.

The seventh hypothesis stated:

> H_{2g} There will be significantly more positive credibility
> elicited by female French accented English speech than
> by male French accented English speech.

In order to test this hypothesis, a t-test was used to compare the credi-

bility elicited by female French accented English speech and male

French accented English speech. The t-test did not find a significant

difference (t = .25; df = 38; p $>$ .05; see Table 10). On the basis

of this test, the null hypothesis was not rejected.

The eighth hypothesis stated:

> H_{2h} There will be significantly more positive credibility
> elicited by female Spanish accented English speech than
> by male Spanish accented English speech.

In order to test this hypothesis, a t-test was used to compare the

TABLE 10

t TEST BETWEEN DIALECT-SEX GROUPS ON CREDIBILITY

GROUPS	MEAN$_1$	STANDARD DEVIATION	MEAN$_2$	STANDARD DEVIATION	t
ENGLISH MALE-FEMALE	49.50	7.34	46.30	7.22	2.71*
FRENCH MALE-FEMALE	37.90	5.51	38.30	7.80	.25
SPANISH MALE-FEMALE	42.70	6.66	43.45	8.75	.64

*p $<$.05

credibility elicited by female Spanish accented speech and male Spanish accented speech. The t-test did not show a significant difference (t = 0.64; df = 38; p > .05; see Table 10). On the basis of this test, the null hypothesis was not rejected.

Credibility Discussion. The credibility findings parallel the attribution results. Thus, a dialect main effect exists: standard English speech proves more credible than both French and Spanish accented English speech; Spanish accented English speech proves more credible than French accented English speech; and evidence of the dialect-by-sex interaction exists. These results may vary geographically.

Dialect does influence the credibility elicited by speakers such that standard English speakers elicit significantly higher credibility ratings than Spanish accented English speakers who, in turn, elicit significantly more positive reactions than French accented English speakers. These findings, when combined with the results of studies by Harms (1961, 1963), Toomb, Quiggins, Moore, MacNeill, and Liddell (1972), and Buck (1968), argue that dialect must be considered when one calculates the credibility potential of a speaker.

The prediction that French accented English speech would elicit more positive credibility reactions than Spanish accented English speech was not supported. The prediction emerged from the Ryan (1972) finding that French accented English speech elicited significantly higher ratings on the expertise and dynamism dimensions of the credibility

scale used in the study. It should be noted also that the overall credibility differences between the two dialect groups did not reach significance and that the Spanish accented English dialect did elicit significantly more positive character ratings than the French accented English dialect. The results of this present study should be treated as representative of the relative credibility stature of the dialect groups considering the weaknesses of the 1972 study mentioned above.

Some evidence supports the predicted dialect-by-sex interaction similar to that found in the stereotypic reactions. Thus, standard English male speech elicited more positive credibility ratings than female standard English speech while French and Spanish accented female speech elicited more positive credibility ratings than male French and Spanish accented English speech. These results did not reach significance.

The parallel directions of the attribution and credibility results suggests the reliability of the .60 correlation between the stereotype and credibility scales used in the Ryan (1972) study. The correlation in this study was .55. Perhaps stereotypes and credibility measure two related constructs.

Persuasion Results. The data analyses offer evidence for the acceptance of two of the eight research hypotheses predicting the influence of dialect and sex on persuasion.

The first hypothesis stated:

H_{3a} There will be a significant difference in persuasive effects between dialect English speech and standard American English speech.

