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SOCIOLINGUISTIC IMPLICATIONS OF THE PHONOLOGICAL VARIATIONS OF BLACK AND WHITE SPEAKERS

by

JOYCE F. BUCK

A dissertation submitted to the Graduate Faculty in Speech in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

THE PROBLEM: ITS SCOPE AND SIGNIFICANCE

Numerous features of the communication message which generate meanings, feelings, and attitudes in listeners have attracted increasing attention in recent years. Earlier studies of the effects of the message on speaker credibility (Anderson and Clevenger, 1963) and on the formation of social perceptions (Allport, 1934; Bruner and Taguri, 1954) regarded the message as a single stimulus configuration. Tannenbaum (1966) and Osgood (1959) viewed the communication message as a set of distinctive elements or cues. Osgood (1959, p. 33) hypothesized that some attributes of a message configuration such as "lexical items, . . . pitch, rate and intensity of speech, the location and nature of pauses, . . . facial expressions, . . . gestures, . . . were events that have definite if complex causal relations to varied psychological states and processes" in the speaker. From a social viewpoint, Sapir (1963, p. 163) noted:

> Peculiar modes of pronunciation, characteristic turns of phrase, slangy forms of speech, . . . are symbols of the manifold ways in which society arranges itself and are of crucial importance for the understanding of the development of individual and social attitudes.

Implicit in these views is the assumption that psychological and social processes, i.e., the individual psychological

states and the varying socio-cultural contexts in communication, are the sources of linguistic and extra-linguistic variations; thus, they (internal and external processes) enable speech variables, either singly or as stimulus cue complexes, to arouse affect reactions and subsequent attitudinal sets within the listener.

The present investigation is concerned with one stimulus cue within the message configuration, namely, phonological variation, and its influence on the impressions and judgments formed by the listener. Phonological variations may be observed as differences in dialect between speakers and/or differences in contextual style within the same speaker. Physiologically, these differences in pronunciation are due to differences in manner and/or place of articulation. This study considers the effects of phonological variations found between speakers who are representative of differences in the social structure.

The role of phonological variants (either between speakers or within the same speaker) as markers of social phenomena such as identification of status, ethnic and racial groups, settings, and situations has been realized through the efforts of various researchers working in anthropology, linguistics, sociology, speech, and psychology.

The scope and significance of the problem to which this study is addressed can best be understood by a discussion of the background of the study. This chapter, then, provides a brief interdisciplinary overview of some

representative studies correlating phonological variation and social structure. A more thorough review of related literature is given in Chapter II. Furthermore, the objectives of the study are indicated. In addition, the significance of the present study is discussed in relation to the affect reactions to dialectal variations and to the respective speakers formed by socially diverse listeners and the subsequent effects on social attitudes and eventual social change.

Background of the Study

In reviewing the background of the present study, the two aspects considered are the role of phonological variants and the importance of value judgments in the formation of social perceptions based on speech differences.

Role of Phonological Variants

Along with other anthropologists, Ferguson and Gumpers (1960) and Bright (1960) working in South Asia found that phonological variables differentiated castes, religious groups, urban and rural inhabitants, regions, and formal and informal situations. Just as there are boundaries between groups sharing similar forms of social behavior, so are there boundaries of dialects whereby configurations of features of phonology, syntax, and vocabulary delineate social groups, institutions, and situations. Hymes (1964) noted that the boundaries of dialect and the boundaries of social context covary.

Linquists such as Kurath and McDavid (1961) specialized in dialect geography and emphasized regional identification of speakers through their observations of phonological patterns throughout the Atlantic States. Secondarily, they noted the social context in which phonetic variables may be found: age and education of the speakers. Later studies were conducted in New England by Fischer (1958) and by Labov (1963) who observed that age, sex, topic, social situation, and attitudes were non-linguistic variables affecting the choice of phonological variants. More recent studies by Labov (1966, 1968, 1970) in New York City, Shuy, Wolfram and Riley (1967) and Wolfram (1969) in Detroit, and Pederson (1965) in Chicago provided empirical evidence of phonological and grammatical variations as reflectors of socioeconomic, racial, and ethnic stratification in major urban areas.

The work of sociologists has been generally confined to accounts of lexical variables (Bernstein, 1961, 1962) and content analysis (Bossard, 1966; Schatzman and Strauss, 1955) which differentiate social class. However, their particular research designs, their concern for random sampling (Pickford, 1956), and their development of indices of social position as a measure of social stratification (Warner, 1960; Hollingshead, 1957, 1958) are basic to all present studies in sociolinguistics.

Relatively recent are the contributions from the field of speech which has encountered difficulties in the management of learning problems and communication differences among "disadvantaged" black children. Baratz (1968,

1969) has vigorously criticized the linguistically naive attitudes of educators, speech pathologists, and psychologists in their evaluation and education of these youngsters. Opposing the harmful effects of their "deficiency" findings, she postulated the "difference" hypothesis which recognizes the black dialect as a systematic entity. She contended that the basic structure of black dialect conflicts with the standard dialect of reading and communication in school. Williams and Naremore (1969) observed that the functional modes of communication differed among black and white socially stratified youngsters. Williams (1970a) was particularly concerned that the negative stereotyping of black children by white teachers on the basis of their phonological and grammatical productions was harmful to these youngsters' motivation and aspirations. Buck (1968) found that phonological variations of black and white speakers influenced the judgments of their competence made by listeners at a statistically significant level. It appears, then, that black speakers of a nonstandard dialect face negative "expectancy" before they produce either in school or in industry.

The work of Labov is particularly noteworthy for its interdisciplinary approach. Labov (1966) endeavored to account for variation in speech by considering social factors, by reaching unexplored sub-groups in New York City, by examining the contextual styles in which communication is embedded, and by isolating phonological variables which are

social and/or stylistic variants. Social variants are phonological variables used with some degree of consistency as indicators of a social class, ethnic or racial group. Stylistic variants are those pronunciations which shift with the occasion or situation ranging from formal to informal or with the topic. Social and stylistic variants are not mutually exclusive.

One of Labov's major findings was that phonological variables that appear to be "free" are in fact distributed over a wide range of social and stylistic dimensions (Labov, 1966). The objective language studies of Labov (1963, 1966, 1968) have demonstrated the importance of examining social and cultural values, institutions and situations in relation to communication events. An increasing body of empirical evidence has come to support Bossard's "a priori" notion that "language comes in a peculiar way to serve as a symbol of home, family, state, status or country" (Bossard, 1966, p. 169).

It is not surprising, then, that language as a form of social behavior reflecting changes in social structure serves as the basis for subjective attitudes toward language and as an influencing factor in the social evaluation of others (Labov, 1970).

Social Values and Perception

Psychologists have long been concerned with the formation of impressions, particularly social perceptions as the bases of evaluational judgments, and their effects

on social interactions. One basic universal source of evaluation pervading all cultures is the value system. Preferences toward a concept fall into a "valued" category as opposed to non-preferences which fill a "non-valued" category. Studies by Postman, Bruner and McGinnis (1948), for example, have shown that there is a relationship between an individual's value system and his impression formation of concepts and of people. Subjects with negative attitudes toward Negroes tended to underemphasize or overemphasize the characteristics of Negroes compared with those of whites in their descriptions of presented photographs (Seeleman, 1940; Secord, Bevan and Katz, 1956). Similar findings were obtained from subjects evaluating the characteristics of Jews compared with non-Jews in given photographs (Lindzey and Rogolsky, 1950). Such characteristics as the width of the nose or the fullness of lips, for example, were ignored or were exaggerated in ratings by subjects depending upon their individual value systems.

Occupation, education, income, and their concomitant life styles serve as horizontal lines separating the layers of society in which prestige and rights are not equally distributed. Systems of value judgments based on different cultural criteria have resulted in universally marked class distinctions. These, according to Jespersen (1946, p. 94), "have actually played an extraordinarily great part in the evolution of languages and in the popular judgments of what is right or wrong."

Society overtly or covertly designates as acceptable or standard those patterns of speech used by the better educated and more influential people of a given community. It has proven advantageous for an "individual to identify himself linguistically with those who possess political and economic influence" (Leach, 1954, p. 50). Thus the standard variety of a language which is set by the elite serves not only as a social marker but as a perpetuator of social stratification (Hertzler, 1965).

The reaction of disdain of marked phonetic differences in a nonstandard dialect as shown by Higgins' attempt to alter Eliza's speech is not limited to literature. In most countries, including the United States, the use of "nonstandard" dialects or of non-preferred dialects is characteristic of people in lower socio-economic and educational levels. Such speakers have encountered negative evaluative reactions (Buck, 1968); even these individuals recognize the prestigious dialects and respect its speakers as educated and "better" (Labov, 1966). Williams (1970b, p. 381) summed up the essence of this problem in the development of social attitudes.

> Our speech, by offering a rich variety of social and ethnic correlates, each of which has attitudinal correlates in the behavior of listeners . . . is the means by which we remind ourselves of social and ethnic boundaries . . . and is thus a part of the process of social maintenance (or change).

A basic premise of the present investigation is that the phonological variable coupled with its assigned value judgment is a distinct stimulus cue complex capable of

generating affective reactions in the listener. Tannenbaum (1966, p. 482) points out:

> An incoming stimulus pattern impinges on and interacts with the predisposing subjective factors within the recipients of the communication.

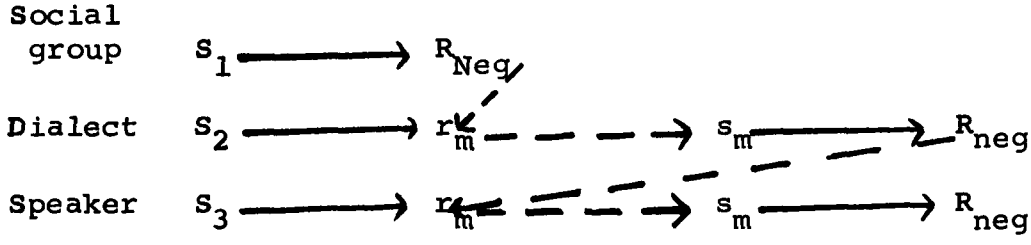
A single such stimulus element may serve to predispose the receiver in terms of attracting him or repelling him depending upon his value system.

Allport (1958), Lambert and associates (1960, 1962, 1965, 1966, 1969) and Williams (1970a), for example, remind us that prejudices are based on stereotypes evolved from assigning negative or positive values to social groups. Listeners attach values to certain phonological variables associated with ethnic and status identifications--on a subconscious level. These are generalized to their impressions of the speaker which include subjective evaluations of his personality, his competency, his character, and even his expected role and the prestige accorded it in society.

A three-stage process in the covert, perceptual behavior of the listener seems to occur. Firstly, ethnic, racial, and status identifications are made on the basis of the phonological stimulus cue. Secondly, the reactions to the social features serve as a stimulus cue which, in a third phase, arouses or evokes an attitudinal set concerning numerous attributes of the speaker, such as personality, appearance, credibility, etc. "The cues of the message," noted Tannenbaum (1966, p. 487), "each elicit

mediational processes noted below ($r_m - - \rightarrow s_m$) within the listener according to his previous experiences." A graphic scheme which combines the basic mediation model of Tannenbaum (1966, p. 487) and the principles of "speaker perception" described above indicates the covert mediating stimulus and response processes in perception shown below.

LISTENING BEHAVIOR



The phonological dimension of the linguistic code is not only a bundle of distinctive acoustic features. Some phonological variables contain another feature which is actively involved in communication events, that is, arbitrarily assigned social and cultural values.

Objectives of the Study

In an effort to explore some of the characteristics in the impressions of speakers which are tapped by phonological variations in dialects, the present investigation is designed to:

1. measure the affect reactions of black and white listeners to phonological variations of black and white speakers using three dialects prominent in New York City: standard New York speech, "New Yorkese," and Black Dialect. These are defined in detail in Chapter III.

2. determine the influence of these dialect patterns on social perceptions of the competence, trustworthiness, personality, and occupational suitability of the speaker.
3. measure the intelligibility of monosyllables produced in each dialect.
4. measure the effects of race and class of the listeners upon their attitudes toward the speakers of the three dialects.

Significance of the Present Study

It has been the increasing concern of educators that minority groups continuing to use nonstandard speech patterns face negative evaluative reactions in spite of their strivings for social, economic, and educational opportunities.

Heavily entrenched value assignments characteristic of social stratification promote stereotyping by teachers, employers, and the general public to such a degree that development of confidence and motivation in members of a sub-group are undermined. This was particularly evident in the study by Rosenthal and Jacobson (1968) in which teachers' expectations concerning students' achievements were prophesized and fulfilled. Exploring attitudes of teachers toward students based on hearing speech samples on tape, Williams (1970a) found that teachers were very much influenced by the standardness of pronunciation and grammar. White teachers, for example, rated a child using

standard speech as of high status and identified him as being white, even if the child were Negro.

If our values are such that a dental [d] or [t] is perceived with disdain and labels of "incompetence or uneducated," stereotyped reactions detrimental to the speaker dominate social interactions. It is well known that persons with a "New Yorkese" speech pattern or a lisp have been rejected from teaching in the New York City Public School System (Cazden, 1971). According to Allport (1958, p. 179), "labels are symbols that act like shrieking sirens, deafening us to all finer discriminations that we might otherwise perceive."

Previous research detailed in Chapter II reveals the considerable influence that language variations have on people perception, attitude formation, stereotyping, expectancy and similar psychological processes. In view of the present period of "black pride" and social protest by college students for the inclusion of the sub-groups of our pluralistic society into the mainstream, it is important that the exploration of the socio-linguistic implications of the phonological variations of black and white speakers be undertaken. An understanding of the value orientations and social perceptions of black and white college listeners toward speakers' dialectal variations is significant in terms of social change--educationally, culturally, and economically.

Summary

An introduction to the present investigation, this chapter provided the basic assumptions of the study, namely, that phonological variations associated with social and cultural values serve as stimulus cues capable of generating impressions and judgments within the listener. The role of phonological variants as markers of social phenomena such as identification of status, ethnic and racial groups, settings and situations was discussed in relation to the work of researchers in anthropology, linguistics, sociology, speech, and psychology. Particular emphasis was given to the relationship between social values and perception formation. Phonological variations notable in standard and nonstandard dialects play a significant part in social perceptions which are influenced to a large extent by value orientations to ethnic, racial and status identifications.

In this era, we are in the midst of a breakdown in social attitudes which have valued the boundaries between class, race, and rank. It is, therefore, important to obtain a better understanding of the value orientations of black and white college listeners toward black and white speakers of standard and nonstandard dialects in New York City. Certainly, the formation of social attitudes ultimately affects all forms of social change.

The main objectives of the study are: 1) to measure the affect reactions of black and white listeners to the phonological variations and to the perceived credibility

of black and white speakers using standard and nonstandard dialects, and 2) to determine the effects of race and class of listeners on their attitudinal evaluations.

The remaining chapters include a review of related research (Chapter II), a discussion of the methods and procedures of the present investigation (Chapter III), and a presentation of the results and discussion (Chapter IV). The conclusions and implications of the study are given in Chapter V.

CHAPTER II

RELATED RESEARCH

The present study is concerned with the effects of phonological variations of black and white speakers upon the value orientations and social perceptions of black and white college students from upper and lower socioeconomic strata, in a period in which "black awareness" and student demonstrations have emerged on college campuses and in major urban areas throughout the country.

It is significant in the study of subjective reactions to dialect and language to note the covariation of social structure and linguistic variables. Objective language studies have shown that phonological, grammatical, and lexical variations among socially different groups serve as social markers. These indicate such variations in social context as socioeconomic status, race, ethnic group, religion, region, formal and informal settings, casual and non-casual speech styles, and attitudes held by the speaker (e.g., McCormack, 1960; Bernstein, 1961, 1962; Wolfram, 1969). Affect reactions toward dialectal variations and speakers closely parallel the social stratification of verbal behavior. It is not unexpected, then, that impressions of superordinate and subordinate dialects (see definitions in Chapter III) and

of the representative speakers of the dialects are formed on a favorable-unfavorable continuum depending upon the socio-cultural value system.

Here in Chapter II is, first, a detailed review of research related to the formation of impressions and attitudes toward dialectal (phonological) differences and toward their respective speakers made by subjects listening to taped messages. The purposes, methods, and results of each study are given. The presentation of the related literature is classified according to the attributes of social perception which are characteristics of the images formed of the speakers and which are concomitant with the auditory perceptions of phonological variations of speakers. Furthermore, the value system basic to the formation of social attitudes and their effects are discussed. Second, included here is a discussion of the ways in which the present experiment differs from these previous investigations.

Contributions of Previous Studies

Previous researchers have found that socially significant speech cues appear to evoke such impressions as the identification of social status, of race, and of ethnic group. Furthermore, dialect perception has been related to attitudes toward competence, trustworthiness and occupational suitability of the speakers. Other non-linguistic characteristics associated with speech differences have been ambition, leadership,and intelligence. The intelligibility of dialects is another factor in the social perception of speakers. Those

studies which focused primarily on subjective reactions to grammatical and lexical variables are not included in this discussion.

This review of related literature concentrates on the influence of speech differences on social perceptions of the speakers and is organized as follows: Speech Differences and the Perception of Social Class; Speech Differences and the Perception of Race; Perception of Credibility and Psychological Characteristics; Speech Differences and Intelligibility.

Speech Differences and the Perception of Social Class

In the United States, it is customary to define social ranking by an Index of Social Position which is a combination of two or more factors, occupation, education, income, and residence. However, in India, the inclusion of religion is a pertinent factor in social classification. Several investigators explored the identification of social status through differences in speech patterns.

Putnam and O'Hern (1955) studied the dialect of a small Negro community outside Washington, D.C. to test their hypothesis that "speech serves as a mark of social class." Seventy judges, mostly graduate students, listened to tape recording of twelve Negroes who were considered representative of various segments of that community and whose occupations ranged from professor to maid. According to Putnam and O'Hern, there was a significant statistical correlation between the ratings by the judges and the objective class

status ratings indicated by Warner's (1949) Index of Status Characteristics. Although Putnam and O'Hern concluded that phonetic speech features were most distinctive of social status, they did not detail the phonetic patterns used. Furthermore, the taped stimulus messages were not standardized since they consisted of retellings of Aesop's Fables. Rather than rating phonetic speech patterns, the judges were most likely rating the ability of the informants to comprehend the fables and their use of language (particularly lexical and syntactic abilities) in retelling these stories. Nonetheless, this investigation is noteworthy as one of the earliest direct studies of speakers which employed ratings of judges rather than the use of questionnaires.

Gumperz' (1958) investigation of dialect differences and social stratification in a North Indian village was essentially an objective language study in which six caste groups were differentiated on the basis of several phonological variables. Gumperz (1958, p. 672) noted, "Most of the informants interviewed in regard to attitudes toward language forms, when asked who uses forms such as /dətəi / (instead of / dʊtəi /) meaning <u>blanket</u>, laughed and said, "That is Chamar speech." Chamars, landless laborers, are viewed as being on the low end of the prestige continuum. Chamars themselves are defensive about their low status and they have come to agree with those in higher status castes that / ə / is "old fashioned and has low prestige" (Gumperz, 1958, p. 672).

In an effort to determine whether or not the social level of a speaker could be recognized on tape, McCormack (1960) studied the reactions of elementary school teachers and college students in Dharwar Kannada, India to speakers representative of three social classes, differentiated primarily on the basis of religion. The Brahmins were regarded as the highest status group. They were better educated, more widely travelled and had government positions. Those who practiced the Lingayat religion were viewed as middle class. The third religious group were the Harijans, considered backward in education, occupation, and in social level. Listeners were able to distinguish the three social classes from phonological and morphological variations among the speakers. However, there were confusions when urbanized members of the "backward" class substituted speech forms utilized by the other social classes. In fact, four Harijan speakers were never identified because they spoke a mixture of their own style, Lingayat and Brahmin. Speakers of the Brahmin dialect were recognized most often and most consistently. Although the Brahmins draw from Sanskrit, English, Hindi, Marathi, and probably other language sources, they do not seem to use linguistic forms which distinguish the social classes beneath them. Evidence from this study seems to indicate that an "elite" group marks its status with distinctive speech variations.

L. S. Harms (1961) found that listener judgments could distinguish high status speakers (well educated with prestige occupations) from middle and low status speakers by their

articulatory patterns or "by the way they talked" on forty second long tape recordings. High status speakers were rated as the most credible on the basis of such status cues as word choice, pronunciation, grammatical structure, and vocal quality. These factors were not specifically defined in this article.

In a related study, Harms (1961) investigated listener comprehension of three status groups defined by means of the Hollingshead (1957) Two Factor Index of Social Position. Listeners of three status groups attempted to reconstruct the original speaker message from mutilated speech samples according to Cloze Procedure Technique. Harms found that speakers of high status were considered more comprehensible than the representative speakers of low and middle status by all listeners. However, listeners hearing a speaker of their own status achieved higher comprehensibility than when speaker-listener status did not coincide.

In a third study, Harms (1963) played Putnam and O'Hern's tapes of twelve Negro speakers relating the story of The Lion and The Mouse to sixty-four college students. They rated the social status of each speaker on a continuum consisting of a nine inch line. Social status ratings by the students correlated at a statistically significant level with the objective Hollingshead Index of Social Position. Harms identified the listener-judges by the geographical location of their colleges (one in the East, the other in the Midwest), by the rural and urban location of their homes, and by the number of years spent in college.

Listener-judges from the Eastern college agreed on social status ratings with judges from the Midwestern college. Judges from the rural areas also agreed with judges from the urban areas on social status ratings. The information which supposedly distinguished the listener-judges, i.e., geographic location of colleges and home, was apparently rather insignificant since there were no significant differences in the subjective reactions of the listener to the speakers. However, it is evident from these studies that native speakers of English have the ability to identify social status from speech cues.

One of the concerns of the Detroit Study conducted by Shuy, Baratz, and Wolfram (1969) was the ability of listeners to identify the social status of speakers. Recorded discourses, rather than reading passages, were extracted from the speech samples of longer utterances obtained from socially stratified black and white, adult male speakers. Some of their distinguishing linguistic features were differences in the frequencies of multiple negation, pronominal apposition, as in my brother, he has . . . ; final consonant clusters as in test, mask; /ŋ / in suffixes and in final endings as in singin' and nothin'; initial, medial, and final /ð,θ / as in they, think, nothing, brother, earth, breathe; and constricted preconsonantal and final /r/ as in part, beard, car, etc.

Listeners were 620 socially stratified (upper and low middle class, upper and low working class according to the

Hollingshead's Social Index) black and white sixth and eleventh grade youngsters and adults. The results revealed that upper middle class speakers were identified accurately only 29.6% of the time, lower middle class speakers 31.8% of the time, and upper working class speakers 40.8% of the time. Most significant was that lower working class speakers were identified 60.8% of the time. Shuy (1969, p. 182) in discussing these results commented, " the most outstanding fact in the differentiation of social dialects in Detroit is the presence of 'stigmatized' grammatical and phonological features in the speech of lower socioeconomic groups. The speech of the middle class is typified by the absence of these features." If not actually absent, they appear in more casual context among middle class speakers, although with less frequency than among lower class speakers (Labov, 1965, pp. 83, 86). In this study, the socioeconomic status of the listener-judges seemed relatively unimportant in identifying Negro speakers. Upper middle class judges were only slightly better than other socioeconomic groups in identifying white speakers (Shuy, 1969, pp. 181-82).

Labov's (1966) strategy in determining listeners' abilities to identify the social status of speakers based on linguistic variations was to employ an occupational rating scale reflecting the socioeconomic hierarchy of the United States. According to Labov (1966, p. 412), use of any scale which is related to the socioeconomic hierarchy in the United States reflects the values of a middle class orientation.

One hundred twenty-two native English speakers, representative of Jewish, Italian, and Negro groups residing on the Lower East Side of New York City participated as listeners. The stimulus messages were individual sentences in which were embedded variants of /r, θ, ð, ɔ,æ/ phonemes. Previously, Labov had observed that speakers of different social strata and ethnic groups vary in their pronunciations of these sounds and he therefore concluded that these phonemes were socially marked.

Listeners rated the speaker after listening to each sentence using a seven-point scale of occupational suitability which ranged from the most prestigious "television personality" to the least prestigious, "factory worker." Labov assumed that standard variants would be identified with higher status occupations. Speakers were rated low on the occupational scale if they used the nonstandard variants of the phonemes, i.e., they lacked a constricted r in preconsonantal and in final consonantal position as in part and car, they used high variants of /æ / and /ɔ / as in bag and law, and they employed stops and affricates in place of interdental fricatives /ð,θ / as in this and thing. Speakers producing the standard variants were generally rated high on the occupational scale if they used a constricted r, low open variants of / æ / and / ɔ / and the interdental fricatives /ð,θ /.

By isolating subjective reactions to individual phonological variables embedded in each sentence, Labov quantified listeners' reactions to each variant. This enabled him to distinguish reactions to variants of /ɔ / as

opposed to reactions to variants of /æ /. Generally, most respondents recognized the stigmatized variant except for the lower working class who were insensitive to the high variants of /ɔ /. Those who often use stigmatized variants in casual speech recognized the social significance of these variables in listening to others. Middle class listeners, in particular, rated the speakers using variants comprising the "New York" accent as lower in occupational status and, of course, in prestige.

Labov also administered his subjective reaction tests to teenage youngsters, black and white, some of whom were members of street gangs in Harlem. Asked to indicate occupational suitability of speakers on tape, teenagers tended to rank the standard speaker as higher in status. Even black teenagers who rejected the mores of the dominant culture were found by Labov (1968, p. 218) to have internalized some middle class values in their positive reactions to speakers who used prestige variants. Labov (1965) noted that the average adult, regardless of social background, comes to recognize and for the most part to accept the system of social norms in his early twenties, not much earlier. While lower classes do not have productive control over middle class norms, they do have perceptual competence in recognizing middle class norms. These norms seem to have been acquired long after their acquisition of linguistic competence. Labov (1968, p. 216) observed that the prestige pattern related to a socioeconomic hierarchy "begins to

invade the audiomonitoring processes very early in the acquisition of sociolinguistic norms."

Williams' study of teachers' attitudes toward children based on speech characteristics in taped speech samples revealed that children with a high incidence of nonstandard patterns and with numerous pauses were rated low in social status (Williams, 1970b, p. 485). Speakers were forty fifth-and sixth-grade, socially stratified black and white youngsters from the Detroit study. Black and white teachers from the inner city of Chicago served as listener-judges. The semantic differential technique was used in the development of the twenty-two seven-point rating scales presented to the teachers. The scales endeavored to permit full description of the child's speech as well as his social and racial background. Some bipolar adjectival scale boundaries were: "quite good-quite bad," "standard-nonstandard," "low status-high status," "white-like-Negro-like," "standard-ethnic," and "advantaged-disadvantaged." Some of the linguistic measures were the use of the phonological features such as final /t, d, m, n, ŋ / and /ð,θ/ in all positions, the morpheme /-s/ and /-z/ as in plurals and third person singular present, pronominal apposition, syntactic elaborations, and hesitations, or pauses.

One of the most outstanding cues of social status was standardness of pronunciation, particularly the deviations in voiced and voiceless <u>th</u>, which served as a strong marker of

low status. Williams (1970b) noted that white teachers equate standardness of pronunciation with linguistic effectiveness and social status. White teachers' ratings of race correlated highly with status judgments, more so than those of Negro teachers. If a child were rated non-standard and of low status, he was generally regarded as Negro. The results of this study indicate that in making distinctions between standard and nonstandard speech patterns, teachers are prone to an ethnocentric bias which can interfere with the educational process.

Speech Differences and the Perception of Race

The issue of race identification on the basis of differences in speech patterns was discussed in several studies. Buck (1968) observed that college students attributed the use of standard dialect to a white speaker when in fact, she was Negro. The race of one standard speaker, and of two nonstandard speakers of "New Yorkese" and Black Dialect was correctly identified on the basis of phonological cues.

Shuy, Baratz and Wolfram (1969) in the Detroit Study discussed above, found that phonological and grammatical cues do distinguish Negro from white speakers. Judges from all social backgrounds correctly identified white and Negro speakers about 80% of the time. It is significant that the race of Negro upper middle class speakers was quite difficult to identify. Negro judges were correct about 17% of the time and white judges were correct only about 8% of the time. The

lower the status of the black speaker, the greater accuracy with which his identification was made. This is probably due to the relatively greater frequency of distribution of certain features, indicated previously, which are present in lower class speakers.

Shuy (1969, p. 181) noted that "Negro judges did only slightly better than whites in identifying Negroes (3.8%), and whites did only slightly better than Negroes in judging whites (7.25%)." Youngsters as young as eleven or twelve could identify the race of the speakers as well as adults could.

Tucker and Lambert (1969) investigated the reactions of black college students from the South and white college students from the North and the South to recorded readings of speakers representative of six American English dialect groups. Among their findings to be discussed in detail in the section on Perception of Speaker Credibility were the race identifications made by the Northern white and Southern white student-judges. Table 2.1 presents the comparative identifications of race, showing the percentage of judges rating the speaker as either white or black.

TABLE 2.1

PERCENTAGE OF JUDGES*

Speakers	Northern White Judges		Southern White Judges	
	%	Rated as	%	Rated as
White Network Standard	95	white	98	white
White College Educated Southern	87	white	96	white
Negro Southern College Graduate (N.Y. alumni)	49	Negro	54	Negro
Negro College Educated Southern	49	Negro	47	Negro
Negro Students, Howard University	84	Negro	70	Negro
Negro Southern College Students (Mississippi Peers)	94	Negro	89	Negro

*From Tucker and Lambert, 1969, p. 467.

The analysis of these data would be more complete if the investigators had specified the linguistic cues characteristic of each dialect. It does seem that in those instances where speech is marked with standard speech cues that there is relative agreement between the Northern and Southern judges. Certainly, it is not surprising that Southern white judges recognized their own standard white speaker more frequently than did the Northern white judges. There must have been certain cues, unfortunately not identified, which permitted Northern and Southern judges to identify the college educated Negro students at Howard University as Negro; yet, the college educated Negro Southern speakers were not as easily identified as negro probably because they shared some speech characteristics with educated white Southerners. Socially marked cues, whatever they were, in the speech of Negro Mississippi peers served to assist both Southern and Northern judges in their identification of race. When there is a mixture of standard and nonstandard speech cues in a dialect, as was possibly the case with the college graduate alumni of southern colleges residing in New York and with the college educated Negro students at Howard University, one may speculate that race identification is more difficult and uncertain since in both instances, about 50% of the judges rated these speakers as Negro (and conversely, 50% thought them to be white).

Williams (1970b, p. 388), noted "that as a child's speech was rated as nonstandard, the children were rated as Negro-like . . ." Another result of this study was that white

teachers' ratings of race were highly correlated with status judgments, more so than those of Negro teachers. Some high status black children were rated as white. This is a similar finding to the study by Buck (1968) in which college students identified the standard Negro speaker as white.

These studies which have explored the issue of race identification indicate that standardness of speech is associated with a white speaker; nonstandardness is associated with a black speaker. Such attitudes reflect the inaccurate and limited social perceptions of listeners who have been exposed to a monocultural rearing in which "standard and white" and nonstandard and black" are stereotyped associations.

Perception of Credibility and Psychological Characteristics

Status and race identifications of a speaker discussed above, are only two variables of social perception. The studies detailed below reveal that other impressions formed by listeners about the speakers on the basis of phonological variations concern the physical appearance, the credibility, the personality, the motivations, and the interpersonal attitudes of the speaker. Auditory perceptions of speech may evoke images of the speaker related to height, looks, weight, etc. The credibility of the speaker in terms of competence and trustworthiness is another factor in impression formation of listeners. Impressions of personality attributes such as humor, popularity, and extrovertedness may also be evoked. Such motivation attributes as leadership, ambition,

and self-confidence may be characteristic of images generated within listeners. Listeners' expectancy of the interpersonal attitudes of the speaker may include images of friendliness, generosity, and likeableness.

Bettinghaus (1961) using the semantic differential technique, found that listeners received a more favorable impression of the speaker whose speech delivery (pitch, loudness, rate, articulation, and vocal quality) was rated as more effective. Bettinghaus' study appears to support his contention that attitudes toward the speaker were congruous with attitudes toward the delivery of the speaker. He (1961, p. 142) concluded that "effective delivery produced a more favorable shift of attitude toward the speaker than an ineffective delivery."

Concerned with stereotyped impressions generated by language and dialectal variations, Lambert and his associates (for example, Lambert, Hodgson, Gardner and Fillenbaum, 1960; Anisfeld, Bogo, and Lambert, 1962; Lambert, Anisfeld and Yeni-Komshian,1965; Lambert, Frankel, and Tucker, 1966; and Tucker and Lambert,1969) employed the matched guise technique. This procedure uses one speaker who is proficient in two languages or dialects; thus it obviously requires speakers who can record first in one language or dialect and later in the second language or dialect. Bilingual or bi-dialectal speakers read a short prose selection on tape. The guise technique, therefore, ensures a controlled experiment in that the stimulus message is standard for all speakers. Vocal

quality of the speakers is also controlled since two languages or dialects are in fact produced by one speaker. In the Lambert studies, groups of listener-judges listen and evaluate personality and credibility characteristics of each speaker unaware that the French and English speakers, for example, are the same.

Lambert, Hodgson, Garner, and Fillenbaum (1960) studied the evaluative reactions of listeners to bilingual speakers of Canadian French and English in Montreal. Both English and French judges rated personality ("leadership, character, intelligence") and physical characteristics ("height, good looks") of English speakers more favorably than French speakers. These results, strongly biased against French Canadians, bore out the community-wide stereotype of the non-dominant culture as being "second rate."

In an attempt to discern differential reactions to the same speakers reading in two dialects heard in Montreal, Anisfeld, Bogo, and Lambert (1962) focused on affective reactions to speakers using "Jewish accented" English and unaccented Canadian English. Subjects listening to tape recordings of these speakers rated them on fourteen traits (such as height, leadership, etc.) using a six-point rating scale bounded by "very much - very little." Speakers using English with a "Jewish accent" were considered shorter, less good looking and weaker in leadership qualities than the speaker without an accent by both Jewish and Gentile subjects. These results similar to those of Lambert, et al, (1960)

cited above, also reveal stereotyped biases against individuals speaking the dialect of a sub-group. Lacking in this study was a description of the specific phonetic and intonation variations which marked the differences between the two dialects under consideration.

Concerned with the development of stereotyped impressions and prejudices, Anisfeld and Lambert (1964) explored the reactions of ten-year-old, French Canadian children to match guises of bilingual youngsters of their own age reading French and English versions of Little Red Riding Hood. Monolingual French Canadian children preferred the French Canadian guises to the English guises, indicating a strong identification with their own group. The bilingual French Canadian youngsters, however, revealed no preferences; they rated both guises essentially the same. Familiarity with two cultures appears to lessen negative judgments toward those outside one's immediate group.

Lambert, Frankel, and Tucker (1966) conducted a longitudinal study of the evaluational reactions of 373 French Canadian girls ranging in age from ten to eighteen to English Canadian and French Canadian guises. The bilingual speakers were girls in the same age range, adult women, and adult men. Results revealed that definite preferences for Canadian English guises appeared at twelve and were maintained through late teens, particularly for bilingual student listeners from both public and private schools. Subjects from upper middle class French Canadian homes had

more positive feelings for the English Canadian guises than did those from working class backgrounds. The authors interpret this as a subconscious regard for the greater economic and social power held by English Canadian citizenry which upper middle class French Canadian students admire.

Seeking to extend the scope of their hypothesis that speech variations play an important role in the formation of social perceptions, Lambert, Anisfeld, and Yeni-Komshian (1965) examined the changes in listeners' perceptions of speakers when exposed to Arabic-Hebrew contrastive guises and to Ashkenazic-Yemenite contrastive guises. Another objective of this study was to compare the results of the Matched Guise Technique with the results obtained from standard attitude measurements. The latter included typical attitude questionnaire statements such as "Yemenites have a lower intellectual capacity than European Jews." Others were negative statements concerning Arabs. Listeners were given six choices which permitted the listener degrees of agreement or disagreement with each statement.

Actually this study was conducted in three phases which are discussed separately. Firstly, Jewish, middle class, teenage speakers of Ashkenazic background in Tel Aviv and Arabic lower-middle and upper-lower class teenagers from a scout troup in Jaffa listened to the taped readings of two bilingual speakers of Ashkenazic, a Hebrew dialect, and of Arabic. Listeners were asked to judge the personalities of each speaker by rating them on twenty traits such as

honesty, intelligence, cleanliness and prestige, using a six-point rating scale, bound by "very little - very much." They were also asked to express their feelings about the speaker on four social distance scales. These items were: "I would befriend this person," "I would accept this person as a neighbor," "I would accept this person as a relative by marriage," "I would help this person if he were in need." Their response was in "yes" or "no" form.

The results of the matched guise procedure revealed that Jewish listeners who use Ashkenazic dialect, considered the Arab speaker as significantly less friendly, less humorous, less honest, less socially acceptable, and significantly more wealthy than the Jewish speaker. Similarly, the Arab listeners viewed the Hebrew speaker as less intelligent, less dependable, less friendly, less honest, and less desirable for marriage than the Arab speaker. Arab listeners also indicated greater willingness to help members of their own group rather than others in time of need. Lambert, et al (1965) concluded that stereotyping of this nature is a barrier to social interaction.

