

## PROSODIC ORGANIZATION IN THE SPEECHES OF MARTIN LUTHER KING

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### 0. INTRODUCTION

The public speeches of Martin Luther King Jr. present an interesting juncture for the study of language as it pertains to culture (and vice versa) because of King's unique place within the cultural history of the United States and within the African-American community. There have been many studies of King's rhetorical style as well as the political and social implications of the content of his speeches; however, there has been very little work done in which the actual linguistic devices which he uses have been clearly identified and described with respect to both distribution and interpretation. This paper offers a first and preliminary account of certain aspects of King's language, with particular emphasis on his use of prosodic tools as a method of discourse organization and cultural reference.<sup>1</sup>

### 1. METHODOLOGY AND THEORETICAL FRAMEWORK

I have chosen an inductive approach to analyzing the speeches of Martin Luther King Jr. By this method, the patterns of his speech become apparent independently. Furthermore, it allows for more general interpretations of form which may occur

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<sup>1</sup>This study is largely the result of a course taught by Anthony Woodbury at the University of Texas at Austin in the Spring of 1992. I would like to thank Dr. Woodbury as well as Keith Walters, Troi Carleton, Mark Hewitt, John Kaufmann and Mark Loudon for helpful comments during the course of this study. However, any errors in fact or interpretation are my own.

within individual texts but also across the corpus as a whole.

The actual corpus of data was obtained from a sample of King's speeches. An audio recording was made from the original videotape *The Speeches of Martin Luther King Jr.* (distributed by MPI home videos). The entire corpus was then transcribed, with each line corresponding to a pause boundary. A representative sample set of speeches was then chosen for specific analysis. Speeches were chosen based on a loose set of criteria which included length of the speech and setting in which the speech appeared. Once the sample set was completed, each speech was digitized using the equipment in the Phonetics Laboratory at the University of Texas at Austin, and subsequently, the sample set was pitch tracked using the linear predictive correlation pitch tracker of the Klattlamm program developed by Denis Klatt. In representing specific intonational contours, I will be drawing on the following set of symbols:

? indicates a phrase-final rise

— indicates a phrase-final level

# indicates a phrase-final fall

## indicates a elongated fall

∞ indicates a phrase-initial rise and

an underlined string indicates a prominent stress.

#### 1.1 Theories of prosody

Several theories have been employed for the purpose of the analyses of the speech of

MLK, with the central analytic work being done through theories of phonetic implementation and the morphology of intonation. The theory of the phonetic implementation of intonation operates within the general framework of generative linguistics in which the elements of a finite grammar can be combined in such a way as to generate an infinite set of possible well-formed intonational tunes. The development of a finite grammar of intonation is largely due to early work by Mark Liberman (1975) and to work by Janet Pierrehumbert (1980) in which intonational contours are a result of the interpolation between a very small set of possible tones, basically H(igh) and L(ow).<sup>2</sup> These two tones align to phrasal units in one of three ways-as boundary tones (T%), phrase accents (T), (tones which fall between a boundary tone and a tonal accent), and pitch accents (T\*) (tones aligned to stressed syllables). The rules of interpolation, as specified on a language specific basis, account for the movements of pitch between tonal accents, and are often specific according to the pragmatics or discourse structure.<sup>3</sup>

Additionally, the theory of the representation and interpretation of intonation proposed in the current work of Cynthia McLemore, Mark Liberman and Anthony Woodbury provides the backbone for this analysis. On this theory, the interpretation and use of given linguistic forms (most notably intonation and other prosodic phenomenon) is partially specified by the particulars of culture and/or context. McLemore (1991) showed that the specific boundary tones used among sorority members (a socially homogeneous group) obtained their "meaning" partly through generalized interpretations and partly through their

interaction with the specifics of context and cultural fine-tuning. Through this interpretation, prosody may be considered iconic, in that the use of a given prosodic feature can refer directly to cultural conventions. In short, the theory demonstrates the need for cultural and contextual knowledge as well as the need for knowledge of the formal linguistic structures in order to truly begin to be able to account for specific linguistic forms.