TABLE 11

TWO BY THREE ANOVA OF DIALECT AND SEX ON PERSUASION

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-RATIO
BETWEEN	58.99	5	11.80	
DIALECT	50.47	2	25.23	3.99*
SEX	1.64	1	1.64	.26
DIALECT X SEX INTERACTION	6.87	2	3.44	.54
WITHIN	720.48	114	6.32	
TOTAL	779.45	119	6.55	

*$p < .05$

TABLE 12

t TEST BETWEEN DIALECT GROUPS ON PERSUASION

GROUPS	MEAN$_1$	STANDARD DEVIATION	MEAN$_2$	STANDARD DEVIATION	t
ENGLISH-FRENCH	30.00	2.65	30.25	2.24	.89
ENGLISH-SPANISH	30.00	2.65	31.35	2.78	4.80*
FRENCH-SPANISH	30.25	2.24	31.35	2.78	3.91*

*$p < .05$

In order to test this hypothesis, a three-by-two analysis of variance was calculated on the influence of dialect and sex on persuasion. The dialect main effect was significant ($F = 3.99$; $df = 2$, 114; $p < .05$; see Table 11.). On the basis of this test, the null hypothesis was rejected and the research hypothesis was accepted.

The second hypothesis stated:

H_{3b} There will be a significant difference in persuasive effects between male and female speech.

In order to test this hypothesis, a three-by-two analysis of variance was calculated on the influence of dialect and sex on persuasion. The sex main effect was not significant ($F = .26$; $df = 1$, 144; $p > .05$; see Table 11). On the basis of this test the null hypothesis was not rejected.

The third hypothesis stated:

H_{3c} There will be significantly more persuasive effect due to standard American English speech than to French accented English speech.

In order to test this hypothesis, a t-test was used to compare the persuasive effect of standard American English speech and French accented English speech. The t-test did not show a significant difference ($t = .89$; $df = 78$; $p > .05$; see Table 12). On the basis of this test, the null hypothesis was not rejected.

The fourth hypothesis stated:

H_{3d} There will be significantly more persuasive effect due to standard American English speech than to Spanish accented English speech.

TABLE 13

t TEST BETWEEN DIALECT-SEX GROUPS ON PERSUASION

GROUPS	$MEAN_1$	STANDARD DEVIATION	$MEAN_2$	STANDARD DEVIATION	t
ENGLISH MALE-FEMALE	30.00	3.18	30.00	1.97	.00
FRENCH MALE-FEMALE	30.15	2.57	29.85	1.59	.75
SPANISH MALE-FEMALE	30.90	1.61	31.80	3.53	2.26*

*p $<$ .05

In order to test this hypothesis, a t-test was used to compare the persuasive effect of standard American English speech and Spanish accented English speech. The t-test did show a significant difference in the opposite direction (t = 4.80; df = 78; p $<$ .05; see Table 12). On the basis of this test, the null hypothesis was not rejected.

The fifth hypothesis stated:

H_{3e} There will be significantly more persuasive effect due to French accented English speech than to Spanish. accented English speech.

In order to test this hypothesis, a t-test was used to compare the persuasive effect of French accented English speech and Spanish accented English speech. The t-test found a significant difference in the opposite direction (t = 3.91; df = 78; p $<$ .05; see Table 12). On the basis of this test, the null hypothesis was not rejected.

The sixth hypothesis stated:

H_{3f} There will be significantly more persuasive effect due to male American English speech than to female American English speech.

In order to test this hypothesis, a t-test was used to compare the persuasive effect of male standard English speech and female standard English speech. A t-test found no significant difference (t = 0.00; df = 38; p $>$ .05; see Table 13). On the basis of this test, the null hypothesis was not rejected.

The seventh hypothesis stated:

H_{3g} There will be significantly more persuasive effect due to female French accented English speech than to male French accented English speech.

In order to test this hypothesis, a t-test was used to compare the persuasive effect of female French accented English speech and male French accented English speech. The t-test did not show a significant difference (t = .75; df = 38; p $>$ .05; see Table 13). On the basis of this test, the null hypothesis was not rejected.

The eighth hypothesis stated:

H_{3h} There will be significantly more persuasive effect due to female Spanish accented English speech than to male Spanish accented English speech.

In order to test this hypothesis, a t-test was used to compare the persuasive effect of female Spanish accented speech and male Spanish accented English speech. The t-test did show a significant difference (t = 2.26; df = 38; p $<$ .05; see Table 13). On the basis of this test, the null hypothesis was rejected and the research hypothesis was accepted.