In the second phase of this study, the same Jewish listener-judges listened to the matched guises of the Ashkenazic dialect and the Yemenite dialect, unaware that the bidialectal speakers were the same person. The same procedures were followed as described above. The findings were not unexpected; the Ashkenazic speaking Jewish listener-judges rated the Yemenite speakers as less intelligent, less ambitious,

less wealthy, less honest, less reliable, and generally less socially acceptable than the Ashkenazic speaker. However, Yemenite speakers were considered more humorous.

In the third phase of the study three different standard measures of attitudes were administered to Jewish subjects. The first consisted of eighteen bipolar rating scales for measuring their attitudes toward Arabs, Ashkenazic Jews, and Yemenite Jews. These consisted of rating scales similar to those used in evaluating the speakers . Subjects were asked to indicate, for example, whether Arabs in general were "interesting" or "boring" on a six-point rating scale. Secondly, there was an eighteen-item attitude questionnaire designed to measure attitudes toward Yemenites with such items as "The intellectual qualities of Yemenites are lower than Ashkenazic Jews." Subjects were given six choices for degrees of agreement or disagreement. Most of the statements were negative ones. Thirdly, a seven-item attitude questionnaire about Arabs was given. A sample item is: "Arabs are a bad influence on Jewish culture." All these items had a negative theme.

The results of the Standard Attitude Measurements were contradictory to the results obtained from the Matched Guise Technique in the evaluation of the Yemenite Jews. With the former procedures, the Yemenite Jews were viewed more favorably by the Ashkenazic Jewish listeners. In contrast to the negative reactions yielded by the Matched Guise Technique, Yemenite Jews were considered more friendly, more

honest, more generous, and more socially acceptable than the Ashkenazic Jews. However, they were still regarded as less capable of leadership, less self-confident and less successful than the Ashkenazic Jews. In rating Arabs, Jewish subjects had essentially negative views, just as they had had when recording their impressions in the guise technique.

Lambert, Anisfeld, and Yeni-Komshian (1965) attribute any differences in the results to the differences in the testing procedures. The matched guise technique using voice and speech styles as cues "directs attention to individuals whose language or dialectal styles make them representative of a particular linguistic and ethnic group." (Lambert, et al, 1965, p. 89). Rating of stereotyped statements typical of standard measures directs attention to the stereotypes of an ethnic group. Furthermore, there may be a tendency for subjects who are made aware of the purposes of the study of this nature to distort their real attitudes in order to appear more socially accepting. The authors concluded that the "matched guise technique, in contrast to standard measures of attitudes, evokes more private, emotional and conceptual reactions" (Lambert, et al, 1965, p. 90).

Tucker and Lambert (1969) investigated the impressions of black and white college students of the credibility of speakers representative of six American English dialect groups. These were Network standard as spoken by white persons, college educated White Southern, college educated Negro

Southern, Southern Negro college students (Mississippi Peers) New York alumni, graduated from a Southern Negro college residing in New York, and college educated Negro speakers from Mississippi attending Howard University in Washington, D.C. Each listener heard two speaker-representatives for each dialect. The speech cues differentiating each dialect were not specified.

There were 150 listeners from a Southern Negro college, forty white students from a New England university, and sixty-eight white students from a Southern university. Fifteen eight-point, bipolar scales related to such factors as intelligence, trustworthiness, education, ambition, personality, etc. were used to measure the listener's expectancy and impressions of the "success" and "friendliness" of the speaker.

All groups agreed in their preference for the Network speaker whom they considered more competent, more trustworthy, and as having more positive attributes than the other speakers. The Northern white and the Southern Negro judges ranked the educated Negro Southern speakers as second in credibility. On the other hand, Southern white students rated the educated white Southern speakers in second place. Both groups of white judges rated Mississippi Peer speakers significantly less favorably than the other speakers. Negro judges rated educated white Southern speakers significantly less favorably than the other speakers.

Tucker and Lambert concluded that dialect groups can be reliably identified (as discussed in the section, Perception of Race) and that basic attitudes held by ethnic groups toward each other are reflected in the preferences of listeners based on voice and speech cues only. It is not surprising that deep conflicts between groups are revealed in "down-grading" other groups. Certainly, familiarity with one's own group and the need to identify with one's cultural peers encourages stereotyping which may be viewed as a defensive and insular type of attitude.

The chief drawbacks to this noteworthy study are the lack of identification of speech cues of each dialect and the failure to stratify the listeners in terms of social class. Also, since Network dialect may be found among some educated Northern Negroes, such speakers representative of this group should have been included.

Concerned with the congruity of dialectal preferences (marked by specific phonological variables) and ratings of speaker credibility (note definitions in Chapter III), Buck (1968) examined the evaluative reactions of female college students to three dialects commonly heard in New York City. Network standard was used by one white speaker and by one black speaker. "New Yorkese" was spoken by one white speaker, and Black dialect, with Southern variants was produced by one black speaker. The four speakers recorded the same reading passage.

Listeners rated their impressions of the perceived articulation patterns in nine, seven-point bipolar scales (employing the evaluative dimension primarily) which included such scales as "pleasant-unpleasant," "acceptable-unacceptable," "clean-dirty," etc. Berlo and Lemert's (1961) measurements of competency and trustworthiness were used to tap listeners' perceptions of the credibility of the four speakers. Some of the scales measuring the trustworthiness dimension were" just-unjust, honest-dishonest, admirable-contemptible.

Results obtained through the analysis of the semantic differential ratings indicated that listeners preferred, at a statistically significant level, standard dialects of both black and white speakers to the nonstandard dialects of black and white speakers. Use of the standard dialect was attributed to white speakers, when in fact, one standard speaker was black. Speakers of standard dialect were also judged significantly more competent than speakers using nonstandard speech. The trustworthy dimension did not seem to be very powerful in this study. However, the Negro speaker of nonstandard dialect was not judged as being significantly less trustworthy than the white or Negro speakers of standard dialect whereas the white speaker of "New Yorkese" was. Buck concluded that dialectal variations may not affect perceptions of trustworthiness but are closely related to perceptions of competence.

Webster and Kramer (1968) were concerned with the relationship of Listeners' evaluational reactions to French Canadian voices and their self-ratings of their own prejudices toward French Canadian race, religion, etc. Using the guise technique, the experimenters engaged bilingual speakers of Canadian English and English with a French Canadian accent to read the same prose passage.

Thirty English speaking subjects rated their own views toward various racial, religious and national groups, including French Canadians. On another special attitude scale, they measured the degree of their own prejudice held toward French Canadians. Resultant scores classified the subject-listeners into three groups: low prejudice, medium prejudice and high prejudice. In addition, these subject-listeners checked ten bipolar six-point scales indicating their impressions of each speaker. Some of these scales were: lazy-industrious, dependable-undependable, selfish-unselfish, blunt-polite, cold-warm, etc.

Whereas the studies of Lambert and his associates, reviewed above, concluded that accented English was viewed less favorably than unaccented English, these investigators (Webster and Kramer) found an inverted U-shaped relationship between the degree of prejudice toward French Canadians and the favorableness of the evaluational reactions to speakers of accented speech. That is, the "low prejudiced" listeners and the "high prejudiced" listeners did not favor accented speech but the "middle prejudiced" group preferred the French

Canadian guises to the non-accented guises. The authors interpreted this increase in preference for French Canadian speakers as a "disintegration of community-wide stereotype" and an "overcompensation for community biases against French Canadians" (Webster and Kramer, 1968, p. 240). Webster and Kramer recognized that changing social conditions for French Canadians due to social protest by this Canadian sub-group for job equality and recognition served as the impetus for attitude changes among some members of the community. However, it is also notable that direct attitude testing does not always reveal the true feelings of subjects as indicated by the similarity of affect reaction to French Canadians by both "low prejudice" and "high prejudice" groups.

Speech Differences, Value Judgments and Social Attitudes

Whereas Lambert's studies tapped generalized reactions to undifferentiated dialects as a whole in the formation of social perceptions, Labov endeavored to show parallel changes in social and linguistic structures which are implicitly associated with the value system of the group in subjective reaction testing. By assigning a quantitative measurement to each variant of the / r,ð,θ,æ,ɔ / phonemes, Labov was able to correlate the distribution of phonological variables with the objective features of social structure such as socioeconomic class, age, ethnic and racial groups, casual and non-casual speech styles.

According to Labov (1966, p. 412) subjective reaction tests reveal the underlying value systems which motivate linguistic behavior.

Labov (1966, p. 563) noted that the mechanism of linguistic change observed in phonological shifts and mergers (such as continued raising of /æ / until it merged with /ɪə /) appeared to be dependent upon the need to identify with one's ethnic group, peer group, or the need to conform to community values. He also concluded that "social differentiation and social evaluation converge" (Labov, 1966, p. 446). Those who often use a stigmatized variant in casual speech recognize the social significance of this variable. Speakers of high variants of /æ / and /ɔ / noted these forms as nonstandard in the speech of others. Speakers have demonstrated this recognition by shifting to more standard forms in their formal styles and in their sensitivity to stigmatized forms in subjective reaction tests. One type of subconscious evaluative reaction to stigmatized variables is the phenomena of hypercorrection. This practice was observed by Labov (1966) in his study of the lower middle class who in formal speech styles used even more standard variants of / æ / than did the upper middle class.

In Self-Evaluation and Self-Report types of subjective reaction tests, Labov's (1966, 1968) respondents listened to taped variant pronunciations of specific words and indicated which one of the variants came closest to

the way he sounded. Listeners selected prestige forms as their own. Labov found that the linguistic goal of most middle class speakers was to lose all traces of the New York 'accent.' The lower class was least concerned with rejection of their native speech patterns (Labov, 1966).

Labov also noted that most of his twenty Negro listeners regarded any features of speech associated with Northern regional dialects as "good, cultivated and educated." Southern dialect features were considered as "uneducated or rough" (Labov, 1966, pp. 497-498). In assessing the value system of black and Puerto Rican teenagers active in street gangs, Labov (1968) asked: Which speaker would you prefer as a friend? Which speaker would most likely win in a fight? Which speaker would be most suitable for this job (e.g., television personality, factory worker, etc.)? Labov observed that values of masculinity and identification were associated with the nonstandard dialects. The standard speaker, however, was associated with higher prestigious position on the occupational hierarchy which Labov regards as a "middle class orientation."

Even black teenagers who rejected the mores of the dominant cultures were found by Labov (1968, p. 216) to have internalized some values of class distinctions in their positive reactions to standard speakers who used prestige variants. On an appropriate scale, these listeners indicated they "were apt to become good friends" with the standard speaker. Basic to the development of perceptual

competence in the recognition of social norms is the value system of one's group.

The effects of social attitude is seen by Williams as an important factor influencing social change. In his study (Williams, 1970a) discussed above, speech cues associated with value judgments appear to elicit general personality, cultural or ethnic stereotypes (Williams, 1970a, p. 486). According to Williams (1970a, p. 486) "teachers' judgments draw from this stereotype rather than from continuous and detailed variety on input cues." In other words, instructional behavior of teachers is influenced by this kind of stereotype (1970a, 486) which may be damaging to "disadvantaged" children. As Rosenthal and Jacobson (1968) have observed, one of the dangers of stereotyping is that teachers do develop expectations which have been shown to be "self-fulfilling."

Speech Differences in Intelligibility

Although little research has been conducted in the area of dialect intelligibility, the question of comparability in the intelligibility of dialects does continue to arise. In this review our interest lies in studies of the intelligibility of phonological variations among dialects. The work in this area has been most meager. Eisenberg, Berlin, Dill, and Frank (1968) studied the responses of 160 Negro and white school children of lower and middle socioeconomic class families to tape recordings of educated

and uneducated white and Negro females. The stimulus messages consisted of lists of monosyllables. The speech most intelligible to Negro and white listeners was produced by the educated speakers. Negro speakers generated slightly poorer intelligibility scores than white speakers independent of the race and class of the listeners with one exception, namely, that the uneducated speakers were understood better by members of their own race. This study lacked a description of specific phonological features that characterized Negro and white educated and uneducated speakers.

Regional and Social Stratification of Dialects

Another area of research related to the present investigation are the studies of the pronunciation of English in New York City conducted by Yakira Frank (1948), by Allan F. Hubbell (1950), by Charles K. Thomas (1951), by Hans Kurath and Raven McDavid (1961) in their Linguistic Atlas, by Arthur Bronstein (1960) and by William Labov (1966). These studies were primarily objective studies of the production of English phonemes. They are of interest here because they served as support for the particular variables which were designated as outstanding features of the standard and "New Yorkese" dialects spoken by the three representative speakers in the present experiment.

Wise (1957) and the maps of the South Atlantic States compiled by Kurath and McDavid (1961) contributed to the

isolation of outstanding phonological Southern features which are part of the phonological system of Black Dialect or Nonstandard Negro English. These features were found in the representative speaker of Black Dialect used in the present study. Investigations by Pederson in Chicago (1965), Shuy, Wolfram and Riley (1967) and Wolfram (1969) in Detroit, Fasold (1969), and Baratz (1969) provide the support for isolation of phonological variables which distinguish the phonological system of Nonstandard Negro English from the standard dialect.

Contributions of the Present Study

The present study differs from previous investigations of the social evaluation of the speech and the credibility of speakers with respect to the following: the general purposes of the investigation, the methodology employed including the selection of the subjects, and the period of time in which the experiment was conducted.

With the emergence of changing educational values among young people and with the advent of minority groups in college, educators have recently recognized the need to examine the social perceptions of black and white college students from socially heterogeneous backgrounds. The achievements of the previous studies of the subjective evaluation of dialect which have provided the base for the present research have not been directed to this concern.

The primary purpose of this study is three-pronged: 1) to examine listeners' perceptions of speech differences, the values assigned to them and the subsequent formation of such impressions as perceived competence, trustworthiness, personality, and occupational suitability of the speakers, 2) to examine the social perceptions of college students concerning speech differences, and 3) to compare the social perceptions of black and white college students from upper and lower socioeconomic levels.

As in the present investigation, Labov (1966) and Shuy, Baratz and Wolfram (1969) provided linguistic descriptions of the speakers and applied social stratification procedures to the selection of the informants. However, the focus of their projects differed from this study. Labov (1966) obtained evaluational reactions to speech variants by use of a scale of ratings of occupational suitability of each speaker (see Chapter III). Through this indirect method, Labov was able to determine that speakers of raised, closed vowel variants, "color-less r, and the use of stops and affricates for /θ / and /ð / were held in low esteem by the listeners who assigned them to "lower level" occupations.

The subjects of the study are black and white college students, native residents of New York City and in the 18-26-year-old age range. Labov's distribution of listeners consisted mostly of working adults between 20 and 50 years of age. There was a heavy concentration of informants in the 40-49-year-old bracket (Labov, 1966, p. 333). There

were very few black respondents in the 20-24-year-old range nor were there any representatives of this race and age group from the upper socioeconomic levels.

Shuy, Baratz and Wolfram's (1969) study was confined to determining the ability of listeners from different socioeconomic strata to identify the race and the socio-economic status of the speakers. Their study which sampled a broad spectrum of the population appeared to by-pass black and white college students (as did Labov). This group has been most critical of value orientations which perpetuate class distinctions and which ignore ethnic identifications.

Unlike these studies, the present investigation is addressed to the exploration of the affect reactions of black and white college populations from upper and lower socioeconomic backgrounds. A primary concern is the formation of the psycho-social impressions of speakers based on speech cues. In addition to obtaining listeners' perceptions of speech differences in terms of value orientations and of impression formations, a third consideration is the speech perception (or auditory discrimination) performance of diverse social groups to the dialects of the representative speakers. None of the previous studies has investigated speech differences and the reactions of speech variations in terms of a measurement of intelligibility of dialects through speech perception testing. In the present study, comparisons of speech perception performances of

listeners from different social strata to speakers using different speech patterns are made. The intelligibility test described in Chapter III in the section, Measuring Instruments, was devised especially for this population of black and white listeners from lower and upper socio-economic levels. Harms (1961) investigated listener comprehension using the Cloze Technique Procedure but this involved deletion of words rather than phonological variables.

The measuring instrument used consistently in the measurement of attitude in this study is the semantic differential technique which is described fully in Chapter III in the section, Measuring Instruments. Unlike other studies such as those of Lambert and associates (which combined an assortment of individual scales which permitted ratings of physical and psychological characteristics, credibility and motivations of the speakers as perceived by the listeners), the present investigation applied the semantic differential technique as indicated by Osgood (1957). In addition, the McCroskey Scales for the measurement of speaker credibility (consisting of six scales for trustworthiness and six for competency) are employed rather than an isolated scale to rate these dimensions.

This study was conducted in the Spring and Fall of 1970, a year after disruptive student strikes and riots had taken place throughout the country, and just prior to serious boycotts of the City University by its students on

all campuses. Unlike previous studies, this investigation took place during a period of struggle for social change when many young people protested against college policies and demanded student participation in administration. It was also an era of black pride in which black Americans were beginning to recognize their Afro-American heritage. Although the participants involved in the study were in college, they still questioned the establishment and its values such as conforming to a standard style of speech, one of those unspoken standards set by the middle class.

Labov's material was gathered some six or seven years ago prior to the recognition of "Black Americans" and black pride among Afro-Americans, and prior to social changes among the attitudes of young Americans.

Thus this investigation is distinct from other subjective language studies because of its comprehensiveness which involves the relationships of listeners' perceptions of speech differences to impression formations, value orientations, and intelligibility of the dialects. Furthermore, it has highlighted the comparisons of social perceptions of black and white college students from upper and lower socioeconomic levels in regard to phonological variations among speakers. In addition, it has offered a linguistic description of speakers and a social class description of the listeners not available in the Lambert studies. Lastly, a speech perception test for the determination of a dialect intelligibility is introduced as

a factor related to the subjective evaluation of dialect.

In this period of social change, it is important that linguistic perceptions and values of different social groups become better understood by educators who are striving for the continuation of middle class norms in speech and whose social attitudes are strongly influenced by this view.

Summary

In Chapter II, we have reviewed the purposes, methods and results of studies related to the formation of impressions and attitudes toward dialectal (phonological) differences and toward their respective speakers. Generally two types of techniques have been used in subjective reaction language studies. In one procedure, subjects listened to taped prose passages recorded by representative speakers of the language or the dialect. In the other, known as the matched guise technique, one bilingual speaker produced two languages or two dialects so that the same voice was heard. Speech stimuli usually consisted of the reading of oral passages, a more formal contextual style rather than an informal one. Subjects listening to the tapes recorded their impressions on a continuum of favorable or unfavorable in relation to scales of psycho-social characteristics. Those categories or attributes tapped by socially significant speech cues were the identification of social status, race or ethnic group. perception of speaker credibility, and such

psychological characteristics as personality, motivation, and interpersonal attitudes. Another related research problem, although insufficiently explored, was the comparative intelligibility of dialects through speech perception testing.

Affect reactions to dialectal variations in the United States were obtained from the following populations: Northern white, Southern white and Southern black college students (Tucker and Lambert, 1969), white Eastern and mid-western college students (Harms, 1963), lower and middle class black and white Detroit school children and adults (Shuy, Baratz and Wolfram, 1969), Jewish, Italian and Negro working adults from the lower East Side in New York City (Labov, 1966), black teenagers in street gangs (Labov, 1968), and black and white teachers in Chicago (Williams, 1970).

Similar type studies conducted outside the United States were the investigations in India of the recognition of religious groups represented by taped speakers in which college students and teachers participated (McCormack, 1960). In Canada, French Canadian, English Canadian, and Jewish "accented" English were three dialects to which these same group of judges provided their reactions (Anisfeld, Bogo and Lambert, 1964; Lambert, Hodgson, Gardener, and Fillenbaum 1960). In Israel (Lambert, Anisfeld, and Yeni-Komshian, 1965) reactions of Arabic and Askenazic Jewish young teenagers were obtained to Arabic and Hebrew speakers.

Furthermore Ashkenazic teenagers gave their impressions of Ashkenazic and Yemenite guises.

Results revealed that affect reactions toward dialectal variations closely parallel the social stratification of verbal behavior. The impressions of superordinate and subordinate dialects and of the representative speakers were congruent with the position in the social hierarchy held by the dominant and non-dominant groups. In general, the speech patterns of the non-dominant group or lower class persons were perceived negatively even among lower class persons. The speech patterns of nonstandard speakers were found by children to be significantly less intelligible than the standard speakers (Eisenberg, Berlin, Dill and Frank, 1968). The relationship of attitudes to expectancy of performance was shown by Rosenthal and Jacobson (1968) and by Williams (1970a,b) to indicate that social change in terms of wider acceptance of a variety of life styles was a limited one, particularly in teacher-student relationships.

The present investigation differs from previous studies in that it focuses on the attitudinal perceptions of lower and upper class black and white native New York college students toward speakers and their phonological variations in a period of social protest among college students accompanied by assertions of black power and ethnic identification.

CHAPTER III

METHODS AND PROCEDURES

The present chapter is concerned with the methods and procedures used in the exploration of evaluative reactions of college students to the phonological variations of black and white speakers and in the intelligibility testing of the dialects. The chapter plan falls into four major sections. The first section provides the symbols used in the phonetic and phonemic transcription of the dialects of the representative speakers in the study. The second section defines significant terms pertinent to the investigation along with commonly used abbreviations and symbols. In the third section, the research hypotheses are given. The research methodologies are described in the fourth section. These include the measuring instruments employed to test the hypotheses in the study, their theoretical bases, previous use, and application to the experiment. Furthermore, the selection of subjects, the selection of speakers, the selection of the message stimulus, and the administration of the tests are discussed.

System of Transcription

The transcription system used to describe the allophonic variations and phonemic features characteristic of the three dialects of the representative speakers observed in the study is the International Phonetic Alphabet modified by Kenyon (1951, p. 61) and Kantner and West (1941, p. 71).

The inventory of standard American English sounds is provided in Table 3.1 which indicates the vowels and their respective positions, and in Table 3.2 which charts the consonants, their manner and place of articulation. Linguistically and socially significant diphthongs are listed in Table 3.3. Modification symbols are provided in Table 3.4.

TABLE 3.1

VOWELS OF AMERICAN ENGLISH

	Front	Central	Back
High	i		u
Lo-High	ɪ	ɨ	ʊ
Mid	e	ɝ ɚ ɜ ə	o
Lo-Mid	ɛ	ʌ	
Low	æ		ɔ
Low-Low	ä	ɑ	ɒ

TABLE 3.2

CONSONANTS OF AMERICAN ENGLISH

Consonants	Labial	Labio-dental	Dental	Alveolar	Palatal	Velar	Glottal
Stops	p b			t d		k g	
Fricatives		f v	θ ð	s z	ʃ ʒ		h
Affricates					tʃ dʒ		
Nasals	m			n		ŋ	
Laterals				l			
Glides	w				j		
Retroflex				r			

The combined vowel units subject to variation in dialects commonly heard in New York City are indicated in Table 3.3 (Bronstein, 1960, p. 191).

TABLE 3.3

SOME DIPHTHONGS OF AMERICAN ENGLISH

Vowel	plus [ɪ]	plus [ʊ]	plus [ə ~ ɚ]
ɪ			[ɪə ~ ɪɚ]* :<u>cheer</u>
e	[eɪ] :<u>late</u>		
ɛ			[ɛə ~ ɛɚ] :<u>chair</u>
a	[aɪ] :<u>time</u>	[aʊ] :<u>now</u>	
ɔ	[ɔɪ] :<u>boy</u>		[ɔə ~ ɔɚ] :<u>door</u>
ʊ			[ʊə ~ ʊɚ] :<u>poor</u>

*Arguments can be made for the use of [iə] but these are outside the scope of this paper.

TABLE 3.4

MODIFICATIONS AND OTHER IPA SYMBOLS

Symbols	Description	Symbols	Description
C^h	aspirated	V˕	retracted
C	released	V˖	fronted
C˭	unreleased	Ṽ	nasalized
C̥	devoiced	Vː	lengthened
C̪	dental	Vˑ	partially lengthened
V̹	rounded	ø	zero realization
V˕	lowered	Ċ	flapped
V˔	raised	ɫ	velarized lateral
ʔ	glottal stop	ɤ	unrounded mid-back vowel

Definitions of Significant Terms, Abbreviations and Symbols

In this section, definitions of the following terms pertinent to the study are presented: dialect (including the specific dialects used in the study), socially significant variables, social class, residential background, speech patterns, sociolinguistic variables, speaker credibility, personality, occupational suitability, intelligibility, social norms, dominant and non-dominant culture.

Dialect

Generally this term refers to the phonological, syntactical and/or lexical features of any social or regional variety of the national language. References to standard and nonstandard dialects in this study pertain only to phonological features and are defined operationally in Table 3.5.

The three dialects of the representative speakers are: standard or network dialect, "New Yorkese," and Black Dialect. The definitions of the standard and nonstandard phonological patterns used in this study are twofold: firstly, a brief descriptive definition of each pronunciation pattern is given; secondly, an operational definition in terms of specific phonological features characterizing the dialect is provided. It is notable that within each dialect, there is a range of variation which

exists between speakers as well as between the contextual styles of one speaker. In this study [$C_1 \sim C_2$] signifies variation between speakers. The comparison of variants across the three dialects is facilitated by observation of the following system. Consonant and vowel categories are represented as /C/ or /V/ accompanied by subscripts, sd for standard dialect as in /C/$_{sd}$; ny, as in /C/$_{ny}$, for the "New Yorkese" dialect; and bd, as in /C/$_{bd}$, for Black Dialect.

Standard Dialect.--Standard dialect or Network dialect in the popular sense refers to the phonological patterns used by cultivated speakers and television personalities in New York City. The phonological variants marked /C/$_{sd}$ are some of the features which distinguish the standard dialect from other dialects spoken in metropolitan New York. These have been described by Bronstein (1960), Gray and Wise (1959, pp. 264-268), Wise (1957, pp. 264-268), Hubbell (1950), and Frank (1948). The socially significant allophones indicated below in Table 3.5 are produced by the representative speakers in their recorded oral reading for this study.

"New Yorkese" Dialect.--"New Yorkese," a term recognized by all groups in and outside of New York City, was referred to by Gray and Wise (1959) in their description

of variant phonological patterns used by persons in lower class groups in less prestigious occupations. This dialect is generally not used by cultivated persons or by television personalities except for occasional television commercials. The phonological variants marked /C/$_{ny}$ are some of the features which distinguish this nonstandard dialect from other dialects spoken in New York City. These have been described by Wise (1957, pp. 193-204), Gray and Wise (1959, pp. 268-280; pp. 309-312), by Thomas (1951), by Labov (1966, pp. 50-56), by Hubbell (1950), and by Frank (1948). The socially significant allophones indicated below in Table 3.5 are produced by the representative speaker in her recorded oral reading for this study.

Black Dialect.--NNE, nonstandard Negro English, refers to the dialect used by black speakers who have been reared in limited educational, economic, and segregated environments in major urban cities such as New York (Labov, 1966), Chicago (Pederson, 1965), and Detroit (Shuy, Wolfram and O'Riley, 1967; Wolfram, 1969). McDavid and McDavid (1951), Kurath and McDavid (1961), and Wise (1957) have shown that some of the phonological patterns are variants used also by White Southerners. Observations, although not documented in the literature, indicate that the black middle class may incorporate some features of

NNE when communicating in "code" to "members" in their community. This dialect is generally not used by cultivated black persons or by television personalities, at least not in public settings.

The phonological variants marked /C/$_{bd}$ are some of the features which distinguish this nonstandard dialect from other dialects spoken in New York City. The socially significant allophones indicated below in Table 3.5 are produced by the representative speaker in her recorded oral reading for this study.

The following section provides a description of the phonological variations of the speakers. This is prefaced by an explanation of the use of Table 3.5

Socially Significant Variables in the Study

Socially significant variables are those variants which are prone to shift either in phonetic realization or in distribution due to social stratification. The following sound categories were embedded in the oral reading passage produced by the speakers of the present investigation. (The way in which the speakers were chosen is explained below in the section on Selection of the Speakers.) Variants of these sound units serve as markers of different dialects and different social backgrounds. The sound units in

Standard Dialect in New York City are the reference points with which their realizations in "New Yorkese" and Black Dialect are compared.

Sound Unit	Examples
t	tired, waistcoat, peeped, get
d	daisy, did, mind, wondered
θ	think, worth, nothing
ð	this, either, breathe
l	feel, trouble, bold, itself
n	ran, mind, wondered, suddenly, own
ŋ	sitting, nothing
ɛ	when, well
æ	flashed, afterwards, ran
ɑ	on, remarkable, watch
ɔ	across, thought, saw
eɪ	chain, daisy, late
aɪ	by, time, eye
aʊ	out, now
ɛə	chair

The socially significant variables distinguishing the three dialects in this study were produced in a formal speech style--oral reading of a light prose passage. Labov (1965, p. 83) has noted that in the range of contextual styles, the readings of passages and word lists represent a formal style as contrasted with such casual styles as relating a story or conversation. The frequency of occurrence of standard variants is greaterin formal contexts for all social

groups. Yet, in spite of more conscious control in non-casual contexts, there is sufficient distance from standard targets which makes it possible for native listeners to identify the speakers and to react accordingly. Social variation is characteristic of a social class, ethnic or racial group.

Examination of Table 3.5 reveals the environments in which consonantal and vocalic differences occur, accompanied by appropriate examples taken from the oral readings of the literary passage and the word lists produced by the representative speakers in the study. Furthermore, Table 3.5 provides samples of contrastive word pairs observed in standard dialect and of possible homophonous pairs noted in nonstandard dialects, particularly Black Dialect. Listings in the table include examples from the text used in the oral readings in this study as well as samples from other investigators.

Consonantal differences in phonetic realizations of the phonemes of the three dialects may be found in the following environments: (1) In word initial position, the consonant variant precedes a vowel in stressed syllables. This environment is designated as 1 in Table 3.5. (2) In word medial position, the consonant variants are positioned either intervocalically, between consonants or between a vowel and a syllabic consonant. This environment is designated as 2. (3) In word final position, the consonant variants may be post-vocalic, post-consonantal or in final consonant cluster. This environment is designated 3.

Vocalic differences appear in checked or free stressed syllables. In Table 3.5, vowels designated as 'free' may occur in word final position as well as before consonants. 'Checked' vowels are those which occur only before consonants. Although most of the variants are non-distinctive, they do signal social differences in which socioeconomic classes, ethnic or racial groups may be distinguished.

Generally, phonetically dissimilar sounds which occur in similar environments produce phonemic contrasts in minimal pairs of words such as in they and day. Such mechanisms as raising, rounding, substituting, and merging of variants may reduce such contrast producing such homophonous words as /t ɔt/, /tɔ t/ for thought, taught. Table 3.5 includes the homophones of the nonstandard dialects in those instances where the standard dialect maintains distinctions. Among standard speakers in formal utterances, reductions, raising, and merging of variants are generally not prevalent. The presence of allophones of final t,d,l,n and /ŋ/ is relatively consistent. The vowels /æ,ɑ,ɔ / are low and open both in monophthongs and in the diphthongs as well.

Among nonstandard speakers in formal utterances, there is evidence of ingliding vowels, raising, backing and rounding of variants of /æ,ɑ,ɔ /, and the merging of /ɪə/ and /æ / as in beard and bad. Most of the variants of a given sound unit characteristic of nonstandard dialects are non-distinctive. Prominent, however, are unreleased final t and

TABLE 3.5

SOCIALLY SIGNIFICANT VARIABLES IN NEW YORK CITY*

Sound Unit	Environment** 1	2	3	Examples	Contrasting Pairs Versus Possible Homophonous Pairs	
					'Tess-test' 'look-looked'	'bell-belt' ' lay-late'
t						
sd	[t^h]	[t]	[t]	[t^haɪm,bɛlt,lʊkt,t^hɛst leɪt,weɪstk^{h}ʊut]	/tɛs, tɛst lʊk, lʊkt	bɛl, bɛlt leɪ, leɪt/
ny	[t^h ~ ts]	[ʔ ~ ø]	[t^- ~ ʔ]	[t^hɔɪm,bɛlt$^-$,lʊkt$^-$,t^hɛst$^-$ leɪt$^-$,weɪsk^{h}ʊut$^-$]	same***	
bd	[t^h ~ t^h]	[ʔ ~ ø]	[t^- ~ ʔ ~ ø]	[t^ha:m,bɛlʔ, lʊk, t^hɛs leɪ^{ə}t$^-$,we^{ə}sk^{h}ʊuʔ]	/tɛs lʊk	bɛl leɪ/
					'mine-mind'	'bowl-bold'
d						
sd	[d]		[d ~ d]	[deɪzɪ^{ə},hæd,maɪnd,bʊuld]	/maɪn, maɪnd	boʊl, bʊuld/
ny	[d ~ dz]		[d$^-$ ~ ʔ ~ d]	[deɪzɪ^{ə},hæd$^-$,mɔɪnd$^-$,bʊuld]	same***	
bd	[d ~ d]		[d$^-$ ~ ʔ ~ ø]	[deɪ^{ə}zɪ,hæø, maːn, bʊuɣø]	/maːn	boʊl/
					'thought-taught'	'Ruth-roof'
θ						
sd	[θ]	[θ]	[θ]	[θɔt,nʌθɪŋ, wɜθ]	/θɔt, tɔt	ruθ, ruf/
ny	[t^h ~ tθ]	[ʔ ~ t$^-$ ~ tθ]	[ʔ~t$^-$~tθ]	[t^hɔ^{ə}t$^-$,nʌʔn,wɜt$^-$]	/tɔt	rut, ruf/
bd	[t^h ~ tθ]	[ʔ ~ t$^-$ ~ f]	[ʔ~t$^-$~f]	[t^hɔt$^-$, nʌfn,wɜf]	/tɔt	ruf/

*Only some of the most outstanding variants are listed. [d$^-$, t$^-$] may be dental or alveolar in nonstandard dialects.

**See Table 3.4 for explanation of symbols.

***Maintenance of phonemic contrast as in standard dialect.

TABLE 3.5--Continued

Sound Unit	Environment 1	2	3	Examples	Contrasting Pairs Versus Possible Homophonous Pairs	
					'they-day'	'breathe-breed'
ð						
sd	[ð]	[ð]	[ð]	[ðeɪ,iðər,brið]	/ðeɪ, deɪ	brið, brid/
ny	[d ~ d̪ ~ dð̪]	[d ~ dð̪]	[d̃ ~ dð̪]	[deɪ,idðə,brid ~ bridð̪]	/deɪ	brid/
bd	[d ~ d̪ ~ dð̪]	[d ~ v]	[d̃ ~ ʔ ~ v]	[deɪ,ivə, brid̃ ~ briv]	/ deɪ	brid/
					'awe-all'	'bow-bowl'
l						
sd	[l]	[ɫ]		[leɪt,bɛlt,bould,trʌbɫ,ɔ:ɫ]	/ɔ:, ɔ:l	bou, boul/
ny	[l]	[ɫ]		[leɪt̃,bɛlt̃,bould̃,trʌbɫ, ɔ^{ɫ}ɫ]	same***	
bd	[l]	[ɣ ~ ø]		[leɪ^{ɫ}t̃,bɛɣ,bouɣ,trʌbɣ, ɔ:ɣ]	/ɔ:	bou/
					'mine-mind'	
n						
sd	[n]	[n]	[n]	[nou,wʌndəd,tʃeɪn, maɪn,maɪnd,maɪ]	/maɪn, maɪnd/	
ny	[n]	[n]	[n]	[nou,wʌndəd,tʃeɪn, mɒɪn,mɔɪnd̃,mɒɪ]	same ***	
bd	[n]	[n̊ ~ n]	[n̊ ~ ṽ]	[nou,wʌn̊əd̃,tʃeɪ^{ə}ən, mã:, ma:n, ma:]	/ma:n/	

TABLE 3.5--Continued

Sound Unit	Environment 1	2	3	Examples	Contrasting Pairs Versus Possible Homophonous Pairs
					'mountain-mounting'
ŋ					
sd			/ŋ/	[nʌθ m̥, sɪt m̥]	/maʊntn̥, maʊnt m̥/
ny			/n/	[nʌʔn̥, sɪʔn̥]	/maʊnʔn̥/
bd			/n/	[nʌʔn̥, sɪʔn̥]	/maʊnʔn̥/

TABLE 3.5--Continued

Sound Unit	Checked Vowel	Free Vowel	Examples	Contrasting Pairs Versus Possible Homophonous Pairs
				'pin-pen' 'since-cents' 'mini-many'
ɛ				
sd	[ɛ] before nasals		[pʰ ɛn,mɛnɪˈ,sɛns]	/p ɪm,pɛn mɪni,mɛni/ sɪms,. sɛns/
ny	[ɛ] before nasals		[pʰ ɛn,mɛnɪˈ,sɛns]	same ***
bd	[ɪ] before nasals		[pʰ ɪn~pʰ ɪˈən mɪnɪˈ,sɪms]	/p ɪm mɪni/ sɪms/
				'cad-cared'
æ				
sd	[æ]		[æftəwədz,flæʃt,kæd,ræn bæŋk]	/kæd,kɛərd/
ny	[ɛə]		[ɛəftəwədz,flɛəʃt, kɛˈəd, bæˈŋk, rɛən]	/kɛəd/
bd	[æˈə ~ɛjə]		[ɛjəftəwədz,flæˈəʃ,kæˈəd, bɛjəŋk, rɛjən]	/kæəd,kɪəd/
				'cot-caught' 'cod-cord'
ɑ				
sd	[ɑ]		[ɑn,wɑtʃ,kɑt,kɑd]	/kɑt,kɔt kɑd,kɔ:d/
ny	[ɑ̰ˈə ~ ɔə]		[ɑ̰ˈən,wɑ̰ˈtʃ,kɑt⁻,kɑd]	same***
bd	[ɑ̰ˈə ~ ɔə]		[ɔən,wɑ̰ˈtʃ, kɑt⁻,kɔd]	same *** / kɔ:d/

TABLE 3.5--Continued

Sound Unit	Checked Vowel	Free Vowel	Examples	Contrasting Pairs Versus Possible Homophonous Pairs	
				'law-lure'	'law-lower'
ɔ					
sd		[ɔː ~ ɔ]	[əkrɔs,θɔt,sɔː,lɔː]	/lɔː,luɚ	lɔː,louɚ/
ny		[ɔ̰ᵊ ə]	[əkrɔ̰ᵊəs,tθɔ̰ᵊt⁻, ⁿ sɔ̰ːᵊə,lɔᵊə]	/lɔːə	lɔːə,louə/
bd		[oə ~ ɔ]	[əkrɔs,tʰɔt⁻ ~tʰɒət⁻ , sɔː ~ soə lɔː ~ loə]	/lɔːə~louə	louə/
				'chain-chin'	
eɪ					
sd		[eɪ]	[deɪzɪᵊ,tʃeɪm,leɪt]	/tʃeɪm,tʃɪm/	
ny		[eɪ]	[deɪzɪᵊ,tʃeɪm,leɪt⁻]	same ***	
bd		[eᵊ ~ ɪə]	[deᵊzɪᵊ,tʃeᵊn,leᵊ t⁻]	/tʃɪən/	
				'buy-boy'	'fire-far'
aɪ					
sd		[aɪ]	[baɪ,tʰaɪm,faɚ]	/baɪ,bɔɪ	faɚ,faːr/
ny		[ɒɪ ~ ɔɪ]	[bɒɪ,ⁿtʰɒɪm,fɒɪə]	/bɔɪ/	same ***
bd		[aː]	[baː,tʰaːm,faːə]	/baː,bɔɪ	faːə/

TABLE 3.5--Continued

Sound Unit	Checked Vowel	Free Vowel	Examples	Contrasting Pairs Versus Possible Homophonous Pairs
æʊ				
sd		[æʊ]	[æʊt, hæʊ]	
ny		[æʊ]	[æʊt⁻,hæʊ]	
bd		[æˈə]	[æˈət⁻,hæˈə]	
				'chair-cheer'
ɛə				
sd	[ɛr]		[tʃɛr]	/tʃɛr,tʃɪr/
ny	[ɛə]		[tʃɛə]	same ***
bd	[ɪə]		[tʃɪə]	/tʃɪə/

d, and substitutions of stops and affricates for interdental fricatives.

