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PERSON PERCEPTION AS A FUNCTION OF TWO
DIALECTALLY REPRESENTATIVE SPEECH STYLES

BY

JOHN ALBERT CRAFT
B.A., Florida Technological University, 1975

THESIS

Submitted in partial fulfillment of the requirements
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INTRODUCTION

"The voice has often been described as the mirror of the personality of the speaker."¹ The inference is that the way in which we articulate ourselves reflects not only our natural or cultural origin, but also our attitude towards any given object or group and even our personality and physique. The belief that one's voice can accurately reveal the above qualities is, of course, a truism. The degree to which this truism has merit has been the subject of controversy since the 40's when Allport and Cantril and others investigated personality judging based on vocal characteristics.²

These early researchers were interested in determining the effects of radio broadcasters' vocal mannerisms on their audience. In the interim, between that era and now, the degree to which personal qualities can be inferred from voice alone perhaps has lost some relevance to the media. In interpersonal situations and with the advent of television the "audience" can judge the speaker "in person" and need not rely solely on voice.

However, the intriguing question of how much one's vocalizations (regardless of content) reveal about the person remains. In our current society the chances for interpersonal contact in business, politics and other areas are rapidly bowing

to the demand for instant electronic communications devoid of personal contact. In these situations we are increasingly forced to rely on voice only contacts and limited ones at that. With these considerations in mind a review of extant research in this area is in order.

According to Mehrabian and Reed, at any given point in communication we are encoding on several levels or channels; verbal, intonational, gestural and facial.³ They further hypothesize that communication accuracy is correlated with the degree to which all of the communication channels typically employed by the encoder for a communication are available to the decoder.⁴

In voice only communication facial expression and bodily postures are removed from consideration, consequently any potential decoder is forced to rely solely on the data conveyed by the voice for meaning and interpretation. X Watzlawick, in his book The Pragmatics of Human Communication, points out that there are two basic modes of communication, digital and analogic.⁵ Digital communication consists of written and spoken language. Digital modes are complex and logical and hence, leave little room for misinterpretation. Analogic communication is non-verbal in nature. With regard to voice only communication, analogic modes consist of intonation, inflection, pronunciation, sequence, disfluencies, and cadence.

Whereas, verbal digital communication is rigid in its

interpretability, analogic communication is much more expressive of underlying relationships. It would seem then that, if indeed personality and other traits can be inferred or deduced from spoken communication, this meaning is detectable primarily on the analogic or non-verbal level.

Solomon and Ali, in a 1975 study, report findings that support this premise.⁶ In an attempt to determine how much emotional or affective meaning is transmitted on analogic, nonverbal channels as opposed to content or digital channels, they undertook a cross cultural survey.

In a previous paper by the same authors⁷ it was found that American children rely almost exclusively on a statements "content" for judgments of its objective meaning. Further, they were also predominantly influenced by content (as opposed to intonation or a content and intonation interaction) in making judgments about the underlying affective meaning associated with a statement.

In contrast to the children, adults were found to rely more heavily on intonation for judgments of affective meaning. Similar to the children, adults relied on content for objective meaning.

At the conclusion of that study it was suggested that these differences were based on the adults greater accumulation of experience as uses of language. Further, it was felt that "a relatively large amount of such experience may be necessary to

learn appropriate interpretations of relatively subtle and inefficiently coded messages conveyed by intonation."⁸

These findings provided the impetus for a later study in that it was hypothesized: "speakers of the same ages, but with different amounts of experience with a language, should show differences in the usage of intonation parallel to those found in the previous study."⁹

Using methodology similar to their first experiment, tapes by an amateur actress were recorded in English. These tapes consisted of a series of verbal evaluation statements encompassing the three previously determined levels of content (positive, neutral, negative) and three levels of intonation (pleased, indifferent, negative). Four different statements for each content level were each repeated once with each of the three intonations. These tapes were played in random order to the two test groups. Data were collected at four secondary schools, two in India and two in Chicago, Illinois. As was previously stated, the tapes were recorded in English for both groups, as were the instructions given the subjects. Ages of the children were asked to complete a test designed to determine their comprehension on the two levels of meaning.

The results were consistent with the initial expectations and confirmed the first experiment. Gross cultural differences between boys generally corresponded with the differences between

girls. "The major finding was that the Indians were more likely to rely on content for judgments of affective meaning, while the Americans relied relatively more on intonation for judgments of affective meaning."¹⁰ This finding was attributed to the differences, in amount of experience with the language. It was also found that the American girls were generally more responsive to intonation than the American boys, while the Indian boys were more responsive to intonation than the Indian girls.

It would appear then, that intonation is relied on for affective meaning and further the degree to which this is so a function of maturation.

. In a 1961 study of this topic Starkweather found:

"The tone of voice and the manner of speaking affect the listener's perception of the speaker's feeling's state. These vocal guideposts suggest some of the personality characteristics of individuals, often enable a person to recognize a friend without seeing him and indicate the speaker's emotional condition of the moment. During infancy, prior to the learning of language, parents and children communicate largely through nonverbal vocal cues.

Most of the time an adult listener does not consciously attend to vocal expression as a communicative stimulus separate and distinct from the speaker's words. Nonverbal signals, nevertheless, are influential, and if at variance with the ideas presented through language, they are usually believed. A parent, for example, believes the sounds and not the words when his child insists in a very tired and petulant voice that he is not tired.

In respect to discrepancies between the vocal and the verbal messages, listeners appear to differ in their sensitivity. "Attempts to indicate irony or sarcasm are lost upon insensitive persons, whereas

others seem to possess a high degree of interpretive skill."¹¹

Starkweather attempted to answer the following questions through a synthesis of relevant research findings: (1) To what extent does nonverbal communication occur, (2) What types of information are transmitted nonverbally? (3) Under what conditions does nonverbal communication take place?

Early studies such as Fay,¹² Taylor,¹³ and previously mentioned Cantril and Allport² found a listener to be moderately accurate in judging the sex and age of a speaker and somewhat less successful in inferring occupation, height, weight and appearance of a speaker correctly. Cantril and Allport, in a series of 14 experiments, found listeners could match voices with age, appearance, vocation, extroversion-introversion, ascendance-submission, values and summary sketch of personality.² Listeners, however, were not able to reliably judge height, complexion, photographic appearance, handwriting, political preferences of dominant characteristics.¹⁴ It is interesting that no characteristic was judged correctly all of the time and that in general the judges agreed better with each other than the criterion.

Other studies, such as Licklider and Miller, have conversely concluded that evaluations of personality based solely on voice have little or no reliability.¹⁵ It would appear that reliable and accurate judgment of selected personal

qualities based solely on voice is not generally possible. The tendency of the judges to agree with one another suggests that perhaps stereotyping is a function (certain cues or aspects) of voice only communication. That is, certain types of speech garner stereotypical judgments from listeners based on their experience or subculture. A number of studies compared written with spoken discourse in an attempt to determine the significance of nonverbal cues in communication.¹⁶ In summary, these studies determined written communication is of more value in predicting subject responses to objective test items and when attempting to diagnose pathological schizophrenia. In general, vocal information adds accuracy when attempting to predict responses to projective tests. Vocal information also aided in judging the degree of particular emotional states.

Reusch and Prestwood in 1949 found that strong momentary emotional states are readily discernable from nonverbal aspects of speech. Further, they found that some nonverbal cues (whether frequency, amplitude or timing modulations), are sufficiently common to communicate the intended emotion at first listening.¹⁷

✓ Experiments using content-free speech from still another group bearing upon the importance of the nonverbal aspects of voice as a means of communication. Content-free speech samples are produced by electronically filtering out verbal stimuli and retaining only the vocal sounds conveying non-linguistic

cues. Soskin and Kauffman, using this method, found that the filtered material conveyed enough information for listeners to classify voice samples according to their emotional states.¹⁸

Starkweather found that judges could discriminate between submissive and aggressive persons based on content-free voice samples.¹⁹

* In general content-free voice samples can carry information about the speaker. Based on changes in pitch, rate and volume, judges can identify emotion and estimate strength of feeling. Speech duration and rate of speaking also provide clues about the person speaking. Frieda Goldman-Eisler interprets: (1) Speech rate as selecting the degree of hesitancy and, therefore, the extent of organization in speech. (2) Breath rate as indicating emotional excitation.²⁰ Fairbanks and Hoaglin found that a rapid rate, short durations, and short pauses correlate with fear, anger, and indifference and that a slow rate was correlated with expressions of contempt and grief.²¹

From the foregoing research it is obvious that one cannot accurately judge personality from voice samples alone, nonverbal sounds, nevertheless, do carry information about the speaker in certain circumstances.

We, as listeners do make judgments about people and things daily, based solely on what we hear from or about them. This can be evidenced in our culture by such hackneyed cliches

as "it's not what you said but how you said it" and "that (or he or she) doesn't sound right," and of course there is the frequently heard exhortation to "sound like an educated man." Indeed, the classic play Pygmalion, by George Bernard Shaw, is based on the premise that the way in which one is perceived and ultimately one's social status is contingent upon certain speech patterns.

These cliches would seem to be at odds with current research which contradicts the assumption that personality can be accurately judged from voice alone. However, if accuracy is eliminated as a criterion of this judgment, new areas are opened to examination.

We employ stereotypes to compartmentalize and compact the phenomenon we encounter daily. If it is true that we also utilize stereotypes of nonverbal speech behaviors to prejudge people, a review of current studies in this area would lend insight.

Addington, in a 1968 study,²² examined the premise that "certain voices are stereotypes: they definitely impress listeners as being the voice of persons who might be classified (according to one or another personality type)."²³ According to Addington "whether we like it or not, our voices do elicit stereotyped personality judgments, which may or may not be consistent with more direct or valid personality assessments."²⁴

Addington's purpose in his study was to investigate the

relationship of nine vocal characteristics to forty personality characteristics as judged by listeners cues only by the sound of the speakers voice. In addition to this general aim, the specific inquiry was intended to answer the following questions:

- (1) To what extent do various vocal samples elicit stereotyped responses?
- (2) Do male and female listeners perceive personality differently?
- (3) Do male and female speakers, using the same vocal characteristics, elicit different personality perceptions?
- (4) What are the dimensions along which personality is perceived from the voice?
- (5) To what extent are different vocal characteristics effective in altering stereotyped personality perceptions?
- (6) To what extent are specific, perceived personality characteristics effected by the voice?
- (7) What are the relationships of the nine vocal characteristics to the forty perceived personality characteristics?²⁵

To answer these questions, Addington used 25 tape recorded samples of standardized speech passages which were made of male and female speakers. Imitating seven voice qualities: breathy, tense, thin, flat, throaty, nasal, and orotund (full, clear etc.). These samples were then judged for pitch, rate and the presence of the aforementioned qualities. After this judging 144 taped samples were retained as valid. Students in freshman rhetoric then listened to the recordings and completed a test designed to rate perceived personality on a bipolar adjectival scale. The raters were divided as to rating task (vocal characteristics vs. personality trait). The findings of previous studies of this

nature were supported by Addington's study. The findings that listeners ascribing personality from samples of speakers voices tend to be uniform were again apparent.

Addington found that perceptions engendered by male and female speakers do differ according to the vocal characteristics simulated, "that is to say a change from normal to nasality in male voices will not result in the same personality ascription as will a similar change in female voices."²⁶ The findings also suggest that the male personality was perceived in terms of physical and emotional power, whereas the female personality was perceived more in terms of social faculties. It was found that vocal manipulations do affect the nature of personality perception. Each of the vocal characteristics, with the exception of thinness, as simulated by males was effective in altering the listeners image of the speaker.