## 2. THE AFRICAN-AMERICAN CHURCH - AN OVERVIEW

As pointed out above, the role of culture and context appear quite important to the interpretation of certain linguistic phenomena such as prosody; therefore, a basic understanding of the context of the African-American church and the tradition of preaching in the African-American church proves crucial to understanding the linguistic form of King's speech. Geneva Smitherman writes "the traditional black church is the oldest and perhaps still the most powerful and influential black institution" (1977:90). Historically, the church has been the cornerstone of African-American social and political life, and it's roots as one of the avenues of change within the community go back to the days of slavery.

Within the social hierarchy of the church, the minister has a privileged position in that he ranks directly below God. Due to a calling from God, the minister carries the primary leadership position within the church and de facto, also one of the primary leadership positions within the community in general.<sup>4</sup> A minister in the African American church is responsible for mediating between the sacred and secular concerns of his congregation, thereby

<sup>2</sup>In Liberman's work, the tone inventory also included a mid-tone; however, since the work of Pierrehumbert a two tone system has become widely accepted and has been adopted here as well.

<sup>3</sup> See Pierrehumbert, 1980 for a concise summary of the shapes which interpolation rules cause

<sup>4</sup>As recent events in Los Angeles have shown, the church and the ministers within the church have been central to dealing with reconstruction efforts as well as coordinating

providing a connection between religious (and historical) teachings and the current experiences of the congregation.

## 2.1 The Performed sermon

Gerald Davis writes "The recognition of the organizing principles which support the sermon in performance is the key to the fruitful investigation of narrative creativity among African-Americans..." (1985:47). One of the principle organizing points of the sermon is the creation of tension between dual forces, most often between the sacred and the secular. Davis maintains that there are rhythmic differences between the two forces, with the sacred being irrhythmic while the secular is rhythmic (1985:60).<sup>5</sup> Important for this discussion is the fact that the tensions is created and maintained primarily through the use of specific prosodic tools, including elongation, enjambment, intonational contours, dramatic pausing and emphatic repetition. (1985:78)

The sermon itself is made up of structural units which have a distinct organization. The sermon begins with the identification of the theme through Biblical reference and proceeds with both broad and narrow interpretations of that theme. The sermon, in being formulaic and adhering to specific, culturally expected and defined modes of organization in terms of content, can be summarized as being comprised of several distinct narrative units. Davis says that the structure of the sermon serves as a mnemonic for the preacher, and that the

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media coverage and arranging for dialogues with various gang leaders.

<sup>5</sup>Unfortunately, Davis is not explicit as to the actual criteria for being either rhythmic or irrhythmic, and it is my interpretation that he is using primarily impressionistic determinations for classification.

preacher has great freedom for layering his own personal style over the basic structure.<sup>6</sup>

In addition to the basic infrastructure of the sermon, the African-American preacher generally follows several other rules of performance. For instance, the preacher is expected to use the vernacular. Furthermore, the preacher generally uses argumentation aimed at appealing to messages with which the congregation is already familiar and at appealing to his/her own believability or ethos.

## 3. Martin Luther King

Martin Luther King Jr.'s speech adheres to the basic form of an African-American sermon; thus the specific devices which he uses are not unique. King's uniqueness comes from his ability to mold the expectations placed upon him by his profession to the needs of an audience which goes beyond that of the congregation of an African-American church. King spoke largely in a political arena to an audience of mixed races and religious affiliations. He is less stringent about using the language of the African-American community, and instead uses something very close to a standard Southern English. His religious references are broad and easily identifiable and his use of actual Biblical quotation sparse. The tensions he creates are often less sacred/secular and more something like "us"/"them", or between the general and the specific. Thus, King is brilliant because he speaks to a broad audience whose expectations of him as a political speaker are quite different from the expectations of him as a minister, and still, he speaks to that audience by using the oratorical tools of the African-American church.

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<sup>6</sup>For a more detailed and comprehensive account of the tradition of preaching in the African-American church as it pertains to prosodic tools, see Queen (1992).