Persuasion Discussion. The main persuasion hypothesis predicting that dialect would differentially affect persuasion was supported by the results of the data analysis; unfortunately, only one other prediction was supported. Moreover, the Spanish accented English dialect speech proved to be more persuasive than standard English speech, which, in turn, did not differ significantly from French accented English speech.

The high persuasive effect of Spanish accented English speech proves rather interesting in light of the low credibility ratings elicited by the Spanish accented English speech treatments. In order

to shed light on this unpredicted set of findings, a series of multiple correlation and partial correlation analyses were conducted. These analyses described the relative efficiency of credibility and attribution as predictors of persuasion and determined the amount of persuasion variance explained by the two variables.

Credibility and stereotypes combine to produce a multiple correlation coefficient of 0.2309 which explains 5.38 per cent of the variance in the persuasion scores elicited by standard English speech. Of the two predictor variables, credibility carries more weight with a partial correlation coefficient of o.2155 which explains 4.65 per cent of the total variance (Table 14). Stereotypes carry little weight as evidenced by the 0.1092 correlation explaining 1.19 per cent of the variance.

Credibility and stereotypes combine to produce a multiple correlation coefficient of 0.3061 which explains 9.37 per cent of the variance elicited by the persuasive messages of French accented speech. Of the two predictor variables, credibility carried more weight with a partial correlation coefficient of 0.2884 which explains eight per cent of the variance. Stereotypes carry little weight with a partial correlation coefficient of 0.0727 and explain a mere 0.05 per cent of the variance (Table 14).

Credibility and stereotypes combine to produce a multiple correlation coefficient of 0.2215 which explains 4.91 per cent of the variance in the persuasion scores elicited by Spanish accented English

TABLE 14

MULTIPLE AND PARTIAL CORRELATION COEFFICIENTS OF CREDIBILITY (1) AND

ATTRIBUTION (2) AS PREDICTORS OF PERSUASION (3)

TREATMENT GROUP (ACCENT)	R_m	R_m^2	CREDIBILITY		ATTRIBUTION	
			$r_{13.2}$	r^2	$r_{23.1}$	r^2
ENGLISH	.23	.05	-.22	-.08	.02	.01
FRENCH	.31	.09	.29	.08	.07	.03
SPANISH	.22	.05	.17	.03	.19	.04

speech. The partial correlation score for credibility was 0.1709 and credibility explained 2.92 per cent of the variance. Stereotypes served as the second predictor and the partial correlation coefficient was 0.1924 and the coefficient squared was 0.0370 (Table 14).

It would seem that credibility has little predictive value in respect to the persuasive effect of standard English and Spanish accented English speech and multiple regression coefficients support this inference. Indeed, in each case, the credibility scores predict less than six per cent of the total persuasion variance.

Perhaps the persuasive influence of the Spanish accented English dialect relates to the high character ratings from the credibility results of the Ryan (1972) study. In addition, the Spanish accented treatment elicited high character ratings on the character related items of the stereotype scale (nice, friendly, and honest). Moreover, the Spanish accented treatments elicited the predicted low stereotype scores in neither this study nor the Ryan (1972) study.

Finally, the high persuasive effect of the Spanish accented English treatment may be due to a differential distribution of polar-positive respondents. A quick review of the pretest attitude scores reveals the existence of more polar positive respondents in the standard English treatment groups than in the dialect treatment groups and this uneven distribution of polar respondents may have allowed more room for attitude change or persuasion in dialect treatment groups.

Thus, the pretest attitude mean for the English treatment groups was 23.92 while the pretest attitude mean for the Spanish dialect treatment group was 23.41. Moreover, 11 of the 40 English treatment group subjects gave polar positive responses in reaction to the concept "computer" while only seven of the 40 Spanish dialect treatment group subjects gave polar positive pretest responses. It should be noted that this differential distribution of pretest scores caused no statistical problems as evidenced by Tables 2 and 3.