It was also evident that none of the perceived personality characteristics was immune from the effect of vocal alteration. Females were more effective in altering personality perceptions than were males. Specific findings for the nine vocal categories for both male and female are as follows:

(1) Breathiness:

- Males: Increased breathiness was correlated to ascriptions of youth and artistic talent.
- Females: In this instance females were perceived as being more feminine, prettier, more petite, more effervescent and more highly strung, while at the same time they were perceived as being shallower.

(2) Thinness:

Males: No significant correlations were revealed.

Females: Increased thinness cued perceptions of increased immaturity of four levels: social, physical, emotional and mental. Linked with immaturity was a tendency to indicate increased ratings of humor and sensitivity.

(3) Flatness:

Both male and female speakers in this category were perceived as being more masculine, more sluggish, colder and generally more withdrawn.

(4) Nasality:

Increased nasality by both sexes provoked a wide array of socially undesirable characteristics. So many in fact that the isolation of any clear cut images was impossible.

(5) Tenseness:

Males: Males using increased vocal tension were perceived as being older and more unyielding. In general more cantankerous and obstreperous.

Females: Conversely, females were perceived as being younger, more emotional, more feminine, high strung, and less intelligent.

(6) Throatiness:

Males: With increased throatiness male speakers were stereotyped as being more realistic, mature, sophisticated and well adjusted.

Females: However, females were perceived as less intelligent, more masculine, lazier, more boorish, unemotional, ugly, sickly, careless, inartistic, naive, humble, neurotic, quiet, uninteresting and apathetic; in general more cloddish and oafish.

(7) Orotundity: (fullness)

Males: With more fullness, males appeared more energetic, healthy, artistic, sophisticated, proud, interesting and enthusiastic. In general more hardy and aesthetically inclined.

Females: Simulated orotundity cued perceptions of increased liveliness, gregariousness, and aesthetic sensitivity. Yet at the same

time this voice quality was thought to be that of one who was proud and humorless.

(8) Rate:

With increases in rate both male and female speakers were perceived as more animated and extroverted.

(9) Pitch Variety:

Males: Males using increased pitch were perceived as more dynamic, feminine, and aesthetically inclined.

Females: Increased pitch variety in females led to ascriptions of extroversion and dynamism.²⁷

Even though the nine vocal and forty perceived personality characteristics are by no means exhaustive, it is probable they can be used to infer about the effects of differing speech styles. It is highly possible that language variables such as, word choice, order, intensity, types of content, organizations patterns, visual cues, disfluencies, and a host of other nonverbal variables may foster a variety of stereotyped images. It would seem possible, at least to some degree, to alter one's perception by others through modification of his or her nonverbal cues.

The area of language intensity was suggested by Addington as another area of investigating the effects of how something is said. Bower's, in his 1964 study, defined intense terms as those which express "the degree to which the communicator tends to approach or avoid the concept toward which the term is directed."²⁸ In general, intense terms express the direction and strength of a communicators attitude toward a concept. Intense terms are not to be confused with nonverbal phenomenon. However, they merit

consideration since it is their affective connotation, not their literal meaning which determines the manner in which they are perceived.

In this initial study, Bowers found that "obscure" or unfamiliar terms connote higher degrees of intensity (affective meaning) than do their more common counterparts. As an example, the term despotic is more intense than the definitionally identical term, severe. Just as "debilitation" connotes more meaning than "weakening." Bowers found that "all things being equal receivers frequently consider an obscure term stronger than a familiar one."²⁹ In addition it was found that language intensity increases with the length of terms in syllables. Surprisingly the correlation between length and intensity is a slightly positive one. That is to say, listeners are positively impressed with multi-syllable words as opposed to simpler forms. The presence of qualifiers and metaphores also affect language intensity. Terms which are preceded by a qualifier, such as "greater height," are highly correlated with intensity. Terms possessing metaphorical qualities such as stampede and fiendish, when applied to people also highly correlate with intensity.

It is possible to subclassify two types of metaphor on the basis of their conventional referents. The first of these can be labeled the "sex metaphor." Generally terms in this category associate with the practice of and traffic in the sex act and

related events. Bowers found a perfect correlation (1.00) between such terms as pimp, prostitution and rape and intensity.

The second subcategory is labeled the "death metaphor." In this category are all terms whose usual associations are with death, decomposition and the after life. As with the sex metaphor, terms such as ghastly, decay and death correlate perfectly with intensity.

It is obvious then that some terms carry or connote more emotional or effective meaning than others. Although Bowers did not investigate the effect of intense terms on receiver evaluations of source, several studies since have. McEwen and Greenberg, in their 1970 research,³⁰ attempted to determine how much effect language intensity has on listeners perception of source.

They stated "the language used by a source should also influence perceiver perceptions of that source's credibility."³¹ McEwen and Greenberg report that the concept of credibility encompasses three major areas: one, fairness or "safety," two, competence and three, dynamism.³² With regard to dynamism, it seems reasonable to anticipate higher perceptions of source, confidence, aggressiveness and decisiveness when the message has a high content of intense terms than when the message is low in intensity. However, it was further felt than an essentially neutral source using highly intense terms would result in more

positive evaluations of the source within the dimensions of fairness and competence.

With these considerations in mind, it was hypothesized: "(1) high intensity messages will result in higher ratings of source credibility than low intensity messages, (2) evaluations of source safety (fairness will be higher when receivers are exposed to a high intensity message, and (4) evaluations of source qualification (competence) will be higher when receivers are exposed to high intensity messages."³³

To test these predictions, 111 undergraduate communication students were exposed to written messages of 250 words. One group was exposed to a high intensity message while the other group received a low intensity message. Subjects were told their particular message was written by a fictional editorial source and had appeared as an article in a major metropolitan newspaper. This fictitious source had previously been determined to have a slightly positive evaluation.

The results provided partial support for the experimental hypotheses. The message intensity manipulations were successful in affecting receiver perceptions of the source's dynamism. "As was hypothesized the source of the high intensity message was judged as significantly more dynamic than when the same source was attributed to the low intensity message. No differences in the evaluations of source safety or qualification occurred as a

function of manipulated message intensity."³⁴

Wheless and McCroskey, in a 1973 study,³⁵ attempted to investigate the effects of stylistic syntactical choices on source credibility. This study differed from McEwen's in that redundancy was the specific variable tested with regard to source perception. It was theorized that arranging the syntax of a message in such a way as to allow the receiver to "fill in the blanks" would result in greater attitudes of credibility and resultant persuasiveness.

In the experimental situation prepared tests of varying degrees of redundancy were ascribed to speakers of high and low credibility. The results of this study did not support the hypotheses. Apparently syntax or sentence structure in script situations has no significant effect on source perception. However, it is also apparent that words connoting various degrees of emotion (intense terms) do have some effect on how a given source is perceived.

In both the foregoing experiments the method of study involved written statements. As was previously stated the syntax of written messages does not effect the authors perception. Conversely, the presence of intense terms in written communication do, to some extent, influence the manner in which an author is perceived. The unanswered question is of course, do these test results hold true for spoken messages? This is a potential area

for future research, especially in the area of person perception as a function of syntax.

One final area of non-socially identifiable non-verbal variance is the effect of nonfluencies on source perception and credibility. This final category, as well as the foregoing studies, report speech variables which exist cross culturally. As such, the results of these experiments cannot be ascribed to ethnocentricisms or culturally based stereotypes.

Studies in the area of fluency and nonfluency with regards to source perception are few in number. In previous studies of source credibility considerable emphasis has been placed on who the source was. Little consideration has been given to how the source presents his message.

At the common sense level, all of us are aware that vocal variables play part in shaping our reactions to a speaker. As has already been demonstrated, we ascribe various personality stereotypes based on certain vocal characteristics. If the manner in which one articulates himself influences a listener's perception of him, then it is possible his credibility is also effected.

In a 1964 study by Miller and Hewgill³⁶ the specific variable of speaker nonfluency was examined. The following hypotheses were investigated by this study: "(1) As the number of nonfluencies presented by a speaker increases,

audience ratings of the speaker's credibility will decrease, and (2) The effect hypothesized in one will be greater for some types of nonfluency than for other; specifically, the effect will be greater for a nonfluency typed 'repetition' than for a nonfluency typed 'vocalized pause'."³⁷

The first hypothesis infers that the quantity of nonfluency and audience perception of source credibility are negatively correlated. The label, nonfluency encompasses a wide variety of verbal behaviors, further these various behaviors operate with different levels of influence. Specifically, it was theorized that a particular type of nonfluency, which occurs with great fluency in a society, would contain fewer cue properties than one which is unique to one individual.

The stimulus employed in the study was a taped message in which the speaker argued against collegiate athletic scholarships based on athletic ability. Nine versions of this 1,054 word speech were prepared, varying only on the number and type of nonfluencies occurring within each. "Four of these messages contained vocalized pauses, four contained repetitions with the remaining message used as a control. The frequencies of vocalized pauses in the four speeches were, 25, 50, 75 and 100 or on vocalized pause every 42, 21, 14, and 10.5, words respectively."³⁸ The frequency of repetitions were identical to those of the pauses.

"Operationally, the two types of nonfluencies were defined as follows: A vocalized-pause was defined by the utterance of the 'uh' sound between two words of the message."³⁹ A repetition was defined as the utterance of the first syllable of a word followed by the short 'uh' sound, followed by the complete word.

One hundred and sixty undergraduate speech students were randomly exposed to the taped messages. The tape was introduced via a nondirective statement about communication research and no information about the source was supplied.

Immediately following the tape each student completed a rating instrument dealing with the perceived credibility of the source. The factors employed were taken from research by Berlo and Lemert.⁴⁰ In the study the three levels of source credibility employed were identified. They were labeled (1) competence, (2) trustworthiness, and (3) dynamism.

The results of this study supported the two hypotheses tested. "Generally, it appears that as the quantity of nonfluency presented by a speaker increases, audience ratings of perceived source credibility decrease."⁴¹ Further, this effect was more pronounced when the nonfluent behaviors involved repetitions rather than pauses.

The result was not operational however on all three levels of credibility. Reductions in credibility were most

prevalent on ratings of trustworthiness were observed. Miller and Hewgill theorized that trustworthiness and nonfluency operate independently of one another. In addition it was felt that the sources anonymity lacked the necessary emphasis on trustworthiness to effect a change.

In a similar study by Sereno and Hawkins⁴² the major intent was to ask the question posed by Miller and Hewgill. "How do speaker nonfluencies affect the amount of the audience attitude shift toward the speech topic?" It was inferred that this shift would be correlated with the sources credibility as perceived by the audience. It was expected the quantity of nonfluencies would be inversely proportional to the amount of attitude shift toward the speech topic as the quantity of nonfluencies exhibited by the speaker increases."⁴⁴

A speech favoring the Black Muslims was developed as the stimulus. As with Miller and Hewgill, tapes were developed differing only in the incidence of nonfluencies. Five categories of nonfluencies were employed: (1) The "ah" sound inserted between words, (2) Sentence correction, a correction in the choice of a word or words while the sentence content remained unchanged, (3) Stutter, the serial superfluous repetition of sounds, (4) Repetition the serial superfluous repetition of words, and (5) Tongue-slip correction, a correction of an unintended sound.