#### 4. RHETORICAL STRUCTURE IN THE SPEECHES OF MLK

The model of rhetorical structure as developed by Woodbury (1985, 1987) relies on independent components which organize a text both autonomously and in interaction with one another. The model in its minimal form includes a prosodic, syntactic and thematic (or content) component, as well as other genre-specific components. For the analysis of Martin Luther King, the heaviest organizational burden is placed on certain prosodic features. It is important to note that, although the genre of speech has remained constant for the texts under discussion, each text is organized according to unique interactions among the various features (as well as other components such as the syntax). Therefore, while the tools themselves remain constant, their implementation is variable in many ways. This is an important factor for recognizing the relevance of whatever generalizations I have made.

#### 5. PROSODIC ORGANIZATION

Martin Luther King's use of prosody makes its primary organizational contribution at the level of the line and achieves this state primarily through the use of structural pauses of varying length. In addition to pause phrasing, King also uses individual pitch contours which can either reinforce the phrasing created by the pauses, divide long pause phrases into units which adhere more to syntactic boundaries (usually S'), or act independently of phrasing. Additionally, King uses both bitonal and monotonal pitch accents as a way of denoting stress.

King's use of phrase-internal accents conforms for the most part to expectations

about stress in English natural discourse.<sup>7</sup> In other words, an analysis of the meter does not reveal any unique poetic properties such as we expect from poetry proper. Therefore, I will not be discussing the metrical properties of his speech in any detail, other than to say that King uses stress (which not only includes pitch contours, but also duration and loudness) as a matter of emphasis, and thus, his patterns are highly variant across and within individual texts.

The basic prosodic devices which King has at his disposal include structured pauses, phrase-final pitch contours and phrase initial rises. In describing these devices, I will be taking the viewpoint that they are defined and interpreted by their form as well as by the cultural conventions and traditions surrounding their use. For instance, while a pause creates a moment of suspension of speech purely by definition (i.e. its form), much of the determination of possible junctures for pausing as well as the interpretation of the suspension of speech are largely the responsibility of the context.

#### 5.1 Stylistic differences

As with any speaker, one expects variation along some continuum of styles from Martin Luther King Jr. Since the range of his variation is highly constrained by the fact that much of what is recorded of his speech is fairly formal, it is pointless to try and draw specific stylistic profiles. Nonetheless, it does appear to be relevant and important to note the gradience in terms of his speech being more or less preacher like. In fact, the interpretation of which linguistic forms act as specific tropes or icons depends on their isolation as units

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<sup>7</sup>It should be noted that any striking use of stress may in fact be attributable to King's native English which differs from my own. See Queen (1992) for a more in-depth discussion of the phrasal accents.

relevant to a specific genre, thus that genre must be identified as clearly as possible.

I will be discussing the features of his preaching throughout the remainder of this essay; therefore, I will now briefly outline the characteristics of his non-preaching. The most salient difference between the two genres is the lack of pitch excursions in the non-preaching style and the significantly lower pitch baseline. The characteristic phrase-initial rises and phrase-final falls are completely absent as are the elongated syllables. Pausing adheres strictly to larger syntactic boundaries (basically S'), and the seemingly deliberate and slow manner of speech does not occur. Furthermore, there is neither Biblical reference nor the creation of a polarity at the level of content. In general, there is nothing about his speech in the non-preaching style which exposes his expertise at oral performance.

## 5.2 Pause phrasing

Pauses are the primary indication of the line and act both independently of and in conjunction with pitch contours. In general, longer pauses tend to mark off units which are larger than a line, although this is by no means a steadfast rule. Furthermore, a pause may (but must not) indicate pragmatic salience. Often, a longer pause is implemented due to interaction from the audience. A note about audience interaction, however, is that, for the most part, King is in control of how long the audience responds to a given phrase, and given the expectations for call and response within the African-American preaching tradition, length of pause may in fact be "planned" in the sense that King structures in a "long" or a "short" pause. Audience response tends to correlate heavily with thematic considerations such that the introduction of a given trope may spark audience response. I find no specific way of determining which factor influences the other and am left to conclude that the two are simply correlated. The following

example shows how pausing works within a given text.

1.  
He was murdered by the irresponsibility (1.45)  
of every politician from governors on down(1.61)  
who have fed his constituents the stale bread of hatred and the spoiled meat of racism. (2.68)  
He was murdered by the timidity (1.59)  
of a Federal Government (1.65)  
that can spend millions of dollars a day to keep troops (.59)  
in South Vietnam (.47)  
and can not protect the lives of its own citizens seeking the right to vote.