Among speakers of Black Dialect in formal utterances, there are some similarities to "New Yorkese." However, zero realizations of t,d,l and the nasalizing of vowels to correspond to /n/ in final positions are more prominent. The merging of /f/ and /θ/, /v/ and /ð/ in certain positions, of /ɪ/ and /ɛ/ before nasals, and of /ɪə/ and /ɛə/ also contribute to the considerable number of homophonous words. These mergers range through various degrees of frequency depending on the particular neutralized contrast, the speaker, and the social context. Black Dialect is distinguished from "New Yorkese" and Standard Dialect both socially and linguistically.

A summary of the most outstanding differences in contrast potential of corresponding sound segments in the three dialects is given in Table 3.6. Black Dialect is characterized by a set of phonological rules which differ from those of other dialects. The most notable features of Black Dialect are the reduction of final consonant clusters, absence of certain postvocalic final consonants, the correspondence of /f/ and /v/ to the standard /θ/ and /ð/ in medial and final positions, reduction of the diphthong /aɪ/, raising and diphthongization of the /ɛ/ phoneme, and the merging of /ɪə/ and /ɛə/ as well as the merging of /ɪ/ and /ɛ/ before nasals.

TABLE 3.6

SUMMARY OF DIFFERENCES IN CONTRAST POTENTIAL OF CORRESPONDING SOUND SEGMENTS IN THE THREE DIALECTS*

Rules	SD	NY	BD
Reduction:			
Final Consonant Cluster	-s	-s	-s
	-st	-st	
	-l	-l	-l
	-lt	-lt	
	-ld	-ld	
	-k	-k	-k
	-kt	-kt	
	-n	-n	-n
	-nd	-nd	
Reduction:			
Final Consonant	-eɪ	-eɪ	-eɪ
	-eɪt	-eɪt	
	-eɪd	-eɪd	
	-ou	-ou	-ou
	-oul	-oul	
	-ɔ:	-ɔ:	-ɔ:
	-ɔ:l	-ɔ:l	
Merging:			
Prevocalic Consonant	t-	t-	t-
	θ-		
	d-	d-	d-
	ð-		

*The frequencies of occurrence of the corresponding cases of non-contrast are dependent upon the social class of the speakers and the stylistic levels used by the speakers.

TABLE 3.6 (Continued)

Rules	SD	NY	BD
Merging: Medial/Final Consonant	-f	-f	-f
	-θ	-θ ~ t	
	-v	-v	-v
	-ð	-ð ~ d	
Reduction: Diphthong	-a, -aɪ, -ɔɪ	-a, -ɔɪ	-a:, -ɔɪ
Merging: Diphthongs	-ɛə, -ɪə	-ɛə, -ɪə*	-ɪə
	-e ɪ n, -ɪ n	-e ɪ n, -ɪ n	- ɪn**
Vowels	- ɪn, - ɛn	- ɪn, - ɛn	- ɪn***
Vowel-Diphthong	- ɔ:, - uə	-oə	- ou, - uə
	- æ, - ɪə	-ɪə	-æ, -ɪə

*Merged for some speakers to ɪə. Furthermore, ɪə and æ also merge to ɪə.

**Merged under certain conditions.

***Always merged.

Thus reduction and merging mechanisms in Black Dialect account for the absence of phonemic contrast in certain sound segments which results in an extensive number of homophonous words not observed in standard or "New Yorkese" dialects.

Social Class

The social status of subjects in this investigation was defined operationally by the scores obtained from the application of Hollingshead's (1957) Two Factor Index of Social Position. This index utilizes the occupational classification and educational level of the subject-listeners' parents and categorizes the various levels on a seven-point scale with the highest levels scored as 1 and the lowest levels as 7. Further discussion of occupational and educational rating scales may be found in the section on Measuring Instruments.

In the present study, subjects were designated "upper socioeconomic status" and "lower socioeconomic status." The "upper status" group consisted of middle and upper class persons fulfilling the criteria described below. The "lower status" group included the lower middle class and the upper working class (referred to by Shuy, Wolfram and Riley, 1967 and by Labov, 1966).

The social description of the socioeconomic background of the informants provided in Appendix D indicates that "upper status" subjects had at least one parent who was a college graduate and is in a professional or administrative position.

On this basis, then, utilizing the occupational and educational scales in Tables 3.7 and 3.8, both occupation and educational levels were assigned ratings of 1 or 2. The following is an example of the application of the Hollingshead (1957) formula which was applied to a subject's parent in order to obtain a social index score.

Factor	Rating	x	Weight	=	RxW
Occupation (physician)	1	x	7	=	7
Education (graduate training)	1	x	4	=	4
Composite Score					11

In this instance, the occupational and educational levels (physician and graduate training) were each assigned a value of 1 (according to Tables 3.7 and 3.8) which were multiplied by given weights of 7 and 4, respectively. A composite score was obtained which was considered an approximate measure of the individual's position in the community's social structure.

Subjects designated "lower status" were persons whose parents had not gone beyond high school and who were engaged in less prestigious and less creative positions. The social description in Appendix D indicates that these informants generally obtained educational ratings of 5, 6, or 7 and occupational ratings of 5, 6, or 7 according to the Hollingshead scales in Tables 3.7 and 3.8. A fireman, for example, received a rating of 5. Not having completed high school, he was assigned an educational rating of 5. An

approximate index of social position was obtained by the application of the Hollingshead formula described above.

It is not truly possible to match the social class of black and white persons due to educational, social, and economic limitations in the lives of most minority individuals. However, the social backgrounds of the twenty black and twenty white students in this study fulfilled the criteria defining the upper and lower socioeconomic strata. Accordingly, four social classes are discussed: lower and upper socioeconomic black students designated as the LB and the UB, and lower and upper socioeconomic white students designated as the LW and the UW.

Residential Background

The residential backgrounds of listeners are analyzed in terms of homogeneity or inter-culture contact among socioeconomic, ethnic and racial groups, and in terms of a total configuration of the socioeconomic conditions in the neighborhood (City Planning Commission, 1968). These factors may be related to dialect usage, bidialectalism, and speech perception. In this study, two factors were considered in the determination of residential status in New York City. One was the homogeneity or heterogeneity of the community in which the residence is located. The other classified residence on the total configuration of housing, social, and economic conditions in the neighborhood. Implicit in the term "homogeneity" is the designation of one of three

terms to an area in which the residence is located: ghetto area, integrated area, and restricted area.

Ghetto areas.--These sections are characterized by a high concentration of minority groups such as Negroes and Puerto Ricans who are in low income brackets, or on welfare and who reside in poor housing. Schools, for example, in these areas, are attended by over 95% black and Puerto Rican students.

Integrated areas.--These sections are characterized by a mixture of racial and economic groups. While housing may or may not be integrated, the area is. Schools, for example, are attended by 60-65% black and Puerto Rican students; approximately 40% or less, are white or "other."

Restricted areas.--These sections are characterized by covert or overt racial and economic restrictions which prevent members of minority groups such as black and Puerto Ricans from residing in the locale. Schools, for example, are attended by 90-95% white students.

The City Planning Commission in New York City uses a classification system of residence according to their perceptions of housing, social, and economic conditions. The three general areas classified according to neighborhood housing needs are major action areas, preventive renewal areas and predominantly sound areas. These are defined as follows:

Major action areas.--These are notable for poverty, old deteriorated housing, overcrowded conditons, disease and crime and fires. Sixty-four percent of Negroes and Puerto Ricans live in these areas where more than one-third live on incomes below the poverty line.

Preventive renewal areas.--These are notable for once having been relatively good neighborhoods. They are characterized by a decrease in the white population and an increase in the Negro and Puerto Rican populations who have been able to leave the ghetto and who are emerging into the middle class. These areas are generally occupied by old families who have lived here for many years and by upward striving minority families. Housing is generally old, but not as old as the housing in the major action areas. To prevent a decline in these older neighborhoods, the city is concerned with a program to preserve the relatively sound but old stock in housing and community facilities.

Sound areas.--These are neighborhoods that are considered to provide good living environments ranging from six story apartment housing and new housing in upper Manhattan, Queens, Brooklyn, Riverdale and Staten Island. Also included are fairly modest neighborhoods of single family and two family frame housing in outer Queens, Canarsie, Staten Island and the East Bronx. Wide range of incomes exist here. Forty-eight percent of the white population resides in these areas along with 12.6% of Negroes and 9.4% of Puerto Rican population. Generally, the middle class of all racial and

ethnic groups may be found here. Naturally, the housing stock is in relatively good condition. Sound areas may exist near preventive renewal areas and near major action areas as well.

Speech Patterns

This study is concerned with the phonological aspect of speech patterns related to differences in pronunciations formed by differences in manner and place of articulation. Such variations are stylistic or social. Social variants, sensitive to changes in the social structure, are for example, realizations of /æ / such as [ɛə,æ,ɛ^{1}jə] as in man: [mɛən,mæn,mɛ^{1}jən] . The measurement of attitudes toward these variants involved the use of nine seven-point, bipolar, adjectival scales which are primarily evaluative. These are discussed further in the section on Measuring Instruments in this chapter.

Sociolinguistic Variables

These are linguistic variables as indicated above which co-vary with social factors. For example, the allophone [ɛə]as in man is a socially significant variant in that it is characteristic of lower class whites in New York City. The low front open [æ] as in man:[mæn] is characteristic of middle and upper class individuals in New York City. The socially significant variant [ɛ^{1}jə] as in man: [mɛ^{1}jən] is recognized in the speech of some lower class Negroes in the North, and among Negroes and white persons in

the South. Sociolinguistic or socially significant variants are recognized as linguistic features characteristic of a social class, racial or ethnic group, age group, or formal or informal settings.

Speaker Credibility

The credibility of a speaker refers to the image or attitude held by a listener toward a speaker. In this study, McCroskey's (1966) scales for the measurement of ethos were used to measure two significant dimensions of credibility, authoritativeness (or competence), and character (or trustworthiness) believed to be attributes of the speaker. Six seven-point, bipolar, adjectival scales were used to measure listener's impressions of the competence of the speaker (Appendix C). These scales were: reliable-unreliable, informed-uninformed, qualified-unqualified, intelligent-unintelligent, valuable-worthless, expert-inexpert. Responses on the extreme positive end of the scale were scored 7. Responses on the extreme negative end of the scale were scored 1, with the neutral interval scored 4. Summing across the scales provided a score of the listener's reaction to the competence of the speaker. Further discussion is given in this chapter under Measuring Instruments.

Six seven-point, bipolar, adjectival scales were used to measure the listener's impressions of the trustworthiness of the speaker (Appendix C). These scales were: honest-dishonest, friendly-unfriendly, pleasant-unpleasant,

unselfish-selfish, nice-awful, virtuous-sinful. Responses on the extreme positive end of the scale were rated 7. Responses on the extreme negative end of the scale were rated 1, with the neutral interval scored 4. Summing across the scales provided a score of the listener's reactions to the trustworthiness of the speaker. Further discussion is given in this chapter under Measuring Instruments.

Personality

For the study, four seven-point, bipolar scales were developed to measure the listeners' reactions to or evaluations of the personality of the speaker (Appendix C). These were: attractive-unattractive, popular-unpopular, bright-dull, introverted-extroverted. Responses on the extreme positive end of the scale were rated as 7. Responses on the extreme negative end of the scales were rated as 1, with the neutral interval scored as 4. The sum of the four scales provided a score of the listeners' evaluations of the speaker's personality. A score of 28 was the most favorable evaluation possible; a score of 4 was the least favorable evaluation possible.

Occupational Suitability

One of the factors in social perception related to the socioeconomic hierarchy is the expectation of the occupational suitability or status of the speaker held by the listener. The same seven-point scale bound by "suitable-unsuitable" was used for each of the eight occupations

considered in this study. The occupations were: newscaster, teacher, nurse, clerk, supervisor, telephone operator, maid, nurse, and waitress (Appendix C). A rating of 7 was assigned to the extreme end of the scale indicated as "suitable." A rating of 1 was assigned to the extreme end of the scale indicated as "unsuitable." The neutral interval was scored 4. Subjects indicated their judgments of the suitability of each speaker for each of the eight occupations.

Intelligibility

In this study, the intelligibility level of each dialect is based on the ability of listeners to recognize the monosyllabic words read by each of the representative speakers of the three dialects. Black's Multiple Choice Intelligibility test (Black and Moore, 1955) was modified for purposes of the present investigation. Listeners heard 36 monosyllabic words read by each of the four speakers. Upon recognizing the oral word, they crossed out its written counterpart in a response sheet which provided three alternative possibilities of phonetically similar words. When the listener did not cross out the word spoken by the speaker, this constituted an "error" response. The obtained listening score was the number of "error" responses made for each representative speaker by each of the socially stratified black and white subject-listeners.

Selected stimulus monosyllabic words were those words susceptible to specific phonological variations which marked

the three dialectal patterns. For example, belt and bell become homophonous if the final consonant cluster of belt is reduced. In another example, Ruth was one of three words in the response sheet which included root and roof. A more complete discussion of this test is provided in Measuring Instruments. The answer sheet and the word lists produced by each speaker are located in Appendix C.

Social Norms

This term refers to the expectations of a pattern of behavior for a particular group. Linguistically, the "upper" strata or middle class has set the levels of acceptability in phonology, in vocabulary, and in grammar which are termed "standard."

Dominant Culture

This term refers to the group whose dialect, mores and life styles are practiced by a majority of the population. In the United States, generally, the linguistic features and life styles of middle class white persons, particularly White American Protestants, have been regarded as acceptable and standard social behavior. Evidence of this statement is demonstrated by the consistent use of standard speech patterns on television and radio. Another term for the dominant group employed by Labov (1970) is the "superordinate" group.

Non-dominant Culture

The social behavior of sub-groups or minority groups such as Negroes and Puerto Ricans in this country, Yemánites in Israel, French-Canadians in Canada, the Chamars in India, has been viewed as part of the non-dominant culture. The social and economic status of these groups has been considered "second place." Such groups have also been labelled the "subordinate" groups (Labov, 1970) to indicate their status in the socioeconomic hierarchy.

Research Hypotheses

Previous investigations reveal that listeners from varied social backgrounds prefer standard speakers (e.g., Anisfeld, Bogo, and Lambert, 1962; Buck, 1968; Tucker and Lambert, 1969; and Williams, 1970a). Even lower status listeners perpetuate class distinctions and reflect middle class orientations in their recognition of socially significant features (Labov, 1965). It appears to be universal that non-linguistic features such as race, class, religion, and ethnicity of the non-dominant group are assigned negative values on the basis of speech cues alone due to unfavorable accumulative perceptions of the subordinate group in the culture (e.g., Gumperz, 1958; Lambert, Hodgson, Garner, and Fillenbaum, 1960; Lambert, Anisfeld and Yeni-Komshian, 1965; Buck, 1968; Tucker and Lambert, 1969). This study is concerned with the present value orientations of black and white college students in an era of social change as reflected in

their affect reactions to two nonstandard dialects and one standard dialect, and to the representative black and white speakers of these dialects.

This section is a presentation of the research hyptheses and their rationale. The null hypotheses stated below pertain to five major concerns of this study: 1) the attitudes toward the speech patterns of representative speakers of the three dialects; 2) the attitudes toward the competence, trustworthiness, and personality characteristics of the speakers of these dialects; 3) the expectations of occupational suitability for each speaker; 4) the influence of the race and class of the listeners and the phonological variations of the speakers upon the subject-listeners' attitudes; and 5) the relative intelligibility of the three dialects.

The variables which may affect attitudinal perceptions and listening scores were considered in the general null hypotheses given below. These were tested for each measurement by the analysis of variance discussed in Chapter IV.

1. There is no significant difference among the speakers.

2. There is no significant difference between the two races (black and white) of the listeners.

3. There is no significant difference between the lower and upper socioeconomic status of the listeners.

4. There is no significant difference in the interactions of the speaker and race (of the listeners).

5. There is no significant difference in the interactions of the speakers and class (of the listeners).

6. There is no significant difference in the interaction of race and class of the listeners.

7. There is no significant difference in the interaction of the speakers, race and class of the listeners.

Attitudes Toward the Speech Patterns of Representative Speakers of Three Dialects

Studies by Labov (1966, 1968) and McCormack (1960), for example, have shown that subjective negative reactions to non-dominant groups may be related to the listener's own speech patterns. Labov (1966, p. 448) observed that phonological variables embedded in sentences are isolated as socially linguistic features by Jewish and Italian ethnic groups. Those speakers who produce stigmatized or socially marked linguistic features recognize these variables in others and stigmatize such individuals accordingly. Based on the results of the ANOVA and the concerns of the study, the following specific hypotheses were tested:

1. Attitudes toward standard dialects of black and of white speakers do not differ significantly.

2. Attitudes toward nonstandard dialects of black and of white speakers do not differ significantly.

3. Attitudes toward standard dialects of black and of white speakers do not differ significantly from attitudes toward nonstandard dialects of black and of white speakers.

Attitudes Toward the Credibility of Representative Speakers of Three Dialects

Except for the study by Buck (1968), previous investigations have not dealt with the competence and trustworthiness dimensions as the sums of related scales. Isolated traits such as honesty, leadership, ambition, and intelligence of speakers have been rated by listeners along with numerous other traits to be discussed below. Lambert (1967), for example, found that positive values attached to the dominant cultural group in a culture have been generalized to such traits as leadership, ambition, height, etc. on the basis of ethnic recognition through speech cues. Tucker and Lambert (1969) found that the Network standard speakers were perceived as significantly more trustworthy, honest, better educated, and more intelligent than the Southern speakers of other dialects. Buck (1968), in summing six related scales to measure competence and six related scales to measure trustworthiness, found that listeners considered nonstandard speakers less competent than standard speakers.

The present study utilizes six scales as the measure of competence. These are: expert-inexpert, informed-uninformed, valuable-worthless, qualified-unqualified, reliable-unreliable, intelligent-unintelligent. Six scales were also used to measure trustworthiness. These are: virtuous-sinful, friendly-unfriendly, awful-nice, pleasant-unpleasant, unselfish-selfish, honest-dishonest. In the present investigation, the evaluative reactions of listeners to the credibility of the representative speakers are measured by using these scales in order to test the following specific hypotheses:

4. Attitudes toward the competence and trustworthiness of black and white speakers of standard dialects do not differ significantly.

5. Attitudes toward the competence and trustworthiness of black and white speakers using nonstandard dialects do not differ significantly.

6. Attitudes toward the competence and trustworthiness of speakers using standard dialects do not differ significantly from attitudes toward the competence and trustworthiness of speakers using nonstandard dialects.

Attitudes Toward the Personality Characteristics of Representative Speakers of Three Dialects

Speech educators have placed considerable faith in the capacity of speech to serve as a "mirror" of personality (Sanford, 1942; Allport 1934). None of the previous investigators, however, have dealt with a personality evaluation score, as in the present study. Here, four traits, attractiveness, popularity, brightness, and extroversion

are considered together. Tucker and Lambert (1969) found that such isolated traits as good disposition, personality, and consideration were perceived as characteristics of the Network Standard speakers, whereas educated Southern, educated Negro, and uneducated Southern Negro speakers were perceived as possessing more negative personality characteristics than the standard speakers. The following specific hypotheses were tested in this study:

7. Personality evaluations of black and white speakers of standard dialects do not differ significantly.

8. Personality evaluations of black and white speakers using nonstandard dialects do not differ significantly.

9. Personality evaluations of speakers using standard dialects do not differ significantly from personality evaluations of speakers using nonstandard dialects.

Attitudes Toward the Occupational Suitability of Representative Speakers of Three Dialects

It appears to be a universal phenomenon that the elite in society maintain their separateness through linguistic distinctions (Geertz, 1960). The elite are those persons in occupations considered prestigious because of the skill, education, and/or creativity necessary for performance. This group, therefore, is rewarded financially and in prestige. These individuals share a range of life styles which includes linguistic behavior.

Previous studies have shown that those in occupations highly regarded by the culture share a dialect which is

highly respected by socially diverse groups and which is recognized as the standard dialect (Gumperz, 1958; Bright, 1960; McCormack, 1960). Similarly, those speakers in occupations which are regarded as less prestigious share dialects which are viewed negatively and generally labelled "nonstandard." Labov (1966) indicated that recognition of the congruity of ranking in the occupational hierarchy with a pattern of linguistic features in terms of a favorable-unfavorable continuum was a middle class orientation which all social groups seem to hold. The hypotheses pertaining to these issues are as follows:

10. Expectations of the occupational suitability of black and white speakers using standard dialects do not differ significantly.

11. Expectations of the occupational suitability of black and white speakers using nonstandard dialects do not differ significantly.

12. Expectations of the occupational suitability of speakers using standard dialects do not differ significantly from expectations of the occupational suitability of speakers using nonstandard dialects.

Relative Intelligibility of the Representative Speakers

Phonological variability among dialects may be an intelligibility factor which may affect evaluational judgments toward the representative speaker. Eisenberg, Berlin, Dill and Frank (1968) found that the intelligibility of monosyllables produced by speakers of standard dialect was significantly greater than the intelligibility of monosyllables

produced by uneducated speakers of nonstandard dialects. The linguistic features of each speaker, however, were not specified by these investigators. In the present study, the listening scores of socially diverse subject-listeners to four speakers of three dialects (Standard dialect, "New Yorkese," and Black dialect) were compared in order to test the following hypotheses:

13. The intelligibility scores of the standard dialect of black and white speakers do not differ significantly.

14. The intelligibility scores of the black and white speakers of nonstandard dialects do not differ significantly.

15. Intelligibility scores of the standard speakers do not differ significantly from the intelligibility scores of the non-standard speakers.

Effects of Social Factors Upon Listeners' Attitudes

Previous research has demonstrated that social stratification co-varies with linguistic variation (Gumperz, 1958; Bernstein, 1961, 1962; Labov, 1966; Wolfram, 1969; Shuy, Wolfram and Riley, 1967; and Williams, 1969, 1970). Social class and ethnic and racial backgrounds of listeners are important social factors affecting social evaluations (e.g., Labov, 1966; Williams, 1970; Lambert, Hodgson, Garner, and Fillenbaum, 1960; Lambert, Anisfeld, and Yeni-Komshian, 1965). Generally, the social perceptions of verbal behavior and of speakers reflect the views of the dominant culture. The social factors considered in the present study are

social class as judged by education and occupation, race, origin of the parents of the subjects, and the geographic residence of listeners in New York City.

A chief concern of this investigation was the comparison of the attitudes of the four social groups toward the speakers: the lower status black and white listeners (LB and LW) and upper status black and white listeners (UB and UW) as defined in this study. The following specific hypotheses pertaining to the effects of the interaction of the speakers, and the race and class of the listeners were tested:

16. Lower status black and upper status black listeners do not differ significantly in their attitudes toward the standard dialects of the representative speakers.

17. Lower status and upper status black listeners do not differ significantly in their attitudes toward the nonstandard speech patterns of the representative speakers.

18. Lower status black listeners do not significantly rate standard dialects higher than nonstandard dialects.

19. Upper status black listeners do not significantly rate standard dialects higher than nonstandard dialects.

20. Lower status and upper status white listeners do not differ significantly in their attitudes toward the standard dialects of the representative speakers.

21. Lower status and upper status white listeners do not differ significantly in their attitudes toward the nonstandard speech patterns of the representative speakers.

22. Lower status white listeners do not significantly rate standard dialects higher than nonstandard dialects.

23. Upper status white listeners do not significantly rate standard dialects higher than nonstandard dialects.

24. Lower status black and white listeners do not differ significantly in their attitudes toward the standard dialects of the representative speakers.

25. Lower status black and white listeners do not differ significantly in their attitudes toward nonstandard dialects of representative black and white speakers.

26. Upper status black and white listeners do not differ significantly in their attitudes toward the standard dialects of the representative black and white speakers.

27. Upper status black and white listeners do not differ significantly in their attitudes toward the nonstandard dialects of the representative black and white speakers.

28. Lower status black and upper status black listeners do not differ significantly in their attitudes toward the credibility and personality of the standard representative speakers.

29. Lower status and upper status black listeners do not differ significantly in their attitudes toward the credibility and personality of the nonstandard speakers.

30. Lower status black listeners do not significantly rate the credibility and personality of the standard speakers higher than the credibility and personality of the nonstandard speakers.

31. Upper status black listeners do not significantly rate the credibility and personality of the standard speakers higher than the credibility and personality of the nonstandard speakers.

32. Lower status and upper status white listeners do not differ significantly in their attitudes toward the credibility and personality of the standard representative speakers.

33. Lower status and upper status white listeners do not differ significantly in their attitudes toward the credibility and personality of the nonstandard speakers.

34. Lower status white listeners do not significantly rate the credibility and personality of the standard speakers higher than the credibility and personality of the nonstandard speakers.

35. Upper status white listeners do not significantly rate the credibility and personality of the standard speakers higher than the credibility and personality of the nonstandard speakers.

36. Upper status black and white listeners do not differ significantly in their attitudes toward the credibility and personality of the representative speakers of standard dialects.

37. Upper status black and white listeners do not differ significantly in their attitudes toward the credibility and personality of the black and white speakers of nonstandard dialects.

38. Lower status black and white listeners do not differ significantly in their attitudes toward the personality and credibility of black and white speakers of nonstandard dialects.

39. Lower status black and white listeners do not differ significantly in their attitudes toward the personality and credibility of the representative speakers of the standard dialect.

40. Lower status black and upper status black listeners do not differ in their listening scores to standard speakers.

41. Lower status black and upper status black listeners do not differ in their 'error responses' to nonstandard speakers.

42. Lower status black listeners do not have higher error response scores to standard speakers than to nonstandard speakers.

43. Upper status black listeners do not have higher error response scores to standard speakers than to nonstandard speakers.

44. Lower status white and upper status white listeners do not differ in their error responses to standard speakers.

45. Lower status and upper status white listeners do not differ in their error responses to the nonstandard speakers.

46. Lower status white listeners do not have significantly higher error response scores to standard speakers than to non-standard speakers.

47. Upper status white listeners do not have significantly higher error responses to standard speakers than to nonstandard speakers.

48. Lower status black and white listeners do not differ significantly in their error responses to standard speakers.

49. Lower status black and white listeners do not significantly differ in their error responses to the nonstandard speakers.

50. Upper status black and white listeners do not differ significantly in their listening scores to standard speakers.

51. Upper status black and white listeners do not differ significantly in their error responses to the nonstandard speakers.

Research Methodologies

In this section, the methods and procedures employed to test the research hypotheses are presented. First, the measuring instruments which served to select the subject-listeners and to measure attitudes and intelligibility are discussed with reference to the theory, previous use, and application to the present study. In addition, the selection of the subjects, the selection of the speakers, the selection of the message stimulus, and the details of the test administration are discussed.

Measuring Instruments

The measuring instruments used include the semantic differential forms for evaluating the speech patterns, the perceived credibility, personality and occupational suitability of the representative speakers, an Identifying Information form, the Hollingshead Two Factor Index of Social Position, and the measurement of the intelligibility of the dialects of the speakers.

The Semantic Differential Technique.--The basic tool for the measurement of affect reactions to a concept or other stimulus behavior employed in the present investigation is the semantic differential technique. The underlying theory of this technique is described here along with its reliability and validity as a measuring instrument. The semantic differentive procedure is based on the representational mediation hypothesis which postulates that covert reactions to a

stimulus serve as a mediated stimulus to an overt response. In the measurement of his affect reaction to a stimulus idea, a subject judges a concept against a series of appropriate seven-point, bipolar scales. According to Osgood, Suci, and Tannenbaum (1957, p. 26), "each judgment represents a selection among a set of given alternative reactions and serves to localize the concept as a point in semantic space." The seven-point rating scale between the bipolar adjectives related to the concept permits the direction and intensity of each judgment to be recorded quantitatively.

In developing this device as an index of meaning, particularly affective meaning, Osgood, Suci and Tannenbaum (1957, p. 289) proposed to tap "that distinctive mediational process or state which occurs in the organism wherever a sign is received or decoded." It was their goal to design an instrument that was capable of measuring in quantitative terms the meaning of a concept or the attitude evoked in a receiver by a concept. Although Osgood regards three dimensions of the affective system, evaluation, potency and activity, as the factors involved in connotative meaning, he does consider the evaluative factor as the attitudinal component of meaning. Most of the many studies using this technique have dealt primarily with the evaluative component.

Smith (1959, 1963), in particular, has studied the use of this technique in speech related areas. Concerned with validity, Smith (1963) reported that the use of the evaluative scales correlated with Thurstone and Guttman

attitude scales and the Bogardus Social Distance Scales at r = .78 to .80 which may be regarded as evidence of a rather high degree of validity. Furthermore, he determined that the reliability of the semantic differential in attitude measurements was .91 on a test re-test basis. Procedures to ensure the validity of measurements in the present investigation are the randomization of the polarity of the scales and the use of scales closely related to the concepts employed.

Concerned with the use of the semantic differential technique in the measurement of "authoritativeness" and "character," two dimensions of speaker credibility, McCroskey (1966) found that the scales for these factors were highly correlated with the Likert scales for the same factors. His correlations of r = .851 and .817 for "authoritativeness" and "character" respectively, reveal the validity of the semantic differential scales for use in the exploration of reactions to speaker credibility. Utilizing the Hoyt Internal Consistency Reliability Estimate and split-halves reliability tests, McCroskey found that the Likert "authoritativeness" and "character" scales showed a reliability of .96 and .97 respectively. Reliability for the same factors on the semantic differential scales were .933 and .922 respectively.

Shuy, Baratz and Wolfram (1969), Shuy (1969) and Williams (1970b) have noted that the semantic differential technique can be a useful tool for exploring the subjective reactions to verbal behavior and to speakers. They observed

that the evaluative scales were generally more applicable and effective for measurement of attitudes and that the potency and activity dimensions were not as meaningful to the listeners. Semantic differential scales and the instructions for their use are presented in Appendix B and C. In this study, they were applied to the measurements of affect reactions to speech patterns, to competence, to trustworthiness, to personality, to occupational expectations, and to the identification of race.

The Identifying Information Form.--Prior to listening to tapes, subjects completed the Identifying Information Form (Appendix A). The purposes of the Form were to obtain the social data necessary for the determination of the socioeconomic background of the subject and to eliminate subjects who did not fit into the criteria set forth by the design of the experiment. Those who were eliminated in the final analysis of the data were bilingual students over 26 years of age, born and reared outside of New York City. Residence of students and geographical origin of parents were of interest as factors which influence the social perceptions of dialects and speakers. Since listeners' social perceptions are in part shaped by socioeconomic and educational backgrounds, it was necessary to categorize listeners' social class as indicated below.

Hollingshead's Two Factor Index of Social Position.--The most essential indicators of social position in the

socioeconomic hierarchy of our society are the occupation of the head of the family, the number of years of education completed by him (or her), and the residence of the family. The Hollingshead (1957) Two Factor Index of Social Position abstracted two strong indicators of social class, occupation and education, which were used in the present study. In a city as large and diversified as New York, the use of residence as an indicator of social position is more complex than was Hollingshead's task in New Haven in 1958.

The use of a seven-point scale for classification of occupation is based on the assumption that the greater the skill, creativity and/or the supervision and direction of others, the higher the social and economic ranking in the social structure. Table 3.7 provides the occupational scale (Hollingshead, 1957) used to rate a listener's parents. A subject who had one parent employed as a lawyer, for example, received a rating of 1 while a subject whose parent was a tailor was rated as 5. According to the Hollingshead formula, the occupational factor was multiplied by 7, a weight determined by multiple correlation techniques.

TABLE 3.7

OCCUPATIONAL SCALE

Rating	Occupation	Examples
1	Major professionals, higher executives, proprietors of large concerns	Doctor, lawyer, accountant (CPA), teacher (college)
2	Lesser professionals, business managers, proprietors of medium businesses	Teacher (elementary, high), social worker, nurse
3	Semi-professionals, small business owners	Photographer, court reporter, supervisor
4	Clerical and sales workers, technicians	Postal clerk, bookkeeper, factory supervisor, investigator
5	Skilled (and protective workers)	Carpenter, plumber, fireman, policeman, mechanic
6	Semi-skilled and machine operators	Meter reader, dressmaker (factory), practical nurse, waiter, waitress (in better places)
7	Unskilled	Janitor, street cleaner, laborer, odd jobs, unemployed

The use of the seven-point scale for classification of education is based on the premise that education reflects knowledge, cultural tastes, and a particular life style. Furthermore, it is believed that those who possess similar tastes and similar attitudes exhibit similar life styles. The higher the educational level achieved, the higher is the ranking on the scale as indicated below in Table 3.8. A

subject whose parent was a college graduate, for example, received a rating of 2 and a subject whose parent completed elementary school received a rating of 6. The educational factor was given a weight of 4 in accordance with the Hollingshead formula.

TABLE 3.8

EDUCATIONAL SCALE

Rating	Educational Level
1	Professional training beyond the BA.
2	Graduated from college (4 yr. College).
3	Completed some college.
4	Graduated from high school.
5	Completed some high school.
6	Graduated from elementary school or junior high.
7	Completed some elementary grades.

The calculation of the Index of Social Position for an individual subject was based on application of the appropriate weights for each factor, multiplying them by the scale ratings, and summing them to obtain a social index score. For example, a subject-listener whose father was an elevator mechanic and completed some high school received scale ratings of 5 and 5 for each factor (see Tables 3.7 and 3.8). The ratings were multiplied by 7 and 4, the respective weights. The results were summed to obtain a composite score as indicated below.

Factor	Scale Rating		Weight	Rating x Weight
Occupation (Elevator mechanic)	5	x	7	35
Education (Partial high school)	5	x	4	20
Composite Score				55

The range of computed scores extending from 11-35 for the upper socioeconomic strata included middle and upper class subjects. The computed scores for the lower socioeconomic level ranged from 36-77 according to the Hollingshead procedure and included the working class and lower middle class subjects. A social description of these informants in the study is provided in Appendix D. Thus, the Index of Social Position is considered a relative measure of the individual's position in the community's social structure.