All five categories were included in each of the tapes. The four versions contained 50, 75, 100 and 125 nonfluencies. The five categories were utilized according to their frequency in normal speech. "Ah" sounds were most prevalent (5 to 1), sentence correction is second most common, with the remaining three categories equal in occurrence.

Speech students at the University of Washington served as subjects in this study. Six equal groups were exposed to the tapes. Four groups heard the altered tapes, one heard the original tape while the remaining group heard no message as a control. Two weeks prior to the exposure pretest attitudes towards Black Muslims were obtained from all groups. Immediately after hearing the tape by an anonymous speaker, each group was tested to obtain ratings of speaker credibility.

It was found that "varying amounts of nonfluency did not diminish the persuasive effect of the speech."⁴⁵ The hypothesis that there are no significant differences in the amount of audience shift toward the speech topic as the quantity of nonfluencies increases could not be rejected.

The findings of this study agree with those of Miller and Hewgill and others,⁴⁶ in that the dimension of trustworthiness was not affected. It was theorized that trustworthiness is more closely related to attitude change than the dimensions of dynamism and competence.

It would appear from these findings that nonfluencies diminish a speaker's credibility up to a certain degree of incidence. Beyond that point increasing speech errors have no further effect. In no cases were the nonfluencies effective enough to completely negate the persuasive effects of the speech.

These findings are interesting and suggest areas for further research. Since both sources in the preceding studies were males, the sex variable in speakers should be investigated for differing results. Also as suggested by the results of the anxiety and syntax studies, the effects of "extreme" fluency should be investigated. It is not clear what effect increasing grammatical complexity would have on source credibility and speaker perception.

If comprehension factors do not intervene, (and existent research would seem to discount this possibility),⁴⁷ the slight preference for multisyllable words found by Bowers²⁸ might indicate increased credibility for those speakers using identifiably more fluent speech patterns.

Heretofore, only studies dealing with idiosyncratic of physiological variables have been presented. Judging from these studies, it is obvious that the way we speak can and does affect the way we are perceived. In addition to the previously mentioned variables, several other factors influence the manner in which we articulate ourselves.

The studies that follow will investigate the variables of background, status, and dialect with regard to their influence on speaker perception. As was previously mentioned, speakers are often encouraged (if only indirectly) to sound like an educated man. This exhortation implies that the style of speech utilized by an "educated man" is superior to all other styles. It also assumes that status and background can be identified from speech alone.

This assertion is based on the premise that individuals of high employment and education speak "acceptably." It follows, that listener reaction to samples of speech can be expected to support (or contradict) this assumption. One significant study has established that some listeners are able to identify the background of the speaker. Putnam and O'Hern⁴⁸ recorded one minute samples of speech from twelve speakers of different educational and social backgrounds. Seventy university students were asked to judge the speakers background and status after listening to the tapes. Putnam and O'Hern found that the subjects were able to discern the speakers background. The experiment produced mean ratings which correlated = .80 with this measure.

It is now clear that some listeners can identify the status of a speaker from speech alone. However, the basic question remains unanswered: What difference does it make? Research on the effects of source credibility have demonstrated

that speakers with differing credentials can influence the perception of identical speeches.⁴⁹ Do listeners assign "credentials" to a speaker when no introduction is given? Also, do listeners agree on how credible a speaker appears to them when judging from speech cues alone?

Harms in a 1961 study⁵⁰ of this topic attempted to:

(1) Obtain subjective listener judgments of speaker status and compare these with the classification of an objective status index; (2) To determine how credible listeners judge speakers to be; and (3) To determine the degree of correlation between listener judgments of speaker status and speaker credibility. Simply, Harms wished to determine if it is possible to tell who a man is from the way he talks.

Nine speakers provided the stimulus material for this experiment. All were, (1) male, (2) 30-50 years of age, and (3) had lived all their life in the American Midwest. The speakers were classified into two status groups based on education and occupation. Those classified as high status held advanced degree (DDS, PHD) and had prestige occupations. Those classified as middle class (3) held middle status occupations and had completed high school and/or one year of college. The final three speakers were classified as lower class. This group had eighth grade educations and held unskilled jobs.

Each speaker made a 40-60 second field tape recording.

The material was elicited by having each speaker respond to questions and statements on cards, such as "How are you?", "Ask for the time," etc. . . .⁵¹ The recorded conversations were content free and were similar to the kind of talk usually associated with introductory situations. One hundred and eighty non-college adults living in Columbus, Ohio, served as subjects for this experiment. These subjects were classified according to status in the same manner as the speakers.

Each speaker was heard by 60 listeners (20 from each status group), listening was done in settings as diverse as firehouses, living rooms, and church basements.

Harms found that the advice to talk like educated members of the community appears to be minimally valid. A given speaker may expect to be judged more credible by sounding educated. This, however, is not the only variable operating.

Most listeners reported making their judgments of both status and credibility after hearing only 10 or 15 seconds of speech, even though the recorded samples ran 40-60 seconds. It may be that a listener notices pronunciation and other stereotyped features most readily after he responds to some yet-to-be identified microscopic speech cues. Efficient learning of a new dialect would probably require the development of a learning program for presentation to a student by a teaching machine.

Harms found, "(1) Listeners of all statuses on hearing

short voice recordings assign mean ratings which group speakers in accordance with their objectively measured status; listeners distinguish among speakers according to status; (2) Listeners of various statuses agree on the amount of credibility they assign to speakers of various statuses; listeners find high status speakers to be the most credible and low status speakers to be the least credible; (3) The correlation between ratings of status and credibility is significant statistically, but cannot be said to be high socially."⁵² Our present knowledge concerning the long-range advantage of one dialect over another is indeed modest. In short, the goal of learning the dialect of the "educated" man should be pursued with an appropriate degree of skepticism.

Based on Harms findings, it appears that status can be perceived from voice and that listener credibility judgments of speakers correspond significantly with speaker status in each case. It is interesting to note, however, Harm's speculation that some "microscopic" speech variable could be responsible for the varying perceptions of speakers by listeners. It is possible that intonation could serve to label a given speaker. As was previously noted (by Addington), listeners judge speakers based on stereotypes, not accurate perceptions of personality. Harms also noted that it is somewhat difficult to associate a stereotyped speech pattern with status.

Status (actual or stereotyped) apparently can be judged

from non-accented speech. In the Harm's study the speakers and listeners were all from Ohio, an area which cannot be generally linked with any given dialect. Common sense and experience tell us that spoken language is an identifying feature of members of a national or cultural group. Individuals in these regional or national groups are easily identifiable by their accent or dialectal speech patterns alone.

★ Lambert,⁵³ in the first of a series of studies on evaluation reactions to spoken languages, attempted to shed some insight on the effect dialect has on person perception. Lambert theorized that because the use of the language is one aspect of behavior common to a variety of individuals, hearing the language is likely to arouse mainly generalized or stereotyped characteristics of the group. "Thus, when one hears a radio broadcast of an international meeting or encounters passages of a foreign language, one's evaluational reactions to the communication are attributal, in part, to the language used and likely reflect generalized attitudinal reactions to the group that uses it."⁵⁴

The purpose of Lambert's study was to determine the significance spoken language has for listeners by analyzing their evaluational reactions. The study was conducted in the Canadian Province of Quebec, an area charged with rivalry between French and English speaking groups. Lambert feels that this schism is as socially significant for residents of Quebec

as that of the north and south is for southerners of the United States.

To test their theory, Lambert and Associates, translated a 2.5 minute passage of French prose (basically content free) into fluent English. This passage was then recorded in French and English by four male bilinguals. Each subject recorded in both English and French. Two other males recorded French and English versions as fillers. The ten taped passages were then exposed to both French and English speaking natives. The subjects were not informed that the speakers were bilingual. The subjects were then asked to complete a response sheet for each voice which directed them to rate each of 14 traits on six point scales. These scales rated physical and personality traits. English speaking subjects, as expected, showed more favorableness to members of their linguistic group. Surprisingly, French subjects also rated English speakers more favorably.

French subjects perceived English speakers as having more favorable physical and personality traits than speakers of their own language. Lambert felt that these findings are similar to other studies⁵⁵ which have noted the tendency of minority groups (as the French are in this case) to sometimes adopt the stereotyped values of the majority groups. The French subjects may regard themselves as members of an inferior group. Since the French and English versions were recorded by the same subject the

listeners had to have based their evaluations on community wide stereotypes of both groups.

In a similarly oriented 1962 study, Anisfeld, Bogo and Lambert investigated evaluational reactions to accented English speech.⁵⁶ This study was intended to continue on the findings of the aforementioned Quebec study. Lambert and Associates attempted to "extend the implications of both the method and its underlying rationale to another cultural group which can be distinguished by its style of speech and about which many stereotypes are held, namely Jews, who speak English with a distinctive accent."⁵⁷ Specifically the study was undertaken to find out whether Jewish and English subjects will evaluate differently Jewish and English speech guises when spoken by the same person.

As in Quebec, experiment "bilingual" speakers recorded a basically content free passage in both English and Jewish accented English. English and Jewish accented English speaking subjects were exposed to the recorded, and asked to evaluate the speakers physiological and personality traits.

Similar to the Quebec study English speaking subjects did not rate Jewish accented speakers favorably on any trait. Jewish subjects rated English speakers as more physically attractive and better leaders. Jewish subjects felt Jewish speakers were more entertaining, kinder and had a better sense of humor.

A variable not present in the Quebec study was the possibility of incorrectly identifying the speaker's guise. Since both speakers in this study used English it was possible for listeners to incorrectly identify the speaker's accent. In fact, listeners did make this mistake, although not in sufficient numbers to warrant a statistical analysis. It was found however, that Jewish subjects tended to assign Jewish guises to non-Jewish speakers and the gentile subjects exhibited a reverse tendency, in that they identified less accented guises as Jewish. As with the subjects correctly identifying the guises, Jewish speakers were downgraded on physical and personality ratings. In comparing the correctly identified guises, very little difference between the two groups reactions was found.

Jewish and gentile listeners were also asked to evaluate their own voices. These ratings were grouped into three clusters: "General evaluation" which included ratings of good looks, self confidence, ambition, sociability, character and like ability; secondly "dependability and character;" and the third cluster "affability."

These three clusters seem to answer the following questions: "Am I good or bad?, Can people count on me?" and "Am I desired as a friend?"⁵⁸ Jewish subjects rated themselves more favorably than did the gentile subjects on all clusters and individual traits except religiousness. As was

previously stated Jewish subjects categorized more voices as Jewish than did gentile subjects.

The most prominent finding of the study is the downgrading of the accented guises on height, good looks and leadership. This reaction occurs in both incorrect and correct identification, by both Jews and gentiles. This suggests that it was not the Jewish speaker specifically, but any person speaking with an accent (Irish, Negro, Southern, New York, etc. . .). Since the evaluations were depicted in relation to the accented and nonaccented voices of the same speaker, it seems unlikely that the basic quality of the voice played any part in eliciting reactions.

As suggested by the previously cited research, it appears likely that the accented voices aroused certain perceptual stereotypes which had been acquired through previous experience. Leadership devaluation can possibly be based on the tendency of accented speakers to be immigrants. It is understandable that an immigrant would not be expected to occupy positions of leadership and might logically be considered as possessing few leadership qualities.