This particular text is interesting in several ways, most obvious of which is the tight parallelism which holds formally as well as thematically. In terms of the pause structure, it should be noted that the longest pause falls between the two largest units, whereas shorter pauses divide individual lines. The final clause receives the shortest structural pauses, a fact which corresponds with the salience of that clause as the "punchline".

## 5.3 Phrase-final contours

I will now turn to a specific description of phrase-final intonational contours. Martin Luther King uses three types of phrase-final contours-rising, level and falling. The falling contours are further categorized in terms of elongated falls and short falls. By far the most prevalent phrase-final contour is the non-elongated fall. This should not be surprising given the fact that phrase-final lowering is an extremely robust occurrence cross-linguistically (cf. Bolinger 1986 and Pierrehumbert and Hirschberg 1990). Of more interest to the present study are the

phrase-final levels and rises and the elongated falls.

In general, phrase-final rises occur very rarely, and I have thus combined them with the levels in terms of both description and distribution (but not necessarily interpretation). Phrase-final levels follow the form presented in Pierrehumbert (1980).<sup>8</sup> Within a text, however, there does not seem to be a clear-cut method for determining when a level boundary will occur. Furthermore, its distribution (as with the distribution of all of the intonational features) appears local in that given texts and given units within texts may vary with respect to the implementation of a level as opposed to a fall. Very often, however, levels are used between structurally parallel lines as seen in the following example.<sup>9</sup>

2.  
And to be sure that (.7) --  
all of the bags were checked (2.19) #  
and to be sure that (1.09) --  
nothing would be wrong in the plane (.67)  
##

Here, the parallel lines are marked by a level boundary. Furthermore, note the longer pause which helps to demarcate the larger units of parallelism. Phrase-final levels may also occur when pausing breaks syntactic clauses, as is demonstrated in the following example.

3.

<sup>8</sup> King uses H\*HL% and HL\* H L% almost exclusively. Levels occur most often at unit-internal points and must always occur text-internally.

<sup>9</sup>The reader should note the following transcription conventions: -- indicates a level boundary; ? indicates a rise, # indicates a non-elongated fall and ## indicates an elongated fall.

I speak out against this war because (.38) --  
I am disappointed with America (.72) ##  
There can be no great disappointment (.55) --  
where there is no great love ##

Additionally, speeches by King which are not in the preacher style use the phrase-final level as the default boundary tone, rather than the phrase final fall.

A fall which lasts over .4 of a second from the final accent to the termination of speech is considered to be an elongated fall. The determination of .4 of a second was based on taking the average length of all phrase final falls and calculating any fall which was longer than that average as being elongated. Elongated falls generally occur on the final syllable of the phrase, but may also encompass the final foot or occasionally several syllables. This methodology may be a bit questionable, however, I was unable to determine some independent criteria for considering a fall to be elongated, although elongated falls are quite salient perceptually. Furthermore, making the distinction between the two is important in terms of the organization of individual texts. For instance, the following example shows the way in which elongated falls mark the orientation and coda of a short speech.

4.

And I oppose the war in Vietnam (.68) ##  
because I love America (1.48) ##  
I speak out against it not in anger but with  
anxiety (.54) #  
and sorrow in my heart (.59) --  
and above all with a passionate desire (.93) #  
to see our beloved country stand (.38) --  
as the moral example of the world (.98) ##

I speak out against this war because (.38) --  
I am disappointed with America (.72) ##  
There can be no great disappointment (.55) --  
where there is no great love ##

In this speech, elongated falls occur at the ends of the first two lines (the orientation to the speech), and again at the end of the first thematic unit. In the second thematic unit, elongated falls mark the semantically salient points. The next example demonstrates the way that elongated falls may work even more directly.

