This study investigated some characteristics of intonation patterns in the English spoken by black adolescents in Seattle, Washington. It was hypothesized that if intonation is central to communicating attitude, and if Black English intonation differs systematically from that of Standard English, communication between blacks and whites may be difficult. The study used tape recordings of black adolescents in an excited, informal discussion, white adolescents (WE) in an informal discussion, and a formal interview with an adult black male (FBE). The following intonation features were found characteristic of Black English: (1) a wider pitch range, extending into higher pitch levels than in WE or FBE, and often shifting into a falsetto register; (2) more level and rising final pitch contours; (3) apparent greater use of falling final contours with general (yes/no) questions in formal and perhaps threatening situations; and (4) the use of nonfinal intonation contours alone (without the use of the word "if") to mark the dependent clause of a conditional sentence. The study concluded that the importance of intonation in communicating attitude has been greatly underestimated. (Author/DA)
Black English (BE) is an American English dialect used by adolescents in Black street communities in Northern urban areas. Research has found the dialect to be not a degenerate "sloppy" speech form, but a systematic dialect with its own rules of grammar, semantics and phonology -- a dialect having possible roots in West African languages.

While the segmental characteristics of Black English -- that is, the grammar, vocabulary and phonemic structure -- have been described in some detail, the suprasegmental characteristics of Black English (stress, rhythm, intonation) have been neglected in most sociolinguistic studies. There is, however, some feeling that intonation, specifically, in Black English, may be systematically different from intonation in Standard American English.

Intonation refers to the patterns of pitch, or musical patterns, which are used in speech. One of the primary functions of intonation in English appears to be the communication of attitude. Most "segmental" sequences -- sentences and parts of sentences for example -- may be pronounced with several different intonation contours, according to the speaker's momentary feeling about the subject matter. For example, the segmental sequence:

"That's your car"

may be pronounced with several intonation contours, each of which conveys a slightly different speaker attitude:
Kenneth Pike, who has written a landmark text on intonation, maintains that "we often react more violently to the intonational meanings than to the lexical ones; if a man's tone of voice belies his words, we immediately assume that the intonation more faithfully reflects his true linguistic intentions." (Pike, 1946)

If intonation is central to the communication of attitude, and if Black English (BE) uses patterns of intonation which differ systematically from those in Standard English (SE), certain consequences may follow. It is likely, for example, that when a speaker of Black English attempts to communicate with a speaker of Standard English, a great deal of misinterpretation of attitude and intention may occur. The speaker of SE may misread the intonational patterns being used, and perceive attitudes in the speaker of BE which were not originally there. For example, a given pattern might suggest a hostile attitude to the speaker of SE while the speaker of BE might perceive only mild excitement in the same intonation pattern. Depending on the situation, this difference in attitude perception could lead to severe consequences.

In fact, there is some evidence that exactly such intonational differences do exist, and that they HAVE led to severe misunderstandings:
noncommunication between Negroes and police has often led to conflict in the past. For example... because black English has a much wider tonal range than white speech, a white person can easily misinterpret the high-pitched intonations of blacks in conversation. Several years ago, a white Indianapolis policeman arrested several black youths on the street because he thought they were involved in a serious argument; in fact, they were merely having a round of a favorite game called "Playing the Dozens" that consists of seeing which player can contrive the gaudiest obscenities with which to describe the other players' relatives.

(Newsweek, February 21, 1972)

In this incident, it would appear that the wider tonal range used by the BE speakers led the white policeman to misinterpret their attitude. He perceived an attitude of hostility in an intonational characteristic which, to the BE speakers, communicated merely excitement and playfulness. Such misinterpretation of attitude on the basis of dialectal intonation differences could have profound implications for communication between Whites and Blacks in the classroom, in courts, in business, and in government.

It is important at the outset to describe the social role of the speech event in Black street culture. There is quite a bit of evidence that the speech event serves a distinctly different function in many instances within the Black street culture, as compared with its function within White American culture at large. Several researchers have commented upon the importance of verbal ability in the streets, in games such as the "Dozens" for example.

T. Kochman (1969) points out that in the Black street culture, a very different sort of oral tradition has developed than in the White middle-class
community. Basically, it is suggested that verbal ability has become a matter of survival in the Black ghetto. One survives there by his wits, by his ability to out-talk the other, and thereby to outwit him (Labov, 1968). One's power is perhaps more personal (as opposed to economic or institutional as in the majority culture); one may exert more power over other individuals in interaction with them by one's personal appearance, by "body language," and by verbal skills like "marking," "sounding," the "Dozens," and a variety of other highly-developed verbal techniques (Labov, 1968).