The devaluations of height and appearance can possibly be explained by previous research,⁵⁹ which suggests that magnitude is a close associate of value. "Extending this relation to person perception, it may well be that immigrants

who are typically relegated to low status roles would be regarded as short and unattractive."⁶⁰

In contrast with the Quebec experiment, where the French minority consistently devaluated themselves, there was a tendency for Jewish subjects to maintain Jewish superiority when comparing Jews with non-Jews. The Jewish subject allowed for some superiority of their "immigrant" co-religionists as well. It appears that Jews have not adopted negative stereotypes concerning Jews in general (as had the French), on the contrary Jews appear to have adopted positive stereotypes concerning Jews, even for Jewish immigrants.

There are several possible explanations for these findings as Lambert suggests. Since the Jewish accented speech was an adoptive guise for the speakers, their unfamiliarity with this mode could have caused a hesitance which caused the devaluated ratings of self-confidence. Similarly Jewish listeners could have been more sensitive to the Jewish guises due to their greater familiarity with them. Finally in contrast with the French, Jews might consider themselves a superior minority.

In this study the difficulty of judging people accurately from their voices is again evident. The subjects apparently seized upon whatever information was available to them. The main sources of information were community-wide stereotypes about people with accents. This study thus reinforces the

findings that stereotypes are functional in making subjectively or objectively correct judgments and need not necessarily function to justify prejudiced attitudes or satisfy personality needs.

Generally speakers who sound "foreign" to a particular group of listeners tend to be rated lower than speakers who do not. Mulac, Hanley and Prigge,⁶¹ assume that the findings of the Lambert and Associates dialect studies were the results of the listener's reactions to one or more of the three elements of the speaker's linguistic presentations: phonology, semantics, and syntax.

It was the purpose of Mulac's 1974 study to determine the impact of phonological aspects of European born persons speech upon attitudinal judgments made by several groups of American listeners. The thrust of this investigation follows the findings of previous studies by assuming that the way a given communication sounds (as opposed to what it means) determines how the speaker is perceived.

Four independent variables were manipulated in this study: (1) Listener sex; (2) Listener age, occupation group (middle aged, middle class townspeople and college students); (3) Speaker sex; (4) Speaker country of origin (Norway, Italy, Eastern Europe and United States). Twenty-six foreign born graduate students were recorded during impromptu monologues in

English. Spontaneous conversations were felt to sound more natural than the prepared passages of Lambert and others.

Content was controlled by asking the speakers to describe two large landscape pictures, while refraining from mentioning his native country, language, age or field of study. The speakers were originally from the previously indicated areas, in Europe and the United States. Male and female speakers were employed. The 16 samples determined to be most representative were selected for use in the experiment. Speaker sex and origin were randomly assigned to a 45 minute master tape. For purposes of measurement the experimentors devised a speech dialect attitudinal scale. This instrument consisted of a scale of 50 bi-polar adjectives designed to test the orthogonal dimensions along which speech foreignness is judged. Three factors were established for the final factor solution: socio-intellectual status, aesthetic quality, and dynamism.

Middle aged, middle class townspeople (26 males-26 females) and university students (25 males-15 females) served as experimental subjects. The subjects were all exposed to the same 45 minute tape and asked to complete the SDAS instrument. The results of this study corroborated the earlier findings of Lambert. Greater degrees of phonological speech foreignness exhibited by the twelve European born speakers elicited lower judgments on all three attitude dimensions than similar American

born speakers. The initial findings of Lambert were confirmed in this experiment, even though many other variables were manipulated and a different experimental method was utilized. In addition this preference for nonaccented English was operative across sex and status lines. Lambert employed techniques similar to his earlier investigations in a 1969 study testing reactions to various American English dialects.⁶² In this study Lambert attempted to answer the following questions, "(1) Are both negro and white subjects sensitive enough to dialect variations to make reliable differentiations? (2) If so, will there emerge a meaningful pattern of dialect preferences, i.e. some particularly favored and others disfavored?"⁶³ A rating instrument was devised for this study by asking southern black college students to indicate those traits they felt were most important for friendship and success. Their responses were tabulated and ranked in order of popularity. They were then asked to assign synonyms and free associations to the trait names.

Dialect samples were selected by trained dialectologists. Recordings were made of four representatives of each of the following six dialect groups:

- (1) Network English ("middle American dialect").
- (2) College educated white southern speakers.
- (3) College educated negro southern speakers.
- (4) College educated negro speakers from Miss. currently attending college in Washington, D.C.
- (5) Southern negro students (peer group) who spoke a dialect similar to that used by students at

- the black college where testing was conducted.
- (6) Alumni from a New York City College.

Speakers in groups 1 and 2 were white, while the remaining speakers were black. Each speaker recorded an identical short, content free passage. Both male and female speakers were used, except in category 2 (due to an oversight), which included only males. The 24 recordings were placed on two tapes, twelve speakers on each.

The subjects were negro male and female college undergraduates from a southern negro college, white male and female students from a New England college and white male and female students attending a southern university. The students serving as judges in all three cases were asked to listen to the voices and to evaluate each speaker in terms of a 15 trait scale devised by Lambert.

Lambert and Tucker found only a few instances where sex differences in response occurred (in these the females tended to rate the speakers slightly more favorably), so the ratings of the males and females were combined.

Statistical analysis clearly demonstrated that each group was able to differentiate the various dialects. All three rating groups (nearly unanimously), perceived the network speakers as having the most favorable profile of traits.

The dialect group rated next most favorably by both

northern white and southern negro judges was the educated negro southern. Southern white judges on the other hand rated members of their own peer group next most favorably. Southern white students rated educated negro southern speakers third.

In terms of the least favored group, negro judges rated educated white southern speakers least favorably on everyone of the 15 traits. Whereas, white judges, both northern and southern, rated the Mississippi peer speakers least favorably, and the New York Alumni speakers only slightly higher.

The two groups of white judges were also asked to indicate which race they thought the speakers were. Northern whites estimated race with the following accuracy for the six dialects: Network 95% white, Educated white southern 87%, New York Alumni 49% black, Educated negro southern 49% black, Howard University 84% black, Miss. peer 94% black, White southern judges estimates were: (1) 98% white, (2) 96% white, (3) 47% black, (4) 54% black, (5) 70% black, (6) 89% black, respectively for the above six dialects. Southern whites were slightly more accurate in race estimation than northern whites, but in most cases the true race of the speakers was judged a majority of the time.

In general subjects were clearly able to differentiate the dialect groups and they clearly favored the network style of spoken English. Lambert and Tucker felt the different perspectives of blacks and whites (with regard to least favorable)

reflect basic comparisons in affectively-toned attitudes that representatives of Americas major ethnic groups hold toward one another. It should be remembered that Solomon and Ali⁶ found that affective meaning is transmitted by intonation as opposed to content. "The contrasts also make it evident that speech styles which are pleasing to one social group will not necessarily be so perceived by another."⁶⁴

In a similar study Buck⁶⁵ utilized standard and non-standard black and white speakers to determine racial preferences. The non-standard speech patterns were similar to the Mississippi peer group in the Lambert experiment. Buck found that listeners provided only with phonetic dialect variations as cues, judged English speakers more competent and trustworthy than the non-standard English speakers regardless of race. This would seem to corroborate the findings of preference for network speakers in Lambert's study.

As an aside, it is interesting to note that recent media surveys have found that Walter Cronkite is generally perceived as the most credible and authoritative man in America. Cronkite, as do most media personages, employs the network or middle American dialect in his broadcasts. Based on Buck, Lambert and others it would appear he could not have risen to such prominence if his speech was accented.

Studies involving Chicanos and American subjects have also

revealed devaluation and ethnic reactions similar to Lambert's studies. In a series of "wrong number" experiments (whereby the speaker would "accidentally" call the experimental subject), Harris and Baudin⁶⁶ found that Chicano subjects helped a Spanish-surnamed confederate who spoke Spanish more than one who spoke English. Suggesting that the language may have cued an ethnic sympathy reaction similar to that of the Jewish subjects in the Lambert experiment.

Building on the findings of her first study, Harris⁶⁷ further predicted that a Spanish accent for Spanish surnamed subjects would have the same effect. Harris theorized that Anglo subjects would be more aggressive and less helpful to a caller with a Spanish accent and Spanish-surnamed subjects would be more aggressive and less helpful to callers with an English (Anglo) accent.

Harris used a methodology similar to her pilot experiment. Forty-eight Spanish-surnamed and forty-eight Anglo-surnamed telephone numbers were randomly selected from the telephone book. Bilingual female subjects called these numbers in either the guise of Spanish accented or non-accented "wrong numbers." The responses of the "wrong number" answerers were recorded and evaluated.

The results of this study not only supported the idea that prejudice against people with Spanish accents does exist,

but provided none at all for the idea that Spanish-surnamed subjects would be less aggressive and more helpful to someone with a Spanish accent. Harris found that all subjects (both Spanish and Anglo), who became more aggressive as the call went on were in the Spanish accented condition.

These findings partially contradict Harris's expectations, but lend added support to Lambert's findings of prejudice towards all accented speech. Borrowing from Lambert's Quebec experiment, it could be theorized that the Mexican subjects responded unfavorably to Spanish accented callers due to a stereotype of ethnic inferiority. This would correlate closely with Lambert's rationale for similar responses by the French ethnic group.

In the foregoing studies listeners were able to make credibility and personality judgments based on stereotypes associated with certain speech characteristics. It is significant to note, however, that listeners were not able to identify which language features acted as cues for these judgments.

In an attempt to specify further dialect characteristics and to identify judgment dimensions of the listener-evaluator, Williams⁶⁸ discovered that dialect speakers were evaluated along two judgmental factors of confidence-eagerness and ethnicity-nonstandardness. Williams attempted to categorize Detroit ghetto speakers and listeners systematically along the dimensions

of social status. Additionally the importance of dialect samples of lexicon and syntax in listener-judgment formation was investigated as was the effect that dialect syntax and lexicon have on speaker status credibility. He found that non-standard grammatical characteristics were the most salient language cues for listeners in making their judgments. Williams findings also coincide with Lamberts in that accented speakers (non-standard), were consistently rated lower on a variety of personality and intelligence scores.

Naremore, in her 1971 study⁶⁹ attempted to judge teacher evaluations of varying student dialects. Teachers were found to have prejudices toward standard English speakers, whereas non-standard speakers were devaluated on a number of scales. She concluded her dialect study with a provocative question only partially answered by recent dialect research: "which characteristics cue which attitudes for which people?"⁷⁰

Bochner and Bochner, in a 1974 study,⁷⁴ explored this general question in terms of American social status and social dialect. The lack of systematic descriptions of listeners and speakers, listener attitudes toward speakers and language cues used in forming listener judgments of speakers and dialects in previous studies was avoided.

Ninety-six undergraduate subjects were ranked in one of three social categories (high, middle, and low) based on their

occupation, education and residence. Linguistic samples representing urban Boston (deemed upper class) and the black ghetto, Washington, D.C. (deemed lower class) were prepared. Two messages identical in semantic content, but differing in syntactical and lexical choice were prepared. Both messages were recorded by native speakers of the respective dialects. Both speakers were males and had resided in Ohio for four years.

Each experimental subject heard only one message. No information pertaining to the source was supplied. Factor analysis for the experimental sample was conducted across 18 scales of authority and 18 scales of character.