5.  
 And it seems that I can hear the God of History saying (.43) #  
 That was not enough (1.8) #  
 But I was hungry (1.32) #  
 and ye fed me not. (1.02) --  
 I was naked and ye clothed me not (1.75) --  
 I was devoid of a decent sanitary house to live in ##  
 and ye provided no shelter for me ##  
 and consequently you can not enter the kingdom of greatness (.90) ##  
 If ye do it unto the least of these, my bretheren, (1.83) #  
 ye do it (1.05) #  
 unto me #

Here, King uses elongated falls to mark the syntactic boundaries within a larger pause phrase. Furthermore, the use of the elongated fall corresponds with the final lines of a parallel set (note also the the first lines of the set are set off by level tones) as well as an enjambed pause phrase. The phrase itself is salient thematically because within it lies one of the primary messages of the speech.

## 5.4 Phrase-initial rises

The final prosodic trope which I will be discussing is the phrase-initial rise. This particular tool occurs comprehensively across the data and it's absence rather than its presence is what appears to be marked. The phrase-initial rise is characterized by its occurrence following a pause break. The rise begins low, most often below 200 Hz and

rises between 50-200 Hz, with the average rise being approximately 120Hz. The most perceptually salient rises are those which occur in the range of 100-200 Hz. Figures 1-2 in the appendix show pitchtracks of phrase-initial rises.

Rises occur on either the first syllable or the first foot of the pause-phrase, but may not occur if the first foot carries a prominent stress as the following examples show (the rise is marked with this [∞] symbol and the prominent stress is underlined).

6.  
 ∞And we've had the plane (.84)  
protected and guarded all night
7.  
 ∞And I've seen (.62)  
 the promised land
8.  
 ∞But it wasn't a victory for colored folk
9.  
This is why I've said

Unfortunately, the case is not as simple as stress since there are also pause phrases where the rise is absent even though the stress does not fall on the first foot. Here, again, the absence of the rise on phrases where the rise is sanctioned seems to act in a way which marks salience. The general tendency in terms of the distribution of the phrase-initial rise appears to be related to information structure.<sup>10</sup> Furthermore, the use and absence of the rise is local in terms of organization. The following give such organizational examples:

<sup>10</sup>For instance, King's speeches never begin on a phrase-initial rise. See Queen (1992) for a more in-depth discussion of the relationship of phrase-initial rises to information structure.

10.  
 The pilot (.97)  
said (.37)  
 over the (1.18)  
 public address system (.28)  
 We're sorry for the delay (1.6)  
 ∞but we have Dr. Martin Luther King on the  
 plane (1.83)

11.  
 ∞that in order to get this bill through, (.28)  
 ∞we've got to rouse the conscience of the  
 nation ∞and we oughtta march to  
 Washington, more than one-hundred  
 thousand, in order to say (.8)  
 ∞in order to say that we are determined (.61)  
 ∞and in order to engage in a non-violent  
 protest (.46)  
 to keep this issue before the conscience of  
 the nation

The first three lines in 10 are constrained by the fact that there is phrasal stress on the first foot, however, the subsequent lines do not have the same constraint. In this example (and it is one of the few examples of this kind), it is the presence of the initial rise which is marked. Example 11 shows the more prevalent pattern of using the absence of the rise in a salient manner, in this case to mark the end of the content unit as well as the end of the speech as a whole. This second example also shows how the phrase-initial rise is not absolutely committed to occurring at the beginning of a pause phrase, but may also occur at the beginning of a syntactic clause and may in fact mark salient syntactic boundaries which occur within pause phrases.

## 6. PROSODIC INTERPRETATION AND CONCLUSION

Given that I have isolated a set of prosodic tropes or devices which Martin Luther King

has at his disposal, where do these data lead? If we accept the culture and tradition of which King is a part as integral to determining what tools are acceptable for him to use, then we must also accept the fact that in some way those tools are indexical to the culture which defines them. The prosodic tropes which King uses have independent functions which are to a large degree defined by their very form (i.e. a rise by its nature signals movement from an endpoint while a fall by its nature signals movement to an endpoint), but they also have an indexical function. McLemore (1991) writes "the indexical function is basically one of evoked extralinguistic associations, in which a language feature cues one to look for the expected co-occurring aspect of context..." and Woodbury (1992) says of Stray footing in Numivak,

If we think of SF as a stylized slowing or rallentando, then it has naturalness as a marker of ending. However, it is purely a matter of convention that this device has become the pervasive, normal and expected marker of ending in the speech of Nunivakers. Moreover, the speaker (or child or linguist) must know what others will accept as 'whole and complete communicative acts'. And knowing that is a question of culture.