Measurement of Attitudes Toward the Speech Patterns.--Nine seven-point, bipolar adjectival scales were used to secure the subjects' affect reaction to the concept, Speech Patterns, of each speaker (Appendix C). The nine scales were: good-bad, clean-dirty, acceptable-unacceptable, pleasant-unpleasant, strong-weak, active-passive, sharp-dull, effective-ineffective, clear-unclear. All semantic differential scalings included the following scoring procedures. Responses on the extreme negative end of the scale were assigned a rating of 1, signifying "least pleasant," for example. Responses on the extreme positive end of the scale were assigned

a rating of 7, indicating "most pleasant." The intervals next to either extreme were designated, for example, as "quite pleasant," or "quite unpleasant" and were valued as 6 and 2 respectively. Intervals on either side of the neutral cell were designated as "somewhat pleasant," for example, or "somewhat unpleasant" and were valued as 5 and 3 respectively. The neutral interval or the center of the scale was assigned a rating of 4. Summing across all nine scales resulted in an attitude score toward the speech patterns of each speaker. A score of 63 indicated the most positive impressions obtainable. A score of 9 was the most negative evaluation of the speech pattern possible. The instructions in the use of the semantic differential and the form to be completed by the subjects in the study are presented in Appendices B and C.

Measurement of Attitudes Toward Speaker Credibility.--McCroskey's (1966) scales for the measurement of speaker credibility identify two factors, authoritativeness and character. These dimensions are similar to the competence and trustworthiness concepts developed by Berlo and Lemert (1961), and used by Buck (1968) in an earlier study.

As presented in Appendix C, twelve seven-point, bipolar, adjectival scales measured the competence and the trustworthiness of the speaker. Six scales measured competence and these are: expert-inexpert, informed-uninformed, qualified-unqualified, reliable-unreliable, intelligent-unintelligent, worthless-valuable. With 7 as the most

favorable rating possible and 1 as the least favorable rating possible, the six scales are summed to form an attitude score toward the perceived competence of each speaker.

Six scales measured the trustworthiness or character of the speaker. These are: pleasant-unpleasant, nice-awful, friendly-unfriendly, virtuous-sinful, selfish-unselfish, honest-dishonest. The scoring methods are the same as those above with the most extreme positive reaction assigned 7 and the most extreme negative reaction assigned a score of 1. Summing across six scales provided the attitude scores for perceived trustworthiness for each speaker. A total score of 42 was the most favorable evaluation possible.; a total score of 7 was the most unfavorable evaluation possible for each measure.

Evaluations of Personal Characteristics of the Speakers.-- Ratings of personality and identification of the race of the speaker were obtained from responses recorded in the form, Personal Characteristics of the Speaker, given in Appendix C. The four seven-point, bipolar scales used in the study were: attractive-unattractive, bright-dull, introverted-extroverted, popular-unpopular. They were included in the study to determine if judgments of perceived personality characteristics are congruous with judgments of speech behavior. The same scoring system as indicated above was applied; the sum of the four scales provided the score of the perceived personality evaluation for each speaker. A total score of 28 was the

most favorable evaluation possible; a total score of 4 was the least favorable evaluation possible.

The identification of race was obtained by a seven-point bipolar scale bounded by "dark skinned-light skinned." In this instance, scoring was not numerical. Ratings given on one side of the neutral interval, the fourth space, in the seven-point scale, were regarded as an indication of a Negro race identification. Ratings on the other side of the neutral category in the direction of the adjective "light skinned" were scored as a white race identification. Ratings in the fourth space were viewed as an undecided response or an unwillingness to stereotype on the part of the subject-listener.

Measurement of Attitudes Toward Occupational Suitability of Speakers.--One of the ways in which we recognize social standing is in the hierarchy of occupations. Occupations have different socioeconomic values attached to them by members of our society. According to Hollingshead (1958, p. 391), "the hierarchy ranges from the low evaluation of unskilled physical labor toward the more prestigeful use of skill through the creative talents, ideas and the management of men."

Labov (1966, p. 412) points out that almost all members of society share these middle class values in perception of this hierarchy and they display this by recognizing and associating standard phonological variables with higher ranked occupations. Labov used a similar scale of Occupational

Suitability in which subjects indicated the position suitable for an individual uttering sentences in which phonological variables were embedded. His results revealed that most of his informants regardless of social class associated standard phonological variables with more prestigious occupations.

This study used a somewhat similar test to ascertain the expectations of socially stratified college students concerning the occupational suitability of the speaker. As presented in Appendix C, the measurement of Projected Occupational Suitability included the use of a seven-point bipolar scale bounded by "suitable-unsuitable" for each of eight occupations. These are: newscaster, teacher, nurse, clerk, supervisor, telephone operator, maid, and waitress. The subject-listener designated his impressions of the occupational suitability for each speaker based on the speech patterns of the speaker.

In addition, an estimation of the cultural view of the occupational hierarchy held by the listener was obtained. Subjects were requested to rank the occupations in the order of their prestige and importance which they believe exists in this country today. The most prestigious occupation in the listeners' view was ranked 1 and the least prestigious occupation was ranked 8.

Measurement of Intelligibility of the Four Speakers.--Intelligibility tests have been primarily part of an audiological battery of tests and have been designed to measure

the number of words recognized by the auditor at threshold and comfort levels of hearing acuity for speech. Generally, the stimulus words have been monosyllabic words on the premise that these stimuli are far more difficult to recognize than sentence context materials. Speakers who read word lists produce closer approximations to standard style than are observed in their oral reading passages or in casual conversations. This was also noted by Labov (1966) and by Wolfram (1969).

The purpose of this measuring instrument was to determine which dialectal pattern was more intelligible on the basis of the auditory perception of taped monosyllables. Furthermore, the study was concerned with the effects of the dialects of the speakers, and of the race and class of the listeners on the intelligibility of monosyllables produced in the three dialects.

The Multiple Choice Intelligibility Tests devised by Black (1955) were modified for the purposes of this investigation which required group rather than individual testing. The thirty-six stimulus monosyllabic words selected were those susceptible to specific phonological variations which marked the three dialectal patterns observed. These are presented in Appendix C along with the multiple choice response sheet described below. The test construct was derived from Labov's observations of the numerous homophonous words apparent in NNE due to the application of phonological rules which differ from those of standard dialect. Such rules, for

example, were the simplification of final consonant clusters as in belt which reduces to bell, the merging of phonemes as in chair which is realized as cheer in NNE, substitituion as in Ruth which becomes roof, and deletions as in line which is often produced in NNE as lie with a nasalized vowel or diphthong replacing n.

Each subject had a set of four answer sheets, one for each speaker. The response sheet contained sets of three words which are minimal or nearly minimal pairs and prone to acoustic confusions. One word in each set of the three words corresponds to the word heard on the tape. The listener upon recognizing the oral word crossed out its written counterpart. When the listener did not cross out the word spoken by the speaker, this constituted an "error"response. The obtained listening score was the number of "error" responses made for each speaker.

Selection of Subjects

Approximately 150 college students in New York City recorded data for this study. However, due to the criteria of age, race, schooling, educational and occupational status of the parents, linguistic background, birth place and length of residency in New York, many students were automatically eliminated by the analysis of the Identifying Information Form.

Forty college students, aged 18-26, constituted the subjects used in this study. According to their teachers, these students had normal hearing acuity and a minimum of eleventh grade reading level. All students were monolingual

in English, and were born and reared in New York City. Application of the Hollingshead (1957) Two Factor Index of Social Position, a social stratification procedure (which combined education and occupation scores assigned to each subject), resulted in four socioethnic groups consisting of ten students in each group: twenty black students in upper and lower socioeconomic strata (UB, LB) and twenty white students in upper and lower socioeconomic strata (UW, LW). All students in each group met the requirements of the criteria for inclusion in each social class. This was described more fully above in the section on Measuring Instruments. An equal number of males and females comprised each group. The following represents the cell design distribution of the study:

	Status	
	Upper	Lower
Black	10	10
White	10	10

In various colleges throughout New York City (for example, New York University, Hunter College, Queens College, and New York City Community College) and in specially arranged groups, randomized students (including the subjects in the study) listened first to the tapes of each of the four speakers reading a one-minute passage from Alice in Wonderland (Appendix E). After hearing each speaker, subject-listeners completed response forms related to their impressions and judgments (Appendix C). Secondly, they then listened to the

tape recording of 36 monosyllic word lists produced by the same four speakers (Appendix C). While each speaker was reading, subject-listeners indicated the recognized word on a special answer sheet (Appendix C). All speakers spoke in clear voices in optimal pitch. There were no outstanding characteristics which called attention to the voice quality.

Selection of Speakers

Four female speakers representative of standard and nonstandard dialects in New York City recorded a one minute two hundred word reading passage presented in Appendix A. On another tape, they also recorded the 36 monosyllabic words which served as the message stimuli in the intelligibility test described previously in Measuring Instruments. One white speaker and one black speaker were selected as representative speakers of standard dialect in New York City according to the procedures described below. Similarly, one white speaker and one black speaker were chosen as representative speakers of nonstandard dialects in New York City.

Five teachers of speech (including two specialists in speech pathology) served as judges, listening separately to each tape recording to ascertain that each speaker was representative of a particular dialect. All judges were skilled in phonetic transcription and sensitive to variant dialectal patterns in New York City. All judges had a minimum of ten years' experience either in speech therapy or in teaching

speech courses in college. They were requested to indicate on a simple check list the standard-nonstandard quality of the pronunciation patterns of the speaker, and the race and sex identification of the speaker. No evaluations such as "standard" or "nonstandard," or information regarding the race or sex of the speaker were given.

There was unanimous agreement among the judges that the speaker on Tape I was a white female, exemplifying standard New York dialect (Network), and that the speaker on Tape II was a negro female, also a user of standard or network dialect. All judges identified the speaker on Tape III as a white user of nonstandard "New Yorkese" and they also agreed that the speaker on Tape IV was a negro speaker of nonstandard dialect. With this inter-rater agreement, the phonetic variations on each tape were taken to be valid, representative and identifiable examples of variant dialects spoken in New York City.

Selection of Message Stimulus

Since the sensitivity of reaction to dialectal variations can be better realized and appreciated in more formalized styles, a standard reading passage was used. This procedure also insured a uniformity in message stimuli for all four speakers. It is noteworthy that closer approximations to standard style occur in oral reading rather than in casual speech (Labov, 1966); therefore, any differences in reactions to the speakers are that much more significant and powerful since dialectal differences are lessened in oral reading.

The passage selected was from Alice in Wonderland. This particular passage was chosen for several reasons. First, it consists primarily of one and two syllable words, and the nature of its dialogue permits a more natural quality to be emitted by speakers. According to the Flesch Readability Formula (Flesch, 1951), this passage is on the ninth grade reading level. Second, the structures of the words allowed phonetic variability to appear readily. Specific linguistic features which are socially significant are listed in Table 3.5. Further descriptions of phonological variations are given in the definitions of significant terms.

Test Administration

The tests were generally administered to groups of students which varied from fifteen to twenty-five in a classroom setting. The Wollensack Tape Recorder 1500 model was used in a free field testing situation. The use of a normal setting with typical environmental noise such as outside traffic differed from previous studies in which acoustic conditions were controlled by use of earphones. The ambient noise level averaged from 40-45 decibels. The speakers were randomized to ensure against any order effects. Furthermore, the subjects, even within a social group, heard the speakers in different positions on the tape.

The following procedures were used during the experimental situation. Instructions were given along with the booklets at the onset of the session, one classroom period (Appendix B). Identifying Information Forms were either

completed prior to this session or at the beginning of the experiment. Just prior to the actual test, a trial run was made to enable speakers to familiarize themselves with the forms and the procedures. Approximately halfway through the tape of each speaker, students were signalled to begin recording their responses.

In Stage I, they recorded their impressions of the speech patterns of the speaker (during and directly after each speaker) using nine bipolar scales provided (Appendix C). In Stage II, subject-listeners checked six bipolar, adjectival scales related to competency, and six bipolar, adjectival scales related to trustworthiness of the speaker (Appendix C). In Stage III, subjects indicated their expectations of the occupational suitability of the speaker on a form sheet providing eight occupations on the socioeconomic hierarchy (Appendix C). In Stage IV, listeners recorded their impressions of the personal characteristics of the speakers which included race indentification, and the personality attributes indicated in four bipolar, adjectival scales (Appendix C). Students had a few minutes to rest before hearing the next speaker.

After the reading passages of the four speakers had been heard and appropriate response forms completed, the fifth stage of the study began. This included listening to readings of the 36 word list and indicating on a form sheet the appropriate word heard (Appendix C). The entire session took approximately 40-45 minutes. By the close of the session

each student had completed five booklets with four response sheets in each. Four booklets, one per speaker, included the semantic differential attitude measurement sheets. The fifth booklet included the response sheets for the intelligibility test; one sheet was used for each speaker.

Summary

In this Chapter, we have discussed the methods and procedures used in the present investigation of the evaluative reactions of black and white, lower and upper status college students to the phonological variations of black and white speakers in New York City. Application of the Hollingshead Two Factor Index of Social Position (1957) resulted in distinguishing low socioeconomic black and white students from upper socioeconomic black and white students.

Forty college students, aged 18-26, monolingual in English, and native New Yorkers, listened to the randomized taped readings of representative speakers of standard or network dialect, "New Yorkese," and Black Dialect, three dialects commonly heard in New York City. Subjects recorded their impressions of the speech patterns, of the competence, trustworthiness, personality and occupational suitability of the speakers on the basis of differentiating speech cues. The test materials included semantic differential forms in which seven-point, bipolar, adjectival scales were used.

A second section of the study was concerned with the intelligibility of the three dialects. Subjects listened

to thirty-six monosyllabic words read by each of the four representative speakers and recorded their recognition of the words perceived in a specially designed Multiple Choice Intelligibility Test.

Description of the statistical procedures applied to the data and the results and discussion of the study are presented in Chapter IV. Summary, conclusions and implications are provided in Chapter V.

CHAPTER IV

RESULTS AND DISCUSSION

The results and discussion of the study are presented in this chapter. The first section provides a review of the scoring methods and the statistical procedures applied to the data. In the second section, the findings and interpretations are presented.

The collection of the data for the study was obtained through the administration of several tests designed to rate attitudes or affect reactions. Five tests utilized the semantic differential technique. These tests were: 1) the measurement of attitudes toward the speech patterns of each representative speaker, 2) the measurement of attitudes toward the perceived competence of the four speakers, 3) the measurement of attitudes toward the perceived trustworthiness of the speakers, 4) ratings of the personal characteristics of the speakers, and 5) ratings of the occupational suitability of the four representative speakers heard in random order on tape. In addition, the occupations considered in the study for listeners' judgments of speaker suitability were ranked for position in the socioeconomic hierarchy by the subject-listeners. Lastly, the listeners' perceptions of the dialects produced by the speakers were tested in four intelligibility tests. A total of seven

tests were given to randomized subjects. These are discussed below in terms of the scoring of the data obtained from the contributions of forty listeners who rated each of the four speakers.

Identifying data such as residence, geographic origin, and socioeconomic status of the families of the forty listeners were tabulated for selection of the subjects and are presented in a social description of the informants found in Appendix D.

Analysis of the Data

Here the scoring procedures and the methods of statistical analysis are presented.

Scoring

The measurement of attitudes toward the speech patterns of each speaker involved nine seven-point bipolar scales (Appendix C). The most positive reactions were rated 7; the least favorable reactions were rated 1. Summing across the nine scales resulted in the highest possible score of 63, the lowest possible score was 9. A mean profile of the composite scores obtained is shown in Appendix F.

The measurements of attitudes toward the concepts of competence and of trustworthiness involved similar scoring methods. Six seven-point bipolar scales were given for each concept (Appendix C). The most positive ratings were scored 7, the most negative ratings were scored 1. Adding across the six scales resulted in the highest possible

score of 42; the lowest possible score was 6. Thus, impressions of speaker credibility were obtained from two scores, namely, a perceived competence score and a perceived trustworthiness score. A mean profile of the composite scores obtained is shown in Figure 4.2 in Appendix F.

Impressions of the personality and the appearance of the four speakers were obtained through a measurement test which consisted of four seven-point bipolar scales embedded among ten other related scales (Appendix C). The most favorable ratings were again scored 7; the least favorable ratings were scored 1. By summing across the four scales, the highest possible score obtained was 28, the lowest possible score was 4. Included among these scales was the determination of race identification. Ratings toward the "light-skinned" end of the scale were considered as identifying a white speaker (W). Ratings toward the "dark-skinned" end of the scale were considered as identifying a black person (B). Ratings on the central or neutral space in the seven-point scale were recorded as neutral (N). A mean profile of the composite scores obtained is shown in Figure 4.4 in Appendix F.

The ratings of the occupational suitability of each speaker were based on the presentation of eight occupations serving as concepts and one seven-point scale bounded by "suitable-unsuitable" for each occupation (Appendix C). Again, the highest rating of "most suitable" was 7, the lowest rating of "least suitable" was 1. Each speaker, then, was given eight ratings, one rating for expected

suitability in each of the eight occupations. The determination of a speaker's suitability for a particular occupation was made by summing the listeners' ratings. For example, all ratings of the suitability of speaker 1 as a newscaster were summed and then divided by 40, the number of listeners. A mean rating of occupational suitability as a newscaster was thus obtained. Similarly, all the ratings of the suitability of speaker 1 as a waitress were summed and a mean rating was obtained for later comparisons. This procedure was followed for all eight occupations for each speaker.

A ranking in terms of prestige of the eight occupations was made by each of the listeners (Appendix C). A rating of 1 was given to the occupation deemed most prestigious in this country. A rating of 8 was given to the occupation deemed least prestigious. Thus, our discussion of the cultural view of relative occupational importance is determined by the mean sum of the ratings given to each occupation by the ten listeners in each of the four social groups. These were lower socioeconomic black and white students (indicated below as LB and LW) and upper socioeconomic black and white students (indicated below as UB and UW).

The scoring of the four intelligibility tests consisted of totaling the error responses made by each of the forty listeners for each of the four speakers. The maximum number of errors possible for each speaker was 36 which was the total number of monosyllabic words uttered in each test.

Altogether, there were 160 listening scores made by the 40 subjects listening to randomly positioned speakers.

The basic concerns underlying the following statistical analyses were to measure the effects of the phonological variations of the representative speakers on the social perceptions of the socially heterogeneous listeners, to measure the intelligibility of monosyllables produced in each dialect, and to measure the influence of race and class of the listeners upon their attitudes.

Statistical Procedures

The data from five tests were analyzed with a three-way fixed effects analysis of variance (4 x 2 x 2) with ten replications in each cell provided by ten listeners. The main effects are designated in the related tables as the A factor which is related to the four speakers (1, 2, 3, 4), the B factor which is related to the two levels of races (black and white), and the C factor which corresponds to the two levels of socioeconomic classes (lower and upper). The interactions considered are the speakers x race (AB), the speakers x social class (AC), and the race x the social class (BC). Another source of variation is the consideration of the triple interaction, the speakers x race x social class (ABC). The statistical significance of the main effects and the interactions, respectively, was tested using the F ratios. The denominator of the F ratio was the within cell error variance, the estimate of experimental error for all main effects and interactions (Edwards, 1964, p. 176). The level of significance was set at .05.

In order to investigate differences between the sixteen means of the three-way interaction (ABC), the Duncan Multiple Range Test was applied. This procedure permitted a comparison of the means to determine significant differences between the speakers for all forty listeners, and certain comparisons within and between the speakers for each of the four social groups. The level of significance was set at .05.

The Spearman Rank Order Correlation Coefficient (Rho) was obtained in order to determine the relationships between listeners' attitudes toward speech patterns and their attitudes toward such perceived psycho-social attributes as credibility, personality, and occupational suitability of unseen speakers. Furthermore, it was used to measure the correlations between occupation suitability and the expected psycho-social characteristics of the speakers--speech patterns, competence, trustworthiness, and personality. In this statistical procedure, ranks rather than raw scores are used.

The significance of the Rho, a measure of the correlation between ranks (Edwards, 1964, p. 78) was determined by the use of the $\underline{t}$ test of the hypothesis of zero correlation. This procedure tests the null hypothesis that the two variables are not associated in the population and that the observed value of the r_s (Rho) differs from zero only by chance.

The data concerning the perceived attitudes of occupational suitability of each speaker held by each of the

socially different groups were treated by the t test in order to ascertain the significance of the difference between two means (Edwards, 1964, p. 88). In this instance, we were not concerned with obtaining an overall significance of the main effects and of the interactions. Furthermore, the values dealt with in this measurement of occupational suitability were extremely small. Our chief concern was with individual comparisons between the means of two social groups' suitability ratings of any two speakers for a particular occupation. In view of this, it was preferable to obtain a t rather than an F. The level of significance was set at .05.

Orthogonal comparisons were made in order to analyze the combined reactions to the two standard speakers against the combined reactions to the two nonstandard speakers (Edwards, 1964, p. 141). The level of significance was set at .05.

Findings and Interpretations

The results of the study are given below along with their respective discussions which relate to the hypotheses tested and to the findings of previous research. The results and discussion are presented under each of the tests administered. The tests are the measurements of reactions to the speech patterns and of the perceived competence, trustworthiness, and personality of the representative speakers. In addition, ratings of the occupational suitability of the speakers were obtained. Through speech perception testing,

the intelligibility of the speakers was determined. The results of the first four tests are discussed with respect to the main effects and the interactions, to the comparisons of the means between and within the speakers, and to the orthogonal comparisons.

Reactions to Speech Patterns

Results

Summary of the analysis of variance of the attitudes toward the speech patterns of the four representative speakers is given in Table 4.1.

TABLE 4.1

ANALYSIS OF VARIANCE OF ATTITUDES TOWARD SPEECH PATTERNS

Source of Variation	SS	df	MS	F*	p
A Speakers	9374.56	3	3124.85	25.08	.001
B Race	13.80	1	13.80	9.02	n.s.
C SES	12.65	1	12.65	9.84	n.s.
AB	297.92	3	99.30	1.25	n.s.
AC	27.26	3	9.08	13.70	.05
BC	74.25	1	74.25	1.67	n.s.
ABC	337.46	3	112.48	1.10	n.s.
Total					
Among	10137.94	15			
Within	17936.3	144	124.55		

*When F values were less than 1, the F ratio was reversed in order to use the F table (df = 144/1).

Main Effects and Interactions.--Significance of the main effects and the interactions are ascertained by the F scores. Significant F scores indicate that most of the differences between the means are not due to sampling errors. Therefore, the null hypothesis is rejected and the alternative research hypotheses are accepted that the means are not equal. Results reveal that the A factor, the differences among the speakers, is highly significant ($F = 25.087$, $df = 3/144$, $p < .001$) in affecting the listeners' attitudes toward the speech patterns. Neither race nor social class (B and C factors) were singularly significant as sources of variation indicating no significant differences between black and white listeners and no significant differences between upper and lower class listeners.

However, the significant interaction of the speakers and the social class of the listeners (AC) indicates ($F = 13.7034$, $df = 3/144$, $p < .05$) that while predominant in influencing the reaction score, the A factor is not completely independent of the C factor (social class). In other words, the effect of the speakers upon the reaction scores to speech patterns is not the same for listeners of upper and lower socioeconomic status. The nonsignificant AB interaction (speakers and race of the listeners) indicates that regardless of the race of the listeners, there is approximately the same difference between the effects of the speech patterns upon listeners for black and white races in this study. The mean reaction scores to all speakers are approximately

the same for black and white listeners. The nonsignificant BC interaction and ABC interaction indicates that beyond the main effects, these combinations of factors did not contribute to the variations in the evaluations of speech patterns.

Mean Comparisons of the Speakers.--Table 4.2 presents the mean attitude scores toward the speech patterns of the four speakers. Speaker 1 was considered a standard white speaker (SW), speaker 2 was considered a standard black speaker (SB), speaker 3 was identified as a nonstandard white New Yorker (NSW), and speaker 4 was identified as a nonstandard black speaker (NSB).

TABLE 4.2

MEAN ATTITUDE SCORES TOWARD SPEECH PATTERNS

	Speakers			
RXC	1 (SW)	2 (SB)	3 (NSW)	4 (NSB)
LB	47.1	47.1	37.5	35.8
LW	49.9	56.7	31.9	36.8
UB	50.0	52.4	34.0	36.8
UW	50.5	51.8	34.4	35.4
Total Means	49.4	52.0	34.4	36.7

Speech patterns of speakers 1 and 2, the standard speakers, produced similarly favorable reactions. The total mean reaction scores were $\bar{X}_1 = 49.4$ and $\bar{X}_2 = 52$. The total mean reaction scores for speakers 3 and 4, the nonstandard

speakers, were also similar to each other but unfavorable as compared to the standard speakers ($\bar{X}_3 = 34.4$, $\bar{X}_4 = 36.7$). A statistically significant difference ($p < .05$) was found in the listeners' preferences for the speech patterns of the standard black speaker 2 as compared to the nonstandard black speaker 3. However, examination of Table 4.2 indicates a definite trend in the direction of favoring the standard speech patterns when the total reactions of forty listeners are considered.

Mean Comparisons of Triple Interactions.--Sixteen means of the triple interactions, speaker, race and class (ABC), were explored through the Duncan Multiple Range Test of the comparison of means between and within the speakers. The significant differences in the mean ratings of the speech patterns are shown in Table 4.3. In this table, a summary of the preferred speakers as judged by socially different listeners is given. The means and the mean differences are provided along with their significance levels. For example, LB gave significantly higher ratings to speaker 1 than to speaker 3. This is indicated as $1 > 3$. The difference between the ratings is 9.3 which is significant at the .05 level.

In the comparisons between the speakers, all four groups preferred the speech patterns of standard speaker 1 to the nonstandard speakers 3 and 4. They also preferred the speech patterns of the standard black speaker 2 to the nonstandard speakers 3 and 4. Three groups, the LW, UB,

TABLE 4.3

SUMMARY OF DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO SIGNIFICANT DIFFERENCES IN MEAN RATINGS OF SPEECH PATTERNS

Listeners	Preferred Speakers	$\bar{X} - \bar{X}$	Mean Difference	p
LB	1 > 3*	47.1-37.5	9.6	.05
	1 > 4	47.1-35.8	11.3	.05
	2 > 3	47.1-37.5	9.6	.05
	2 > 4	47.1-35.8	11.3	.05
LW	1 > 3	49.9-31.9	18.0	.01
	1 > 4	49.9-36.8	13.1	.01
	2 > 3	56.7-31.9	24.8	.01
	2 > 4	56.7-36.8	19.9	.01
UB	1 > 3	50.0-34.0	16.0	.01
	1 > 4	50.0-38.8	11.2	.05
	2 > 3	52.4-34.0	18.4	.01
	2 > 4	52.4-38.8	13.6	.01
UW	1 > 3	50.5-34.4	16.1	.01
	1 > 4	50.5-35.4	15.1	.01
	2 > 3	51.8-34.4	17.4	.01
	2 > 4	51.8-35.4	16.4	.01
LW > LB**	2	56.7-47.1	9.60	.05
All***	2 > 3	52.0-34.45	17.55	.05

*Speaker 1 was rated higher than speaker 3 by the LB.

**Speaker 2 was rated more highly by the LW than by the LB.

***All 40 listeners rated speaker 2 higher than speaker 3.

and UW, rated the standard speech patterns significantly higher than the nonstandard speech patterns ($p < .01$). The LB group was marked by its preference for the standard speakers at $p < .05$. Both the LB and UB significantly preferred the speech patterns of speaker 1 to those of speaker 4, the nonstandard black speaker ($p < .05$). There were no significant differences between the reactions to the speech patterns of speaker 1 and speaker 2. Also, there were no significant differences between the reactions to the speech patterns of the nonstandard speakers 3 and 4.

In the comparisons within the speakers, there was a fair amount of consistency of reactions between the social groups. For example, the mean reactions of each group to speaker 1 were not significantly different. The LB tended to favor the speech patterns of the standard white speaker least. There were no significant differences among the social groups in their attitudes toward the speech patterns of speaker 3 and of speaker 4. The UB tended to favor the speech patterns of speaker 4 the most. The LW had a significantly greater preference for speaker 2 than did the LB (p .05).

Orthogonal Comparisons.--The results of this procedure are given in Table 4.4. The speech patterns of the standard speakers 1 and 2, when combined, were significantly preferred over the combined reaction scores to the speech patterns of the nonstandard speakers 3 and 4 ($p < .001$). Although the LB indicated a significant preference for the standard speakers

TABLE 4.4

ORTHOGONAL COMPARISONS OF COMBINED REACTIONS TO THE SPEECH PATTERNS OF STANDARD AND NONSTANDARD SPEAKERS

	Speakers	Coeffieicnt a	$\bar{X}$	$a\bar{X}$	t	p
Between	1	1/2	49.3	24.6	8.56	.001
	2	1/2	52.0	26.0		
	3	-1/2	34.4	-17.2		
	4	-1/2	36.7	-18.3		
		0		15.1		
		1				
Within	LB					
	1		47.1	23.5	2.96	.01
	2		47.1	23.5		
	3		37.5	-18.7		
	4		35.8	-17.9		
		0		10.4		
		1				
	LW					
	1		49.9	24.9	5.37	.001
	2		56.7	28.3		
	3		31.9	-15.9		
	4		36.8	-18.4		
		0		18.9		
		1				
	UB					
	1		50.0	25.0	4.19	.001
	2		52.4	26.2		
	3		34.0	-17.0		
	4		38.8	-19.4		
		0		14.80		
		1				
	UW					
	1		50.5	25.2	4.60	.001
	2		51.8	25.9		
	3		34.4	-17.2		
	4		35.4	-17.7		
		0		16.2		
		1				

($p < .01$), this was not as marked as the favorble impressions formed by the UW, LW, and UB ($p < .001$). The sum of the differences between the combined reactions obtained by the LB was the smallest of all the groups. This was shown by the smallest calculated t ($t = 2.96$, $df = 144$, $p < .01$) which was an indication that LB did not favor or disfavor speech patterns quite as strongly as did the other groups. The calculated t ($t = 5.37$, $df = 144$, $p < .001$) for the LW was far greater than for the other groups. Apparently for the LW, there was a greater difference between the combined reactions to the standard speech patterns of speakers 1 and 2 and the combined reactions to the nonstandard speech patterns of speakers 3 and 4. The LW according to these results highly favored standard patterns and highly disfavored the nonstandard patterns.

Discussion

Main Effects and Interactions.--The general null hypothesis 1 was rejected ($p < .001$) and the alternative research hypothesis was accepted: there are differences among the speakers which contribute significantly to the variations in attitudes toward the speech patterns. The null hypothesis 2 was not rejected. There is no reason to suspect that there are differences between the race levels of the listeners which affect the attitudes toward speech.

The factor of race alone does not affect variations in attitudes. Attitudes toward speech patterns are the same for both races. The null hypothesis 3 was not rejected.

There appear to be no differences between the variations in attitudes for upper and lower socioeconomic status listeners. The factor of class alone does not affect attitudinal scores. The general null hypothesis 4 was not rejected. There is no reason to suspect that there are differences in the interaction of speaker and race (AB) of the listener which contribute to the variation of the reaction scores.

The null hypothesis 5 was rejected ($p < .05$) and the alternative research hypothesis was accepted: there are differences in the interaction or combination of speaker and class of listeners which contribute to variations in attitudes. This means that the reaction scores differed for upper social status subjects combined with the speaker factor and lower social status subjects combined with the speaker factor.

The null hypothesis 6 was not rejected. There is no reason to suspect that attitudinal scores were affected by race and class of the listeners. The scores did not vary for black and white listeners from upper and lower social classes.

The null hypothesis 7 was not rejected. There was no reason to suspect that the combination of factors, AxBxC, the triple interaction of the race and class of the listeners and the speakers contributes to the variations of attitudes. Since the basic concerns of the study were the attitudes of social groups toward the speakers, it was not necessary for the treatment square of the ANOVA to be significant in order

to pursue the comparison of the triple interaction means (Edwards, 1964, p. 136).

Hypotheses 1-3 relating to the reactions toward the speech patterns of the representative speakers were not completely rejected by the results. Hypothesis 1 and 2 were not rejected by the results of the study which revealed that there were no differences between the ratings of the standard speech patterns of speakers 1 and 2. Nor were there significant differences in the attitudes toward the nonstandard speech patterns of speakers 3 and 4. Hypothesis 3 was rejected ($p < .01$); the alternative research hypothesis was accepted due to the findings of significant differences between the attitudes toward standard speech patterns and nonstandard speech patterns. The standard dialects of speakers 1 and 2 were rated significantly higher than the nonstandard dialects of speakers 3 and 4.

Mean Comparisons of Triple Interactions.--Hypotheses related to the comparisons of the mean ratings toward speech patterns made by each social group are numbered 16-27. Hypotheses 16-19, which referred to the comparisons of the attitudes or the UB and LB listeners were not completely rejected by the findings of the study. Hypotheses 16 and 17 were not rejected; the UB and LB listeners did not significantly differ in their attitudes toward the speech patterns of standard speakers 1 and 2. Nor did they differ in their attitudes toward the nonstandard speech patterns of speakers 3 and 4.

Hypotheses 20-23 which referred to the comparisons of the LW and UW listeners' attitudes toward the speech patterns of the representative speakers could not be rejected. Hypotheses 20 and 21 were not rejected. The LW and the UW did not differ significantly in their attitudes toward the standard dialects of speakers 1 and 2. Nor did they differ in their attitudes toward the nonstandard dialects of speakers 3 and 4. Hypotheses 22 and 23 were rejected ($p < .01$); the alternative hypotheses were accepted on the basis of the results that both groups of LW and UW rated standard speech patterns significantly higher than nonstandard speech patterns.

Hypotheses 24 and 25, which referred to the comparisons of the LB and LW listeners' attitudes, were not rejected by the findings that the standard dialects were not judged significantly different by these two social groups. Nor were there significant differences in their attitudes toward the nonstandard dialects. Hypotheses 26 and 27, which referred to the comparisons of the UB and UW listeners, were not rejected; both these social groups did not differ significantly in their attitudes toward the standard speech patterns. Nor were there significant differences in their attitudes toward the nonstandard speech patterns.

Studies by Lambert in Canada (1962) by McCormack in India (1960), by Labov (1966, 1968), and Buck (1968) in New York City have shown that speech cues serve to identify ethnic or social class membership; consequently, value

judgments are assigned to the speech patterns generated by all speakers. Such speech patterns as accented English spoken by Canadian Jewish speakers and by Canadian French speakers, "New Yorkese" spoken by lower class white persons in New York City, pronunciation differences among the non-Brahmins in India, and nonstandard Negro English (Black Dialect) spoken chiefly by lower status black speakers were generally perceived negatively by listeners from all social strata in a given culture. Conversely, the dialects of the dominant groups such as standard Network English, Canadian English and the Brahmin dialect were viewed favorably in the social perceptions of the speaker-listeners in a given culture.

Some notable observations in the results of the present study are that the LB who had identified the standard white speaker as white tended to favor him the least. The UB, though not at a statistically significant level, tended to favor the speech patterns of speaker 4 more than did the other social groups, thereby showing identification with a recognized member of their own race (Table 4.2). Furthermore, the LW who did not identify speaker 2 as black rated this speaker significantly more highly than did the LB ($p < .05$). Both the LB and UB significantly preferred speaker 1 to speaker 4 indicating that in spite of the race of the speaker, the standard quality of the dialect may have been a governing factor in their higher rating. Both these groups correctly identified the race of these speakers.

Although the LB rated the standard speech patterns significantly higher than the nonstandard speech patterns ($p < .01$), as did the other social groups, they did not favor or disfavor speech patterns quite as strongly as did the UW, LW, and UB ($p < .001$), according to the results of the orthogonal comparisons. The LW, in direct opposition to the LB, highly favored standard speech patterns and highly disfavored the nonstandard speech patterns. The LW appeared to have more positive attitudes toward the standard speech patterns and more negative attitudes toward the nonstandard speech patterns than did the LB. Therefore, it may be inferred that this group was most strongly influenced by variations in speech patterns, particularly by the standard and nonstandard varieties which they recognized.

Labov's impressions that lower status listeners, particularly the LW listeners, perpetuate class distinctions in their recognition and evaluation of socially significant features were borne out by the results of the orthogonal comparisons in this study.

Reactions to Perceived Competence

Results

A summary of the analysis of variance of the attitudes toward perceived competence of the representative speakers is presented in Table 4.5.

TABLE 4.5

ANALYSIS OF VARIANCE OF ATTITUDES TOWARD COMPETENCE

Source of Variation	SS	df	MS	F*	p
A Speakers	4007.72	3	1335.90	24.98	.001
B Race	29.75	1	29.75	1.79	n.s.
C SES	13.80	1	13.80	3.87	n.s.
AB	217.11	3	72.37	1.35	n.s.
AC	91.46	3	30.48	1.75	n.s.
BC	20.30	1	20.30	2.78	n.s.
ABC	384.57	3	128.18	2.39	n.s.
Total					
Among	4764.74	15			
Within	7699.5	144	53.46		
Total	12464.24	159			

*When F values were less than 1, the F ratio was reversed in order to use the F table (df = 144/1).

Main Effects and Interactions.--According to the results, the A factor, the differences among the speakers, contributes significantly to the reactions of perceived competence of the four speakers ($F = 24.9848$, $df = 3/144$, $p < .001$). The other main effects, race and social class (B and C) do not appear as significant sources of variation. Nonsignificant F scores for the double interactions, AB, AC, and BC, indicate that the combination of factors does not contribute to the overall variation of the measurements of perceived

competence. Regardless of the race or class of listeners, the effect of phonological variations among the speakers operates primarily on the formation of impressions of competence. The magnitude of the effect of the A variable is the same for black and white listeners and for upper and lower status listeners. The mean reaction scores to all speakers is approximately the same for the two levels of races and for the two levels of socioeconomic class. The nonsignificant ABC interaction indicates that beyond the main effects, this combination of factors did not contribute to the variations in the evaluations of competence.