This study had two possible main effects: the effect of dialect on groups of differing social status and the effect of social status on the response to speaker and dialect. A main effect of dialect resulted in the significant difference in the response to syntactical items of both dialects. Subjects responded very positively to the standard English high status syntactical patterns. Conversely, subjects evaluated negatively non-standard low status speakers. These findings support the premise forwarded by most American linguists: Syntax (word arrangement) does differentiate dialect. Furthermore, Bochner theorized that listener status plays a weak role in speaker evaluations. The determinant may well be the norm of the listeners linguistic community. This finding is substantially

the same as Lambert, Harris and others findings of preference for a dialect other than the listeners own. In this study all subjects, regardless of their own social status, held as their linguistic norm white standard American English. The positive responses to high status dialect confirm this preference.

The negative responses were viewed as rejections of a racial minority linguistic norm of which the subjects had no part. Some evidence, although slight, was found indicating perhaps certain verbal structures may affect the reaction to the meaning of a given sentence more than others.

Dialect and status effects were found for isolated vocabulary pairs along lexicon (diction) factor dimensions. These results suggest that while subjects did not respond to vocabulary as an exclusive indicator of dialect, they may have responded to vocabulary as an indicator of social status. This may be an effect of the aesthetic or intense quality of the language used. It is possible that differing groups hold different views of what is linguistically beautiful.

As in the previous attitude studies, high status (standard English) speakers were positive. Conversely, low status speakers were devaluated. Bochner feels this may also be a result of the linguistic norm of the listeners. They theorize that the dialect of the low status speakers served to identify them as nonmembers of the community. In addition, middle status (class) listeners

were the most uniform in their preference for standard English speakers across the scales.

In conclusion Bochner and Bochner forward the following five conclusions with regard to speaker ethos based on social dialect:

- "(1) A person's response to the dialect speech of another is not uni-dimensional. Three dimensions reflected the factor structures of this investigation were response to meaning, response to grammar, and response to aesthetic quality.
- (2) Syntactical cues appear to be primary in listener-differentiation of dialects.
- (3) The social dialect of a speaker may influence listener judgments of his character, but not of his authority in a given situation.
- (4) Persons of differing social status who nevertheless subscribe to a similar set of linguistic norms are not likely to make significantly different judgments about another's dialect.
- (5) Dialect in speech is more likely to be a significant determinant of speaker ethos for persons of middle social status than for persons of higher or lower social status."⁷²

The findings that syntax (or what is said as opposed to how it is said), is the primary cue in listener-differentiation of dialects although a contradiction to the body of this report does have some support. Delia⁷³ found that dialect and message acceptance interact to generate perceptions of similarity, attraction and credibility in conditions where an audience accepted, norm discrepant position was perceived. In other words, when the content of a speaker's message contradicts, or

is at odds with the audiences stereotypical perceived position of that speaker's dialect the speakers judge him/her more favorably.

The conclusions and contradictions of Bochner and Bochner's study serve to underscore the tentative nature of similar experiment's findings. Their apparent refutation of the pretext that intonation plays a major role in person perception may, however, be a consequence of a faulty research design. Like most other researchers in the field, Bochner and Bochner utilized a carefully worded prepared statement as their experimental stimulus. It may well be that in their attempt to guard against content reactions to their recorded stimulus they over-compensated and confounded their findings anyway. Although prepared scripts insure content free dialogue, the mere fact that they are contrived and not spontaneous may have an influencing effect. On a common sense level it is apparent that naturally occurring evaluational reactions would, of course, occur as the result of spontaneous encounters. Further, in those situations where a speaker's discourse is not spontaneous (i.e. speeches, presentations, plays, etc.), it can be assumed that the speaker is familiar with the text, either through composing or rehearsing it. This element of naturalness is decidedly lacking in the foregoing studies utilizing prepared scripts.

In the face of these methodological shortcomings and possibly resultant contradictions, it becomes necessary to firmly establish the role of intonation in person perception.

It has hopefully been demonstrated that listeners cannot make accurate judgments about a speaker based on vocal cues alone. Listeners, however, can and do make voice only judgments about speakers based on stereotypes cued by (as yet still undefined) aspects of their speech. Idiosyncratic variables are only one of the bases for these judgments. Word choice also influences a listener's perception of a speaker.

Studies on accents and dialects have overwhelmingly confirmed that those speaking with an accent are consistently devaluated in the manner in which they are perceived, even by members of their own linguistic speech community.

What has not been specifically defined, however, is the truth or falsity of the hackneyed cliché "it's not what you say but how you say it." It is clear that the way in which one speaks exerts tremendous influence on the way he is perceived. What is not clear are the specific variables requiring manipulation to optimize that perception.

It has been found that we rely on intonation for affective meaning. What needs to be determined is if intonation accounts for the majority of person perception. Do the intonational differences between varying dialects or accents

account for how we are perceived by others or do the words we chose or the order in which we use these words account for the stereotyped responses elicited by the foregoing research?

Based on the experiments reviewed, it would appear that at least a combination of the above variables is responsible for the effects of dialect and accented speech on person perception. What is clear from the cited experiments is a cross cultural preference for network-high-class speech guises (in the United States). What was not specified are the ways in which this mode of speech differs from others. As of yet no one has specifically defined the most favorably perceived style of English speech. When these unknowns are identified it may be possible to eliminate the generally unfavorable and stilted stereotypes associated with ethnic and cultural groups merely by modifying the way in which we speak.

PURPOSE OF THE STUDY

Before the "microscopic cues" in speech, which trigger predispositions and stereotypes, can be examined and identified the existence of naturally occurring speech person-perception liabilities must be firmly established. Past studies have been unable to answer this pivotal question due to faulty and confounding methodologies.

It is the purpose of this study to examine the effects

of two dialectally representative speech styles on listener perceptions of personality and physical characteristics. The evaluational responses of general population subjects to dialectally distinct speakers in similar speech situations shall be examined to determine what, if any, effect their representative speech styles have on person perception.

HYPOTHESES

Based on the implications of previous research, the following hypotheses were forwarded for testing in this study:

1. Speakers utilizing dialectally representative general American speech styles will be perceived more favorably on physical and personality scales than their central Florida counterparts.
2. Further this preference for general American speech styles is expected even in situations where the speakers are utilizing the sentence structure and grammatic choice of their counterparts.

Support for these hypotheses will confirm the effects of intonation on evaluational reaction to spoken language.

METHODOLOGY

This study is attempting to determine the effects of various speech styles on listener judgments of personality and physical characteristic. To this end, taped samples of various speakers were rated by experimental subjects on a series of semantic

differential type scales designed to detect perceptions of specific characteristics.

Speakers

Previous research methodologies⁷⁶⁻⁷⁷ have utilized status as the criterion for selecting speakers. However, they have failed to clearly link any representative speech style with status to justify its use in speaker selection. Speakers for this study were chosen primarily on the basis of the dialectal speech styles they employ, as judged by a language expert.

Lambert and Tucker's examination of various dialectal styles showed a cross cultural ascription to general American dialect even when raters utilized differing styles of accented speech.⁷⁸ The significance of this finding is somewhat muted by the fact that the comparison groups utilized heavily accented regionally identifiable speech styles (i.e. Mississippi Peer Group, New York English, etc.). Although previous studies⁷⁹ have found raters less than 100% consistent in determining race or ethnic origin from voice in the present study the possibly confounding variables of speakers sex and race were controlled by using only white male speakers. Similar to Lambert's study, however, the comparison groups were speakers using general American professional broadcast English and speakers using central Florida southern accented speech. To insure the relevance of these styles, speakers were selected on the basis of the following

criteria. General American speakers were required to have a midwest or northeast origin and ten years broadcast (radio or TV) experience. Central Florida speakers were required to have lived at least half of their lives in central Florida. Only speakers between the ages of 22 and 50 were employed to avoid the possibly devaluative effects of sounding "too young or too old" (for demographic data see Appendix 1).

In a final attempt to insure that any significant difference generated by this study was based only on speech styles, all speakers were required to hold at least a bachelor's degree from an accredited institution. In this fashion significant difference in the evaluations of the two groups could not be attributed to differential educational levels.

PROCEDURE

Ten subjects meeting the above arbitrary criteria (5 in each group) were asked to describe a content free 8" x 10" painting of a wheat field by Van Gogh.

Sixty second tape samples were taken of these spontaneous descriptions. Speakers were given no specific instructions on how to express themselves, other than to "describe the painting as you would to someone over the phone." General American speakers were asked to employ their broadcast voice, if it differed from their normal speaking voice. All

recording was done in quiet, noiseless locations on a Panasonic Cassette Recorder, model No. RQ-309-DS.

After the ten taped samples had been gathered they were randomly assigned to a master tape and presented to Dr. J. Hoglin of Florida Technological University. Dr. Hoglin has an extensive background in the area of regional dialect and served as an expert judge of the representativeness of the taped samples. Of the initial ten tape samples, Dr. Hoglin judged five speakers to be utilizing good general American dialect, one speaker to be utilizing substandard general American dialect, and three speakers to be using moderately southern speech styles.

Of the initial ten speakers, two speakers meeting the criteria for the central Florida group were judged by Dr. Hoglin to utilize general American dialect. One of these speakers, although meeting the criteria for the central Florida group, had had broadcast experience. The other speaker, while also meeting the standards for the central Florida group, was judged to utilize sub-standard general American. The difficulty in selecting by criteria speakers representative of both groups, is noted to accentuate the similarity of the samples to the untrained ear. It was felt that speaker selection should be as rigorous as possible to insure that any significant differences would be a direct consequence of the "microscopic" speech cues indigenous to each of the two styles.

In order to obtain comparison groups of four speakers each, one additional tape sample from a subject meeting the qualifications of the central Florida group was taken. This speaker was judged by Dr. Hoglin as representative of the expected group.

The eight taped segments were then randomly arranged on another cassette tape for presentation to the experimental subjects. All random groupings were accomplished with the aid of two Wollensak Tape Recorders, model no. 25-20.

Following the judging of the tape samples by Dr. Hoglin the dialogue of each speaker's tape sample was reduced to script form, complete with vocalized pauses and nonfluencies. Subjects in each of the two groups were then randomly assigned counterparts from their comparison group. These subjects were then presented with their counterparts' scripts. The speakers read through the brief passages several times to overcome any hesitancy due to unfamiliarity, the speakers were then asked to record these scripts in the same fashion as the spontaneous condition.

These samples were arranged in the same order as the spontaneous condition on another cassette tape. It was felt that having the speakers record the scripts of their experimental counterparts would allow the verbal and intonational effects of their speech to be separated for examination without the aid of complex recording equipment.

The two tapes (spontaneous and script) plus the bare

scripts themselves were presented to experimental subjects for the purpose of gaining the perceptions about the speakers, or authors (in the script-only condition).

Pilot Test

A pilot test was conducted to determine the practical efficiency of the preceding experimental methodology.

Subjects

Experimental subjects for the pilot test were 12 upper level Communication students enrolled in COM 462 at Florida Technological University in the latter part of the Spring quarter, 1977.

Each subject was exposed to the eight voice samples from the spontaneous description condition (in random order) and asked to complete eight, 40 item, seven point bi-polar adjective scales similar to a semantic differential (see Appendix 2). The instrument used was identical to the one developed by Addington⁸⁰ in his study. These scales were designed to test raters' perceptions of speakers' personality and physical characteristics.