Summary

Chapter III has presented and discussed the results of the statistical analyses used to test the study's 24 research hypotheses. Eleven of the 24 hypotheses were accepted on the basis of evidence from the statistical analyses. The import of these results was discussed in light of the theory and research presented in Chapter I. The following Chapter summarizes and concludes the study, predicting new directions in socio-linguistic research.

CHAPTER IV

SUMMARY AND SUGGESTIONS FOR FURTHER STUDY

This, the final chapter of the research report, presents a brief overall summary of the experimental study described in this report, draws forth several conclusions, implications, and projections for future research. Congruity theory provides a systematic matrix for generation of suggestions for future research.

This study was designed to answer the following research question: What influence does dialect English speech have on persuasive interaction with standard American listeners? To answer the question, this experimental study measured the influence of dialect on the attribution of stereotypes, speaker credibility, and persuasive effect controlling for possible variance due to the sex of the speaker. As was predicted, there was a significant difference in the reactions of standard American English auditors to standard and foreign accented English dialect speech.

Summary and Conclusions

The major thrust of the study was to investigate the parameters of reactions to standard and dialect English speech. Three sets of parallel research hypotheses were offered. The first set of eight hypotheses predicted the influence of dialect and sex on stereotypic

attribution; the second set of research hypotheses predicted the influence of dialect and sex on credibility; and the third set of research hypotheses predicted the influence of dialect and sex on persuasion.

Data were gathered, analysed, and on the basis of the results, the author concluded (1) that dialect English speech influences the stereotypic attribution, credibility, and persuasive effect of a speaker; (2) standard English speech elicits more positive stereotypic attribution and credibility than both Spanish and French accented English speech; (3) Spanish accented English speech elicits more positive stereotypic attribution, credibility, and persuasive effect than French accented English speech; and finally, (4) some evidence suggests that female dialect English speech elicits more positive reactions than male dialect English speech while the reverse relation-ship holds true for standard English speech.

Implications

In Chapter I, it was established that the results of this study should have practical implications for intercultural communication. It was mentioned that the results should have practical implications for foreign accented English dialect groups such as the Chicanos and Acadians who interact persuasively with majority code Americans. It was mentioned that the results of this study should have practical implications for Americans who travelled and interacted with dialect groups in foreign countries and in various parts of the United States.

Finally, it was mentioned that the results of this study should

have implications for the theorists and advertisers of the mass

communications media. The question now arises: What are these

practical implications? The answer to the question rests on the

assumption that the attribution, credibility, and persuasion

reactions of the majority code members to minority code speech in

this study are actually predictive of majority code communicative

behavior in actual social interaction. Perhaps the attribution

and credibility results of this study will prove to be more

predictive than the persuasion results, considering the problems

treated above (pp. 55-56).

The results of this study suggest that the dialect code speaker

enters any majority-minority code persuasive role set as the low

status member. The minority code speaker might prove more successful

in the persuasive interaction if he realized the negative nature of

the attribution and credibility reactions of the majority code speaker

and took measures to correct that negative perspective. Thus, the

dialect speaker might consider the presentation of information contra-

dicting the negative stereotypes held by the majority code speaker.

In addition, the dialect code speaker might rely more on logical and

emotional appeals in the persuasive interaction to compensate for the

low credibility rating attributed by the majority code speaker.

This study has established the existence of negative stereotypes

and low credibility reactions attributed to dialect English speech and

these reactions may initiate a self fulfilling prophesy. As explained by Williams (1971), a self fulfilling prophesy is operant when the majority code member of the communicative set has low expectations as to the minority code member's behavior due to the negative stereotypes and credibility reactions of the majority code member to the speech patterns of the minority code member. The minority code member perceives the low expectations and performs accordingly, thus, fulfilling the majority code member's expectations. The fulfilled prophesy, in turn, reinforces the negative stereotypes and credibility reactions of the majority code member towards the minority code member.

Mass media theorists and practitioners might be wise to avoid the use of dialect English speech in persuasive messages for the standard American audience. The one exception might relate to the use of the Spanish dialect of English to encode messages with which the majority of the audience agrees. The results of this study did suggest that the positive attitudinal valence of the topic compensated for the negative valence of the dialect speakers.