Mean Comparisons of the Speakers.--Table 4.6 presents the mean attitude scores toward the perceived competence of the speakers.

TABLE 4.6

MEAN ATTITUDE SCORES TOWARD COMPETENCE

	Speakers			
RXC	1(SW)	2(SB)	3(NSW)	4(NSB)
LB	31.7	28.4	25.6	24.9
LW	33.3	36.3	19.9	21.7
UB	30.9	32.1	18.1	24.3
UW	34.4	31.7	21.3	24.3
Total Means	32.5	32.1	21.2	23.8

Examination of the total mean impressions of all listeners concerning the competency of the speakers reveals that speaker 1 and speaker 2, the standard speakers, were considered equally competent ($\bar{X}_1 = 32.5$, $\bar{X}_2 = 32.1$). Speakers 3 and 4, the nonstandard speakers, were viewed as similarly competent, although far less competent than the standard speakers ($\bar{X}_3 = 21.2$, $\bar{X}_4 = 23.8$). A statistically significant difference was found in listeners' impressions of greater competence of the standard white speaker (1) compared to the perceived competence of speaker 3, the nonstandard white speaker ($p < .05$). Observation of Table 4.6 reveals a definite trend in the direction of more positive impressions of competence of the standard speakers as opposed to the negative impressions of the competence of the nonstandard speakers when the total reactions of forty listeners are considered.

Mean Comparisons of Triple Interactions.--The Duncan Multiple Range Test was applied to sixteen means of the triple interactions, speaker, race and class (ABC) for a comparison of means between and within the speakers. The significant differences in the mean ratings of perceived competence are presented in Table 4.7. This table presents a summary of the preferred speakers as judged by listeners in the four social groups. The means and mean differences are given along with their significance levels. The notation $1 > 4$ indicates that LB perceived speaker 1 more highly than speaker 4. The difference between the ratings is 6.8

TABLE 4.7

SUMMARY OF DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO SIGNIFICANT DIFFERENCES IN MEAN RATINGS OF COMPETENCE

Listeners	Preferred Speakers	$\bar{X} - \bar{X}$	Mean Difference	p
LB	1 > 4*	31.7-24.9	6.8	.05
	1 > 3	31.7-25.6	6.1	.05
LW	1 > 3	33.3-19.9	13.4	.01
	1 > 4	33.3-21.7	11.6	.01
	2 > 3	36.3-19.9	16.4	.01
	2 > 4	36.3-21.7	14.6	.01
UB	1 > 3	30.9-18.1	12.8	.01
	1 > 4	30.9-24.3	6.6	.05
	2 > 3	32.1-18.1	14.0	.01
	2 > 4	32.1-24.3	7.8	.05
	4 > 3	24.3-18.1	6.2	.05
UW	1 > 3	34.4-21.3	13.1	.01
	1 > 4	34.4-24.3	10.1	.01
	2 > 3	31.7-21.3	10.4	.01
	2 > 4	31.7-24.3	7.4	.05
LW > LB**	2	36.3-28.4	7.9	.01
LB > UB	3	25.6-18.1	7.5	.05
All***	1 > 3	32.58-21.23	11.35	.05

*Speaker 1 was rated higher than speaker 4 by the LB.

**Speaker 2 was rated more highly by the LW than by the LB.

***All 40 listeners rated speaker 1 significantly higher than speaker 3.

which is significant at the .05 level.

In the comparisons between the speakers, it was found that all groups viewed speaker 1, the standard white speaker, as significantly more competent than either the nonstandard black or white speakers, 3 or 4. The LB significantly rated the competence of speaker 1 more highly than the competence of the nonstandard speakers 3 and 4 ($p < .05$). Their peers, however, in the LW and UW groups, made the same determination at the .01 level. Speaker 2 was believed by the LW, UB, and UW to be significantly more competent than speakers 3 and 4 ($p < .01$). Only the LW preferred both standard speakers to nonstandard speakers at the .01 level. All groups found the nonstandard speakers to be significantly less competent than the standard speakers. According to the LB, speakers 2, 3, and 4 were similarly competent. In fact, all groups but the LB believed speaker 2, the standard black speaker, more competent than speakers 3 and 4. The UB group was the only group to find the nonstandard black speaker (4) significantly more competent than the nonstandard white speaker (3) at the .05 level. It may be observed that UB rated the competence of speaker 1 higher than that of speaker 4 at the .05 level. The UW favored the competence of speaker 2 to that of speaker 4 at the .05 level. Speakers 1 and 2, the standard speakers, were not judged significantly different in competence. Nor were there significant differences in the perceived competence of speakers 3 and 4, the nonstandard speakers, except for the ratings of the UB indicated above.

In the comparisons within the speakers, there were no significant differences among the listeners in their attitudes toward the competence of speaker 1. Similarly, the four social groups were also in accord in their attitudes toward the competence of speaker 4. The LW considered speaker 2 significantly more competent than did the LB ($p < .01$). The LB perceived speaker 3 as more competent than did the UB ($p < .05$).

Orthogonal Comparisons.--The results of this procedure as shown in Table 4.8 reveal that the combined reactions to the competence of standard speakers 1 and 2 were significantly more favorable than those of the nonstandard speakers (3) and (4) according to the ratings of competence made by the UW, LW, and UB at the .001 level and by the LB at the .05 level. The LB associated the competence factor with standard speech patterns but not as strongly as did the other groups. This can be observed in the smallest sum of the differences achieved by the LB and reflected in the smallest calculated t ($t = 2.08$, $df = 144$, $p < .05$). The LW obtained the highest calculated t ($t = 6.05$, $df = 144$, $p < .001$) indicating the largest sum of the differences between the combined reactions to the standard speakers and those of the nonstandard speakers, It appears then that LW most strongly associated competence with standard speech patterns and incompetence with nonstandard speech patterns.

TABLE 4.8

ORTHOGONAL COMPARISONS OF COMBINED IMPRESSIONS OF THE COMPETENCE OF STANDARD SPEAKERS AND OF NONSTANDARD SPEAKERS

	Speakers	Coefficient a	$\bar{X}$	$a\bar{X}$	t	p
Between	1	1/2	32.5	16.3	8.52	.001
	2	1/2	32.1	16.0		
	3	-1/2	21.2	-10.6		
	4	-1/2	23.8	-11.9		
		0		9.8		
		1				
Within	LB 1		31.7	15.8	2.08	.05
	2		28.4	14.2		
	3		25.6	-12.8		
	4		24.9	-12.4		
		0		4.8		
		1				
	LW 1		33.3	16.6	6.05	.001
	2		36.3	18.1		
	3		19.9	-9.9		
	4		21.7	-10.8		
		0		14.0		
		1				
	UB 1		30.9	15.4	4.45	.001
	2		32.1	16.0		
	3		18.1	- 9.0		
	4		24.3	-12.1		
		0		10.3		
		1				
	UW 1		34.4	17.2	4.43	.001
	2		31.7	15.8		
	3		21.3	-10.6		
	4		24.3	-12.1		
		0		10.3		
		1				

Discussion

Main Effects and Interactions.--Null hypothesis 1 was rejected ($p < .001$) and the alternative research hypothesis was accepted: there are differences among the speakers which contributes significantly to the variations in attitudes toward competence. Null hypothesis 2 was not rejected. There is no reason to suspect that there are difference between the race levels of the listeners which affect attitudes toward competence. Attitudes toward competence are are the same for both races of listeners. Null hypothesis 3 was not rejected. There appear to be no differences between the variation in attitudes for upper and lower socio-economic status listerners. The factor of class alone does not affect reaction scores. Null hypothesis 4 was not rejected. There is no reason to suspect that there are differences in the interaction of speaker and race of the listener (AB) which contribute to the variation in the attitudinal scores. Null hypothesis 5 was not rejected. There is no reason to suspect that the interaction of speaker and class of listeners (AC) contributes to variation in reaction scores to competence. This means that the attitudinal ratings were the same for upper and lower status listeners each combined with the speaker factor. Null hypothesis 6 was not rejected. There was no support for the influence of the interaction of race and class of the listeners upon the attitudes toward competence. The scores did not vary

for black and white listeners from upper and lower social classes. Null hypothesis 7 was not rejected. There is no reason to suspect that the combination of factors, ABC, the triple interaction of the speakers and the race and class of the listeners, contributes to the variations of attitudes. Comparisons of the triple interactions are discussed below.

Hypotheses 4-6 relating to the impressions of forty listeners toward the competence of the speakers could not be completely rejected. Hypotheses 4 and 5 were not rejected. Results indicated that there were no differences between the ratings of the competence of the two standard speakers nor were there significant differences between the ratings of competence of the nonstandard speakers. Hypothesis 6 was rejected ($p < .01$) and the alternative research hypothesis was accepted due to the findings of significant differences in the competence ratings of the standard speakers as opposed to those of the nonstandard speakers. The competence ratings of speakers 1 and 2 were significantly higher than the competence ratings of the nonstandard speakers 3 and 4.

Mean Comparisons of Triple Interactions.--Hypotheses related to the comparisons of the mean competence ratings of each social group are numbered 28-39. Hypotheses 28 and 29 which referred to the comparisons of the LB and UB listeners were not completely rejected by the findings.

The LB and UB did not differ significantly in their perceptions of the competence of the standard speakers 1 and 2. Nor did they differ significantly in their perceptions of the nonstandard speakers. Hypotheses 30 and 31 which referred to the LB and UB ratings of the competence of standard speakers versus that of the nonstandard speakers were rejected ($p < .01$) and the alternative research hypotheses were accepted on the basis of the results that LB rated the competence of the standard speakers significantly higher than the competence of the nonstandard speakers. The UB also rated the competence of the standard speakers significantly higher than the competence of the nonstandard speakers.

Hypotheses 32 and 33 which referred to the comparison of LW and UW listeners' attitudes toward competence were not rejected. The LW and UW did not differ significantly in their attitudes toward the competence of the standard speakers. Nor did they differ significantly in their attitudes toward the competence of the nonstandard speakers. Hypotheses 34 and 35 which referred to the attitudes of the LW and UW toward the competence of the standard speakers versus nonstandard speakers were rejected ($p < .01$). The LW did rate the competence of the standard speakers higher than the competence of the nonstandard speakers. The UW also rated the standard speakers significantly more competent than the nonstandard speakers. Hypotheses 36 and 37 which referred to the attitudes of UB and UW toward competence

were not rejected. There was no evidence of significant differences in the ratings of the competence of speakers 1 and 2 or of speakers 3 and 4. Hypotheses 38 and 39 which referred to the attitudes of the LB and LW were not rejected. The LB and LW do not differ significantly in their attitudes toward the competence of the nonstandard speakers. Nor were there differences between the two groups in their ratings of the competence of the standard speakers.

Buck (1968), Lambert and associates (e.g. 1965), and Tucker and Lambert (1969) observed that speakers of standard dialects were perceived as more competent than speakers of nonstandard dialects.

Reactions to Perceived Trustworthiness

Results

Table 4.9 presents a summary of the analysis of variance of attitudes toward the perceived trustworthiness of the four representative speakers.

TABLE 4.9

ANALYSIS OF VARIANCE OF ATTITUDES TOWARD TRUSTWORTHINESS

Source of Variation	SS	df	MS	F*	p
A Speakers	1282.12	3	427.37	11.52	.001
B Race	3.90	1	3.90	9.49	N.S.
C SES	68.90	1	68.90	1.85	N.S.
AB	145.56	3	48.52	1.30	N.S.
AC	62.76	3	20.92	1.77	N.S.
BC	51.75	1	51.75	1.39	N.S.
ABC	33.11	3	11.03	3.35	N.S.
Total Among	1648.14	15			
Within	5341.1	144	37.09		

*When F values were less than 1, the F ratio was reversed in order to use the F table (df = 144/1)

Main Effects and Interactions.--Results reveal that the A factor representing the differences among the speakers is highly significant ($F = 11.5223$, $df = 3/144$, $p < .001$) in affecting the reactions of the listeners to the trustworthiness of the speakers. The other main effects, race and social class (B and C), do not appear as significant sources of variation. Nonsignificant F scores for the double interactions, AB, AC and BC indicate that the combination of factors does not contribute to the overall variation of the measurements of perceived trustworthiness. Regardless of the race or class of the listeners, the effect of phonological variations among the speakers operates primarily on the formation of impression of trustworthiness. The

magnitude of the effect of the A variable is the same for black and white listeners and for upper and lower status listeners. The mean reaction scores to all speakers is approximately the same for the two levels of race and for the two levels of social class. The nonsignificant ABC interaction indicates that beyond the main effects, this combination of factors did not contribute to the variations in the evaluations of trustworthiness.

Mean Comparisons of the Speakers.--Table 4.10 presents the mean attitude scores toward the perceived trustworthiness of the representative speakers.

TABLE 4.10

MEAN ATTITUDE SCORES TOWARD TRUSTWORTHINESS

	Speakers			
RXC	1(SW)	2(SB)	3(NSW)	4(NSB)
LB	32.2	31.7	28.2	34.7
LW	34.3	32.7	25.4	31.1
UB	30.5	32.3	24.3	29.9
UW	34.9	32.6	25.4	29.9
Total Means	32.9	32.3	25.8	31.4

The perceived trustworthiness of speakers 1, 2, and 4 appears to be quite similar according to the judgments reflected in the total mean reactions of all forty listeners ($\bar{X}_1 = 32.9$, $\bar{X}_2 = 32.3$, $\bar{X}_4 = 31.4$). The lowest scores were received by Speaker 3 ($\bar{X} = 25.8$) who tended to be perceived

as the least trustworthy of the four speakers. There were no statistically significant differences in the listeners' impressions of the trustworthiness of any of the individual speakers when the total reactions of forty listeners were considered.

Mean Comparisons of Triple Interactions.--The Duncan Multiple Range Test was applied to sixteen means of the triple interactions, speaker, race and class (ABC) for a comparison of means between and within the speakers. The significant differences in the mean ratings of perceived trustworthiness are presented in Table 4.11. A summary of the preferred speakers as judged by listeners from four social groups is provided along with the means, mean differences, and their significance levels. The notation $4 > 3$, for example, indicates that the LB rated speaker 4 significantly higher than speaker 3. The difference between the ratings is 6.5 which is significant at the .05 level.

The mean comparisons between the speakers reveals that standard speakers 1 and 2 were perceived as significantly more trustworthy than the nonstandard speaker 3 by the LW ($p < .01$), by the UB (speaker $1 >$ speaker 3, $p < .05$; speaker $2 > 3$, $p < .01$), and by the UW ($p < .01$). The LB, however, did not significantly prefer the trustworthiness of standard speakers to that of nonstandard speakers. Other findings indicate that the nonstandard black speaker 4 was considered more trustworthy than the

TABLE 4.11

SUMMARY OF DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO SIGNIFICANT DIFFERENCES IN MEAN RATINGS OF TRUSTWORTHINESS

Listeners	Preferred Speakers	$\bar{X} - \bar{X}$	Mean Difference	p
LB	4 > 3*	34.7-28.2	6.5	.05
LW	1 > 3	34.3-25.4	8.9	.01
	2 > 3	32.7-25.4	7.3	.01
	4 > 3	31.1-25.4	5.7	.05
UB	1 > 3	30.5-24.3	6.2	.05
	2 > 3	32.3-24.3	8.0	.01
	4 > 3	29.9-24.3	5.6	.05
UW	1 > 3	34.9-25.4	9.5	.01
	1 > 4	34.9-29.9	5.0	.05
	2 > 3	32.6-25.4	7.2	.01
All	None**			

*Speaker 4 was rated higher than speaker 3 by the LB.

**None of the speakers was rated significantly more trustworthy by all 40 listeners.

nonstandard white speaker 3 by the LB, UB and LW ($p < .05$). The UW were the only group that did not find a nonstandard speaker significantly more trustworthy than a standard speaker. Speaker 3 was regarded by all social groups as significantly more untrustworthy than the standard speakers.

Observation of Table 4.11 shows that the LB tend to perceive speaker 4, a member of their own race and class, as more trustworthy than the other speakers. Theirs was also the highest rating for speaker 4 among the social groups. However, these are trends, not statistically significant differences. Speakers 1 and 2, the standard speakers, were not judged significantly different in trustworthiness. There were significant differences in the perceived trustworthiness ratings between speakers 3 and 4 according to the judgments of the LB, UB, and LW as noted above. The LB and UB rated a recognized member of their own race, speaker 4, significantly higher in the trustworthiness factor. The mean comparisons within the speakers reveal that there were no significant differences between the social classes in their impressions of the trustworthiness within speakers 1, 2, 3 and 4.

Orthogonal Comparisons.--The results of this procedure as presented in Table 4.12 indicate that the combined reactions to the trustworthiness of standard speakers 1 and 2 were significantly more favorable than those of the nonstandard speakers 3 and 4 according to the ratings made by

TABLE 4.12

ORTHOGONAL COMPARISONS OF COMBINED IMPRESSIONS OF THE TRUSTWORTHINESS OF STANDARD SPEAKERS AND OF NONSTANDARD SPEAKERS

		Speakers	Coefficient a	$\bar{X}$	$a\bar{X}$	t	p
Between		1	1/2	32.9	16.5	4.19	.001
		2	1/2	32.3	16.1		
		3	-1/2	25.8	-12.9		
		4	-1/2	31.4	-15.7		
			0		4.0		
			1				
Within	LB	1		32.2	16.1	.26	n.s.
		2		31.7	15.8		
		3		28.2	-14.1		
		4		34.7	-17.3		
			0		.50		
			1				
	LW	1		34.3	17.1	2.73	.01
		2		32.7	16.3		
		3		25.4	-12.7		
		4		31.1	-15.5		
			0		5.2		
			1				
	UB	1		30.5	15.2	2.23	.05
		2		32.3	16.1		
		3		24.3	-12.1		
		4		29.9	-14.9		
			0		4.3		
			1				
	UW	1		34.9	17.4	3.17	.01
		2		32.6	16.3		
		3		25.4	-12.7		
		4		29.9	-14.9		
			0		6.1		
			1				

the UW and LW ($p < .01$) and by the UB ($p < .05$). Among the LB, there were no significant differences in perceived trustworthiness between standard and nonstandard speakers. The association of trustworthiness and standard speech appears to be non-existent for LB. In examining the calculated t, the UW obtained the highest t value ($t = 3.17$, $df = 144$, $p < .01$) reflecting the highest sum of the differences between the combined reactions. It appears that the UW most strongly associate trustworthiness with standard speech patterns and untrustworthiness with nonstandard speech patterns.

Discussion

Main Effects and Interactions.--Null hypothesis 1 was rejected ($p < .001$) and the alternative research hypothesis was accepted: there are differences among the speakers which contribute significantly to the variations in attitudes toward trustworthiness. Null hypothesis 2 was not rejected. There is no reason to suspect that there are differences between the race levels of the listeners which affect attitudes toward trustworthiness. Attitudes toward trustworthiness are the same for both races of listeners. Null hypothesis 3 was not rejected. There appear to be no differences between the variations in attitudes for upper and lower social level listeners. The factor of class alone doesn't affect reaction scores.

Null hypothesis 4 was not rejected. There is no reason to suspect that the interaction of speaker and race of listeners (AC) contributes to variation in reaction scores to competence. This means that the attitudinal ratings were the same for black and white listeners each combined with speaker factor. Null hypothesis 5 was not rejected. There is no reason to suspect that the interaction of speaker and class of listeners contributes to variations in reaction scores to trustworthiness. This means that the attitudinal ratings were the same for upper and lower status listeners each combined with the speaker factor. Null hypothesis 6 was not rejected. There is no support for the effects of the interaction of race and class of the listeners upon attitudes toward trustworthiness. The scores did not vary for black and white listeners from upper and lower social classes. Hypothesis 7 was not rejected. There is no reason to suspect that the combination of factors ABC, race, class of listeners and the speakers contributes to the variations of attitudes. Hypotheses 4-6 relating to listeners' impressions of the trustworthiness of the speakers could not be completely rejected. Hypotheses 4 and 5 were not rejected. Results indicated that there were no differences between the ratings of the trustworthiness of the standard speakers nor were there significant differences between the ratings of trustworthiness of the nonstandard speakers. Hypothesis 6 was not completely rejected. The alternative hypothesis was partially accepted that among all

forty listeners, there were no significant differences in the impressions of trustworthiness of the speakers. All speakers were regarded as equally trustworthy.

Mean Comparisons of Triple Interactions.--Hypotheses related to the comparisons of the mean ratings of trustworthiness made by each social group are numbered 28-39. Hypotheses 28, 32, 36, 39 were concerned with the ratings of the trustworthiness of the standard speakers. Hypothesis 28 was not rejected. The LB and UB evaluated the trustworthiness of the standard speakers 1 and 2 similarly. Hypothesis 32 was not rejected due to the findings that the LW and UW agreed in their perceptions of the trustworthiness of the standard speakers. Hypothesis 36 was not rejected. The UB and UW rated the trustworthiness of the standard speakers similarly. Hypothesis 39 was not rejected. The LB and LW had similar perceptions of the standard speakers' trustworthiness.

Hypotheses 29, 33, 37, 38 involved the ratings of the trustworthiness of the nonstandard speakers. Hypothesis 29 was not rejected. The LB and UB agreed in their perceptions of the trustworthiness of the nonstandard speakers 3 and 4, notably that speaker 4, the black nonstandard speaker, was perceived as more trustworthy than speaker 3, the nonstandard white speaker. Hypothesis 33 was partially rejected and a partial alternative hypothesis was accepted. The LW and UW agreed in their ratings of speaker 3; however, unlike the UW,

the LW rated the trustworthiness of speaker 4 more highly than the trustworthiness of speaker 3. Hypothesis 37 was partially rejected and a partial alternative hypothesis was accepted. Whereas the UB and UW perceived speaker 3 similarly, the UB, unlike the UW, rated the trustworthiness of speaker 4 significantly higher than that of speaker 3. Hypothesis 38 could not be rejected. The LB and LW did not differ significantly in their ratings of the trustworthiness of the nonstandard speakers. Both social groups agreed that speaker 4 appeared to be more trustworthy than speaker 3.

The nonstandard black speaker (4), then, was judged significantly more trustworthy than speaker 3, the nonstandard white speaker by the LB, UB, and LW. The UW were the only group that did not find a nonstandard speaker significantly more trustworthy than a standard speaker. The LB and UB rated the recognized member of their own race, speaker 4, significantly higher than speaker 3. Speaker 3 was regarded by all social groups as significantly more untrustworthy than the standard speakers. These results concur with the findings of Labov (1966) which indicated that native New Yorkers as well as out-of-towners hold the "New York accent" in low esteem.

Hypotheses 30, 31, 34, 35 referred to the combined ratings of trustworthiness of the standard speakers versus the combined ratings of trustworthiness of the nonstandard speakers. Hypothesis 30 could not be rejected. LB did not rate the trustworthiness of the standard speakers significantly

different from the trustworthiness of the nonstandard speakers. Hypotheses 31, 34 and 35 were rejected and the respective alternative hypotheses were accepted that each social group, the UB, LW, and UW, perceived the trustworthiness of the standard speaker significantly higher than the trustworthiness of the nonstandard speakers.

The combined reactions of trustworthiness of standard speakers were significantly higher than the combined reactions to the trustworthiness of the nonstandard speakers according to the ratings made by the UW, LW, and UB. However, among the LB, standard speakers and nonstandard speakers are perceived similarly trustworthy. There were no significant differences in the ratings of perceived trustworthiness between standard and nonstandard speakers. The LB may not engage in stereotyping (evaluating and ranking of ethnic, racial and economic groups) based on differences in speech cues. This may be explained by the fact that excluded from the main stream of activity, the LB do not share the social, cultural, and economic values propagated in American educational institutions. Therefore, they may not completely accept the myths or stereotypes of those who are working actively in the system or are consciously striving for upward mobility.

The UW apparently do form certain impressions from speech cues. One is the association of trustworthiness with standardness of speech. The UW have indicated indirectly

that they would tend to distrust nonstandard speakers more than standard speakers. Considering that the UW are usually in close contact with standard speakers as judged from the residence chart in Appendix D, it is not surprising that they value and associate this trait with standard speech cues more strongly than other groups. Living in segregated sound areas inhabited by upper socioeconomic groups who use a higher frequency of standard phonological features, the UW would tend to be less familiar with nonstandard speakers and may be more likely to distrust them than would other social groups.

The studies by Lambert (e.g. 1960) and by Tucker and Lambert (1969) revealed that higher ratings of trustworthiness were given to members of the dominant group in a culture.

Reactions to Personal Characteristics

Results

Ratings of Perceived Personality

A summary of the analysis of variance of attitudes toward the perceived personality of the representative speakers is given in Table 4.13.

TABLE 4.13

ANALYSIS OF VARIANCE OF ATTITUDES TOWARD PERSONALITY

Source of Variation	SS	df	MS	F*	p
A Speakers	999.52	3	333.17	16.81	.001
B Race	35.15	1	35.15	1.77	N.S.
C SES	10.50	1	10.50	1.88	N.S.
AB	66.71	3	22.23	1.12	N.S.
AC	75.16	3	25.05	1.26	N.S.
BC	1.80	1	1.80	10.97	N.S.
ABC	49.86	3	16.62	1.19	N.S.
Total Among	1238.74	15			
Within	2853.7	144	19.81		

*When F values were less than 1, the F ratio was reversed in order to use the F table (df = 144/1).

Main Effects and Interactions.--The results reveal that the A factor, the differences among the speakers, is highly significant in affecting the impressions of the personalities obtained by the listeners ($F = 16.8122$, $df = 3/144$, $p < .001$). Both the race and social class factors (B and C) did not appear significant as sources of variation. Nonsignificant F scores for the double interactions, AB, AC, and BC, indicate that the combination of factors does not contribute to the overall variation of the measurements of the perceived personality or "charisma" of the four speakers. The magnitude of the effect of the A variable is the same for black and white listeners and for upper and lower status listeners. The mean reaction scores to all speakers are not

significantly different for the two levels of races and for the two levels of socioeconomic class. The nonsignificant ABC interaction indicates that beyond the main effects, this combination of factors did not contribute to the variations in the evaluations of personality.

Mean Comparisons of the Speakers.--Table 4.14 presents the mean attitudes scores toward the personalities of the four speakers.

TABLE 4.14

MEAN ATTITUDE SCORES TOWARD PERSONALITY

	Speakers			
RXC	1(SW)	2(SB)	3(NSW)	4(NSB)
LB	17.6	19.7	16.5	18.7
LW	20.7	22.5	15.3	16.9
UB	19.1	21.6	13.0	15.9
UW	21.3	21.9	14.9	16.1
Total Means	19.7	21.4	14.9	16.9

Examination of the total mean impressions of all listeners concerning the personality of the speakers reveals that speakers 1 and 2, the standard speakers, received nearly similar ratings ($\bar{X}_1$ = 19.7, $\bar{X}_2$ = 21.4). Speakers 3 and 4, the nonstandard speakers, also received similar personality evaluations, although they were perceived as somewhat less attractive than the standard speakers ($\bar{X}_3$ = 14.9, $\bar{X}_4$ = 16.9).

Speaker 2 was viewed as a significantly more attractive personality than speaker 3 ($p < .06$). It is apparent that there was not a marked trend in personality perception as related to the phonological variations of the speakers according to the total reactions of the forty listeners.

Mean Comparisons of Triple Interactions.--Sixteen means of the triple interactions, speaker, race, and class (ABC) were compared between and within the speakers by the application of the Duncan Multiple Range Test. A summary of the significant differences in the mean ratings of perceived personality is given in Table 4.15. Indicated in the table are the preferred speakers as judged by listeners of the four social classes, the means, the mean differences of the rating scores, and significance levels. The notation $1 > 3$, for example, indicates that LW evaluated the personality of speaker 1 significantly higher than speaker 3. The difference between the ratings is 5.4 which is significant at the .01 level.

In the comparisons between the speakers, it was found that speakers 1 and 2, the standard speakers, were rated as "more attractive" personalities than the nonstandard speakers (3) and (4) by the LW, UB, UW ($p < .01$). The LW favored the personality of speaker 1 to that of speaker 4 ($p < .05$). Among the LB, there were no significant differences in their reactions to the personalities of the four speakers. The UB significantly favored the standard black speaker (2) to the

TABLE 4.15

SUMMARY OF DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO SIGNIFICANT DIFFERENCES IN MEAN RATINGS OF PERSONALITY

Listeners	Preferred Speakers	$\bar{X} - \bar{X}$	Mean Difference	p
LB	None			
LW	1 > 3*	20.7-15.3	5.4	.01
	> 4	20.7-16.9	3.8	.05
	2 > 3	22.5-15.3	7.2	.01
	> 4	22.5-16.9	5.6	.01
UB	1 > 3	19.1-13.0	6.1	.01
	2 > 3	21.6-13.0	8.6	.01
	> 4	21.6-15.9	5.7	.01
UW	1 > 3	21.3-14.9	8.4	.01
	> 4	21.3-16.1	5.2	.01
	2 > 3	21.9-14.9	7.0	.01
	> 4	21.9-16.1	5.8	.01
UW > LB**	1	21.3-17.6	3.7	.05
All***	2 > 3	21.4-14.9	6.5	.06

*Speaker 1 was rated higher than speaker 3 by the LW.

**Speaker 1 was rated more highly by the UW than by the LB.

***All 40 listeners rated speaker 2 higher than speaker 3.

nonstandard black speaker (4) ($p < .01$). However, they did not appear to favor the personality of speaker 1 to that of speaker 4 with statistically significant differences. There were no significant differences in the personality evaluations of standard speakers 1 and 2. Nor were there significant differences in the personality ratings of speakers 3 and 4, the nonstandard speakers.

In the comparisons within the speakers, it was found that the UW gave significantly higher personality ratings to speaker 1 than did the LB ($p < .05$). There were no significant differences among the social groups rating personality within speaker 2, within speaker 3, and within speaker 4.

Orthogonal Comparisons.--The results of this procedure as shown in Table 4.16 reveal that the combined personality ratings of the standard speakers were significantly greater than the combined personality ratings of the nonstandard speakers according to the evaluation scores given by the UW, LW and UB ($p < .001$). Among the LB, there were no significant differences in the personality ratings between the standard speakers and the nonstandard speakers. Apparently, the LB did not associate a more attractive or charismatic personality with the use of standard speech. However, the UW obtained the highest t value ($t = 4.33$, $df = 144$, $p < .001$), an indication of the largest sum of the differences between the combined reactions to the standard speakers and those of the nonstandard speakers. According

TABLE 4.16

ORTHOGONAL COMPARISONS OF COMBINED IMPRESSIONS OF THE PERSONALITY OF STANDARD SPEAKERS AND OF NONSTANDARD SPEAKERS

		Speakers	Coefficient a	$\bar{X}$	$a\bar{X}$	t	p
Between		1	1/2	19.6	9.8	6.58	.001
		2	1/2	21.4	10.7		
		3	-1/2	14.9	- 7.5		
		4	-1/2	16.9	- 8.4		
			0		4.6		
			1				
Within	LB	1		17.6	8.8	.75	n.s.
		2		19.7	9.8		
		3		16.5	-8.2		
		4		18.7	-9.3		
			0		1.1		
			1				
	LW	1		20.7	10.3	3.91	.001
		2		22.5	11.2		
		3		15.3	- 7.6		
		4		16.9	- 8.4		
			0		5.5		
			1				
	UB	1		19.1	9.5	4.19	.001
		2		21.6	10.8		
		3		13.0	- 6.5		
		4		15.9	- 7.9		
			0		5.9		
			1				
	UW	1		21.3	10.6	4.33	.001
		2		21.9	10.9		
		3		14.9	- 7.4		
		4		16.1	- 8.0		
			0		6.1		
			1				

to these results, the UW most strongly associate an attractive personality with standard speech patterns and a less "favorable" personality with nonstandard speech patterns.

Race Identification

The results of listeners' abilities to identify the race of the speaker are recorded in Table 4.17. The percentage of judges in each social group of ten subject-listeners identifying the speaker as black (B) or white (W) is given. Some listeners chose to check the neutral interval (N). We may speculate that this type of response was used to indicate a non-committal attitude, a refusal to stereotype a speaker on the basis of taped speech or an inability to discern race in this experimental situation. According to Table 4.17, the UB used this category more often than the other social groups.

The following observations may be noted. Speaker 1, a standard white speaker, was identified correctly by 80% or more of the LB, LW and UW. The UB made a higher number of incorrect identifications than did the other groups. Speaker 2, a standard black speaker, was identified incorrectly by 80% or more of the LB, LW, and UB. The UW made the most correct identifications of speaker 2. Speaker 3, a nonstandard white speaker, was identified correctly by 80% of the LB, LW, and UW. The UB made the most incorrect identifications of speaker 3. Speaker 4, a nonstandard

black speaker, was identified correctly by 80% or more of all social groups. Speakers 1, 3 and 4 were identified correctly by 80% or more of the listeners. Speaker 2 was the most difficult to identify primarily because expectations of a white speaker are often correlated with standard speech whereas black speakers are not usually associated with standard speech. Correct race identifications 80% of the time is an observation which concurs with the results of the Shuy, Baratz and Wolfram study (1969).

Among the social groups, 80% or more of LB, LW, and UW were accurate in race identification. The UB did the most poorly in race identification which may have reflected their negative feelings concerning this issue. Another possible factor was the use of the scale "dark-skinned-light skinned" which signifies a range of skin tones in the black community rather than race identification.

TABLE 4.17

PERCENTAGE OF JUDGES IN RACE IDENTIFICATION

	Speakers											
	1 (W)			2 (B)			3 (W)			4 (B)		
Listeners*	B	W	N	B	W	N	B	W	N	B	W	N
LB	-	100	-	10	80	10	10	80	10	80	10	10
LW	-	100	-	10	80	10	20	80	-	100	-	-
UB	20	50	30	10	80	10	30	60	10	80	10	10
UW	10	80	10	30	60	10	20	80	-	100	-	-

*N = 10 in each social group.

Discussion

Main Effects and Interactions.--Null hypothesis 1 was rejected ($p < .001$) and the alternative research hypothesis was accepted. There are differences among the speakers which contribute significantly to the variations in attitudes toward personality. Null hypothesis 2 was not rejected. There is no reason to suspect that there are differences between the races of the listeners which affect attitudes towards personality. Attitudes toward personality are the same for both races of listeners. Null hypothesis 3 was not rejected. There appears to be no difference between variation in attitudes for upper and lower social strata listeners. Null hypothesis 4 was not rejected. There is no reason to suspect that the interaction of speaker and race of listeners contributes to variation in reaction scores to personality. Attitudinal ratings were the same for black and white listeners combined with each speaker. Null hypothesis 5 was rejected. There is no reason to suspect that the interaction of speaker and class of listeners contributes to variations in reaction scores to personality. The attitudinal ratings were the same for upper and lower status' listeners each combined with the speaker factor. Null hypothesis 6 was not rejected. There is no reason to suspect that there are differences in the effects of the interaction of race and class of the listeners upon attitudes toward personality. The rating scores did not vary for black and white listeners from upper and lower social classes. Hypothesis 7 was not

rejected. There is no reason to suspect that the combination of factors, ABC, race, class of listeners and the speakers contributes to the variations of attitudes toward personality. Comparisons of the triple interactions are discussed below.

Hypotheses 7-9 which referred to the evaluations made by forty listeners of the personalities of the representative speakers were not completely rejected by the results. Hypotheses 7 and 8 were not rejected. The personality evaluations of the standard speakers did not differ. Nor did the personality evaluations of the nonstandard speakers differ. Hypothesis 9 was partially rejected and the partial alternative hypothesis was accepted. In comparing the personality ratings of the standard speakers to those of the nonstandard speakers, speaker 2, a standard speaker, was judged significantly more personable than speaker 3, a nonstandard speaker, by all listeners. Speakers 1 and 2 were rated as more attractive personalities than the nonstandard speakers by the LW, UB, and UW. The LW favored the personality of speaker 1 to that of speaker 4. Among the LB, however, there were no significant differences in reaction to the personalities of the 4 speakers. Again it is evident that the impressions stimulated by the standardness-nonstandardness quality of phonological variations for the LW, UW, and UB appear to have little significance for the LB in this study.

UB significantly favored the personality of the standard black speaker (2) to that of the nonstandard black speaker (4). However, they did not significantly favor the personality of speaker 1 whom they had identified as white to that of the recognized black speaker (4). The UB evaluated the personality of speaker 1 more poorly than the personality of speaker 2. It is notable that they obtained poorer or lower intelligibility scores to speaker 1 than to speaker 2. The UW gave significantly higher personality ratings to speaker 1 than did the LB. All social groups' ratings within speaker 2, the most difficult speaker to identify, within speaker 3, and within speaker 4 whose race was also identified correctly were in general agreement.

The combined personality ratings of standard speakers were significantly greater than the combined ratings of the nonstandard speakers according to the evaluational scores given by the UW, LW, and UB. Among LB, there were no significant differences in the personality ratings of standard and nonstandard speakers. This is another instance in which the LB did not share with other groups the impressions evoked by phonological variations. The UW appear to most strongly associate attractive personality with standard speech patterns and an unattractive personality with nonstandard speech patterns.