Standardized instructions on the completion of the questionnaire were provided by a female confederate in an effort to minimize experimenter bias and eliminate the confounding effects of utilizing the male experimenter's voice as one of the

the central Florida samples. The taped samples were presented to the experimental subjects with no supplementary demographic data or status ascriptions.

During the administration of the pilot test it became evident that some members of the experimental group recognized some of the taped speakers. At the end of the session the Ss were asked to identify any subjects they thought they recognized on the last page of their questionnaire.

Analysis

Four of the twelve Ss correctly identified one or more of the speakers. As a consequence, their data was not considered in the analysis of the pilot test's results.

As was previously mentioned, the instrument used was originally developed by Addington. In Addington's original analysis each set of scales was submitted to factor analysis. The purest scales were correlated and labeled as components of a common factor. For the purposes of this study seven of Addington's isolated factors (14 scales) were examined, plus two unrelated scales of interest to the experimenters.

Initially the data was analyzed for similarity of responses within groups, via a one way analysis of variance (ANOVA) applied to each group. Nine t-tests, one for each factor or scale were utilized to determine the effects of each

speech style on person perception.

Results

The results of the pilot study are displayed in tables 1-4. Tables one and two display the results of the t-tests on factors 1-9. As is readily discernable, significant difference was generated by factors 2, 5, 6 and 9.

As a measure of internal consistency each group of speakers was examined for intra group variance via F tests. The results of these tests were recorded in tables 3 and 4. Significant difference was discovered within the groups on 5 of the 9 factors. However, the varying factors were different in each group. A cursory examination of the data would tend to suggest that in each group the internal deviance was caused by very positive or very negative evaluations of one subject. These evaluations were, however, in line with the predicted results in that the negatively rated speaker was in the central Florida group while the positively rated speaker was in the general American group.

Insofar as no specific predictions about individual scales were made, the experimental hypotheses were supported within the limitations of the pilot test methodology. As a group, the general American group was rated more favorably than the central Florida group. Further, in those instances where the G.A. group was not more positively evaluated, listener ratings were neutral

Table 1

Factors for Rating of Speakers--Polar Adjectives
and the Levels of Significance

FACTOR	DESCRIPTIVE CATEGORY	POLAR ADJECTIVES (2 per descriptive category)	LEVEL OF SIGN
1	Lanky-dumpy	Young-old Skinny-fat	.10 ^a
2	Hearty-glum	Talkative-quiet Extroverted-introverted	.01
3	Potent-impotent	Well adjusted-neurotic Self-respecting-servile	NSD
4	Soft-hearted-hard-hearted	Sensitive-insensitive Kind-cruel	NSD
5	Aggressive-unresisting	Energetic-lazy Active-passive	.10
6	Urbane-coarse	Educated-uneducated Rich-poor	.10
7	Hardy-fragile	Unemotional-emotional Tall-short	NSD
8	Good-looking-ugly*		NSD
9	Intelligent-stupid*		.01

^aApproaches the .10 level of significance

*These Bi-polar adjectives were selected as additional potentially relevant scales by the experimenter.

Table 2

Factor Ratings for General American Speakers
And Central Florida Speakers

FACTOR	GENERAL AMERICAN SPEAKERS \bar{X}	CENTRAL FLORIDA SPEAKERS \bar{X}	t
1	8.5625	7.2478	1.2492
2	6.2500	7.4062	2.6876 ^a
3	5.9062	6.6562	0.9842
4	6.6875	6.5312	0.2944
5	6.4062	7.2812	1.4240 ^b
6	6.4687	7.2500	1.5068 ^b
7	8.1250	7.8125	0.9747
8	3.6875	3.6562	0.1726
9	2.5937	3.3125	2.7043 ^a

Note: N=8.

a $p < .01$ (one-tailed)

b $p < .10$ (one-tailed)

Table 3

Mean Factor Ratings for Each Speaker
Within the General American Speakers' Group

FACTOR	SPEAKER $\frac{2}{X}$	SPEAKER $\frac{3}{X}$	SPEAKER $\frac{5}{X}$	SPEAKER $\frac{6}{X}$	F
1	8.3750	9.3750	8.3750	8.1250	0.6988
2	6.1250	6.8750	4.5000	7.5000	3.5524 ^b
3	5.7500	6.0000	5.3750	6.5000	0.4733
4	6.7500	6.6250	6.1250	7.2500	0.5997
5	6.3750	7.3750	4.1250	7.7500	5.3897 ^a
6	7.0000	6.2500	5.3750	7.2500	2.1307 ^c
7	8.0000	8.5000	9.1250	6.8750	4.6400 ^a
8	3.6250	3.5000	3.6250	4.0000	1.3552
9	2.8750	2.3750	1.8750	3.2500	1.9504 ^d

Note: N=8 (for each speaker).

a p .01 (one tailed)

b p .05 (one tailed)

c strong trend toward .05 level (one tailed)

c strong trend between .10 and .05 levels.

Table 4

Mean Factor Ratings for Each Speaker
 Within the Central Florida Speakers' Group

FACTOR	SPEAKER $\frac{1}{X}$	SPEAKER $\frac{4}{X}$	SPEAKER $\frac{7}{X}$	SPEAKER $\frac{8}{X}$	F
1	6.0000	5.8750	8.8750	8.1250	7.2478 ^a
2	7.1250	9.0000	6.6250	6.8750	2.7421 ^c
3	5.6250	7.8750	5.5000	7.6250	3.8067 ^b
4	5.7500	6.7500	6.8750	6.7500	0.7562
5	6.6250	8.5000	6.7500	7.2500	1.1656
6	6.0000	8.6250	6.2500	8.1250	5.1103 ^a
7	8.2500	7.0000	8.2500	7.7500	0.9709
8	3.3750	4.0000	3.7500	3.5000	0.9904
9	2.3750	4.5000	2.5000	3.8750	6.6348 ^a

Note: N=8 (for each speaker)

a p .01 (one-tailed)

b p .05 (one-tailed)

c p= strong trend toward .05 level (one-tailed)

for both groups and no significant differences were recorded.

Posits about the importance and causation of these findings will be forwarded in the discussion section.

Discussion

As can readily be discerned from the tables significant differences were generated by this pilot study. Judging from the compiled data, general American speakers were judged more favorable on 2 of the 9 factors or scales examined. The analysis of the data with regard to factor one suggest that the general American speakers were perceived as being different from their Central Florida counterparts, but not significantly so. The t-tests reveal a strong trend towards significance at the .10 level. This particular factor paired the scales of young-old and skinny-fat. The data suggests that the speakers percieved the general American speakers as older than their central Florida counterparts. This finding is entirely congruent with the actual ages of the two groups (see the index) as the median ages for the G.A. and C.F. groups are 43 and 29.5, respectively. It also appears, based on the mean factor ratings for each subject on factor one (Tables 3 and 4), that the raters were generally accurate in discerning the relative ages of the speakers in each group. Specifically, older speakers received higher mean factor ratings for factor one than did younger speakers, regardless

of the dialectal group.

Factor two, hearty-glum, also produced significance at the .01 level. This factor combined the scales extroverted-introverted and talkative-quiet. Based on this data, it is evident that the raters perceived the G.A. speakers as more out-going and conversant. A finding which is in line with the experimental hypothesis.

Raters were unable to make any distinctions between the two groups as factors 3 and 4. These factors required subjective evaluations of the personality characteristics of potency and compassion. Based on these limited findings, it is evident that the raters were unable to effectively discriminate between the comparison groups on a group basis. Some interesting individual inter-group differences were in evidence however, these will be noted in a moment when the results of F tests are discussed.

Statistical differences beyond the .10 level were produced by factors 6 and 7. Although not strong these findings suggest that the general American speakers are perceived as more aggressive and urbane than their central Florida counterparts. These factors consisted of evaluations of the energy and activity of the speaker as well as his education and status levels. It is significant to note that the tendency to perceive the general American speakers as better educated and highly affluent was stronger than the tendency to perceive them as energetic, even

though both were only marginally significant at the .10 level.

Factor 7 and scale 8 did not reveal any significant difference in the way the two groups are perceived with regards to their desirability or good looks. Raters evidently did not perceive any difference between the two groups along these lines.

Scale 9 required raters to make subjective evaluations of the speakers intelligence or stupidity. General American speakers were perceived as being significantly smarter (beyond the .10 level) than the central Florida group. This finding reinforces the tendency in factor 6 for the G.A. group to be rated as better educated and more affluent.

An internal check of consistency was made of rater responses within each group via F tests of variance. It was hoped that NSD would be found indicating consistency of perceptions within each group. However, as indicated by tables 3 and 4 significant intra group variance was observed within each group on 5 of the 9 factors (although not the same 5 factors in each group). Closer examination of the data would seem to infer that this deviance could be the result of aberrant scores for one individual in each group. Specifically, speaker 5 in the general American group was judge more favorably than his G.A. counterparts and the central Florida speakers. Speaker 4 in the central Florida group conversely was judged least favorably of all speakers in both groups. The noted intra group deviance is entirely in

line with predicted responses. Namely the most highly rated was, as anticipated, in the most highly rated group while the reverse is true for the least favorably perceived speaker.

It is uncertain what is responsible for this disparity in rater responses. This difference is even more perplexing when one considers the similarity in demographics of the speakers within and between groups, the difference in mean ages notwithstanding. Intra session history could explain the depreciatory ratings for speaker no. 4. During the administration of the experiment certain innocuous statements made by speaker 4 in his taped message unexpectedly generated snickers and overt laughter from the experimental subjects. It is potentially possible that this outburst is at least partially responsible for speaker no. 4's devaluation, beyond that caused by his speech style.

However, the differences noted for speaker no. 5 are harder to explain. No outburst or unusual activity was noticed during the playing and rating of his taped segment.

An immediate consequence of the pilot study was the streamlining of the experimental questionnaire from 40 to 19 salient scales. In addition, the factor of appealing-disagreeable and the single scale of honest-dishonest were added to the seven factors and two single scales analyzed in the pilot study.

Written as opposed to spoken instructions were decided upon for the actual administration of the study in an attempt to

further minimize any experimenter bias that might be conveyed by non-verbal cues in the recitation of the instructions.

METHODOLOGY

With the exception of the changes in the questionnaire and the method of instruction introduced as a result of the pilot study, the methodology of the study was unchanged.

Aside from these changes the experimental methodology was identical for both the pilot test and the main study in the spontaneous description condition.

In the actual administration of the study the experimental subjects were also asked to evaluate the aforementioned eight speakers in the script recitation and script reading conditions as well.

Subjects

Forty-nine undergraduate students enrolled in three Humanities classes (N=18, 13 and 8 respectively) at Embry Riddle Aeronautical University, Daytona Beach, Florida, served as the experimental subjects in the study. These subjects were chosen over a similar group at Florida Technological University to preclude the confounding effects of speaker recognition exposed by the pilot test. This study was conducted during the first few weeks of the summer semester, 1977.

Intact classes were used to evaluate the speaker in one

of the three conditions. Subjects, after their exposure to the tape samples of script, were asked to complete the 19 scale questionnaire derived from the pilot test, (see appendix 3). As in the pilot test the questionnaire was designed to test a speakers perceived physical and personality characteristics.

Results

As with the pilot test, the data amassed in the actual administration of the study was examined for intra-group variance via the use of the t-tests, and inter-group variance through the application of F tests (ANOVA).

The results of this study are displayed in statistical form in Tables 5 through 10.