Suggestions for Further Research

These results, conclusions, and implications may be viewed from any of several theoretical perspectives to produce a program for further research projects. At this point, these conclusions will be viewed from the theoretical perspective of the congruity model of attitude change (Osgood, Suci, and Tannenbaum, 1957). Adoption of this theoretical perspective is appropriate here because both the

congruity model and the semantic differential type scales used as
the dependent measures in this study rest on similar sets of assumpt-
ions. For example, each holds that a concept in one's mind can be
placed on a continuum ranging from positive to negative with a
neutral zero point.

Congruity theory explains attitude change as a convergence of
two concepts on a scale, each moving in reverse proportion to their
distance from the neutral point. In this study, the concepts
"computer" and "dialect" were associated by means of a persuasive
speech in which the dialect speaker favored the computer. One may
use the attribution and attitude pretest scores as indicators
of the proper place for the concepts on the evaluational scale
of the congruity model. If the attitude change follows the prediction
from congruity theory, no further research is required, however, if
the attitude change results fail to follow the congruity prediction,
one may investigate this failure in future research projects.

Let us place the concept "computer" and the concept "standard
English speech" on the evaluative scale of the Csgood congruity
model. Based on the attitude pretest and the attribution scores report-
ed in Chapter III, one might give each of these a scale value of + 3 on
a scale ranging from + 3 to -3. As each had the same scale value, no
tension for attitude change ensued and the results did not demonstrate
any change.

One might also place the concept "computer" and the concept

"Spanish accented English speech" on the congruity scale. The

attitude pretest and the attribution results reported in Chapter

III suggest that the concept "computer" might rest at the + 3 point

on the scale and the Spanish dialect of English might rest at the

- 2 point on the scale. According to congruity theory, this set of

circumstances should produce a substantial positive increase in

stereotype reactions and a slighter decrease in positive attitudes

towards the computer. The data analysis yielded an attitude change

in favor of the computer, a movement contrary to predictions.

In like fashion, one could compare the predictions of congruity

theory to the results of the associative bond between the concepts

"computer" and "French accented English speech."

The research question sought to determine the influence of

dialect on persuasive interaction with standard American English

speakers. It remains partially unanswered until researchers

investigate several questions from the perspective of congruity theory.

(1) What is the reason for the weakness of the congruity theory

prediction for attitude change when the concept "computer" is

associated with the concept "Spanish accented English speech?"

(2) Congruity theory tells us that the greatest movement will

occur on the part of concepts which are closer to neutral. Thus,

if a dialect speaker elicits a stereotype score of - 1 and the

concept computer has a score of +2.9, wouldn't one expect greater

movement on the part of the stereotype scores rather than on the

part of the attitude change scores? Consequently, future researchers should replicate this study using neutral and negative topics. (3) Congruity theory focuses on the recipient of a message and helps to predict his reaction. Future researchers might consider: What characteristics of the listener influence initial reactions to the topic and the speaker? They could include variables such as sex, socio-economic class, ethnic background, religious affiliation, and social group affiliation (Bettinghaus, 1972).

(4) The context of the persuasive message will usually influence the reactions of listeners. A consideration of variables such as message context and geographic location might improve the researchers' ability to correctly place concepts on linear scales and produce improved predictions based on congruity theory. For example, the persuasive influence of a dialect speaker might be more effective in his cultural habitat than in a college classroom. Moreover, speakers in certain parts of the United States have more contact with dialect speakers than Oklahoma students and this contextual variable might be tested in future research.

Several methodological modifications to this research project could aid answering the research question more fully in future projects. (1) An after-only-control group design would avoid error due to sensitization to the attitude scales and give a more valid picture of dialect induced persuasion.