In the ratings of the personal characteristics of the speakers, the identification of race differed among speakers and listeners. Speakers who were identified most easily were

speakers 1, 3, and 4 by 80% or more of the listeners. Speaker 2, the standard black speaker, was identified incorrectly by the UB, LB and LW. It is not within the expectations of most social groups that a standard speaker can be black. Furthermore, speaker 2 was probably difficult to identify because expectations of a white speaker are often associated with standardness of speech and that of a black speaker often associated with nonstandardness of speech. Willams (1970) noticed that the teachers in his study also identified a Negro child as white if his speech was standard. The group having the most difficulty in race identification was the UB. Sixty percent of the UB used the neutral interval; twenty percent of the UW and thirty percent of the LB used the neutral interval. The LW appeared to be more certain of their decisions--ten percent used the neutral category.

Mean Comparisons of Triple Interactions.--Hypotheses related to the comparisons of the mean personality ratings of each social group are numbered 28-39. Hypotheses 28,32, 36 and 39 involved the ratings of the social groups of the personalities of the standard speakers. Hypothesis 28 was not rejected. The LB and UB rated the personalities of the standard speakers similarly. Hypothesis 32 was not rejected. LW and UW also rated the personalities of the standard speakers similarly. Hypothesis 36 was not rejected. The UB and UW rated the personalities of the standard speakers

similarly. Hypothesis 39 was not rejected; the LB and LW were in accord in their judgments of speakers 1 and 2.

Hypotheses 29, 33, 37 38 were concerned with the personality ratings of the nonstandard speakers. Hypothesis 29 was rejected and the alternative hypothesis that the LB and UB agreed in their ratings of the nonstandard speakers was accepted. Hypothesis 33 was not rejected. The LW and UW did not differ in their evaluations of the personalities of the nonstandard speakers. Hypothesis 37 was partially rejected and the alternative hypothesis was accepted. The UB and UW did agree in their ratings of speaker 3; however, the UB preferred the personality of speaker 4, the recognized member of their own race, to that of speaker 3. Hypothesis 38 was not rejected. The LB and LW agreed in their personality ratings of the nonstandard speakers.

Hypotheses 30, 31, 34, 35 referred to the comparative ratings of the social groups concerning the personalities of the standard speakers versus the personalities of the nonstandard speakers. Hypothesis 30 was not rejected. The LB did not prefer the personality of standard speakers to the personality of nonstandard speakers. Hypothesis 31 was partially rejected and the alternative hypothesis was partially accepted due to the evidence that UB did rate the personalities of the standard speakers higher than the personalities of the nonstandard speakers except in the instance of speaker 4 whom they rated significantly higher than speaker 1. Hypothesis 34 was rejected and the alternative

hypothesis was accepted that the LW rated the personalities of the standard speakers significantly higher than the personalities of the nonstandard speakers. Hypothesis 35 was rejected and the alternative hypothesis was accepted that the UW rated the personalities of the standard speakers significantly higher than the personalities of the non-standard speakers.

The Orthogonal comparisons revealed that LB do not associate impressions of speaker's personalities with the standardness and nonstandardness of speech. The UW were most strongly influenced by the standardness of pronunciation in their judgments of personalities of speakers. Studies by Lambert et al (e.g. 1960, 1965) indicated that higher ratings of personality were given to the dominant groups using the standard dialect.

Intelligibility of the Dialects

Results

A summary of the analysis of variance of the listening scores or 'error' responses made by the four social groups in response to the four representative speakers is presented in Table 4.18.

TABLE 4.18

ANALYSIS OF VARIANCE OF 'ERROR' RESPONSES IN INTELLIGIBILITY TESTS

Source of Variation	SS	df	MS	F*	p
A Speakers	222.36	3	74.12	28.21	.001
B Race	18.90	1	18.9	7.19	.01
C SES	54.05	1	54.05	20.57	.001
AB	18.62	3	6.20	2.36	N.S.
AC	23.56	3	7.85	2.99	.05
BC	56.40	1	56.40	21.47	.001
ABC	8.72	3	2.90	1.10	N.S.
Total Among	402.61	15			
Within	378.3	144	2.62		
Total	780.91	159			

*When F values were less than 1, the F ratio was reversed in order to use the F Table (df = 144/1).

Main Effects and Interactions.--According to our findings, the three main effects, speakers (A), race (B) and social class (C), are significant sources of variation ($p < .01$) affecting the error response scores of the listeners to the dialects of the four speakers. Significant F scores for the double interactions, speaker and social class of the listeners (AC) and race and social class of the listeners (BC) indicate that these combinations of factors contribute to the overall variation of the listening scores. The effects of the phonological variations of the four speakers upon the listening scores vary according to the race and class of the listeners. In other words, the means of the speakers are not the same for black and white

listeners nor are they the same for upper and lower status listeners. The nonsignificant ABC interaction indicates that beyond the main effects, this combination of factors did not contribute to the variations in the 'error' response (listening scores).

Mean Comparisons of the Speakers.--The mean 'error' responses which constitute the listening scores are given in Table 4.19. High 'error' responses are equivalent to poor listening scores.

TABLE 4.19

MEAN 'ERROR' RESPONSE SCORES

	Speakers			
RXC	1 (SW)	2 (SB)	3 (NSW)	4 (NSB)
LB	5.6	5.1	4.2	7.1
LW	2.2	3.	3.5	5.8
UB	2.7	1.4	3.7	4.8
UW	2.5	2.2	3.8	6.1
Total Means	3.2	2.9	3.8	5.9

Examination of the total mean 'error' scores of all listeners concerning the intelligibility of the dialects of the representative speakers indicates that speaker 4, the nonstandard black speaker, generated the highest 'error' response score ($\bar{X}_4 = 5.9$). Speaker 2, the standard black speaker, tended to be the most intelligible speaker to which the fewest 'error' responses were made ($\bar{X}_2 = 2.9$). According to the

total listening scores of the forty listeners, a significantly greater number of errors were made to speaker 4, the nonstandard speaker, than to speakers 1 and 2, the standard speakers ($p < .05$). There were no other significant differences in the listening scores between the speakers.

Mean Comparisons of the Triple Interactions.--The Duncan Multiple Range Test was applied to sixteen means of the triple interactions, speakers, race and class (ABC), for a comparison of means between and within the speakers. The significant differences in the mean listening scores are presented in Table 4.20. In this table we find a summary of the social groups whose listening scores are compared and the speakers who generate the most 'error' responses or low listening scores. In addition, the means and the mean differences are given along with their significance levels. For example, the LB made significantly more 'error' responses to speaker 1 than to speaker 3 which is noted on the chart as $1 > 3$. The difference between the listening scores is 1.4 which is significant at the .05 level.

The comparisons between the speakers reveal that the LW and UW made significantly more errors listening to speaker 4, the nonstandard black speaker, than to speakers 1 and 2, the standard speakers and to speaker 3, the nonstandard white speaker ($p < .01$). The LB made significantly more errors listening to speaker 4 than to speakers 1, 2, and 3 ($p < .05$, $< .01$, $< .01$, respectively). The UB made significantly more errors listening to speaker 4 than to speakers 1 and 2 ($p < .01$).

TABLE 4.20

SUMMARY OF DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO SIGNIFICANT DIFFERENCES IN MEAN 'ERROR' RESPONSE SCORES (INTELLIGIBILITY TESTS)

Listeners	Preferred Speakers	$\bar{X} - \bar{X}$	Mean Difference	p
LB	1 > 3*	5.6-4.2	1.4	.05
	4 > 1	7.1-5.6	1.5	.05
	4 > 2	7.1-5.1	2.0	.01
	4 > 3	7.1-4.2	2.9	.01
LW	3 > 1	3.5-2.2	1.3	.05
	4 > 1	5.8-2.2	3.6	.01
	4 > 2	5.8-3.0	2.8	.01
	4 > 3	5.8-3.5	2.3	.01
UB	1 > 2	2.7-1.4	1.3	.05
	3 > 2	3.7-1.4	2.3	.01
	4 > 1	4.8-2.7	2.1	.01
	4 > 2	4.8-1.4	3.4	.01
UW	3 > 1	3.8-2.5	1.3	.05
	3 > 2	3.8-2.2	1.6	.05
	4 > 1	6.1-2.5	3.6	.01
	4 > 2	6.1-2.2	3.9	.01
	4 > 3	6.1-3.8	2.3	.01

*More 'error' responses were made to speaker 1 than to speaker 3 by the LB.

TABLE 4.20 (Continued)

Listeners	Preferred Speakers	$\bar{X} - \bar{X}$	Mean Difference	p
LB > UW**	1	5.6-2.5	3.1	.01
>LW		5.6-2.2	3.4	.01
>UB		5.6-2.7	2.9	.01
LB >UW	2	5.1-2.2	2.9	.01
>LW		5.1-3.0	2.1	.01
>UB		5.1-1.4	3.7	.01
LW >UB	2	3.0-1.4	1.6	.05
LB >UB	4	7.1-4.8	2.3	.01
UW >UB	4	6.1-4.8	1.3	.05
All	4 > 1***	5.95-3.25	2.70	.05
	4 > 2	5.95-2.925	3.025	.05

**The LB made more 'error' responses than the UW, LW, and UB to speaker 1.

***All 40 listeners made more 'error' responses to speaker 4 than to speaker 1.

All social groups, then, found speaker 4 less intelligible than speakers 1 and 2 in the formal type of social context employed in this study. The LB made significantly more 'errors' listening to standard speaker 1 than to nonstandard speaker 3 ($p < .05$). Thus, this was the only group to find a standard speaker less intelligible than a nonstandard speaker.

There were no significant differences in the listening scores between speakers 1 and 2, the standard speakers, except for the UB who made significantly more error responses listening to speaker 1 than to speaker 2 ($p < .05$). There were significant differences between listening scores of speakers 3 and 4, the nonstandard speakers. The LB, LW, and UW found speaker 4 significantly less intelligible than speaker 3 ($p < .01$). Significantly more errors were made in listening to speaker 3 than to speaker 1 by the LW and UW ($p < .05$). Furthermore, significantly more errors were made listening to speaker 3 than to speaker 2 by the UB ($p < .01$) and by UW ($p < .05$).

The comparisons within the speakers indicate that the LB made significantly more errors than the other social groups. The LB made significantly more errors listening to speakers 1 and 2 than did the LW, UB, and UW ($p < .01$). The UB made significantly fewer listening errors to speaker 2 than did the LW and LB ($p < .01$). There were no significant differences in error response scores among the four social groups listening to speaker 3. Although speaker 4 generated

the poorest listening scores, the UB made significantly fewer errors than did the UW ($p < .05$) and the LB ($p < .01$) in listening to speaker 4.

Figure 4.5 shows the mean percentages of 'error' responses made by each social group to the representative speakers. The most outstanding results of this test are indicated. Speaker 4 received the highest percentage of error responses from all social groups. The LB heard speaker 3 significantly better than speaker 4 and furthermore, did not perceive the standard speakers as well as did the other three social groups. All listeners perceived speaker 3 similarly.

Speakers 1 and 2 generated the fewest 'error' responses for the LW, UB, and UW,

Orthogonal comparisons.--The results of this procedure are given in Table 4.21. The combined intelligibility of the standard dialects was significantly greater than the combined intelligibility of the nonstandard dialects according to the error scores made by the UW, LW and UB ($p < .001$). For the LB, there were no significant differences in the combined listening scores to standard speakers versus those of the nonstandard speakers. In examining the calculated t, the highest t values were made by the UW ($t = 5.070$, $df = 144$, $p < .001$) which reflected the greatest sum of the differences between the combined listening scores to the standard speakers and those of the nonstandard speakers. Among all social groups, the UW, therefore, made significantly

TABLE 4.21

ORTHOGONAL COMPARISONS OF COMBINED INTELLIGIBILITY (ERROR) SCORES OF STANDARD SPEAKERS AND OF NON-STANDARD SPEAKERS

		Speakers	Coefficient a	$\bar{X}$	$a\bar{X}$	t	p
Between		1	1/2	3.2	1.6250	-6.98	.001
		2	1/2	2.9	1.4625		
		3	-1/2	3.8	-1.9		
		4	-1/2	5.9	-2.975		
			0		-1.8		
			1				
Within	LB	1		5.6	2.8	- .58	n.s.
		2		5.1	2.5		
		3		4.2	-2.1		
		4		7.1	-3.5		
			0		- .3		
			1				
	LW	1		2.2	1.1	-4.00	.001
		2		3.0	1.5		
		3		3.5	-1.7		
		4		5.8	-2.9		
			0		-2.0		
			1				
	UB	1		2.7	1.3	-3.32	.001
		2		1.4	1.2		
		3		3.7	-1.8		
		4		4.8	-2.4		
			0		-1.7		
			1				
	UW	1		2.5	1.2	-5.07	.001
		2		2.2	1.1		
		3		3.8	-1.9		
		4		6.1	-3.0		
			0		-2.6		
			1				

fewer errors in response to standard speech patterns and more listening errors in response to the nonstandard speakers.

Discussion

Main Effects and Interactions.--Null hypothesis 1 was rejected ($p < .001$) and the alternative research hypothesis was accepted. There are differences among the speakers which contribute significantly to the variations in listening scores. Null hypothesis 2 was rejected ($p < .01$) and the alternative research hypothesis that there are differences between the races of the listeners affecting the intelligibility scores was accepted. The listening scores differed for black and white listeners. Null hypothesis 3 was rejected ($p < .001$) and the alternative research hypothesis was accepted. There are differences in the social class of the listeners which contribute to the error responses made by the listeners. 'Error' responses differ for black and white listeners.

Null hypothesis 4 was not rejected. There is no reason to suspect that there are differences in error responses due to the interaction of speaker and race of listeners. Hypothesis 5 was rejected ($p < .05$) and the alternative research hypothesis was accepted. There are differences in the combined factors of speaker and class which contribute to variation in the listening scores. The error response scores differed for upper and lower status listeners and the speaker. Hypothesis 6 was rejected ($p < .001$).

There are differences in the interaction of race and class of the listeners which contribute to differences in error responses or listening scores. These varied for black and white listeners from upper and lower classes. Null hypothesis 7 was not rejected. There is no reason to suspect that the combination of factors, ABC, the triple interaction of the speakers and the race and class of the listeners, contributes to the variations in listening scores. Comparisons of the triple interactions are discussed below.

Hypotheses 13-15 referred to the speech perception (listening) scores made by the forty listeners to the representative speakers. Hypothesis 13 was not rejected. There were no significant differences in the intelligibility scores of the standard speakers. Hypothesis 14 was rejected and the alternative research hypothesis was accepted that there were significant differences in the intelligibility scores of the nonstandard speakers. Speaker 4 generated the poorest listening scores and certainly poorer listening scores than did speaker 3. Hypothesis 15 was rejected and the alternative research hypothesis that the intelligibility scores of the standard speakers were significantly higher than the intelligibility scores of the nonstandard speakers was accepted.

Mean Comparisons of Triple Interactions.--Hypotheses 40-51 referred to the comparative listening scores or mean 'error' responses made by each social group to the representative speakers. Hypotheses 40, 44, 48 and 50 referred

to the comparisons of the listening scores of the social groups to the standard speakers. Hypothesis 40 was rejected and the alternative hypothesis that the LB made significantly more 'error' responses than the UB in their listening scores to the standard speakers was accepted. Hypothesis 44 was not rejected. The LW and UW did not differ significantly in their 'error' responses to the standard speakers. Hypothesis 48 was not rejected. The LB and LW did not differ significantly in their 'error' responses to the standard speakers. They made similar scores to speakers 1 and 2.

Hypothesis 50 was partially rejected and the alternative hypothesis was partially accepted. There were no significant differences between the listening scores of the UB and UW concerning the intelligibility of the standard speakers except that the UB made significantly fewer listening errors to speaker 2 than did the UW. Also, the UB made significantly more 'error' responses to standard speaker 1 than to standard speaker 2. The UB rated the personality of speaker 1 negatively, and having identified her as white, may have been unwilling to closely follow the words she produced. The UW made similar 'error' response scores to both standard speakers.

Hypotheses 41, 45, 49, 51 referred to the listening scores of the social groups to the nonstandard speakers. Hypothesis 41 was rejected and the alternative hypothesis was accepted that the LB and UB had different listening scores to the nonstandard speakers. The LB made significantly

more error responses than did the UB in listening to speaker 4. Hypothesis 45 was partially rejected and the alternative hypothesis was partially accepted. The LW and UW had similar speech perception performances to the nonstandard speaker 3. However, the LW, unlike UW, made significantly more error responses to speaker 4 than to speaker 3. Hypothesis 49 was not rejected. According to the data, the LB and LW seem to have similar intelligibility scores to the nonstandard speakers; both groups found speaker 4 significantly more unintelligible than speaker 3. Hypothesis 51 was partially rejected. There were no differences between the UB and UW concerning nonstandard speakers. The UB made significantly fewer errors than did the UW in listening to speaker 4. They made similar listening errors to speaker 3. The bridging of two dialects was facilitated for UB who usually are bidialectal.

Hypotheses 42, 43, 46, 47 referred to the comparative listening scores of the social groups concerning the combined intelligibility scores to the standard speakers versus the combined intelligibility scores to the nonstandard speakers. Hypothesis 42 was not rejected. The LB did not find differences in the combined listening scores between the standard and nonstandard speakers. The LB found standard and nonstandard speakers equally intelligible. Hypotheses 43, 46 and 47 were rejected and the alternative research hypotheses were accepted that the UB, LW, and UW made significantly fewer error responses to the standard speakers than to the nonstandard speakers.

According to Wolff (1959, p. 39), "intelligibility . . . is a function of intercultural or interethnic trends and relationships." The dialect of the culturally dominant group is "the language of the market place and of communication with outsiders in general" (pp. 40-41) and therefore commands far greater intelligibility than other dialects. Thus the functional value of standard dialects is notably greater.

Among all the groups, the UW made significantly fewer error responses to standard speakers than to nonstandard speakers. Their listening scores appeared to be strongly governed by the standard and nonstandard quality of speech. Intelligibility scores may also be influenced by general attitudes. The UW gave more negative personality evaluations to nonstandard speakers than to standard speakers.

The LB did not find standard speech more intelligible than nonstandard speech. Nor did they find standard speakers more trustworthy and more personable than the nonstandard speakers. The LB, however, rated standard speakers as more competent than nonstandard speakers. They also rated standard speech patterns more highly than nonstandard speech patterns.

That lists of monosyllabic words produced by speakers of standard dialect were significantly more intelligible than those produced by speakers of nonstandard dialects was also found in the Eisenberg, et al. study (1968) which investigated the speech perception performances of grade

children using earphones. Several findings of the present study did differ from the Eisenberg study. First, lower class black students did not perceive the speakers of their own race and class best. Their best listening scores were in response to the "New Yorkese" speaker. It is notable that the New Yorkese speaker was equally intelligible to all groups and may be regarded as the most commonly spoken dialect in New York City. Standard speakers and nonstandard speakers were perceived quite similarly by the LB. Second, upper status black students obtained somewhat better listening scores than their white peers in response to the black nonstandard speaker and the black standard speaker. Living in integrated parts of the city and having attended integrated schools, upper status black students were probably bidialectal and more adept at code switching than white students.

The speech perception test constructed for this study was derived from Labov's observations of the systematic loss of phonemic contrast in Black Dialect. Phonologically, Standard Dialect is an application of a different set of rules as compared with the system of rules applied in Black Dialect. Standard dialect as shown in Table 3.5 is marked, for example, by a greater frequency of final consonants and final consonant clusters, the interdental fricatives in all positions, the diphthongs /aɪ/ as in hire, /ɛə/ as in chair, /ɪə/ as in cheer and the use of the lower high front vowel /ɪ/ as in pin and the mid-front vowel /ɛ/ as in pen. In Black Dialect, we see a reduction or weakness of final

consonants as, for example, in late which becomes lay. We also note numerous mergers--whereby roof corresponds with Ruth; chair and cheer are produced with /ɪə/. Black Dialect is marked by its profusion of homophonous words whereby words with different meanings sound alike due to the absence of phonemic contrast.

It does appear likely that the speech perception performances of lower socioeconomic black youngsters who are facile only in Black Dialect are poorer than their white peers in tests of auditory discrimination which are tests of the speech perception of Standard Dialect. The role of phonemic conflicts between Standard and Black dialects in reading, pronunciation, and spelling difficulties warrants further exploration.

Reactions to the Occupational Suitability of the Speakers

Results

The results provided in this section were obtained from three sources: 1) the t tests of the significance of the differences between the mean ratings, 2) rankings of the total mean ratings of each speaker's suitability for each of the eight occupations, and 3) mean rankings of occupational position in the socioeconomic hierarchy by the four social groups of subject-listeners. Table 4.22 provides the mean ratings of occupational suitability given by the social groups for each speaker in each of the eight occupations.

TABLE 4.22

MEAN RATINGS OF OCCUPATIONAL SUITABILITY

Profes-sion	Speaker 1				Speaker 2				Speaker 3				Speaker 4			
	UW	LW	UB	LB	UW	LW	UB	LB	UW	LW	UB	LB	UW	LW	UB	LB
News-caster	5.5	5.1	4.3	4.6	4.8	4.5	4.8	4.1	2.4	1.2	1.8	2.9	2.2	1.6	1.7	3.0
Teacher	6.0	6.0	6.0	5.7	5.7	5.9	5.8	5.4	3.3	2.3	2.7	3.3	3.2	3.1	4.0	3.7
Nurse	5.5	5.5	5.6	4.0	5.6	4.8	5.2	3.8	3.4	4.3	3.6	4.3	4.3	4.1	5.3	5.0
Telephone Operator	5.5	5.2	5.0	5.7	5.0	5.5	5.8	4.1	5.1	3.3	3.1	4.7	4.2	4.2	3.7	4.0
Supervisor	5.0	5.0	5.1	5.2	5.1	5.7	4.7	4.5	3.0	2.7	1.9	3.6	2.3	3.3	3.1	4.1
Clerk	4.7	4.7	5.7	4.4	4.5	4.6	4.6	3.7	4.6	5.5	5.1	5.5	4.7	5.3	4.5	4.7
Maid	2.7	3.6	4.0	3.6	4.5	3.9	4.3	2.8	4.4	4.3	5.7	3.8	4.7	4.9	5.2	3.2
Waitress	4.5	3.1	4.4	3.1	4.2	3.3	4.1	3.2	4.8	5.2	6.3	4.3	4.7	4.7	4.8	3.6

The t tests.--A summary of the results of the t tests is given in Tables 4.23-4.28. In the presentation below, the findings are discussed according to the social group's ratings of the speakers in each of eight occupations. These are: newscaster, teacher, nurse, supervisor, telephone operator, clerk, maid and waitress. The tables indicate the occupation considered, the social class of the listeners, the preferred speakers who receive comparatively higher ratings, the within or between comparisons of the speakers, and the calculated t and their levels of significance. The notation $1 > 3$, for example, signifies that speaker 1 was rated as more suitable than speaker 3.

In Table 4.23 concerning newscaster, comparisons of the mean ratings within the speakers reveal that there were no significant differences among the social groups' ratings of the high suitability of speaker 1 as a newscaster. Similarly, the four social groups were in accord in their judgments of speaker 2 as a newscaster. The LB rated speaker 3 significantly higher as a newscaster than did LW ($p < .02$). Speaker 4 was rated significantly higher as a newscaster by LB in comparison with the ratings made by LW and UB ($p < .05$). Comparisons of the mean ratings between the speakers indicate that the UW, LW, and UB significantly judged speaker 1 more highly than they judged speakers 3 and 4 ($p < .01$). The LW and UB rated speaker 2 more highly than they did speakers 3 and 4 ($p < .01$). There were no significant differences in the ratings of the LB of the

TABLE 4.23

RESULTS OF THE t TESTS OF SIGNIFICANCE OF THE DIFFERENCES BETWEEN MEAN RATINGS OF OCCUPATIONAL SUITABILITY OF FOUR SPEAKERS MADE BY FOUR SOCIAL GROUPS

Projected Occupation	Listeners	Preferred Speaker	Within/ Between	t	p
Newscaster	All*	1	W	-	n.s.
	All	2		-	n.s.
	LB > LW**	3		2.83	.02
	> LW	4		2.33	.05
	> UB	4		2.40	.05
	UW	1 > 3***	B	3.65	.01
		1 > 4		3.71	.01
	LW	1 > 3		5.00	.01
		1 > 4		4.5	.01
		2 > 3		4.3	.01
		2 > 4		3.78	.01
	UB	1 > 3		3.24	.01
		1 > 4		4.2	.01
		2 > 3		4.56	.01
		2 > 4		4.1	.01
	LB	1 > 3		(1.75)	n.s.

*All social groups rated the speaker similarly.

**LB rated speaker 3 more highly than did the LW.

***UW rated speaker 1 higher than speaker 3.

speakers' suitability as a newscaster based on dialect perception.

In Table 4.24 concerning teacher, comparisons of the mean ratings within the speakers indicate that there are no significant differences among the ratings of the four social groups within each speaker. Comparisons of the mean ratings between the speakers reveal that the LW, UW, and UB judged speakers 1 and 2 significantly higher in teacher suitability than speakers 3 and 4 ($p < .05$). The UB viewed speaker 2 more suitable than speaker 4 ($p < .05$). However, among the LB, there were no significant differences in their ratings of each speaker's suitability as a teacher.

In Table 4.25 concerning nurse, comparison of the mean ratings of listeners within speakers resulted in the following observations. Speaker 1 was judged more suitable as a nurse by the UB than by the LB ($p < .05$). The UW, LW, and LB were in general agreement in their ratings of speaker 1. Similarly, within speakers 2, 3, and 4, there were no significant differences in the ratings made by the four social groups. Comparisons of the mean ratings between the speakers indicate that speaker 1 was rated more highly as a nurse than speaker 3 by the UW ($p < .05$) and by the UB ($p < .02$). Speaker 2 was rated more highly than speaker 3 by the UW ($p < .05$). The LB did not favor any speaker more significantly in the role of nurse.

In Table 4.26 concerning supervisor, comparisons of group judgments within speakers 1 and 2 reveal that none

TABLE 4.24

RESULTS OF THE t TESTS OF SIGNIFICANCE OF THE DIFFERENCES BETWEEN MEAN RATINGS OF OCCUPATIONAL SUITABILITY OF FOUR SPEAKERS MADE BY FOUR SOCIAL GROUPS

Projected Occupation	Listeners	Preferred Speaker	Within/ Between	t	p
Teacher	All*	1	W	-	n.s.
	All	2		-	n.s.
	All	3		-	n.s.
	All	4		-	n.s.
	UW	1 > 3**	B	3.10	.01
		1 > 4		3.44	.01
		2 > 3		2.45	.05
		2 > 4		2.69	.02
	LW	1 > 3		4.93	.01
		1 > 4		3.24	.01
		2 > 3		4.85	.01
		2 > 4		3.22	.01
	UB	1 > 3		4.71	.01
		1 > 4		2.93	.01
		2 > 3		4.09	.01
		2 > 4		2.42	.05
	LB	None		-	n.s.

*All social groups rated the speaker similarly.

**UW rated speaker 1 higher than speaker 3.

TABLE 4.25

RESULTS OF THE t TESTS OF SIGNIFICANCE OF THE DIFFERENCES BETWEEN MEAN RATINGS OF OCCUPATIONAL SUITABILITY OF FOUR SPEAKERS MADE BY FOUR SOCIAL GROUPS

Projected Occupation	Listeners	Preferred Speaker	Within/ Between	t	p
Nurse	UB > LB*	1	W	2.10	.05
	UW > LB	1		(1.86)	n.s.
	LW > LB	1		(1.83)	n.s.
	UW > LB	2		(2.01)	n.s.
	UB > LB	2		(1.79)	n.s.
	All**	3		-	n.s.
	All	4		-	n.s.
	UW	1 > 3***	B	2.69	.02
		2 > 3		2.47	.05
	LW	1 > 4		(1.78)	n.s.
	UB	1 > 3		2.61	.02
		2 > 3		(1.99)	n.s.
		4 > 3		(2.04)	n.s.
	LB	None		-	n.s.

*The UB rated speaker 1 more highly than did the LB.

**All social groups rated the speaker similarly.

***Speaker 1 was rated more highly than speaker 3.

TABLE 4.26

RESULTS OF THE t TESTS OF SIGNIFICANCE OF THE DIFFERENCES BETWEEN MEAN RATINGS OF OCCUPATIONAL SUITABILITY OF FOUR SPEAKERS MADE BY FOUR SOCIAL GROUPS

Projected Occupation	Listeners	Preferred Speaker	Within/ Between	t	p
Supervisor	All*	1	W	-	n.s.
	All	2		-	n.s.
	UB > LB**	3		3.09	.01
	LB > UW	4		2.67	.02
	UW	1 > 3***	B	2.12	.05
		1 > 4		3.42	.01
		2 > 3		2.24	.05
		2 > 4		3.58	.01
	LW	1 > 3		2.25	.05
		1 > 4		(1.72)	n.s.
		2 > 3		3.45	.01
		2 > 4		2.88	.01
	UB	1 > 3		4.94	.01
		1 > 4		2.94	.01
		2 > 3		3.80	.01
		2 > 4		(2.09)	n.s.
		4 > 3		(1.96)	n.s.
	LB	1 > 3		2.49	.05

*All social groups rated the speaker similarly.

**The UB rated speaker 3 more highly than did the LB.

***Speaker 1 was rated more highly than speaker 3.

of the groups expressed a significant preference. However, the UB did favor speaker 3 more significantly than did the LB ($p < .01$). The LB in comparison to the UW significantly favored speaker 4 as a supervisor ($p < .02$). It can be seen from Table 4.25 that the LB among the social groups gave speaker 4 the highest rating as supervisor. Comparisons of mean ratings between speakers indicate that the LW, UW, LB and UB judged the standard speaker (1) significantly more highly than the nonstandard speaker (3) ($p < .05$). Speaker 2 was preferred as a supervisor to speaker 3 by the UW ($p < .05$) and by the LW and UB ($p < .01$). The UB did not rate speaker 4, the nonstandard black speaker, significantly different from speaker 2, the standard black speaker. Although statistically nonsignificant, the UB were the only group that considered speaker 4 as possibly suitable as a supervisor in preference to speaker 3 ($p < .10$). The LB did not show significant preferences between the speakers except for speaker 1 whom they judged more suitable as a supervisor than speaker 3 ($p < .05$).

In Table 4.27 concerning telephone operator, comparisons of group judgments of speaker suitability as telephone operator reveal general agreement among the four social groups within the speakers. Comparisons of the mean ratings between the speakers reveal that the UW and the LB agreed that all speakers were equally suitable as telephone operator. The LW, however, significantly rated standard speakers 1 and 2 more suitable as telephone operators than speaker 3

TABLE 4.27

RESULTS OF THE t TESTS OF SIGNIFICANCE
THE DIFFERENCES BETWEEN MEAN RATINGS OF OCCUPATIONAL
SUITABILITY OF FOUR SPEAKERS MADE BY FOUR SOCIAL GROUPS

Projected Occupation	Listeners	Preferred Speaker	Within/ Between	t	p
Telephone Operator	All*	1	W	-	n.s.
	UB > LB**	2		(1.98)	n.s.
	UW > LW	3		(1.81)	n.s.
	UW > UB			(2.00)	n.s.
	All	4		-	n.s.
	UW	None	B	-	n.s.
	LW	1 > 3***		2.37	.05
		2 > 3		2.68	.02
	UB	1 > 3		2.27	.05
		1 > 4		(1.72)	n.s.
		2 > 3		3.41	.01
		2 > 4		2.95	.01
	LB	1 > 2		(1.84)	n.s.
		1 > 4		(1.74)	n.s.
Clerk	UB > LB	1	W	(1.90)	n.s.
	All	2		-	n.s.
	All	3		-	n.s.
	All	4		-	n.s.
	UW	None	B	-	n.s.
	LW	None		-	n.s.
	UB	1 > 2		(1.89)	n.s.
		1 > 4		2.21	.05
	LB	2 > 3		2.50	.05

*All social groups rated the speaker similarly.

**The UB rated speaker 2 more highly than did the LB.

***Speaker 1 was rated more highly than speaker 3 by the LW.

($p < .05$, $p < .02$) as did the UB ($p < .05$, $p < .01$). The UB preferred the black standard speaker (2) to the nonstandard black speaker 4 ($p < .01$).

In Table 4.27 concerning clerk, there were no significant differences in the comparisons of the mean ratings within the speakers. In the comparison of mean ratings between speakers, the UW and LW did not significantly prefer one speaker to another as a clerk ($p < .05$), an indication that a standard speaker was just as suitable for a lower level position as a nonstandard speaker. The LB rated speaker 2 significantly higher than speaker 3 ($p < .05$). The UB rated speaker 1 significantly higher than speaker 4 ($p < .05$) indicating that a standard speaker was just as suitable for a lower level position as a nonstandard speaker. The LB preferred speaker 2 to speaker 3 as clerk ($p < .05$).

In Table 4.28 concerning maid, comparisons of mean ratings within the speakers reveal that there were no significant differences among the groups in rating speakers 1 and 2 as a maid. Speaker 3 was rated significantly higher as a maid by the UB than by the LB ($p < .05$). The LW, UW, and UB significantly rated speaker 4 more highly than did the LB ($p < .01$). Comparisons of mean ratings between speakers indicate that none of the groups significantly preferred one speaker to another as a maid. There was a tendency for all social groups to rate speakers 3 and 4, the nonstandard speakers, more highly as a maid than standard speakers 1 and 2. The LB tended to give lower

TABLE 4.28

RESULTS OF THE t TESTS ON SIGNIFICANCE OF THE DIFFERENCES BETWEEN MEAN RATINGS OF OCCUPATIONAL SUITABILITY OF FOUR SPEAKERS MADE BY FOUR SOCIAL GROUPS

Projected Occupation	Listeners	Preferred Speaker	Within/ Between	t	p
Maid	All*	1	W	-	n.s.
	UW > LB**	2		1.72	n.s.
	UB > LB	3		2.42	.05
	UW > LB	4		2.72	.01
	LW > LB			3.67	.01
	UB > LB			5.11	.01
	UW	1 > 3***	B	(1.72)	n.s.
	LW	None		-	n.s.
	UB	1 > 3		(2.00)	n.s.
	LB	None		-	n.s.
Waitress	All	1	W	-	n.s.
	All	2		-	n.s.
	UB > UW	3		(1.80)	n.s.
	UB > LB	4		(1.76)	n.s.
	UW	None	B	-	n.s.
	LW	3 > 1		2.34	.05
		3 > 2		2.20	.05
		4 > 1		(2.01)	n.s.
	UB	3 > 1		2.28	.05
		3 > 4		2.32	.05
		3 > 2		2.47	.05
	LB	None		-	n.s.

*All social groups rated the speaker similarly.

**The UW rated speaker 2 more highly than did the LB.

***Speaker 1 was rated more highly than speaker 3.

ratings than other groups to speaker 4 in considering her suitability as a maid.

In Table 4.28 concerning waitress, comparisons of the four social groups' impressions within speakers 1, 2, 3, and 4 reveal no significant differences. Comparisons of mean ratings between the speakers indicates that the UW did not significantly rate one speaker higher than another. The LW, however, rated speaker 3 significantly higher than speakers 1 and 2, the standard speakers ($p < .05$). The UB also preferred speaker 3 as a waitress in preference to speakers 1, 2, and 4 ($p < .05$). There were no significant differences in the ratings of the speakers made by the LB.

Rankings of Total Mean Ratings.--Table 4.29 presents the rankings of the total mean ratings of the speakers by all listeners for each of the eight occupations considered above. The higher values indicate the more favorable responses, the lower values indicate the less favorable responses. Examination of the mean ratings and rankings within each speaker reveals that speaker 1 received her highest scores as a teacher; her lowest scores referred to her suitability as a maid. Speaker 2 received similar ratings. Speakers 3 and 4, the nonstandard speakers, obtained their highest scores as clerk and their lowest scores as newscaster. The standard speakers according to these results were deemed more suitable in communication oriented positions. The nonstandard speakers were viewed in lower status occupations requiring lesser skills. Comparisons of the mean

TABLE 4.29

RANKING OF TOTAL MEAN RATINGS
OF OCCUPATIONAL SUITABILITY OF FOUR SPEAKERS*

Occupation	Speaker 1	Rank	Speaker 2	Rank	Speaker 3	Rank	Speaker 4	Rank
Teacher	5.92	1	5.70	1	2.90	6	3.50	6
Newscaster	4.87	5.5	4.55	5	2.07	8	2.12	8
Nurse	5.15	3	4.85	4	3.90	5	4.67	2
Telephone Operator	5.35	2	5.10	2	4.05	4	4.02	5
Supervisor	5.07	4	5.00	3	2.80	7	3.20	7
Clerk	4.87	5.5	4.35	6	5.17	1	4.80	1
Waitress	3.77	7	3.87	7	5.15	2	4.50	3
Maid	3.47	8	3.70	8	4.55	3	4.45	4

*Higher values refer to ratings of high suitability; lower values refer to ratings of low suitability.

ratings between speakers reveal that speakers 1 and 2 were rated more suitable as teacher, newscaster, telephone operator and supervisor than nonstandard speakers 3 and 4. The standard speakers were rated least suitable as waitress or maid. Speakers 1, 2, and 4 were rated similarly as clerk; speaker 3 was viewed most suitable as a clerk. Speakers 3 and 4 were rated more suitable as maid, clerk and waitress than speakers 1 and 2. The nonstandard speakers were viewed less suitable as newscaster, supervisor, and teacher than were the standard speakers.