Condition A: Spontaneous Description. Based on the analysis of the assimilated data the experimental subjects (Ss) were unable to distinguish between the general American (G.A.) and central Florida (C.F.) speakers with regard to their age or physical bulk, as there was no significant difference between the groups on factor #1 (see Table 5).

General American speakers were perceived as slightly more talkative and hearty than their C.F. counterparts on factor two. Significance on this factor was marginal at the .10 level.

General American speakers however, were perceived as much more potent than central Florida speakers on factor three. The

significance of this difference was beyond .001. No significant difference was observed between the two groups with regards to their compassion.

General American speakers were perceived as more aggressive than the C.F. group of factor 5 at a level just short of .05. They were also strongly perceived as richer and more educated (factor 6) than the comparison group beyond the .001 threshold. The G.A. group was not, however perceived as any more or less fragile than the C.F. group (factor 7). The general American group was perceived as strongly ($P=.01$) more appealing than the C.F. group on factor 8.

Congruent with the strong support registered in factor 6, the G.A. speakers were also perceived as more intelligent (factor 9). The G.A. group was not, however, perceived as significantly honest (factor 11). They were perceived as slightly better looking, as support for factor 10 although minimal, was significant at the .10 level.

Condition B: Script Recitation. In this condition speakers were asked to read the script descriptions of their counterparts. In this it was hoped that the verbal and intonational components could be separated for analysis.

Converse to hypothesis two general American speakers in this condition were perceived most favorably on only two of the

Table 5

Factors for Rating of Speaker--Polar Adjectives
and the Levels of Significance

Factor	Descriptive Category	Polar-Adjectives (2 per descrip- tive category)	Level of Significance		
			Condition A	Condition B	Condition C
1	Lanky-Dumpy	Young-Old Skinny-Fat	NSD	.02	NSD
2	Hearty-Glum	Talkative-Quiet	.10	.20	NSD
3	Potent-Impotent	Extroverted-Introverted	.001	NSD	.001
4	Soft-hearted- Hard-hearted	Well-adjusted-Neurotic Self-respecting-Servile	NSD	.20	.02
5	Aggressive-Unresisting	Sensitive-Insensitive Kind-Cruel	.10 ^a	.05	.20
6	Urbane-Coarse	Energetic-Lazy Active-Passive	.001	NSD	.05
7	Hardy-Fragile	Educated-Uneducated Rich-Poor	NSD	NSD	NSD
8	Appealing-Disagreeable	Emotional-Unemotional Tall-Short	.01	NSD	.01
9	Intelligent-Stupid*	Polite-Boorish Convincing-Unconvincing	.01	NSD	.001
10	Goodlooking-Ugly*		.10	NSD	.20
11	Honest-Dishonest*		NSD	.10	.01

*These bi-polar adjectives were arbitrarily selected by experimenter
^aApproaches the .10 level of significance

Table 6

Factor Ratings for General American Speakers and
Central Florida Speakers. Condition A

Factor	General American Speakers \bar{X}	Central Florida Speakers \bar{X}	t
1	32.944	31.6111	.8833
2	28.333	31.111	1.68079 ^a
3	22.8333	28.666	3.99474 ^d
4	25.7222	26.5000	.46885
5	27.9444	31.3888	1.91572 ^b
6	23.444	27.9444	3.93893 ^d
7	31.2777	31.6111	.2455
8	26.6111	31.000	2.85671 ^c
9	9.9444	12.7222	2.72251 ^c
10	14.333	15.333	1.68330 ^a
11	13.222	13.055	.20510

N = 18

^a $p > .05$ (one-tailed)

^b $p > .02$ strong trend toward .01 level (one-tailed)

^c $p > .01$ (one-tailed)

^d $p > .001$ (one-tailed)

Table 7

Factor Ratings for General American Speakers and
Central Florida Speakers. Condition B

Factor	General American Speakers \bar{X}	Central Florida Speakers \bar{X}	t
1	34.76923	30.61538	2.77565 ^d
2	27.30769	24.30769	1.56188 ^b
3	21.69230	21.23076	.024736
4	22.46153	24.84615	1.44827 ^b
5	28.46153	24.15384	2.35734 ^c
6	25.38461	25.0	.23410
7	30.38461	30.07692	.17577
8	24.23076	26.0	.92695
9	10.84615	10.61538	.20342
10	14.30769	14.69230	.40378
11	11.69230	13.69230	1.92992 ^a

N = 13

^a p > .05 (one-tailed)

^b p > .02 strong trend toward .01 level (one-tailed)

^c p > .01 (one-tailed)

^d p > .001 (one-tailed)

Table 8

Factor Ratings for General American Speakers and
Central Florida Speakers. Condition C

Factor	General American Speakers \bar{X}	Central Florida Speakers \bar{X}	t
1	30.375	29.625	.33436
2	24.625	27.0	1.01290
3	20.75	31.5	4.44527 ^d
4	20.5	30.125	2.89530 ^b
5	26.125	31.125	1.48395
6	27.25	33.625	2.38121 ^a
7	33.8750	31.625	1.23876
8	21.875	33.0	3.40763 ^c
9	10.125	17.25	4.59962 ^d
10	14.5	15.75	1.38676
11	10.375	14.75	2.90 ^d

N = 8

^a $P > .05$ (one-tailed)

^b $P > .02$ strong trend toward .01 level (one-tailed)

^c $P > .01$ (one-tailed)

^d $P > .001$ (one-tailed)

Table 9
 Mean Factor Ratings for Each Speaker Within the
 General American Speakers' Group in condition A

Factor	Speaker 1 \bar{X}	Speaker 2 \bar{X}	Speaker 4 \bar{X}	Speaker 7 \bar{X}	F
1	9.50	7.0	7.1	9.3	10.579 ^a
2	7.38	8.5	7.1	9.0	3.016 ^b
3	5.55	7.22	4.5	5.27	5.953 ^a
4	6.833	6.444	5.722	6.722	.89337
5	7.722	8.444	4.333	7.6111	10.823 ^a
6	5.6111	7.444	4.555	5.555	8.22769 ^a
7	7.111	8.444	7.888	7.833	1.77302
8	7.277	7.500	5.333	6.611	4.14418 ^a
9	2.666	3.333	1.777	2.166	5.6602 ^a
10	3.944	3.777	3.0	3.777	7.0606 ^a
11	3.222	3.222	3.277	3.50	.27327
\bar{X}	6.0722	6.48181	4.95972	6.12154	

Note N = 18

^a $p > .01$ (one-tailed)

^b $p > .05$ (one-tailed)

Note: The order of the speakers was re-randomized for presentation during the administration of the study such that: The Pilot Test Speaker 1 was Study speaker 8; 2 was 1; 3 was 7; 4 was 6; 5 was 4; 6 was 2; 7 was 5 and 8 was 3.

Table 10

Mean Factor Ratings for Each Speaker Within the
Central Florida Speakers' Group in condition A

Factor	Speaker 3 \bar{X}	Speaker 5 \bar{X}	Speaker 6 \bar{X}	Speaker 8 \bar{X}	F
1	8.166	9.50	7.55	6.66	8.279 ^a
2	6.611	8.166	9.88	7.0	7.2314 ^a
3	6.77	6.944	8.166	6.44	3.2764 ^b
4	6.684	6.444	7.166	6.33	.6223
5	6.944	7.888	9.3888	7.166	4.98132 ^a
6	7.44	6.166	7.833	6.55	4.355 ^a
7	8.44	7.789	8.166	7.77	.62259
8	8.055	6.833	9.388	6.888	6.3108 ^a
9	3.722	2.888	3.50	2.666	3.30271 ^b
10	3.722	4.111	4.055	3.333	3.550 ^b
11	3.666	2.888	3.444	3.055	1.95251
\bar{X}	6.38227	6.32527	7.13881	5.8053	

Note N = 18

^a p > .01 (one-tailed)

^b p > .05 (one-tailed)

Note: The order of the speakers was re-randomized for presentation during the administration of the study such that: The Pilot Test Speaker 1 was Study Speaker 8; 2 was 1; 3 was 7; 4 was 6; 5 was 4; 6 was 2; 7 was 5 and 8 was 3.

11 factors or scales (see Table 5). General American speakers were perceived as strongly more aggressive (factor 5 $>.05$) and slightly more honest (factor 11 $.10$) than their C.F. counterparts while reading their scripts.

The experimental subjects in this condition perceived the general American speakers as significantly older and bulkier than the central Florida group (factor 1 $>.02$).

Although not significant statistically, the general American group was perceived as minimally more talkative and extroverted than the C.F. group, (factor 2 $>.20$).

Condition C: Script Reading. In this condition the subjects were required to read the spontaneous descriptions of the compared groups and then evaluate them. Hypothesis two was based on the assumption that subjects would be unable to discriminate between the two groups based only on their word choice as evidenced in their scripts, (see Appendix 4). This was not, however, the case. Although no significant difference was registered between the two groups on factors one and two (see Table 5), general American speakers were, however, perceived as much more potent and compassionate than the C.F. group on factors 3 and 4 ($.001$ and $.02$ respectively).

While G.A. speakers were not perceived as more aggressive than the C.F. group (factor 5) they were pictured as more ($>.05$)

educated and affluent, (factor 6). They were also perceived as much more intelligent (.001) than the C.F. group on factor 9. Based solely on their words the G.A. speakers were perceived as more honest than the C.F. counterparts on factor 11. This difference was significant at the .01 level. The speakers were unable to distinguish between the two groups fragility or attractiveness however, (factors 7 and 10, respectively).

Intra Group Variance

As was previously mentioned the group scores were checked for internal consistency via one way analyses of variance. The results of these statistical checks are recorded in Tables 9 and 10. This analysis was conducted only on the scores generated by the spontaneous description condition. As in the pilot test statistical difference was recorded between individuals within both groups.

Mean scores of the eight individuals lead to the conclusion that this internal inconsistency is due to the aberrant scores of one individual in each group. This variance from the group mean is, however, in the direction expected. Specifically, the most favorably perceived speaker (no. 4) was a member of the general American group, the group predicted to elicit the most favorable evaluations. Conversely, the least favorable perceived speaker (no. 7) was a member of the central Florida group. It is significant to note that these two speakers

were perceived in exactly the same manner (most and least favorable) in the pilot test.

Conclusions

As can readily be discerned from the data, the support for hypothesis one generated by this study was less than resounding. Statistical difference beyond or equal to the .05 level was in evidence on only four of the eleven factors and scales.

While support for hypothesis one was marginal, confirmation of hypothesis two was nonexistent. Contrary to the prediction that general American speakers would be judged more favorably even when speaking another's written message, G.A. speakers were generally judged less favorably in this condition. The means for the two groups (Table 7) are much closer than in the spontaneous condition. In seven of the eleven categories, the mean scores for the central Florida speakers are smaller than those of the G.A. group, indicating a more favorable (although not necessarily statistically significant) perception of that group.

Based on the data from condition A and B (spontaneous and reading descriptions), it appears that word choice is a very important consideration in person perception. Consequently, the central Florida group was generally perceived more favorably when using the word choice of the general American group.

The significance of this conclusion is underscored by the

data generated in condition C., (script, reading). It had been assumed that Ss would be unable to make significant discriminations between the two groups based solely on their word choice.

However, this was not the case. Responses on six of the eleven factors indicate a strong preference (beyond .05) for the G.A. speakers word choice.