The prestige norms within the culture of the Black inner-city child place a high premium on the ability to use words. The channel through which this ability is promoted and developed and through which recognition is given is oral-aural. Expertise via this channel is more highly regarded and developed in Black culture than in the White middle-class culture (Kochman, 1969). Status on the street is not inherited or conferred but has to be earned. Acquiring status is a prime motivation for the Black street youngster. Verbal ability, like ability to dance, fight, sing and run, is highly prized in the Black community because such ability helps to establish one's "rep" (status). At the same time life on the streets is full of hazards and control over events is desireable. . . . Verbal ability helps the Black child maximize control in these contexts, especially expert development of the directive function which permits him to establish control over people through the art of persuasion, manipulation, deception, and a developed sensitivity as to what motivates others. (Kochman, 1969)

If the speech event in the Black street culture serves such a different function from that of the speech event in the White middle-class culture, it would be surprising indeed if international differences did not mark that.
different function. Within the context of the Black street culture, the participant in the speech event brings to his communication, attitudes and motivations which are different from the set of attitudes which a participant brings to a typical speech event within the context of White middle-class culture (Kochman, 1969). The difference in attitude "set" should be reflected in a difference in intonational patterning — if, indeed, intonation and attitude are as closely tied as Pike (1946) would claim.

An investigation was undertaken in Seattle, Washington, to attempt to determine and describe some intonation patterns characteristic of Black English, and to compare those patterns with intonation patterns occurring in White English (WE) and Formal Black English (FBE). Tape recordings were made of Black adolescents in an excited, informal discussion (BE data), and of a group of White adolescents in an informal discussion (WE data). The Black English interaction was indeed a competitive one, distinguished by a great deal of verbal gamesmanship, such as "marking," "sounding," and "loud-talking." In addition, a formal interview with an adult Black male was tape-recorded (FBE data). The recorded speech samples were then transcribed for intonation and the transcriptions checked for reliability by two additional phoneticians.* Several significant differences in intonation

*The data for terminal intonational contours were grouped according to phrase types, with chi square tests employed between and among groups.
patterns were found in the Black English data, when compared with the WE and FBE data (both WE and FBE utterances were much closer to Standard English in intonational patterns). The distinctive Black English intonation patterns could be accounted for in large part as resulting from different "social rules" for speech within Black street culture. The speech events occurring in Black street culture seemed to call for specialized use of intonation patterns which themselves were entirely consistent with Standard English phonology. Thus, one of the most important conclusions of the study was that intonation could not be studied apart from the social situation and culture.

In the BE data, several intonational features were found which significantly distinguished the Black English utterances from both the WE and the FBE utterances. (1) A wider pitch range was used in the Black English utterances -- a range which extended into much higher pitch levels than either the White vernacular or the formal BE of the adult informant. The White English and FBE utterances recorded appeared to stay within a narrower pitch range, centered around a lower mean pitch. As we have noted, the participants in the Black English discussion were competing in verbal ability and "playacting." If one is "competing" in verbal ability in the streets, there is an element of aggressiveness and competitiveness in one's communication which is expected, and which one might expect to see reflected in a
wider pitch range. The use of a very high level pitch (almost "sung"), as well as greater use of the falsetto register, in Black English, seems to have been associated with the speaker's creating a dramatic effect in his argument. It usually occurred when the speaker was making his point by building up suspense or by establishing the strength of his own feelings about the issue at hand. Johnson (1971) makes a direct correlation between the falsetto register, and friendliness or playfulness appropriate to the verbal "games" played in the Black street community.

One of the most friendly greetings that can be given to another Black is to walk up to him and verbally greet him with a warm statement (often this verbal statement is delivered in a falsetto voice, the friendly level or "game" level ... (Johnson, 1971)

Another possible, and somewhat broader, interpretation, is that the high pitch or falsetto might function to establish a kind of rapport within a group within the Black community. The frequent use of the falsetto or high pitch in greetings, for example, would then serve to communicate the attitude of pride of membership, or identification with, the Black community. The fact that the falsetto or high pitch is not used in the same way at all in the White community would serve to reinforce the use of this feature in BE to help satisfy the "ethnicity" of the Black context.

(2) The Black English phrases in this study seemed in general to have more level and rising final pitch contours, while the White English and
Formal BE phrases appeared to be characterized by more falling final contours. Further, in BE level and rising final contours appeared to be used at a higher pitch level than was characteristic of either of the other two codes. Given the competitive "gaming" interaction which produced the BE utterances in this study, the higher occurrence of level and rising finals in BE should not be surprising. Pike's observations about level final contours may be especially relevant at this point:

(... LEVEL contours add a meaning of unification as well as ruggedness internally in sentences, and strong implication at the ends of sentences, which is added to -- or contradicts -- the meaning of the words themselves.) (Pike, 1946)

Level final contours which carry with them a meaning of strength and strong implication would appear to be entirely appropriate to the aggressive, competitive nature of the "sounding" or "Dozens" types of speech events which occur within Black street culture. The level final would serve to strengthen the individual's "power" by its implication of strength, assurance and unification, and it could put others in the situation on the defensive by virtue of the meaning of strong implication -- especially in word games where the purpose is precisely to imply indirectly, uncomplimentary messages about the other participants, their mothers, and so forth.