Rankings of the Occupations.--The cultural views of the hierarchy of prestigiousness of occupations are presented in the listeners' mean ranking of occupations given in Table 4.30.

TABLE 4.30

LISTENERS' MEAN RANKING OF OCCUPATIONS*

Social Class	News.	Teach.	Nurse	Tel O.	Supv.	Clk.	Maid	Waitr.
LB	3.4	1.5	2.3	4.8	4.3	5.5	7.4	6.8
LW	3.8	1.7	1.7	5.0	3.2	6.3	7.4	6.9
UB	1.8	2.3	3.4	5.8	2.5	6.0	7.5	6.7
UW	1.9	2.3	2.4	5.6	3.8	5.2	8.0	6.8

*More prestigious occupations were given lower rankings (scores). Less prestigious occupations were given higher rankings (scores).

It is notable that the UB and UW shared the view that the profession of newscaster was the most important occupation of the eight given in the study. On the other hand, the LB and LW thought that the occupation of teacher was the most prestigious. The UW and LW ranked the nursing profession as equal to that of the teaching profession. The UB and UW similarly ranked the roles of teacher and nurse as second in importance. All groups agreed that waitress and maid were the least significant occupations in American society.

Discussion

Hypotheses 10-12 refer to the expectations of the occupational suitability of the speakers based on speech cues heard by forty listeners. Hypotheses 10 and 11 were not rejected. There were no significant differences in the expectations of the occupation suitability of the standard speakers. Nor were there differences in the expectations of the occupational suitability of the nonstandard speakers. Standard speakers were considered more suitable for "higher" level occupations than were nonstandard speakers. Nonstandard speakers were judged to be more suitable for "low" level occupations. Hypothesis 12 was rejected; the alternative hypothesis that expectations of speakers using standard dialect differ from expectations of the speakers using nonstandard dialects was accepted.

According to the findings of the study, the standard speakers were considered more suitable than the nonstandard speakers for the occupations deemed prestigious. Speaker 1

received higher scores as a teacher and lower scores as a maid. Speaker 2 also received the highest scores as a teacher and the lowest scores as a maid. Speakers 3 and 4, the nonstandard speakers, received the highest scores as a clerk and the lowest scores as a newscaster. Standard speech is associated with higher level occupations and may be observed in speakers considered suitable for lower status occupations, such as waitress or maid. Nonstandard speech is associated with lower level occupations and not associated with the higher level positions.

The listeners in general agreed that standard speakers were more suitable in the roles of newscaster and teacher. Although there was general agreement that nonstandard speakers were more suitable in the roles of maid and waitress, there were instances indicated by the UW that standard speakers were also suitable in these roles. All groups viewed the four speakers similarly in the role of maid. The LB ratings were particularly distinctive in two instances. They did not appear to regard standardness of speech as a factor in their judgment of suitability for the occupations of newscaster, teacher, telephone operator, nurse, maid or waitress. According to their ratings, any speaker could serve in these roles. Furthermore, they rated speaker 4, the nonstandard black speaker, more suitable as a newscaster and as a supervisor than did the other social groups. However, they did give higher ratings to the standard speakers than to the nonstandard speakers in these occupations.

Unlike the other social groups, they gave lower ratings to speaker 4 as maid or waitress. Clearly, the LB favored the recognized member of their own race and class. The LB appear to engage in less stereotyping based on speech differences than did the other social groups.

Correlations

Between Occupation and Psycho-social Traits

Spearman Rank-Order Correlation Coefficients were obtained to determine the association between occupational roles and psycho-social traits such as speech patterns, competence, trustworthiness, and personality in the social perceptions of listeners. The results as shown in Table 4.31 indicate that there is a highly significant relationship between positive attitudes toward the occupations of teacher, newscaster and supervisor, and positive attitudes toward speech patterns ($p < .01$). Positive attitudes toward the speech patterns of speakers correlated highly with such favored occupations as teacher, newscaster ($p < .001$), supervisor, telephone operator, and lastly, nurse ($p < .01$). Negative attitudes toward speech patterns were associated highly with the least favored occupations of waitress ($p < .01$). The more negative attitudes toward speech patterns were associated with a lower skilled type of occupation. More favored speech patterns were associated with higher skilled type of occupations. Standard speech patterns seem to be expected of persons in higher positions.

TABLE 4.31

SPEARMAN RANK-ORDER CORRELATION COEFFICIENTS BETWEEN OCCUPATIONAL SUITABILITY AND PSYCHO-SOCIAL TRAITS

Psycho-social Traits		Occupational Suitability							
		Teacher	News-caster	Super-visor	Telephone Operator	Nurse	Clerk	Maid	Waitress
Speech Patterns	r_s	.88	.81	.87	.73	.63	- .37	- .37	- .63
	t	6.93*	5.17*	6.60*	4.00**	3.04**	-1.49	-1.49	-3.04**
Competence	r_s	.91	.91	.89	.79	.59	- .28	- .61	- .77
	t	8.21*	8.21*	7.30*	4.82*	4.63*	-1.09	-2.88***	-4.52*
Trustworthi-ness	r_s	.73	.78	.73	.53	.56	- .28	- .64	- .72
	t	4.00**	4.66*	4.00**	2.34***	2.53***	-1.09	-3.12**	-3.88**
Personality	r_s	.80	.82	.85	.65	.61	- .32	- .51	- .73
	t	4.99*	5.36*	6.04*	3.20**	2.88***	-1.26	-2.22***	-4.00**

*Significant at the .001 level.

**Significant at the .01 level.

***Significant at the .05 level.

Nonstandard speech patterns are expected of persons in lower qualified positions.

Favorable ratings of competence correlate significantly with higher positions such as newscaster, teacher, supervisor ($p < .001$). Unfavorable ratings of competence appear to correlate highly with lower occupations such as maid ($p < .05$) or waitress ($p < .001$).

Favorable ratings of trustworthiness correlate significantly with higher level positions such as newscaster ($p < .001$), teacher ($p < .01$), and supervisor ($p < .01$). Poor impressions of trustworthiness are significantly related to waitress and maid ($p < .01$). Impressions of attractive personalities correlated significantly with teacher, newscaster, and supervisor ($p < .001$). Impressions of unattractive personalities are associated with such occupations as waitress ($p < .01$).

According to these results, positive values of such psychological qualities as competence, trustworthiness and personality are linked to those occupations respected and admired in a culture. Furthermore, the speech patterns usually associated with these occupations are also admired and respected.

Between Speech Patterns and Psycho-social Variables

The significance of the Rho in the Spearman Rank Correlations between ratings of speech patterns and ratings of perceived psycho-social attributes is presented in Table 4.32. Observations of the t values indicate that impressions of competence are most closely related to attitudes toward speech patterns ($t = 20.28$, $df = 158$, $p < .001$).

Favorable reactions to speech patterns evoke favorable perceptions of competence of the speaker. Similarly and significantly, although not as powerful, impressions of the speaker's personality are significantly correlated with attitudes toward speech patterns ($t = 13.04$, $df = 158$, $p < .001$). Also significant but even less powerful as a dimension of credibility related to judgments of phonological variations is the trustworthiness factor ($t = 8.50$, $df = 158$, $p < .001$). Positive attitudes toward speech patterns appear to correlate highly with such nonlinguistic traits such as competence, personality, and trustworthiness.

The findings in Table 4.32 also indicate that negative attitudes toward speech patterns are significantly related to poorer intelligibility scores ($t = -.26$, $df = 158$, $p < .001$). The findings of the previously discussed intelligibility tests are that nonstandard speech patterns generated more negative attitudes and higher error response scores than did the standard speech patterns.

TABLE 4.32

SIGNIFICANCE OF RHO IN SPEARMAN RANK-ORDER CORRELATIONS BETWEEN RATINGS OF SPEECH PATTERNS AND RATINGS OF PERCEIVED PSYCHO-SOCIAL ATTRIBUTES

Psycho-Soc. Attributes	Speech Patterns			
	Compet.	Trustworth.	Personality	Intelligibility
Rho	.85	.56	.72	-.26
t*	20.28	8.50	13.04	-3.38

*Significant at the .001 level.

Summary

The A factor, differences among the four speakers, was highly significant in influencing all ratings of attitudes toward speech patterns, competence, trustworthiness, and personality of the speakers and the measurement of the intelligibility of the speakers. The B factor, differences between the races, was not a significant factor affecting the reaction scores to speech and personality characteristics. However, the race of the listeners was a significant factor contributing to the variation of the listening scores. The C factor, the socioeconomic class of the listeners, was not a significant factor in affecting the attitudinal scores. This means that the reaction scores were the same for upper and lower status listeners. However, the social class of the listeners was a significant factor contributing to the variation of the 'error' responses in the speech perception tests.

The interaction of speaker and race of listeners (AB) was not a contributing factor to the variation in the attitudinal scores or in the intelligibility scores. The interaction of speaker and class of listeners (AC) contributes to variations in attitudes toward the speech patterns and to the variations in the intelligibility of the speakers. This means that the reaction scores and the listening scores differed for the combined speaker and class (upper and lower status) of subjects in both these tests. The interaction of race and class of the listeners (BC)

was a significant combination of factors only in the variation of the listening scores. This means that the scores varied for black and white listeners from upper and lower classes. The triple interactions A(race) x B (class) x C (speakers) were not significant from the overall view of the F tests. This means that the combination of factors did not contribute to the variations in attitudinal scores or to the variations in the intelligibility scores.

The results of the study reveal that all groups demonstrated a preference for standard speech patterns by giving higher ratings to standard dialects than to nonstandard dialects. All groups were prone to forming perceptions of competence based on differences in phonological variations. The competence of the standard speakers was perceived as greater than the competence of the nonstandard speakers. To this extent, the value system assigned to dominant and nondominant groups extends to the evaluation of their respective speech patterns and to the social perceptions of the psycho-social characteristics of the speakers.

With regard to such psycho-social attributes as the trustworthiness, personality, and occupational suitability of the speaker, one group, the LB, is distinctive in not extending the value system to the perception of these traits. The LB did not find standard and nonstandard speakers different in trustworthiness, personality, and in occupational suitability. Standardness and nonstandardness factors in

speech cues did not serve as the basis for the judgments and evaluations of these perceived traits made by the LB. Unlike the other social groups in the study, the LB did not find the standard speakers more intelligible than the nonstandard speakers.

The judgments of the UB, in spite of some protestations during one testing session, paralleled the evaluations made by the LW and the UW of the competence, personality, intelligibility, and trustworthiness of the standard speakers. Combined reactions to the nonstandard speakers were significantly less positive than the combined reactions to the standard speakers. The UW formed the most positive impressions of the trustworthiness and the personality of speakers who use those phonological variations which have been described as "standard." In other words, standardness of speech largely affects or influences the social perceptions of the UW. In addition, standard speakers appear significantly more intelligible to the UW than nonstandard speakers. The LW rated the speech patterns of the standard speakers significantly higher than those of the nonstandard speakers. They, too, formed positive perceptions of the competence, the trustworthiness, and the personality of the standard speakers and negative impressions of the nonstandard speakers.

Expectations of occupational suitability as a teacher or as a newscaster were assigned to standard speakers; expectations of suitability as a maid or waitress were assigned to nonstandard speakers. The LB, while finding all speakers

equally suitable for a particular occupational role, were the only group that found speaker 4 more suitable as a newscaster than the other speakers.

Correlations obtained between attitudes toward occupation and attitudes toward speech patterns revealed that standard speakers were considered significantly more suitable for such higher level positions as teacher or newscaster and that nonstandard speakers were rated more suitable for lower level positions as maid or waitress. Further correlations between attitudes toward occupation and other social perceptions revealed that the more highly preferred and prestigious occupations were correlated with favorable evaluations of competence, trustworthiness, and personality. Less favored positions were correlated with more negative evaluations of competence, trustworthiness, and personality. Less skilled, less remunerative type positions were associated with negative or unfavorable perceptions of competence, trustworthiness, personality, and speech patterns. More skilled, more creative, and more remunerative type positions were associated with positive or favorable perceptions of competence, trustworthiness, personality, and speech patterns.

Positive attitudes toward teacher, newscaster, and supervisor were significantly correlated with attitudes toward speech patterns, indicating that members of these occupations may be expected to have standard speech patterns. Negative attitudes toward speech patterns were associated

highly with the least favored occupations of waitress and maid. The most favored speech patterns, the standard speech patterns, were associated with higher skilled occupations. Least favored speech patterns, the nonstandard speech patterns, were associated with lower skilled work. Speaker 3, the "New Yorkese" speaker, was rated more poorly than the nonstandard black speaker in trustworthiness, personality, and competence. Speaker 3 was considered highly suitable as a clerk or waitress and least suitable as a newscaster or teacher.

In addition, correlations were obtained for the relationship between the values assigned to speech patterns and the formation of impressions based on speech cues. The most significant impression was that of competence which was highly related to judgments made from the standardness-nonstandardness value system. Impressions of personality were also related to differences in speech cues. Last, but still significant, was trustworthiness, another image evoked by differences in speech patterns. Another factor influenced by the standard quality of speech was intelligibility--significant, but not as powerful a factor according to Table 4.32. It is difficult to determine whether dialects that are less intelligible are therefore evaluated more poorly or whether dialects that are in low esteem are less intelligible due to negative attitudes. It can be inferred that nonstandard speech patterns generate negative social attitudes and higher error response scores whereas standard

speech patterns generate more positive attitudes and lower error response scores. The speech patterns of speaker 4 in this type of formal experimental setting were regarded as the least intelligible. The speech patterns of standard speakers 1 and 2 were considered comparatively more intelligible. This is due to the fact that the speech intelligibility test construct focused on pairs of words which are homophonous in Black Dialect and in contrast in other American English dialects.

It is also notable that the LB made poorer listening scores to all speakers than did the other listeners. It may be concluded then that social perceptions are in part evoked by phonological variations between speakers and associated values which extend to the psycho-social traits of the speakers. Not all groups subscribe to this value system completely. The LB, whose struggles have been both ideological and practical, do not fully participate in this value system in which mythologized views and stereotypy concerning the elite and non-dominant groups are perpetuated. Such a system of distinctions stems from a socio-economic system which accepts the hierarchy of ethnic and racial groups and occupation.

The following and last chapter summarizes the results of the study and discusses implications raised by the present investigation.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

In this last chapter, we summarize the results of the study and discuss their significance and implications for future research.

The objectives of the investigation were primarily concerned with the effects of phonological variations on the formation of listerners' perceptions of representative speakers and their dialects. The dialectal varieties presented on tape were standard New York patterns spoken by one white speaker (1) and one black speaker (2), "New Yorkese" spoken by a white speaker (3), and Black English spoken by a black speaker (4). Seven tests were administered in order to measure affect reactions to the speakers and to determine the intelligibility of the dialects. Black and white college students from upper and lower socioeconomic strata (as defined by the Hollingshead Index of Social Position) rated their reactions to the speech patterns and to the speakers on semantic differential scales, the major testing instrument.

Summary

This section presents a summary of the significance of the main effects and the interactions as obtained by the analysis of variance tests which were applied to the

measurements of attitudes and to speech perception scores. Furthermore, a summary is given of the mean comparisons of the attitudes of socially diverse listeners to the speakers (triple interactions). These were obtained by the application of the Duncan New Multiple Range Tests.

Main Effects and Interactions

The speaker (A) factor, the differences among the four speakers, was highly significant as a source of variation in all ratings of attitudes toward speech patterns, competence, trustworthiness, and personality of the speakers and in the measurement of the intelligibility of the speakers. The race (B) factor, differences between the races of the listeners, was a significant factor contributing only to the variation of the intelligibility scores to the dialects of the representative speakers. The class (C) factor, differences between the social levels of the listeners, was a significant factor only in influencing the variation of the listening scores ('error' responses). The interaction of speaker and the race of the listeners (AB) never appeared as a significant combination of factors contributing to the variations in the attitudinal scores or in the listening scores. Differences in attitudes toward the speech patterns and in the measurements of the intelligibility of the speakers were influenced by the interaction of the speaker and class of listeners (AC). The interaction of race and class of the listeners (BC) was a significant

combination of factors contributing to variations in the listening scores. The triple interaction, the speakers and race and class of the listeners (ABC) was not significant from the overall view of the analysis of variance. This combination of factors did not serve as a significant source of variation in the attitudinal ratings or in the listening scores. One basic concern of the study was to investigate the attitudes of the social groups toward phonological variations of black and white speakers. The results of the comparisons of the means of the triple interactions, speaker, race and class of the listeners, are summarized below.

Triple Interactions

On the basis of statistically significant findings, the following observations can be made with reference to the speakers and to the four social groups of subject-listeners: lower status black and white students (LB and LW) and upper status black and white students (UB and UW).

Speakers.--In formal context, the speech patterns of speakers 1 and 2, users of standard dialect, were rated significantly higher than the speech patterns of speakers 3 and 4, users of the nonstandard dialect, by all groups of listeners. Speakers of standard dialect were judged more competent, more trustworthy and more attractive than speakers using nonstandard dialects by three social groups, the LW, UW and UB. Standard speakers were judged more "suitable" for such higher level occupations as teacher, supervisor, and newscaster.

Nonstandard speakers were judged more "suitable" for such lower level positions as maid or waitress. Speakers 1 and 2 received their highest ratings as teacher or newscaster, their lowest ratings as maid or waitress. Speakers 3 and 4 received their highest ratings as waitress or maid and their lowest ratings as teacher and newscaster. Standard speakers 1 and 2 generated significantly higher intelligibility scores or fewer "error" responses than speakers 3 and 4. Speaker 4 generated significantly poorer intelligibility scores or more "error" responses than the other speakers.

Listeners.--All social groups preferred standard speech patterns to nonstandard speech patterns. The LW, in their perceptions of the competence, trustworthiness, and personality of the speakers seemed most influenced by the standard-nonstandard factor in the phonological variations heard on tape. The UW held strong positive impressions of the trustworthiness and personality of speakers 1 and 2, users of phonological patterns which have been described as "standard."

Whereas the UB perceived the competence, personality, and trustworthiness of the standard speakers more highly than the nonstandard speakers, they did favor speaker 4, a member of their race in two instances. The UB were the only group to find the nonstandard black speaker (4) significantly more competent than the nonstandard white speaker (3). The UB, along with LB and LW, rated speaker 4 significantly more trustworthy than speaker 3. The LB perceived speaker 4 as significantly more trustworthy than other speakers.

The LB were distinctive in these results in that standardness of speech did not affect their impressions of the trustworthiness, personality, occupational suitability, and intelligibility of the speakers. They did not ascribe significantly more positive images to the standard speakers than to the nonstandard speakers except that they indicated a preference for the standard speech patterns and gave higher ratings of competence to the standard speakers. Nor did they find standard speakers more intelligible than nonstandard speakers. The other social groups found the standard speakers more intelligible, more personable, and more trustworthy than the nonstandard speakers. They also rated the standard speakers as more suitable for higher level positions such as teacher, newscaster, and supervisor. The nonstandard speakers were given significantly poorer ratings for these positions. However, the lower socioeconomic strata differed from the upper socioeconomic strata in the rankings of occupations in terms of prestige. The LB and LW ranked newscaster as third in importance whereas the UB and UW ranked newscaster as first in importance.

Correlations

Correlations obtained between attitudes toward occupation and attitudes toward speech patterns indicated that standard speakers who were rated more highly were considered significantly more suitable for such higher level positions as teacher or newscaster than nonstandard speakers whose

speech patterns were rated less favorably. Correlations between attitudes toward occupation and other social perceptions revealed that the more highly preferred occupations were closely related to favorable evaluations of competence, trustworthiness, and personality. Less favored positions such as maid or waitress were correlated with more negative evaluations of competence, trustworthiness, and personality. Impressions of the competence, the trustworthiness, and the personality of speakers appear to be considerably influenced by variations in speech cues which are subject to judgments based on the "standard-nonstandard" value attachment.

Conclusions

According to the results of this study, it may be concluded that in formal context, standard speech patterns generate more positive attitudes and lower "error" response scores on intelligibility tests whereas nonstandard speech patterns generate negative social attitudes and higher "error" response scores. The present investigation has shown that the UB, LW and UW still persist in the "mythologized view" (Aurbach, 1971) that standard speech patterns reflect competence, trustworthiness, and more attractive personalities. In spite of the recent recognition of the cultural plurality in the United States, student dissent, and the emergence of black power, it seems evident that phonological variations still serve as markers of social distinctions and stereotyped attitudes.

It does appear that changing social conditions are not internally marked as surface descriptions would indicate. Value orientations related to speech variations in spite of protestations and ethnic pride have not altered substantially to affect changes in social perceptions. However, the group most divergent in dialect variation is also most divergent in social perceptions of speakers and value orientations based on speech cues. In the present investigation, this group, the lower socioeconomic black college students, did not seem to fully participate in the value system shared by the LW, UW, and UB. Standardness of speech did not affect their impressions of the trustworthiness, personality, occupational suitability, and intelligibility of the representative speakers.

Implications

A significant feature of this investigation is that it is related to two major issues: one concerns social prejudices arising from the formation of "people perceptions" based on speech differences; the other focuses on the question of modifying speech behavior for the development and occupational fulfillment of the individual whose social group is culturally, educationally, and economically outside the main stream and whose dialect reflects this condition.

The first issue is concerned with the reality that all social groups participate in "myth making" or stereotyping based on the perception of speech cues associated with dominant

and non-dominant groups. Those groups who share favorably in the political and economic life of the nation and are continually striving upward (such as the UW and the LW) are particularly vulnerable to these beliefs. In the United States, lower socioeconomic black persons who have had limited opportunity for educational, economic, and social advancement do not participate fully in this value system and, therefore, are not as strongly influenced by variations in speech cues. The problem of stereotyped attitudes or negative expectations which label or classify individuals on the basis of minority group affiliation and occupational role has been increasingly recognized as a barrier in the learning process of children and in the employment of adults.

The second issue concentrates on the individual's speech behavior, his repertoire of patterns for both public and private settings, and the usefulness of his dialect in these instances. Furthermore, his attitudes and his parents' attitudes concerning the use of his dialect, his level of awareness of dialect differences and his needs, if any, for Standard American English are equally as important as the attitudes held by educators. Although not demonstrated conclusively, many black parents, regardless of social class, urge that their children be taught the "language of the book."

Thus, the consideration of these issues introduces implications for further research. These are discussed under three overlapping categories: search for causative factors

in the development of stereotyped perceptions; goals and attitudes in education and variables in experimental research in attitudinal studies.

Causative Factors in the Perpetuation of Stereotypes

In order to dispel the myth that there is a "better" dialect which reflects positive traits, it is necessary to explore how and by whom such beliefs are transmitted. Thus, perhaps negative expectancies of teachers as demonstrated by Rosenthal and Jacobson (1968) may be altered to some extent in the classroom. One area for exploration initiated by Williams (1970a) is that of the teacher-child relationship in terms of teachers' comments to children concerning speech differences; another includes the type of activities used by teachers to broaden and stimulate language concepts and a variety of communication modes. Of particular interest are the kinds of penalties, usually of a verbal nature, inflicted on the child whose speech is different. On the other side of the coin, little is known about children's thoughts concerning their own speech, the extent of their feelings, and the situations and ages in which they begin to perceive how their own speech patterns differ from others, and the subsequent effects.

Similarly, the development of functional speech habits and ethnic and speech associations are fostered also in parent-child relationships. Another major area of investigation therefore consists of exploring the kinds of speech

behavior that are approved and/or penalized by families from diverse social classes. Examining the quality, length, and variety of conversations in the home may provide us with some insights into the importance given to communication by parents in home settings. Consequently the degree of sensitivity to variations in dialects may be better understood.

A third force by which attitudes toward speech may be molded is the mass media where standard dialect is primarily heard. A study of commercials and personality shows and of the roles played by speakers of nonstandard speech patterns may reveal the degree of "downgrading" of the speech of individuals in minority groups. In addition, it is through these media that intelligible, though nonstandard, dialects could be heard in order to mitigate the denigration of non-dominant groups and their associated mythologized social characteristics. However, at what distance from the target dialect (standard dialect) would a nonstandard dialect spoken by a newscaster, for example, be acceptable to the general public? Investigations of this nature would permit us to examine more closely the ways in which a culture fosters social perceptions, particularly those based on speech differences.

Goals and Attitudes in Education

In the past, educators particularly in New York City did not tolerate any phonological deviation from the standard

dialect among students and particularly among teacher candidates. Nor did they consider the effects of the functional limitations of a lisp in communication, the effects of the omission of the third person singular morpheme -s, -z upon the extent of information that is received or imparted in the communication process. Certainly the development of diagnostic aids of a linguistic nature is vital for teachers, speech therapists, and psychologists in order to determine the communication needs of "disadvantaged" children in public settings.

A controversial issue at the present time is concerned with the extent of alteration of speech behavior, if any, for users of nonstandard dialects. Another such issue is the question of teaching in Black Dialect, particularly to develop and to improve reading skills of black youngsters in lower socioeconomic strata. Judging from the results of this study, one may predict that at the present time, efforts to teach and utilize Black Dialect in the school system would be regarded negatively by the UB and even by the LB. Both groups gave significantly higher ratings to the standard dialects than to the nonstandard dialects in a school testing setting and furthermore, both groups evaluated the competence of standard speakers higher than the competence of nonstandard speakers. It is recommended that the usefulness of "home dialects" in public settings be explored in terms of the transmission and reception of informative content. The Bernstein studies were essentially

confined to inventories of the components of the restricted and elaborated codes and did not consider the functional aspects of a dialect.

It has become increasingly important that teachers discard the old stereotypes of minority group children. In fact, new teaching techniques are continually being developed in order to cope with the variety of learning styles presented by children in all social classes. It is therefore imperative that investigations be undertaken to determine the kinds of inputs in teacher training program necessary for understanding the communication process and the relationship between social context and speech differences within and between speakers. Furthermore, the structural and functional conflicts between standard and black dialects should be explored in relation to spelling, pronunciation, and reading problems.

The consideration of bidialectal approaches in language stimulation programs in pre-school, kindergarten, and first grade necessitates the interest and cooperation of families whose children are concerned. Such an exploration requires a survey of the community's attitudes which generally have been ignored in this sensitive area of education. A feature of speech behavior in many countries is bidialectalism which is recognized as the accepted use of dialect variations in different social settings. Educated children in Scandinavia and in the Caribbean, for example, are aware that they switch dialects for formal and informal

occasions. The school situation is viewed as a formal setting requiring the use of standard dialect; at home they converse in their local dialect.

Experimental Research in Attitudinal Studies

Most attitudinal studies toward dialect differences have been concerned with listeners' reactions to speakers based on variations in speech cues. The following research projects are particularly indicated as an outgrowth of the present investigation:

1. Studies of the effects of pitch variation and stress on speaker credibility.

2. Studies of the dimension of familiarity as a variable in exposing the public to speakers of nonstandard dialects in commercials, in newscasting and in other respectable roles.

3. Studies of the social variation of kinesics, proxemics, and paralinguistic features and their effects upon social perceptions.

4. Studies of the subjective reactions of elementary school, junior high, and high school students to their own speech behavior.

5. Studies of regional attitudinal differences in homogeneously populated areas versus heterogenous or diversified ethnic areas.

For example, due to early settlement factors, the ethnic diversity of the New York City area is much greater than that of Seattle where most settlers had already lived in another section of the United States and to whom English was a native language. The question arises as to whether persons exposed to primarily homogeneous groups form negative

expectations of individuals from non-dominant groups based on dialect variations presented on tape as in the present study in New York City.

It is necessary to consider the social stratification of listeners in order to understand the effects of dialectal variations upon social perceptions. In particular, we have examined in this study, the affect reactions of four social groups to variant speech patterns and to the representative black and white speakers in formal context.

Variations in phonological patterns between speakers reflect the ethnic and socioeconomic hierarchy of a culture. Phonological variants having been assigned a value system related to this hierarchy are thereby evaluated along with the respective speakers in terms of importance and positive attributes. Cross cultural studies have shown that society, regardless of degree of industrialization, has perpetuated this differentiation of strata which is reflected in the political structure, and in educational and economic opportunities.

All dialects, then, are socially distinctive and as such, they contribute to the sociolinguistic competence of native American English speakers who in listener roles form certain social perceptions of speakers on the basis of phonological variations.

APPENDICES

APPENDIX A

IDENTIFYING INFORMATION FORM

IDENTIFYING INFORMATION FORM

Part I

1. Name _____ Male-female College _____
2. Address_____Borough_____
3. Birthdate _____Place of Birth_____
4. How long have you resided in New York City?_____

Part II

1. Date of high school graduation or equivalency diploma _____
2. Circle type of diploma: Commercial General Academic
3. Circle type of high school: Academic General Vocational
4. Circle: Racially integrated Racially segregated

Part III

1. Father's place of birth _____
2. Mother's place of birth _____
3. Father or mother's occupation_____
4. Father or mother's education: Circle the number that applies:
   1. completed some grade school
   2. graduated from grade school
   3. completed some high school
   4. graduated from high school
   5. completed some college
   6. graduated from college
   7. professional training with a graduate degree

Part IV

1. Language spoken at home with parents_____
2. Language spoken with friends_____
3. Can you write in another language besides English?____

Part V

1. Do you work? _____
2. How many hours per week? _____
3. Did you have a speech course in high school?_____
4. Are you taking a speech course?_____
   Will you take one in college?_____
5. What is your impression of your own speech patterns in English?
   Circle: Good Fair Poor

APPENDIX B

INSTRUCTIONS

General Directions to Subjects

We would like to get your impressions of the four speakers whom you will hear on tape. Your contributions will help us to learn more about how people form attitudes about others--based on speech patterns.

You each have four booklets in which you will record your impressions. There is one set for each speaker plus answer sheets for the Multiple Choice Word Tests, one for each speaker. On the first sheet in each booklet, you indicate your closest impressions of the speech patterns of the speaker, particularly, the PRONUNCIATION of the speaker. On the second sheet, you record your reaction to the individual as a person, i.e., what do you think of this person based on her pronunciation patterns? On the third sheet, you indicate the speaker's suitability for a particular occupation. On the fourth sheet, you note your impressions of the personal characteristics of the speaker based on her pronunciation. Naturally, you might find it difficult to decide if the speaker is tall or short, but do attempt a guess. If you have no impressions, you may have to record a neutral reaction and mark the center interval. Before we listen to each speaker--particularly, her pronunciation patterns, let us look at the instructions for the use of the semantic differential technique.

INSTRUCTIONS
SEMANTIC DIFFERENTIAL TECHNIQUE

The purpose of this study is to determine your impressions of the speech pattern you hear on the tape or your impressions of the person who is speaking.

Please make your judgments solely on the basis of the first impression you receive from the person's speech by use of the scales described below.

If you feel the person or his speech is very closely related to one end of the scale, place your check-mark as follows:

bad X : : : : : : good

OR

bad : : : : : : X good

If you feel the person or his speech is quite closely related to one end of the scale (but not extremely), place your check-mark as follows:

strong : X : : : : : weak

OR

strong : : : : : X : weak

If you feel the person is only slightly related to one end of the scale (but not really neutral), place your check-mark as follows:

unfair : : X : : : : fair

OR

unfair : : : : X : : fair

The direction in which you check the scale will, of course, depend upon which of the two ends of the scale is more closely related to your feelings about the speech or the speaker. If you feel that the speaker is neutral on a particular scale, place your check-mark in the middle space:

safe : : : X : : : dangerous

IMPORTANT: (1) Mark in the middle of the space, not on the boundaries:

: X : : : X :
THIS NOT THIS

(2) Take every scale in order. Do not look back and forth through the scales.
(3) Each item should be an independent and separate judgment.
(4) Work at fairly rapid speed. But do not be careless. We want your true first impressions.
(5) Listen carefully to these tapes.

APPENDIX C

TEST FORMS

SPEAKER _____

SPEECH PATTERNS (ARTICULATION)

ACTIVE	_____:_____:_____:_____:_____:_____:_____	PASSIVE
DIRTY	_____:_____:_____:_____:_____:_____:_____	CLEAN
ACCEPTABLE	_____:_____:_____:_____:_____:_____:_____	UNACCEPTABLE
STRONG	_____:_____:_____:_____:_____:_____:_____	WEAK
PLEASANT	_____:_____:_____:_____:_____:_____:_____	UNPLEASANT
BAD	_____:_____:_____:_____:_____:_____:_____	GOOD
EFFECTIVE	_____:_____:_____:_____:_____:_____:_____	INEFFECTIVE
UNCLEAR	_____:_____:_____:_____:_____:_____:_____	CLEAR
SHARP	_____:_____:_____:_____:_____:_____:_____	DULL

SPEAKER _____

THE SPEAKER

inexpert	_____:_____:_____:_____:_____:_____:_____	expert
virtuous	_____:_____:_____:_____:_____:_____:_____	sinful
informed	_____:_____:_____:_____:_____:_____:_____	uninformed
worthless	_____:_____:_____:_____:_____:_____:_____	valuable
friendly	_____:_____:_____:_____:_____:_____:_____	unfriendly
qualified	_____:_____:_____:_____:_____:_____:_____	unqualified
awful	_____:_____:_____:_____:_____:_____:_____	nice
pleasant	_____:_____:_____:_____:_____:_____:_____	unpleasant
unselfish	_____:_____:_____:_____:_____:_____:_____	selfish
unreliable	_____:_____:_____:_____:_____:_____:_____	reliable
dishonest	_____:_____:_____:_____:_____:_____:_____	honest
intelligent	_____:_____:_____:_____:_____:_____:_____	unintelligent

SPEAKER _____

How suitable or unsuitable do you think this speaker would be in the following occupations?

WAITRESS

suitable _____:_____:_____:_____:_____:_____:_____ unsuitable

TEACHER

suitable _____:_____:_____:_____:_____:_____:_____ unsuitable

CLERK

suitable _____:_____:_____:_____:_____:_____:_____ unsuitable

SUPERVISOR

suitable _____:_____:_____:_____:_____:_____:_____ unsuitable

TELEPHONE OPERATOR

suitable _____:_____:_____:_____:_____:_____:_____ unsuitable

MAID

suitable _____:_____:_____:_____:_____:_____:_____ unsuitable

NEWSCASTER

suitable _____:_____:_____:_____:_____:_____:_____ unsuitable

NURSE

suitable _____:_____:_____:_____:_____:_____:_____ unsuitable

SPEAKER _____

PERSONAL CHARACTERISTICS OF THE SPEAKER

tall	_____:_____:_____:_____:_____:_____:_____	short
thin	_____:_____:_____:_____:_____:_____:_____	heavy
dark-haired	_____:_____:_____:_____:_____:_____:_____	light-haired
young	_____:_____:_____:_____:_____:_____:_____	old
light-skinned	_____:_____:_____:_____:_____:_____:_____	dark-skinned
unattractive	_____:_____:_____:_____:_____:_____:_____	attractive
bright	_____:_____:_____:_____:_____:_____:_____	dull
popular	_____:_____:_____:_____:_____:_____:_____	unpopular
introverted	_____:_____:_____:_____:_____:_____:_____	extroverted
efficient	_____:_____:_____:_____:_____:_____:_____	inefficient

Ranking of Occupations

Using your own judgments, rank the following occupations according to their importance and prestige in society (as you see the existing ranking today in the U.S.)

	USE #1 - MOST IMPORTANT	#8 - LEAST IMPORTANT
waitress		
teacher		
supervisor		
telephone operator		
maid		
newscaster		
nurse		
clerk		

PLEASE MAKE CERTAIN YOU'VE RANKED ALL OCCUPATIONS USING NUMBERS #1 THROUGH #8.

Intelligibility Test

SPEAKER I

Number 1	felt	Number 19	Jim
Number 2	death	Number 20	doze
Number 3	tie	Number 21	lease
Number 4	tooth	Number 22	far
Number 5	cold	Number 23	coal
Number 6	fire	Number 24	toy
Number 7	least	Number 25	toot
Number 8	those	Number 26	deaf
Number 9	gem	Number 27	fell
Number 10	bed	Number 28	bade
Number 11	paired	Number 29	leaf
Number 12	mine	Number 30	fail
Number 13	poor	Number 31	cheer
Number 14	guard	Number 32	rod
Number 15	rot	Number 33	God
Number 16	chair	Number 34	pour
Number 17	fell	Number 35	my
Number 18	leave	Number 36	pad

SPEAKER 1

MULTIPLE CHOICE WORD TEST

You are going to hear a list of words. Match the word you hear with a word you recognize in each section below. Cross out the one word you recognize as you hear it. Listen carefully and work quickly but accurately.

