

# THE STYLISTIC USE OF PROSODIC RHYTHM IN AFRICAN AMERICAN ENGLISH<sup>1</sup>

by  
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This study investigates the social meanings of prosodic rhythm (using the Pairwise Variability Index, PVI) in African American English (AAE), and how this paralinguistic feature varies within the speech of "Michael", a fourteen-year-old male from Washington, D.C. The analysis demonstrates that Michael, in general, uses prosodic style-shifts to be expressive. However, a more fine-grained analysis reveals that rhythmic style shifts represent a stance taking strategy that occurs in oppositional alignment with authoritative figures (e.g., police officers). The current study seeks to contribute to the understanding of African American English prosody by uncovering some of its social meanings, as revealed in intra-speaker variation.

## *1. Introduction*

The current study investigates the social meanings of prosodic rhythm (or syllable timing) in African American English (AAE), and how this paralinguistic signal varies within the speech of a single individual. The study of rhythm in African American English has mainly compared group scores from speakers of European American English (EAE) and African American English using the Pairwise Variability Index (PVI; Low and Grabe 1995), which measures the degree to which a language variety is, for instance, stress-timed or syllable-timed. The only preexisting study of AAE prosodic rhythm found no measurable synchronic differences between the above-mentioned groups (Thomas & Carter 2006), yet prosody and rhythm are viewed as salient features of African American English (Spears 1988; Wolfram & Thomas 2002; Thomas 2007). Further,

our understanding is limited with regard to possible intra-individual variation in prosodic rhythm, including how individuals strategically use rhythm to project personal identities and create positions, for example, in relation to sociocultural opportunities and constraints.

In the present study, I address the above shortcoming by mapping PVI scores to specific moments in discursual interaction, using stance theory (Du Bois 2007). Specifically, I focus on how prosodic rhythm is used for the purpose of style shifting in constructed dialogue in narratives, which increases the immediacy of a past utterance in a present conversation (e.g., Hymes 1977; Schiffrin 1981) and recontextualizes a previous utterance in a current narrative or piece of discourse (Tannen 2007). The benefit of such a quantitative and qualitative fusion is an understanding of how rhythm can shift from being syllable-timed to stress-timed in order to accomplish specific interactional goals, including creating diverging stances and alignment between speakers. Finally, I argue that skillful narration and manipulation of syllable timing are essential aspects of the African American verbal strategy **marking**.

## 2. *The Pairwise Variability Index in Sociolinguistics*

The past couple of decades have seen a growing interest in the study of rhythm (e.g., Deterding 2001; Gut 2002; Udofot 2003; Torgersen & Szakay 2011), especially after Low & Grabe (1995) introduced the Pairwise Variability Index (PVI), which measures the degree with which a language variety is stress-timed, syllable-timed, or in between. Torgersen & Szakay (2011:165) describe the difference between syllable-timing and stress-timing as:

Duration, which is linked to time, is the most frequent unit to measure...So-called syllable-timed languages will have a near-equal duration of units (e.g. syllables or vowels). Examples

of such languages are Mandarin and Spanish. Stress-timed languages, on the other hand, will have larger durational variability of units.

In other words, stress-timed varieties are viewed as having larger durational variability in units regardless of whether or not vowels or entire syllables are measured. With regard to perception, the durational variability of units in stress-timed varieties distinguishes stress-timing and syllable-timing. In general, the lower the PVI score, the more syllable-timed a language is, whereas higher scores will indicate more durational variability and thus stress-timing (e.g., as in English and Dutch). Low & Grabe (1995) and Low, Grabe, & Nolan (2000) developed a method for calculating PVI scores, which has set the standard for current studies. Different flavors of the PVI equation exist, but there is little disagreement as to whether or not PVI is a reliable measure of prosodic rhythm. The equation used in this study will be discussed in the method section (Section 7, below).

With regard to PVI itself, there is currently some consensus; however, such a consensus has not always existed, as scholars have argued whether or not syllable-timing depends on a language's overall phonological structure (Ramus et al. 1999; Gut et al. 2002). Dellwo & Wagner (2003) and Torgersen & Szakay (2011) argue that a high speech rate tends to make stress-timed speech more syllable-timed (actually, Low and Grabe's equation does control for overall speaking rate). It is also common belief today that syllable-timing and stress-timing are not absolute entities but more of a gradable phenomenon (Ramus et al. 1999). A speaker of a stress-timed language will exhibit several stretches of syllable-timed speech throughout a conversation and vice versa, which suggests great intra-speaker variation.