Word choice would appear to be the single most important aspect in perceptions of personality and physical characteristics. The strength of word choice alone was not substantial enough, however, to completely reverse the significance evident in condition A. Central Florida speakers when using the word choice of their general American counterparts were perceived more favorably, but not as favorably as the G.A. group in the spontaneous condition (A). Evidently a speakers word choice and intonation interact to determine the manner in which he will be perceived. It is unclear, from this study, exactly to what extent each aspect is significant.

The generalization of these conclusions to either of the larger dialectal groups from which the speakers were chosen is placed in doubt by the disparity evident in speaker ratings within groups. Subject evaluations of the speakers, particularly in the case of the most and least liked speakers, would appear to be more a function of the idiosyncratic aspects of their intonation and word choice than any dialectally identifiable

characteristic.

This is not altogether an unexpected outcome. The dialectal groups and the speakers chosen from them were selected for their similarity of age, education, race and sex. It is possible that the experimental hypotheses tested in this study would have been strongly supported had there been a greater dissimilarity between the comparison groups. None the less, the experimental subjects were able to make significant discriminations between the two groups, regardless of their similarity. What these selections were based upon is not presently clear. A content analysis of the two group's word length may clarify the issue and expose a preference for simple or more complex speech styles. If such a preference was, in fact, evident, a determination would have to be made as to its origin. As the educational background of the speakers was similar, it was hoped their word choices would also be similar. Ss in this study were still able, however, to distinguish between the two. Future research may address the significance of geographic or ethnic origin and education as mediating factors in word choice.

Future research should also continue the study of person perception between more diverse ethnic and dialectal groups, particularly those groups who habitually occupy the lower rungs of the socio-economic ladder. It is still possible that the altering of these groups speech styles to a more optimum form may

affect a pygmalion like change in their lives individually and as a group.

Based solely on this study the benefits of remedial instruction for those with "inferior" grammar is clearly evident.

From a purely empirical perspective, future studies should attempt to identify the microscopic speech cues upon which the Ss in this study based their selections.

SUMMARY

This study was concerned with the way a person's voice influences his perception by others, divorced from other than nonverbal cues.

Previous research had found that certain speech styles engender stereotypical perceptions of the speaker. However, this research was inconclusive as to the precise causes of these responses. This study attempted to verify the roles intonation and word choice play in the formulation of these affective responses. Specifically this study took the position that intonation or the nonverbal components were the deciding factor in person perception, as opposed to word choice. To this end it was hypothesized that similar to previous research, speakers employing general American speech modes would be perceived more favorably than similar speakers using central Florida speech

styles. Further, it was hypothesized that this preference would extend to situations where the preferred speakers were employing the word choice of the devaluated group, thus confirming the role of intonation in the perception phenomenon.

Speakers from two dialectal groups (general American and central Florida native) were chosen for similarity on the basis of selected background, educational and sex criteria. These arbitrarily chosen speakers were then judged for dialectal representativeness by an expert judge.

Four speakers were selected as representative in each group. Each speaker was asked to spontaneously describe a print of a content free pastoral scene. These descriptions were recorded on tape and were all approximately 60 seconds in duration.

In an effort to separate the vocal and verbal components of these descriptions, each speaker's response was reduced to script form. The scripts were copied verbatim from the recorded descriptions and included vocalized pauses, mispronunciations and non-fluencies when they occurred. Each speaker was then asked to recite the script description of a randomly assigned counterpart from their respective comparison group. In this fashion it was hoped to separate intonation and word choice without the use of complex electronic filtering devices.

Three conditions were employed in this methodology. Two

tapes were compiled by randomly assigning the speakers in each speaking condition; spontaneous description and script description. In addition, the script transcriptions were similarly arranged to comprise the third script only condition.

Three complete undergraduate classes of English and Humanities served as experimental subjects. Each class of subjects were asked to listen to or read the descriptions of the speakers in one of the three aforementioned conditions. After their exposure to the descriptions, the subjects were instructed to complete 19, 7 point bi-polar adjective scales derived from a pilot study and designed to test perceptions of personality and physical characteristic.

The resultant data was analyzed for inter group variance via the application of t-tests. F tests were utilized to detect intra group variance.

Analysis of the results revealed only partial support for the hypothesis that general American speakers would be most favorably perceived. G.A. speakers were most favorably perceived in the spontaneous description, however, the difference between the two groups factor means was not always significant. While support for hypothesis one was less than resounding, support for hypothesis 2 was non existent. Little significant difference supporting this premise was in evidence. Mean scores were closer and indicated an improvement in the perception of C.F.

speakers when employing G.A. word choice. This finding lends support to the theorists who feel word choice is the crucial factor in person perception.

The results of the script only condition tend to support the importance of word choice as well. Strong preference was noted for the word choice of the general American speech group when compared with the central Florida group. The results, however, are not wholly supportive of this position. The failure of the C.F. group in the script description to elicit the same degree of positive evaluation as the G.A. group on the spontaneous condition suggests that an interaction of word choice and intonation is responsible for the discriminations made by the experimental subjects.

Significant variance was also noted within groups. This deviance appears to be the result of very positive evaluations of one speaker and very negative devaluations of another in the G.A. and C.F. groups, respectively.

The causes of these perceptions were not addressed in this study, however, they suggest that certain, as yet unidentified, idiosyncratic speech cues also play a significant role in person perception.

Appendix 1

Demographic Data
About Speaker

1-8

No.	<u>General American Group</u>
2	W/M, 50, 15 years broadcast experience. New England origin.
3	W/M, 50, 18 years broadcast experience. Mid-West origin.
5	W/M, 35, 15 years broadcast experience. Mid-West origin.
6	W/M, 37, 12 years broadcast experience. Mid-West origin.
	<u>Central Florida Group</u>
1	W/M, 23, 20 years Central Florida residence.
4	W/M, 26, 13 years Central Florida residence.
7	W/M, 42, 31 years Central Florida residence.
8	W/M, 27, 26 years Central Florida residence.

Appendix 4

Scripts of Speakers 1 Through 8

Speaker 1

The picture which I'm about to describe is obviously one that has been uh, copied from an oil painting and it pictures in a grand display of colors, including yellows and greens . . . and skies of a flowing uh, wheat field or something similar to that and just above the tops of the flowing wheat uh, is the outline of a bird, an undistinguishable type of bird, but obviously very beautiful, very colorful and the bird is uh, disappearing in the distance, away from the point of the viewer into the, the sky which is I, I guess perhaps you could interpret the sky as that of being slightly overcast uh, white, billowy clouds and all in all a very comprehensive picture which makes for a very eye appealing uh, approach to the, the visual senses. An interesting foreground part of the picture is apparently us, some newly cut grass.

Speaker 2

The picture I am describing is basically set in shades of blue, green and yellow. The picture describes an outdoor scene. It would take place, I would guess in a marsh or field. We see before us one area of the field, or marsh as it may be,

where the foliage appears to have been taken away. That area is predominantly yellow. Beyond that there is foliage that's standing, that is varied in color. Part of it is yellow, part of it is green, and there are apparently red and black flowers mixed in that section. Above that we find, quite naturally, the sky . . . and as a part of the sky we see one bird flying above the horizon.

Speaker 3

Okay. This is a painting of a field with uh, it looks like wheat and there's a little bit of green and the sky is blue and cloudy. There's a couple of birds flying around and uh, the wheat's gold uh, looks like a little grasshopper hopping around and there's red wheat and that's really a pretty nice picture. It's uh, kinda smeared up, it's sorta greenish-blue with uh, white streaks through it, and the bird is really highlighted. Everything is focused on the bird . . . it's really in the center of the painting and it's flying just above the wheatfield and uh, it just, everything is focused. It really gives a perspective of the bird. It seems to be flying off into the horizon. The wheat field's blowing in the wind. It's kinda bent to the left a little bit and it looks like it's, might even been, half of it's mowed. It's cut down pretty sharp and uh, that's where the grasshopper's hopping around.

Speaker 4

I am looking at a picture which is somewhat surrealistic but nonetheless you can tell exactly what it is. We have here a field which has partially been harvested and partially unharvested, with some wild flowers growing in it. There are bright colors in the picture--greens, blues, reds, browns, blacks. The picture itself is of a single lone bird flying in a brushed sky above a field of what appears to be waving grain or wheat. The bird is flying in a left direction, perhaps you can't really tell exactly what it is, whether it's north, south, east or west, but the bird is flying from left to right on the screen. The painting as a painting looks though it was at one time an oil painting done with rather thick oil paints. The sky is brushed, the brush marks are clearly left in for effect. The bird is rather definitive as is the wheat and is the cut wheat and the painting is overall very clear. The sky is a very pale blue but definitely a sky and not a sea.

Speaker 5

Well now, this particular picture I would suggest conveys an oncoming storm, for one thing. The little grouse, or the little pheasant is being flushed because the wind is creating violence to the wheat or whatever it is that stands tall in the meadow. But primarily it looks to me like a storm is coming and the winds are blowing and it's a very beautiful picture other than

that. There could be, perhaps a snake in the grass. You can see the brush strokes quite well because, uh, the artist uh, has a real highlized, highly stylized uh, form, and the only thing that your eye goes to is the itty-bitty bird in the picture and uh, it's a rather kind of depressing picture. I don't know if I'm entirely happy when I look at it because of uh, the deep heavy dark clouds. I think something perhaps lighter could a done, could have been done to the sky. It would have uh, given a better rendition I believe.

Speaker 6

Well, it looks like it's a beautiful spring day. It's awfully windy out. All the brush is bent far to the left. It's a nice bright blue day. There's uh, a seagull or some type of bird, out doors animal, that's flying over the uh, the tall grass. It's grass around six feet high that's really blowing in the wind. Um, things have just bloomed. There looks like there's red and blue types of, of flowers. It's almost like they're covering another shorter, uh, type of grass, or uh, or I, I can't exactly remember what--cat-tails it looks like. And it looks like the cat-tails are about uh, three or four feet shorter than the other grass. Um, there seems to be like a soft sky, I mean it's like uh, uh, not a real bright blue but it's not really uh, a cloudy day either. It's just almost like a cirrous-type wisp, "wispery" type clouds. Um, the top parts of the grass are more or less

not blooming.

Speaker 7

I'm looking at a painting of a rural scene, of a grain field and not, not ripened grain yet. . .it's green stage, although the area in the foreground has been mowed for some reason or another, perhaps for access to the field. There's a bird over the field, a beautiful blue sky with white cirrous clouds and a few weeds have blossomed in the grain which I don't suppose will detract too much from the, the farmer's profits when this has all gone to storage. It's all in all a very colorful uh, picture, heavy on greens and yellows, uh, with touches of red and with the sky with its whites and its shades of blue uh, blending into a, a most harmonious, peaceful and satisfying scene to view.

Speaker 8

I'm looking at a pastoral scene of wheat and sky. In the foreground is some freshly threshed wheat. In the background is some standing wheat blowing gently in the breeze off to the left of the picture. Behind the field of wheat there is a small bird that is flying, banking on the breeze. The sky appears to be cloudy, not really dark and ominous, but cloudy none the less. Broad brush streaks of blue and white intermixed with the wheat are some blooming flowers of red and blue. In the foreground, mixed with the chaff of the threshed wheat are some brown brush

marks that might indicate weeds. It's a very picture.., pretty picture all in all. It's very inviting, it gives one the impression of coolness.

FOOTNOTES

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