1	felt	7	lead	13	pour	19	gem	25	two	31	cheer
	fail		lease		poor		gin		toot		chair
	fell		least		paw		Jim		tube		sheer
2	deaf	8	doze	14	God	20	doze	26	death	32	rot
	death		toes		guard		those		debt		rod
	debt		those		gored		toes		deaf		raw
3	toy	9	gem	15	wrought	21	lease	27	feel	33	gored
	tide		Jim		rod		lace		fail		guard
	tie		gin		rot		less		fell		God
4	toot	10	bade	16	chair	22	fire	28	bay	34	pour
	tooth		bed		cheer		far		bade		poor
	two		bay		share		for		beg		paw
5	coal	11	paired	17	fail	23	coal	29	leaf	35	mile
	cove		pad		fell		coat		Lee		my
	cold		pair		feel		code		lease		might
6	fire	12	mind	18	leave	24	tie	30	feel	36	pear
	far		my		leaf		toy		fail		pad
	fight		mine		Lee		toil		Fay		pared

Intelligibility Test

SPEAKER II

Number 1	welt	Number 19	tin
Number 2	Ruth	Number 20	den
Number 3	buy	Number 21	mass
Number 4	both	Number 22	high
Number 5	sold	Number 23	soul
Number 6	hire	Number 24	boy
Number 7	mast	Number 25	boat
Number 8	then	Number 26	roof
Number 9	ten	Number 27	well
Number 10	fed	Number 28	fade
Number 11	cared	Number 29	life
Number 12	sign	Number 30	tail
Number 13	poor	Number 31	cheer
Number 14	card	Number 32	pod
Number 15	pot	Number 33	cod
Number 16	chair	Number 34	pour
Number 17	tell	Number 35	sigh
Number 18	live	Number 36	cad

SPEAKER 2

MULTIPLE CHOICE WORD TEST

You are going to hear a list of words. Match the word you hear with a word you recognize in each section below. Cross out the one word you recognize as you hear it. Listen carefully and work quickly but accurately.

	wolt		mast		paw		ten		bow		chair
1	wail	7	mass	13	pour	19	tin	25	boat	31	cheer
	well		mess		poor		tan		bowl		share
	root		don		cod		den		roof		pod
2	Ruth	8	ton	14	card	20	then	26	root	32	pawed
	roof		thon		cord		din		Ruth		poured
	boy		tent		pot		mess		well		card
3	bide	9	tin	15	pod	21	mass	27	wail	33	cord
	buy		ten		part		mace		will		cod
	boat		fade		chair		high		Fay		pour
4	both	10	fed	16	cheer	22	hide	28	fade	34	paw
	bow		Fay		share		hard		fed		poor
	soul		cared		tail		sewed		lot		sighed
5	sew	11	cad	17	toll	23	soul	29	lie	35	sigh
	sold		care		till		so		life		sign
	hire		signed		live		boy		tail		cad
6	high	12	sigh	18	life	24	boil	30	toll	36	cared
	hide		sign		lie		burn		till		care

Intelligibility Test

SPEAKER III

Number 1	belt	Number 19	since
Number 2	death	Number 20	tin
Number 3	buy	Number 21	Tess
Number 4	both	Number 22	high
Number 5	field	Number 23	feel
Number 6	hire	Number 24	boy
Number 7	test	Number 25	boat
Number 8	thin	Number 26	deaf
Number 9	cents	Number 27	bell
Number 10	west	Number 28	waste
Number 11	fared	Number 29	safe
Number 12	dine	Number 30	wail
Number 13	poor	Number 31	cheer
Number 14	card	Number 32	nod
Number 15	not	Number 33	cod
Number 16	chair	Number 34	pour
Number 17	wall	Number 35	die
Number 18	save	Number 36	fad

SPEAKER 3

MULTIPLE CHOICE WORD TEST

You are going to hear a list of words. Match the word you hear with a word you recognize in each section below. Cross out the one word you recognize as you hear it. Listen carefully and work quickly but accurately.

	bail		taste		pour		sense		boat		cheered
1	belt	7	Tess	13	poor	19	since	25	bow	31	chair
	bell		test		paw		cent		bowed		cheer
	deaf		ten		cod		tin		deaf		nod
2	death	8	tin	14	card	20	ten	26	debt	32	gnaw
	debt		thin		cord		tan		death		not
	boy		cents		not		Tess		bail		card
3	bide	9	since	15	nod	21	taste	27	bill	33	cod
	buy		sane		naught		tease		bell		cord
	boat		waste		chair		hard		wait		poor
4	both	10	west	16	cheer	22	high	28	west	34	pour
	bow		way		share		height		waste		paw
	fee		fared		wail		fill		safe		dial
5	feel	11	fad	17	well	23	feel	29	say	35	dine
	field		fair		wed		fail		save		die
	hire		dined		save		bide		way		fag
6	high	12	die	18	safe	24	buy	30	wail	36	fad
	hide		dine		say		boy		well		fared

Intelligibility Test

SPEAKER IV

Number 1	felt	Number 19	pin
Number 2	Ruth	Number 20	day
Number 3	tie	Number 21	guess
Number 4	faith	Number 22	far
Number 5	bold	Number 23	bowl
Number 6	fire	Number 24	toy
Number 7	guest	Number 25	fate
Number 8	they	Number 26	roof
Number 9	pen	Number 27	fall
Number 10	red	Number 28	raid
Number 11	bared	Number 29	leaf
Number 12	line	Number 30	sail
Number 13	poor	Number 31	cheer
Number 14	guard	Number 32	cod
Number 15	cot	Number 33	God
Number 16	chair	Number 34	pour
Number 17	sell	Number 35	lie
Number 18	leave	Number 36	bad

SPEAKER 4

MULTIPLE CHOICE WORD TEST

You are going to hear a list of words. Match the word you hear with a word you recognize in each section below. Cross out the one word you recognize as you hear it. Listen carefully and work quickly but accurately.

	fail		guest		paw		pain		Fay		chair
1	felt	7	guess	13	pour	19	pen	25	fate	31	cheer
	fell		gassed		poor		pin		fade		sheer
	Ruth		thee		guard		day		roof		cod
2	root	8	day	14	God	20	they	26	Ruth	32	cord
	roof		they		gored		thee		root		card
	toy		pen		cot		guess		for		God
3	tide	9	pin	15	cod	21	kiss	27	fall	33	guard
	tie		pain		caught		case		four		gored
	fate		raid		sheer		fire		rid		paw
4	faith	10	red	16	cheer	22	far	28	red	34	poor
	Fay		ray		chair		fall		raid		pour
	bowl		bared		sail		bowl		leaf		lied
5	bowed	11	bad	17	sell	23	bold	29	Lee	35	line
	bold		bear		sill		bowed		leave		lie
	far		lined		leave		tie		sail		bad
6	fire	12	lie	18	leaf	24	toy	30	sell	36	bared
	fine		line		Lee		toe		sill		bag

APPENDIX D

SOCIAL DESCRIPTION OF INFORMANTS

SOCIAL DESCRIPTION OF INFORMANTS LOWER SOCIOECONOMIC STATUS

Informant	Race	Sex	Age	Residence	Parental Background Occupation	(Rt)	Education	(Rt)	Birthplace
1	B	F	19	G MA	Unskilled	(7)	P.H.S.	(5)	N
2	B	F	20	G MA	Baker	(5)	P.H.S.	(5)	W.I., Cuba
3	B	F	19	G MA	Unskilled	(7)	P.E.S.	(7)	S
4	B	F	20	G MA	Construction Worker	(5)	P.H.S.	(5)	S, W.I.
5	B	F	19	G MA	Practical Nurse	(6)	H.S.G.	(4)	S
6	B	M	21	G MA	Unskilled	(7)	Jr.H.	(6)	S
7	B	M	19	G MA	Unskilled	(7)	P.H.S.	(5)	S
8	B	M	25	G PR	Custodian	(7)	P.H.S.	(5)	S
9	B	M	22	I MA	Fireman	(5)	P.H.S.	(5)	S
10	B	M	20	G PR	Postal Worker	(4)	H.S.G.	(4)	S
11	W	F	18	Sg PR	Tailor	(5)	P.E.S.	(7)	E
12	W	F	19	Sg PR	Barber	(5)	P.H.S.	(5)	E

(Continued)

Informant	Race	Sex	Age	Residence	Parental Background Occupation	(Rt)	Education	(Rt)	Birthplace
13	W	F	19	Sg MA	Sanitation Worker	(6)	P.H.S.	(5)	N
14	W	F	22	Sg Sd	Machinist	(4)	P.H.S.	(5)	N
15	W	F	18	I PR	Fireman	(5)	P.H.S.	(5)	N
16	W	M	20	Sg Sd	Fireman	(5)	H.S.G.	(4)	N
17	W	M	20	I Sd	Demolition Foreman	(5)	P.H.S.	(5)	N
18	W	M	21	I MA	Waitress	(6)	Jr.H.	(6)	N
19	W	M	23	Sg PR	Unskilled	(7)	H.S.G.	(4)	N
20	W	M	19	Sg PR	Meter Inspector	(6)	H.S.G.	(4)	N

Key:

Rt = ratings 1-7 from Hollingshead's Index of Social Position; G = ghetto; I = integrated; Sg = segregated; MA = major action; PR = preventive renewal; Sd = sound; N = north; S = south; E = Europe; Eng = England; W.I. = West Indies; Ca = Canada; G.Tr. = graduate training; C.Gr. = college graduate; H.S.G. = high school graduate; P.H.S. = partial high school; Jr.H. = junior high; E.S.G. = elementary school graduate; P.E.S. = partial elementary school.

SOCIAL DESCRIPTION OF INFORMANTS UPPER SOCIOECONOMIC STATUS

Informant	Race	Sex	Age	Residence	Parental Background Occupation	(Rt)	Education	(Rt)	Birthplace
21	B	F	20	I PR	Dentist	(1)	G. Tr.	(1)	N, Haiti
22	B	F	18	I Sd	Lawyer	(1)	G. Tr.	(1)	N, S
23	B	F	20	G MA	Teacher-Artist	(2)	C. Gr.	(2)	W.I.
24	B	F	18	I PR	Social Worker	(2)	C. Gr.	(2)	S
25	B	F	21	I PR	Accountant	(1)	C. Gr.	(2)	N, S
26	B	M	22	I PR	College Professor	(1)	G. Tr.	(1)	N
27	B	M	24	I PR	Businessman	(2)	C. Gr.	(2)	N
28	B	M	21	I Sd	Accountant	(1)	C. Gr.	(2)	N, W.I.
29	B	M	19	I Sd	Director, Afro-American Institute	(1)	G. Tr.	(1)	S
30	B	M	22	G MA	Judge	(1)	G. Tr.	(1)	N
31	W	F	18	Sg Sd	Dentist	(1)	G. Tr.	(1)	N

(Continued)

Informant	Race	Sex	Age	Residence	Parental Background Occupation	(Rt)	Education	(Rt)	Birthplace
32	W	F	19	Sg Sd	Supervisor	(2)	C.Gr.	(2)	N
33	W	F	19	Sg Sd	Lawyer	(1)	G.Tr.	(1)	N
34	W	F	19	Sg Sd	Lawyer	(1)	G.Tr.	(1)	N, Ca
35	W	F	19	I PR	Social Worker	(2)	G.Tr.	(1)	N
36	W	M	18	Sg Sd	Teacher	(2)	C.Gr.	(2)	N
37	W	M	20	Sg Sd	Lawyer	(1)	G.Tr.	(1)	N, Eng
38	W	M	19	Sg Sd	Chief Investigator	(3)	C.Gr.	(2)	N
39	W	M	19	Sg Sd	Orthodontist	(1)	G.Tr.	(1)	N, Iowa
40	W	M	22	Sg Sd	Industrial Specialist (Navy)	(2)	C.Gr.	(2)	N

Key:

Rt = ratings 1-7 from Hollingshead's Index of Social Position; G = ghetto; I = integrated; Sg = segregated; MA = major action; PR = preventive renewal; Sd = sound; N = north; S = south; E = Europe; Eng = England; W.I. = West Indies; Ca = Canada; G.Tr. = graduate training; C.Gr. = college graduate; H.S.G. = high school graduate; P.H.S. = partial high school; Jr.H. = junior high; E.S.G. = elementary school graduate; P.E.S. = partial elementary school.

SOCIAL DESCRIPTION OF INFORMANTS

ORIGIN OF PARENTS

Percentage of Listeners

	North	South	Europe	Caribbean
LB	10	80	-	10
LW	80	-	20	-
UB	70	20	-	10
UW	100	-	-	-

RESIDENCE OF INFORMANTS

Percentage of Listeners

	Ghetto	Int.	Restr.	M.A.	P.R.	Sd.
LB	90	10	-	80	20	-
LW	-	30	70	10	50	40
UB	20	80	-	20	50	30
UW	-	10	90	-	10	90

Key:

LB = Lower status black persons
LW = Lower status white persons
UB = Upper status black persons
UW = Upper status white persons
Int. = integrated
Restr. = restricted
M.A. = major action area
P.R. = preventive renewal
Sd. = sound

APPENDIX E

STIMULUS MESSAGE

Stimulus Message - Alice in Wonderland

Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, "and what is the use of a book," thought Alice, "without pictures or conversations?"

So she was considering in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy chain would be worth the trouble of getting up and picking the daisies, when suddenly a white rabbit with pink eyes ran close by her.

There was nothing so very remarkable in that; nor did Alice think it so very much out of the way to hear the rabbit say to itself, "Oh dear! I shall be too late." (When she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the rabbit actually took a watch out of its waistcoat pocket, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never seen a rabbit with either a waistcoat pocket, or a watch to take out of it.

APPENDIX F

TEST DATA

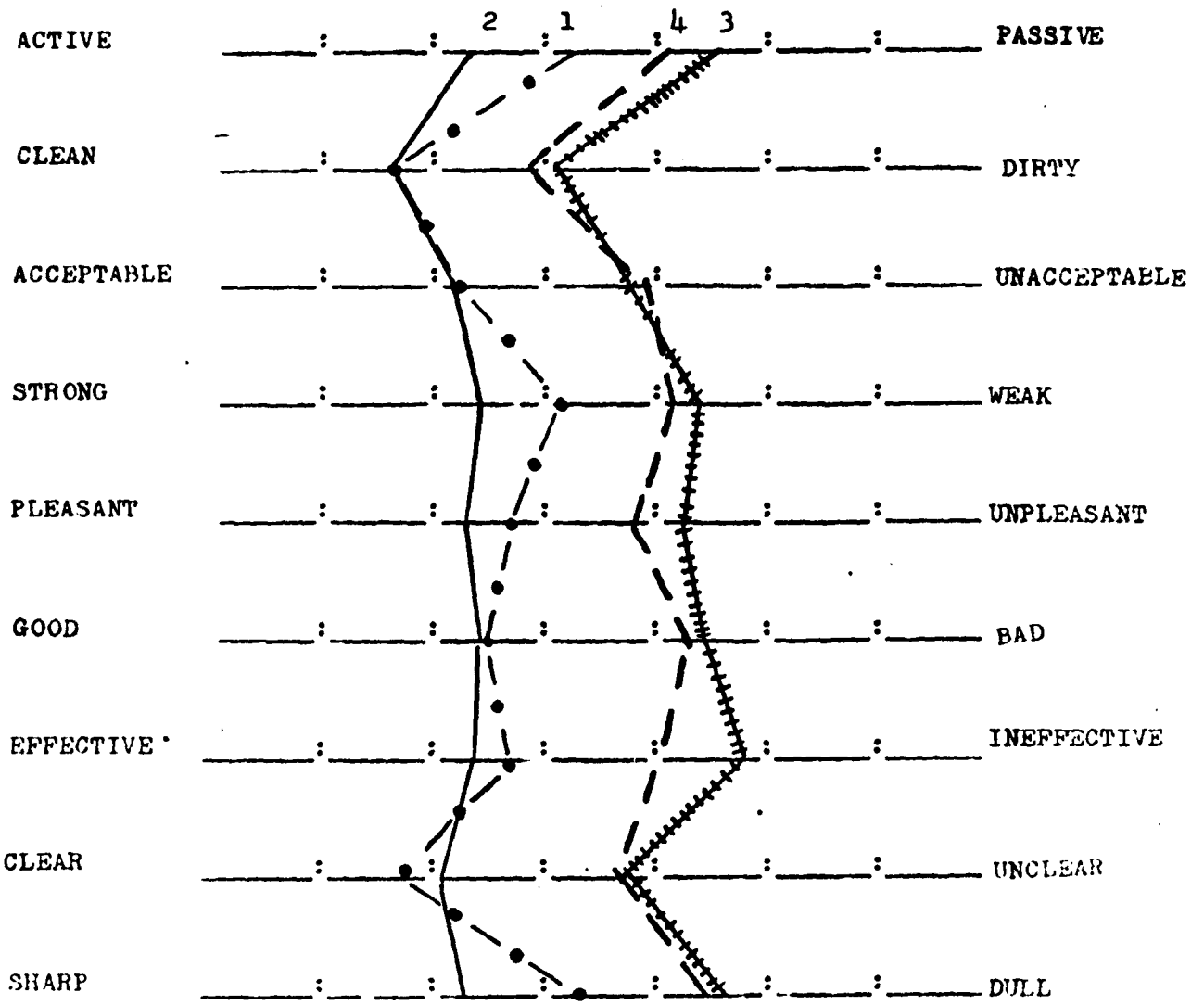


Fig. 4.1--Mean Profiles of the Attitudes Toward the Speech Patterns of the Speakers

Key: 1, standard white speaker; 2, standard black speaker; 3, nonstandard white speaker; 4, nonstandard black speaker

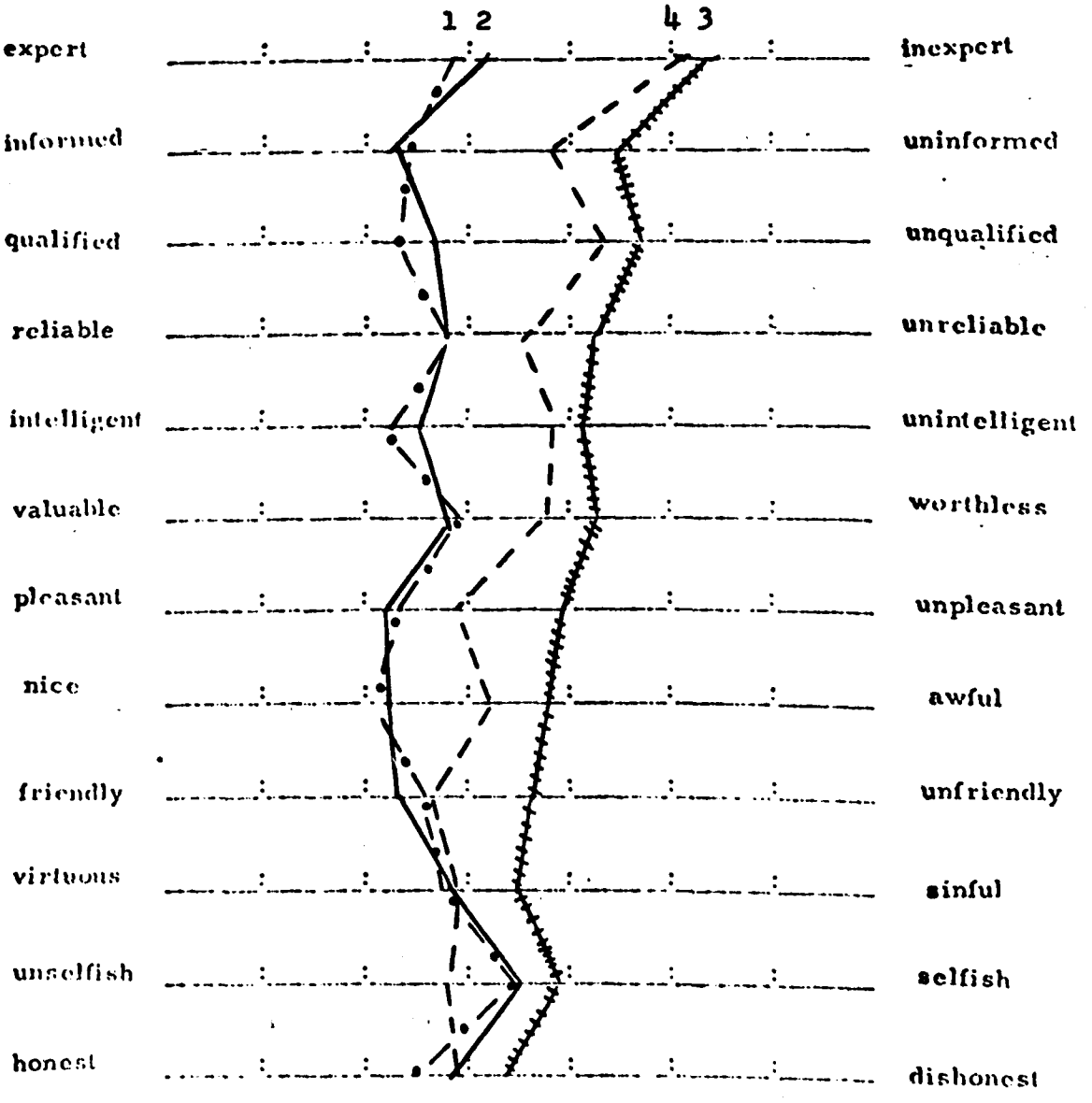


Fig. 4.2--Mean Profiles of the Attitudes Toward the Speakers

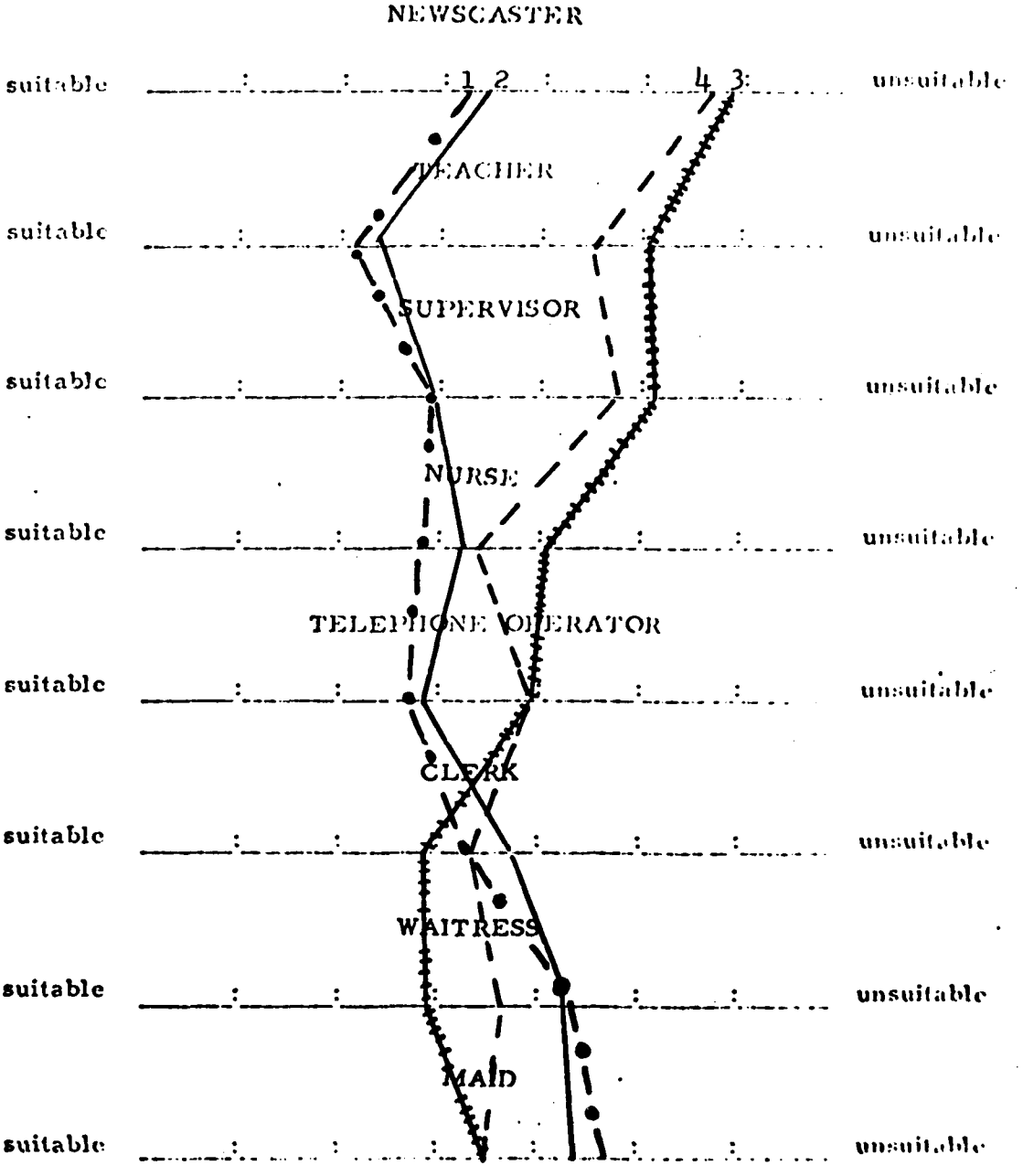


Fig. 4.3--Mean Profiles of the Attitudes Toward the Occupational Suitability of the Speakers

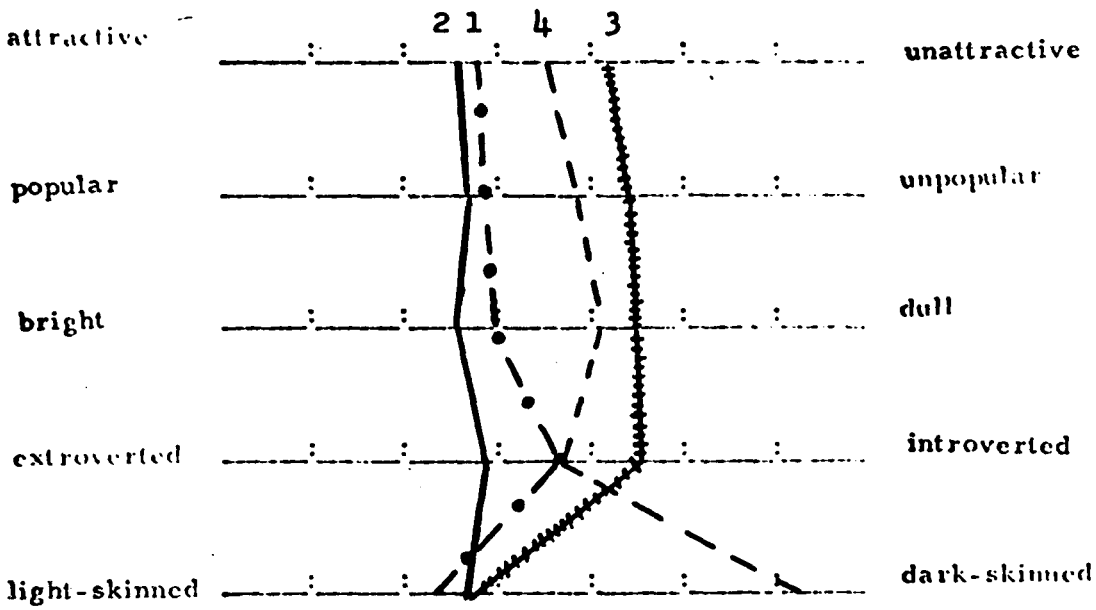


Fig. 4.4--Mean Profiles of the Attitudes Toward the Personal Characteristics of the Speakers

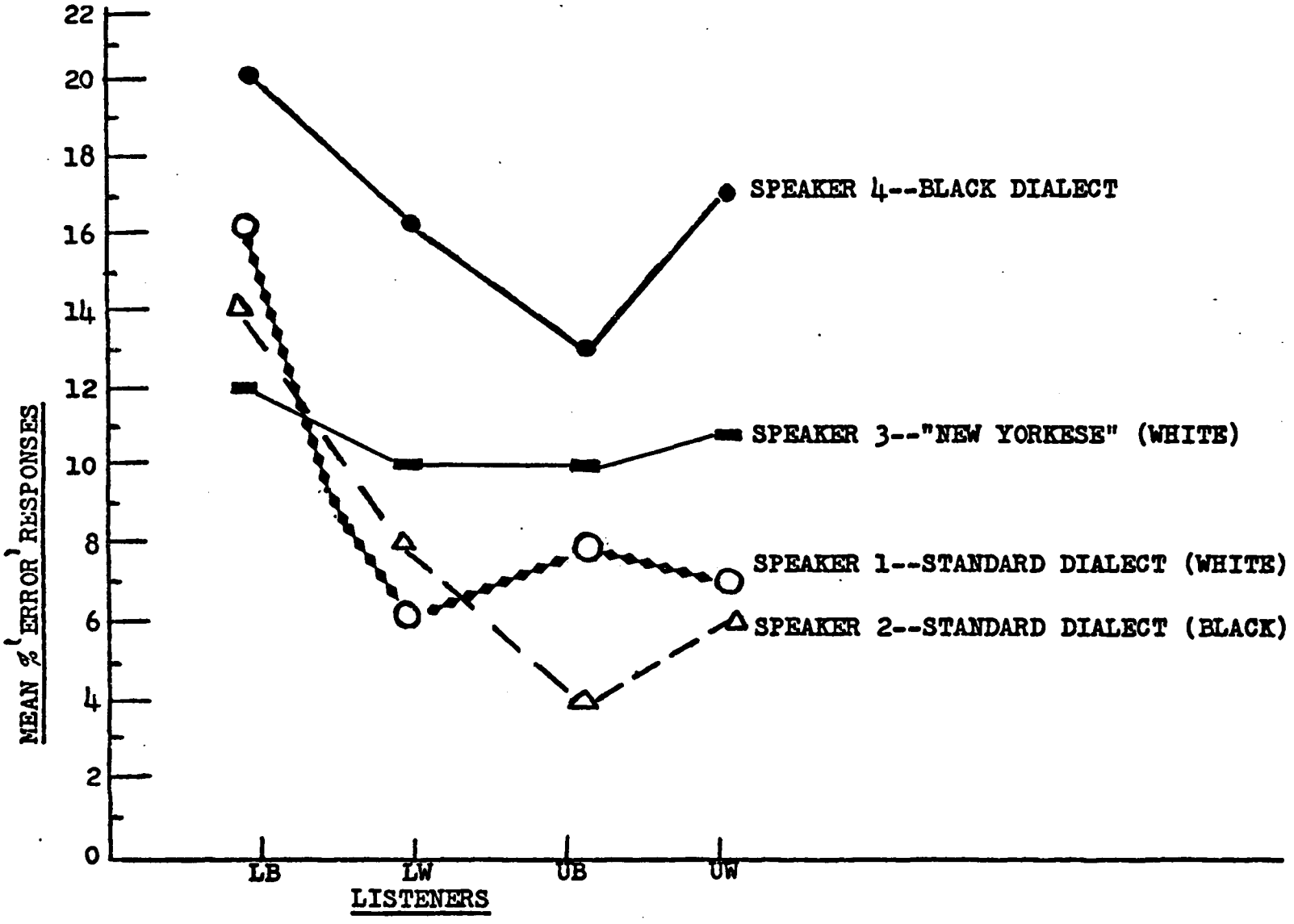


Fig. 4.5--Listeners' Mean Percentages of 'Error' Responses for each Speaker

RAW SCORES OF LISTENERS' REACTIONS TO SPEECH PATTERNS*

Speaker 1				Speaker 2				Speaker 3				Speaker 4			
White		Black		White		Black		White		Black		White		Black	
U	L	U	L	U	L	U	L	U	L	U	L	U	L	U	L
47	62	49	63	47	59	48	50	28	40	23	31	22	37	57	44
56	42	51	59	63	61	58	58	61	30	35	34	61	26	21	55
63	53	48	30	62	62	58	59	32	31	48	37	42	31	34	27
47	47	53	58	63	62	59	33	21	30	52	50	59	44	31	34
61	56	58	26	57	57	49	34	36	33	24	31	32	41	40	49
42	54	51	52	48	63	57	29	28	49	33	25	25	54	45	16
52	56	45	19	34	58	51	38	17	18	18	39	46	25	46	32
57	30	41	60	34	41	31	59	15	31	32	44	12	30	28	41
53	56	47	53	63	56	50	55	50	29	38	48	29	37	49	34
27	43	57	51	47	48	63	56	56	28	37	36	26	43	37	26
505	499	500	471	518	567	524	471	344	319	340	375	354	368	388	358

*Most favorable reaction score possible is 63.
Least favorable reaction score possible is 9.

RAW SCORES OF LISTENERS' RATINGS OF PERCEIVED COMPETENCE OF THE SPEAKERS*

Speaker 1				Speaker 2				Speaker 3				Speaker 4			
White		Black		White		Black		White		Black		White		Black	
U	L	U	L	U	L	U	L	U	L	U	L	U	L	U	L
31	37	30	41	27	41	28	30	19	25	12	20	21	22	30	20
42	39	34	37	42	35	38	38	36	22	13	22	31	16	13	36
37	37	33	21	36	40	35	11	17	15	25	28	26	13	30	16
36	31	36	34	36	40	40	25	10	21	35	30	39	22	19	24
37	37	39	19	34	34	36	29	23	16	14	19	22	29	25	31
34	37	29	32	29	42	35	22	20	26	21	26	30	34	22	17
34	33	16	27	22	35	29	23	14	18	12	24	30	22	28	24
35	23	28	34	15	34	15	39	8	21	18	28	12	17	20	33
34	31	32	33	39	35	30	36	34	21	23	27	17	19	35	23
24	28	38	39	37	27	41	31	32	14	13	32	15	23	21	25
344	333	309	317	317	363	321	284	213	199	181	256	243	217	243	249

*Most favorable reaction score possible is 42.
Least favorable reaction score possible is 7.

RAW SCORES OF LISTENERS' RATINGS OF PERCEIVED TRUSTWORTHINESS OF THE SPEAKERS*

Speaker 1				Speaker 2				Speaker 3				Speaker 4			
White		Black		White		Black		White		Black		White		Black	
U	L	U	L	U	L	U	L	U	L	U	L	U	L	U	L
33	40	26	37	28	36	25	29	21	39	14	25	23	32	34	37
38	37	38	39	39	33	37	36	37	27	25	24	30	25	22	38
36	36	32	27	39	31	38	39	24	20	25	35	37	28	28	41
36	29	36	39	41	34	40	38	18	22	38	35	42	33	35	37
37	39	35	20	37	31	33	38	31	19	20	30	30	41	34	37
36	33	27	31	33	42	28	26	24	27	31	25	34	30	33	29
35	33	16	22	18	35	25	26	21	23	10	26	32	29	31	25
40	29	27	35	23	24	26	23	14	22	20	25	15	28	24	37
28	30	29	31	32	29	30	30	32	28	30	28	24	29	36	31
30	37	39	41	36	32	41	32	32	27	30	29	32	36	22	35
349	343	305	322	326	327	323	317	254	254	243	282	299	311	299	347

*Most favorable reaction score possible is 42.
Least favorable reaction score possible is 7.

RAW SCORES OF LISTENERS' RATINGS OF PERCEIVED PERSONALITY OF THE SPEAKERS*

Speaker 1				Speaker 2				Speaker 3				Speaker 4			
White		Black		White		Black		White		Black		White		Black	
U	L	U	L	U	L	U	L	U	L	U	L	U	L	U	L
16	24	18	16	15	27	19	16	11	25	6	13	10	15	18	16
26	20	23	22	28	21	22	28	22	14	5	16	20	18	9	23
24	13	19	12	24	25	20	22	15	8	17	14	23	13	15	17
21	20	19	20	28	25	28	17	8	14	23	19	24	15	12	14
27	25	25	14	25	16	21	15	20	13	8	19	11	15	20	20
15	16	21	18	23	26	25	17	10	15	19	17	12	21	17	14
24	19	7	19	12	24	19	16	13	16	5	16	22	20	17	19
24	22	18	23	14	15	15	26	13	15	17	15	9	14	15	19
21	22	20	16	24	23	19	22	21	17	17	19	13	21	21	23
15	26	21	16	26	23	28	18	16	16	13	17	17	17	15	22
213	207	191	176	219	225	216	197	149	153	130	165	161	169	159	187

*Most favorable reaction score possible is 28.
Least favorable reaction score possible is 4.

NUMBER OF 'ERROR' RESPONSES IN THE SPEECH PERCEPTION OF THE SPEAKERS*

Speaker 1				Speaker 2				Speaker 3				Speaker 4			
White		Black		White		Black		White		Black		White		Black	
U	L	U	L	U	L	U	L	U	L	U	L	U	L	U	L
0	4	2	3	1	3	0	3	4	3	3	1	6	8	5	6
6	1	3	5	2	5	3	4	4	3	8	4	5	6	5	9
2	4	2	5	2	2	2	4	3	2	2	4	7	6	6	8
2	0	2	6	2	3	1	6	4	6	2	4	9	11	3	7
3	3	3	8	2	4	2	9	5	5	3	6	5	8	5	8
2	2	2	5	1	2	1	2	5	4	2	3	4	3	3	5
3	2	4	8	5	4	0	8	4	3	7	3	6	2	7	4
1	2	3	4	2	3	2	5	3	5	4	3	6	5	5	7
4	1	4	5	2	3	2	5	3	1	3	9	6	3	3	9
2	3	2	7	3	1	1	5	3	3	3	5	7	6	6	8
25	22	27	56	22	30	14	51	38	35	37	42	61	58	48	71

*Highest possible number of errors is 36.
Lowest possible number of errors is 0.

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