(1992:8)

The prosodic devices used by King are acceptable and expected because culture and tradition define them as such. The question as to their inherent "meaning" in terms of the connection between a given sound or set of sounds and some definable concept becomes is in many ways less interesting.

I think this viewpoint becomes especially clear when we consider the phrase-initial



rise. This is an intonational contour which is unique in many ways. It has not been used in tests of computer-generated speech nor has its interpretation as something emotive or something based on the internal state of the speaker been widely studied or discussed. The question is, then, what does it mean when Martin Luther King starts a phrase with an initial rise?<sup>11</sup> I contend that it doesn't necessarily "mean" anything. It is indexical or iconic and derives its meaning from the fact that conventions for its use and interpretation have been established by the culture which uses it.

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<sup>11</sup>The use of this specific contour is not specific to Martin Luther King. Recently on *Saturday Night Live*, Jesse Jackson performed a parody of the speech of an African-American preacher in which one of the primary jokes was his exaggerated use of prosody (including the phrase-initial rise).

## APPENDIX

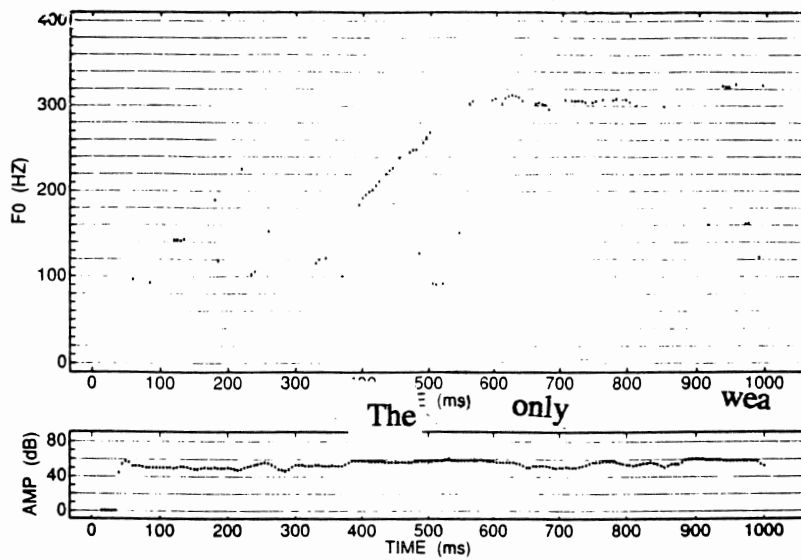


Figure 1

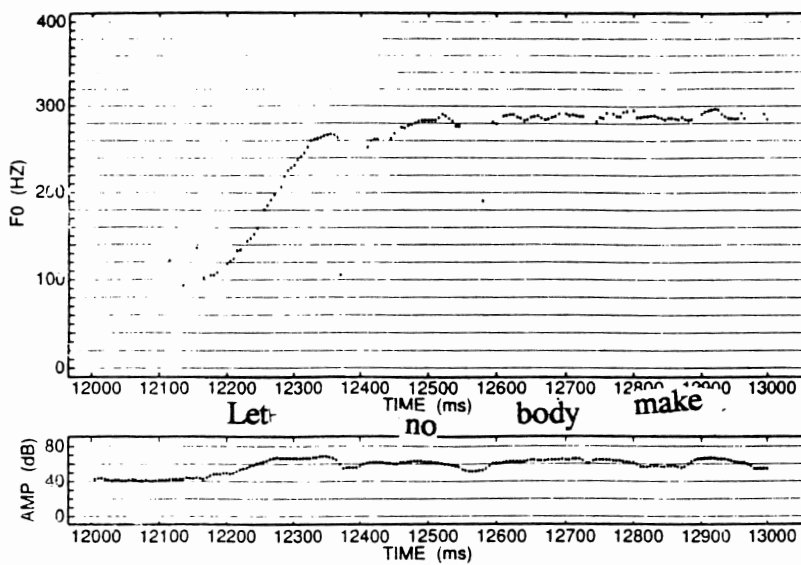


Figure 2