To my knowledge, only one study (Thomas & Carter 2006) has investigated rhythm in African American English, using PVI. Thomas and Carter (2006) studied 20 African Americans and 20 European Americans from three rural North Carolina counties:

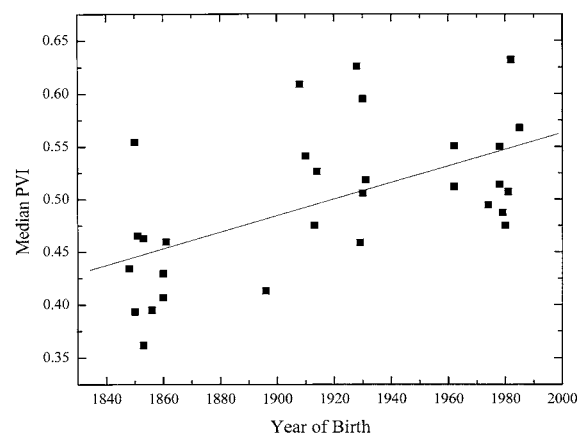


Figure 1. *PVI scores from all African American speakers (adopted from Thomas and Carter 2006:346)*

Hyde County (coastal), Warren County (bordering Virginia), and Robeson County (bordering South Carolina). The main focus was to compare rhythmic scores from European Americans and African Americans, though data from other speakers were included in the study as well: recordings from pre-1860 European Americans, ex-slaves, Jamaican and Hispanic (Mexican origin) L2 speakers, and L1 Spanish speakers (the control group). The results showed no statistical difference in the rhythm produced by modern day African Americans and European Americans in North Carolina, whereas there was a clear distinction in the past.

Looking at the data presented in Figure 1, we see that the regression line illustrates a clear shift towards stress-timed speech in African American English in North Carolina over time. Recordings from the ex-slaves reveal a tendency skewed towards syllable-time speech, whereas younger speakers today are overwhelmingly stress-timed. In

other words, speakers of AAE and EAE are becoming more similar. As to the convergence/divergence controversy regarding AAE and EAE, the authors argue that these findings be taken as evidence in favor of the convergence hypothesis. Note that Thomas and Carter decided to report mean of median scores instead of mean scores, as they argue center scores are more appropriate for inter-group comparison. They state, "the distribution of PVI values for any speaker is skewed," recognizing that for any speaker there is great variation (i.e., intra-individual variation) between syllable-timed and stress-timed speech, and therefore they want to exclude all extreme scores from either end of the PVI continuum.

Only two studies (Carter 2007; Callier 2011) have investigated intra-speaker variation and the social meanings of prosodic rhythm. Carter (2007) studied linguistic reinvention (i.e. a linguistic shift in an individual over time) in the speech of 'Maria', a 14-year-old Mexican American, who was born in Mexico City, but came to Raleigh, North Carolina at the age of eight. Carter noticed that Maria's speech changed over a period of three years from an initial suburban white variety of English to a Latina dialect, which was accompanied by an orientation towards the urban landscape including hip hop clothing. While Maria had shifted her speech at the segmental level to "match up with the racialized social milieu" (2007:12) of her school, her rhythm did not change significantly; it did become more stress-timed, though, and matched up well with the other Latino groups in the area. The rhythmic change over time was not significant, but the Carter study does suggest that rhythm, just like any other variable, can be investigated as a stylistic resource for the construction of the linguistic self. In a similar study, Callier (2011) found two distinct linguistic styles in Mandarin Chinese – a "measured" style favored by men compared to the women's "variable" style. The "variable" style consisted in general of more rhythmic variability and a greater degree of syllable lengthening, which leaves an overall impression of women having a

more dynamic prosody. Accordingly, Callier attaches social meaning to PVI scores, and demonstrates in addition that variation in PVI is expanding the range of gender identities.

In view of the fact that few studies have focused on individual speakers (as Carter 2006, Callier 2011 have done), more studies of stylistic variation in prosodic rhythm are needed, including the investigation of how rhythm can be used to accomplish specific interactional goals in face-to-face interaction. In the field of AAE, rhythm has mainly been noted impressionistically rather than quantitatively. However, despite the literature gaps, the existing observations are still crucial for our general understanding of AAE prosody and for the current study. Some of the studies on rhythm in AAE will be addressed in the following section.