(2) This study used standard English speakers to create

foreign accented dialect treatments and while this procedure provided control of potential error variance due to individual differences, it did not answer the question: Do reactions to artificial foreign accented English dialects differ from reactions to actual foreign accented English dialects? The result of a replication of this study with both actual and artificial dialect treatments would help to determine the social implications of the findings reported in this study. Thus, if subjects react to actual and artificial dialect speech identically, the findings of this study can be generalized to social reality with more confidence.

(3) The stereotypic attribution operationalizations differed in each dialect treatment condition and some of the correlation ratios were lower than one might desire ($r = .78$; $.76$; and $.64$). Future researchers might use identical scales in each dialect treatment condition to determine the reliability of stereotypic attribution findings from this project.

(4) The literature includes several attempts to describe the credibility and stereotypes elicited by regional, socio-economic, ethnic, and foreign accented English dialect groups. Unfortunately, few studies have investigated the influence of these dialects on persuasive interaction. This would be an extremely relevant area for further research in an age of increasing mobility and national persuasion ventures.

KINDLY RESPOND TO THE FOLLOWING QUESTIONS

1. Age _____

2. Sex _____

3. Your father's occupation is (was) most like which of the following?

    a. longshoreman or laborer _____
    b. policeman, mechanic, or farmer _____
    c. draftsman or foreman _____
    d. doctor, lawyer, or engineer _____
    e. barber or truck driver _____
    f. ticket agent or tool maker _____
    g. professor or manager _____

4. Your religious affiliation is which of the following?

    a. Baptist _____
    b. Church of Christ _____
    c. Presbyterian _____
    d. Methodist _____
    e. Episcopalian _____
    f. Other (please specify)

                                        (Church Name)

5. The farthest you have travelled from home is

    a. 0-500 miles _____
    b. 500-1,000 miles _____
    c. 1,000-2,000 miles _____
    d. 2,000 miles or more _____

6. Which of the following foreign countries have you visited?

    a. Mexico _____
    b. Canada _____
    c. Asian countries _____
    d. European countries _____
    e. South American countries _____
    f. African countries _____

7. Where did you grow up?

    a. rural environment   _____
    b. small town environment   _____
    c. urban environment   _____

8. Home town name:_____ State:_____

Appendix B

Please evaluate _____ on the following scales.

good   ___:___:___:___:___:___:___: bad

worthless   ___:___:___:___:___:___:___: valuable

important   ___:___:___:___:___:___:___: trivial

foolish   ___:___:___:___:___:___:___: wise

Appendix C

Today's Forum speaker holds a significant post with the United

Nations in New York. The speaker's background recommends our attention

as he/she holds a masters degree in International Relations and has

vast experience in human affairs. Today's speaker has chosen to deal

with a topic of relevance to each of us in the audience and the time

we spend listening will be time well spent.

INSTRUCTIONS FOR COMPLETING SEMANTIC DIFFERENTIAL SCALES

On the following pages are several "semantic differentials" which is a type of attitude scale. You are asked to evaluate each concept in terms of the bipolar adjectives below the concept. For example, if you were to evaluate the concept "President Nixon" in terms of his attractiveness, and you think he is very attractive, you would mark an X as below:

President Nixon

Beautiful　**: X　:＿＿:＿＿:＿＿:＿＿:＿＿:＿＿:** Ugly

If you feel that he is quite unattractive, of course, your X would be placed near the "Ugly" pole.

The middle space should be considered "Neutral". Check this space if you feel that neither adjective applies to the concept or if you feel that both adjectives apply equally to the concept.

:

Appendix E

Please rate the speaker on the following scales

friendly   ___:___:___:___:___:___:___: unfriendly

unpleasant   ___:___:___:___:___:___:___: pleasant

nice   ___:___:___:___:___:___:___: awful

expert   ___:___:___:___:___:___:___: inexpert

intelligent   ___:___:___:___:___:___:___: unintelligent

unqualified   ___:___:___:___:___:___:___: qualified

aggressive   ___:___:___:___:___:___:___: weak

tired   ___:___:___:___:___:___:___: energetic

emphatic   ___:___:___:___:___:___:___: hesitant

Appendix F

Please rate the speaker on the following scales.