Another characteristic of the Black speech event which should call for a high incidence of level and rising finals, is the "call and response"
aspect of communication within Black culture. As Kochman points out, there
is a much more active role assigned to the "audience" in the Black speech
event:

Black speech events such as rapping to a peer-gone
frequently involve active audience participation.
For example, the "call and response" pattern and accom-
panying rhythms, which may also include handclapping,
nodding and swaying, and which derive from the Black
church service and the role the audience plays in that
event (sic), are often extended to secular speech events
such as rapping to a peer group. The traditional notion
of a passive-receptive audience for the classroom is
modeled after the White prototype. As indicated above,
Black audiences are active-participative. (Kochman, 1969)

Intonational cues may be used by a speaker within the Black speech event to
indicate the speaker's expectation of participation from his audience.
One of the "meanings" which Pike assigns to a rising or level final contour
is that of incompleteness or of expectation of response.

Rising contours generally imply that the speaker considers
them incomplete by themselves, and needing supplementa-
tion of some type, by himself or by the hearer. The
supplementation may be in terms of a further clause
uttered by the speaker, or an answer which the hearer is
to furnish, or an inference to be drawn by the hearer.
(Pike, 1946)

In the rapid repartee of the speech event in Black street culture, there
are few utterances in isolation; immediate response from the audience is
usually expected in some form -- whether in the form of an answer, or an
inference on the part of the audience about the topic. In such a speech
event, the speaker performs and his performance is responded to. Every
utterance may be subject to supplementation or comment for the audience; the speaker's expectation of such supplementation may be reflected in his usage of rising or level final contours.

In an earlier study on intonation conducted by Bengt Lorman (1967), and in a pilot study for the Seattle investigation, it appeared to be the case that in more formal and structured situations, speakers of BE used a falling final intonation contour in asking general questions — (that is, questions which may be answered "yes" or "no," such as:

Are you the teacher?

Is the man here?)

In SE, such questions usually occur with a rising final contour. The falling pattern used by BE speakers in the studies just cited would ordinarily be associated by speakers of SE with a rude attitude of demanding a response. The implications of this sort of difference in intonation patterning for the Black child in the classroom could be severe. Imagine the Black child who asks:

You the teacher?

using an intonation pattern which the teacher considers demanding and rude.

Would the child be sent to the office for using a "rude tone of voice?"

It is interesting to find that in the informal recording situation of
the final Seattle study, speakers of BE did not use the falling final contours on general questions. One can only speculate that the informal situation was somehow less threatening to the speakers of BE, so that the peremptory and even rude "tone of voice" on general questions was not used as they spoke to other members of their own community.

An extremely interesting finding of the Seattle study is documented in Table A. In the Black English corpus, there were thirteen utterances which occurred in which the "if-clause" of a conditional sentence occurred without the "if." (This phenomenon has also been noted by Dillard (1972, p.64).) Instead, the dependent clause appeared to be marked by intonation alone, by either a rising or level final contour, or by a -32 (non-final) contour. At least one implication of this phenomenon relates to language testing in the Black community. It has been suggested, for example (Deutsch et al, 1968) that a "restricted code" (BE qualifies as a "restricted code" with these investigators) often does not use logical conjunctions which are used in an elaborated code. It has been suggested that if speakers of a restricted code do not use such conjunctions, their language and probably their logical processes, are somehow deficient. So, for example, some might claim that because a child did not use the logical conjunction "if" to mark the dependent clause in a conditional sentence, he has no way of differentiating dependent and independent clauses, and hence may have a difficult time
conceptualizing conditionality. The finding just mentioned, of the use of intonation rather than a lexical item to mark the dependent clause of a conditional sentence, would indicate that perhaps language testing is itself deficient when it does not take suprasegmental features into consideration.

In summary, the intonational features which significantly characterized the Black English data in the Seattle study were:

1. A wider pitch range, extending into higher pitch levels than in WE or FRE, and often shifting into a falsetto register;

2. More level and rising final pitch contours;

3. Apparent greater use of falling final pitch contours with general ("yes/no") questions in formal and perhaps threatening situations, but not in "rapping with a peer group;"

4. The use of nonfinal intonation contours alone (without the use of the lexical item "if") to mark the dependent clause of a conditional sentence.

It is clear, in light of this study, that research into the nature of Black English and other dialects of American English, would do well not to overlook suprasegmental features such as intonation. As we have seen, the importance of suprasegmentals such as intonation in communicating (or miscommunicating) attitude has been greatly underestimated.
TABLE A

The Use of Intonation to Mark the Dependent Clauses of Conditional Sentences — Without Use of Lexical Item "If"

People don’t want to do it, then no sense gettin mad about it.

You able to do it, just do it.

Hey talk to him, you talk to him.

He can walk out, she can walk out.

She can do me some good, that’s cool.

Somebody offered you one, would you take it?

She wanted proof, I could give her proof.

And she find out about you hittin a lick over there, your asses gonna be laying six feet in some dirt.

She ain’t got sense enough to keep her offspring clean, how in the hell’s she gonna keep herself clean?

Her man’s comin over, her mess’ supposed to be together.

She, she want to argue and all that, "Yeah, uhhuh, yeah."

They can’t be clean like me, forget ’em.

She smell ’em when they’re comin, she gonna tell ’em, and embarrass ’em too.
BIBLIOGRAPHY