### *3. Prosody and Rhythm in African American English*

It is common belief that intonation and prosody are just as characteristic of African American English as are segmental and morpho-syntactic features (Tarone 1973; Spears 1988; Alim 2004). Rhythm has been studied as a salient aspect of call and response in African American churches (Smitherman 1977; Green 2002), but these studies focus more on articulating the rhythmic cohesion between the preacher and the congregation than on intra-speaker variation. Except for the recent study by Thomas and Carter (2006), most observations on rhythm remain impressionistic, most likely because of the lack of reliable ways to measure prosody acoustically.

Though rhythm has not been established quantitatively to be a salient factor in the production of AAE, there are indications that rhythm correlates positively with identifying AAE perceptually. In a perception study from the early 1970s, Rickford found that respondents identified African American ethnicity correctly in 86% of all cases, using words such as "inflection", "variation in pitch and

rhythm", "intonation", and "tone" to identify African Americans (findings reported in Rickford & Rickford 2000:102). Rickford and Rickford (2000:19) have also argued that cadence is essential in constructing social meaning:

In black speech, cadence is as crucial to meaning as the words themselves. The rhythm, inflection, and rhetorical style are organic to the message, the clues that the speaker provides as to his or her mood and the nature of his or her relationship with the audience.

In addition, Green (2002:160) argues that different rhetorical strategies in AAE are just as important as variation in lexical, morpho-syntactic, and segmental features, and variation in rhythmic patterns contributes to the construction of these rhetorical strategies. One of the questions that remain then is which language or discourse features contribute to the construction of these rhetorical strategies, and whether rhythmic style shifts contribute to create these strategies. Apparently, African American verbal strategies are constructed based on a conglomeration of linguistic features, and variation in rhythm appears to be a salient factor in these strategies – especially in the strategy called **marking**.

### *4. The African American Verbal Strategy **Marking***

The verbal strategy **marking** appears to be one of the strategies in which rhythm could play a significant role, since Mitchell-Kernan (1972:176) argues that the most important linguistic features and functional effect of marking is so-called "paralinguistic mimicry". Mitchell-Kernan (1972: 176) defines marking as follows:

A common black narrative tactic in the folk tale genre and in accounts of actual events is the individuation of characters through the use of direct quotation. When in addition, in reproducing the words of individual actors, a narrator affects the voice and mannerisms of the speakers, he is using the style referred to as *marking* (clearly related to the standard English 'mocking'). Marking is essentially a mode of characterization. The marker attempts to report not only what was said but the way it was said, in order to offer implicit comment on the speaker's background, personality, or intent.

The idea that a marker not only reports what was said, but also comments on the way it was said, is similar to Bakhtin's (1981[1953]) notion of heteroglossic discourse and Tannen's work on constructed dialogue, in which she argues that the reported dialogue is not a report but rather "the recontextualization of words in a current discourse" (Tannen 2007:17). Marking is performed with constructed dialogue to mock the speech of a person either present or absent in the discourse. However, marking is not any type of performance speech, and should be understood in terms of Bakhtin's (1984) notions of uni-directional and vari-directional double voicing. Uni-directional double voicing refers to the performance of another voice, in which the speaker aligns positively with the performed speech, whereas vari-directional double voicing is used to take an opposing (perhaps negative) stance towards the voice being performed. Accordingly, marking should be viewed as a type of vari-directional double voicing, since the marker "attempts to report not only what was said but the way it was said" for the purpose of mocking someone (i.e. to align negatively with the performed voice) and represent the ideas, intentions, and values of the constructed speaker (see, e.g., Johnstone 2008). In addition, marking also involves topics or people that evoke a highly emotive investment in the performed speech, since an interactant would under normal circumstances not use expressive paralinguistic cues

unless some face-work is also being performed. In this connection, Mitchell-Kernan (1972:177) argues that marking often involves "a caricature of a social type which is frequently the object of scorn and derision", such as a police officer in an inner city neighborhood (see also Alim 2004:51). Finally, the expressive nature of marking appears to be more important than mere referential linguistic meaning, since "change in posture, speech rate, tone of voice, facial expression, etc., may signal a change in meaning" (Mitchell-Kernan 1972:179). As a consequence, rhythm plays a central role in marking, which is why I address rhythm in constructed dialogue to investigate if certain cases of constructed dialogue can be considered cases of marking and also to see if rhythmic style shifts play a role.