selfish   ___:___:___:___:___:___:___: unselfish

nice   ___:___:___:___:___:___:___: awful

unpleasant   ___:___:___:___:___:___:___: pleasant

inexpert   ___:___:___:___:___:___:___: expert

qualified   ___:___:___:___:___:___:___: unqualified

reliable   ___:___:___:___:___:___:___: unreliable

aggressive   ___:___:___:___:___:___:___: weak

hesitant   ___:___:___:___:___:___:___: emphatic

bold   ___:___:___:___:___:___:___: timid

Please rate the speaker on the following scales.

friendly ___:___:___:___:___:___:___: unfriendly

unpleasant ___:___:___:___:___:___:___: pleasant

awful ___:___:___:___:___:___:___: nice

inexpert ___:___:___:___:___:___:___: expert

informed ___:___:___:___:___:___:___: uninformed

intelligent ___:___:___:___:___:___:___: unintelligent

hesitant ___:___:___:___:___:___:___: emphatic

fast ___:___:___:___:___:___:___: slow

tired ___:___:___:___:___:___:___: energetic

Appendix H

Please rate the speaker on the following scales

confident ___:___:___:___:___:___:___: unconfident

unfriendly ___:___:___:___:___:___:___: friendly

interesting ___:___:___:___:___:___:___: uninteresting

poor disposition ___:___:___:___:___:___:___: good disposition

helpful ___:___:___:___:___:___:___: non-helpful

Appendix I

Please rate the speaker on the following scales.

good looking ____:____:____:____:____:____:____: not good looking

not amusing ____:____:____:____:____:____:____: amusing

intelligent ____:____:____:____:____:____:____: unintelligent

unfriendly ____:____:____:____:____:____:____: friendly

good disposition ____:____:____:____:____:____:____: poor disposition

Appendix J

Please rate the speaker on the following scale.

not amusing ___:___:___:___:___:___:___: amusing

religious ___:___:___:___:___:___:___: irreligious

unkind ___:___:___:___:___:___:___: kind

friendly ___:___:___:___:___:___:___: unfriendly

foolish ___:___:___:___:___:___:___: wise

Appendix K

The computer is the predominant symbol of the twentieth century

and most people are aware of the benefits of computer technology.

Computers serve as man's tool extending his abilities beyond limits

never before imagined. Stanley Jaki in his book, <u>Mind and Computers</u>

tells us that present day computers have done for man's brain what

the first industrial revolution did for man's arm. He explains that

computers relieve man from tedious and lengthy mental operations just

as machines relieved man from heavy physical labor.

Students will directly benefit from computer technology as hun-

dreds of computer terminals are now in use in education and eventually

you will be able to take courses at home through instructional terminals

in your study. Professor Bruce Hicks of the University of Illinois

tells us that your home computer terminal will compute your income tax,

keep your records, keep important dates and print out reminders to you

each morning, plan balanced daily menus, and give you access to public

information files. Recent government reports add that computer tech-

nology will offer instructions to repair your cars and appliances,

allow you to shop from home, keep your home safe from theft, and even

provide a babysitting service. Computer technology benefits you today

and will be of greater benefit tomorrow.

Professor Davis, author of an introductory computer technology

textbook spells out some implications of computers in our society. He mentions the uses to which management can put the computer in decision making, record keeping, and employee development. He tells us that doctors will one day use computers to diagnose medical problems, that politicians can use computers to predict election results, and, finally, that artists can use computers to create artistic designs. Computers are serving as extensions of man aiding him to achieve what he has never achieved before.

These innovations will happen as a result of new kinds of computers. Presently, we are seeing the advent of fourth generation computers in three sizes: mini, macro, and network. Minicomputers which will cost $2,000 will replace the calculator in the home; macro computers will increase the size of operations one may perform with computers, and regional and national computer networks will allow even more efficient use of computer technology. Dr. Blackwell of Rand Corporation even sees new communication technologies based on computer-cable television hookups. Man has a bright future with the aid of computer technology.

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