In their study of AAE rhythm, researchers have primarily commented upon rhythm impressionistically without looking at quantitative patterns; alternatively, researchers have lumped ethnicities into predefined categories for the comparison of PVI scores without paying attention to the potential social meanings conveyed through style shifts. Therefore, a combination of methods is needed when we seek to understand the overall PVI patterns, while at the same time aiming to uncover the social meanings of PVI and to determine how rhythm is used as a discursive strategy to accomplish specific interactional goals. When studying marking, issues of speaker representation, stancetaking, and alignment between speakers must be considered, since marking appears to happen in divergent alignment between subjects – i.e. between the marker and the marked subject.

Starting from the gaps in the literature signaled above, the current study is guided by the following research questions:

1. Is there a difference in rhythm (PVI) between constructed dialogue within narratives and non-dialogue narrative discourse?
2. Does rhythm in a narrative depend on speaker alignment?
3. What are the social meanings of rhythmic style shifts in narratives?

### 5. *Michael and the Data*

The data for this study comes from a one-hour sociological interview with Michael, a fourteen-year-old African American male from Washington, D.C., who has earlier been confirmed as a highly vernacular speaker of the AAE variety spoken in South East Washington, D.C. (Nielsen 2010; Nielsen 2011; Schilling-Estes 2006; Schilling & Jamsu 2010). Michael is a vivid storyteller, and he often goes off on tangents to tell narratives about fighting, run-ins with law enforcement, going to prison, and dating (Schilling-Estes 2006). Further, Michael often displays agentive behavior and takes control of the conversation to tell stories, and he often uses constructed dialogue to perform the views of his friends, girlfriend, and family, as well as of the antagonists in his life, such as police officers in his neighborhood. As such, the interview with Michael is an ideal site for investigating identity and style shifts as well as the complexities of social meanings expressed through constructed dialogue. Michael performs the speech of friends and foes alike, and the constructed dialogue displays various types of alignment with narrative characters, such as divergent and convergent alignment. An ideal framework for investigating alignment is that of Du Bois (2007), as it represents the discourse framework that I seek to integrate with the variationist paradigm. The following section provides specific examples of how I operationalize stance theory and thus fuse it with the variationist paradigm and the Pairwise Variability Index.

### 6. *Operationalizing Stance Theory*

This section concerns the integration of stance theory into the study of AAE for the purpose of quantitative and qualitative benefits. Stance should be understood as a type of linguistic social action that aligns interactants with respect to objects and people in the real world and

the story world. Stance is a central aspect of constructed dialogue and marking, since the most important form of stancetaking is **evaluation** (Du Bois 2007:142). Marking is precisely the act of evaluating a character through constructed dialogue, thus recontextualizing previously spoken discourse. The stance act involves **evaluation**, **positioning**, and **alignment** between speakers (Du Bois 2007:163). These components all constitute an overall stance act (illustrated by the stance triangle in Figure 2):

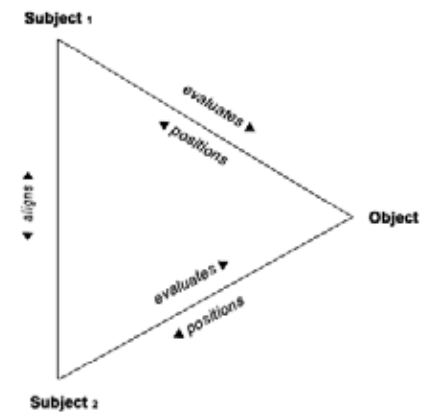


Figure 2. *The Stance Triangle* (Du Bois 2007:163)

The alignment between speakers creates intersubjectivity, illustrated by Du Bois' formulation, "*I evaluate something, and thereby position myself, and thereby align with you*" (2007:163, his italics). The "I" represents subject 1 in the stance triangle and "you" represents subject 2.

In the current study, I adopt Du Bois' (2007) perspective of scalar alignment, in which alignment is viewed as a continuous phenomenon. Alignment is defined here "as the act of calibrating the relationship between two stances, and by implication between

two stancetakers" (Du Bois 2007:162). In a scalar perspective, calibration is a measure of relative agreement between interactants; it involves convergent, divergent, or ambiguous alignment between interactants, since the alignment always occurs to a certain degree and not in absolute terms (i.e. one agrees to a certain extent with another person).

Stance or stancetaking involves linguistic ways in which interactants create and signal relationships with other interactants, discursively constructed personas, or with objects and ideas. Accordingly, I will first identify cases of constructed dialogue, and determine alignment between subject 1 and subject 2. Then I categorize alignment in constructed dialogue as being convergent, divergent, or ambiguous, while mapping these dynamic, discursively founded categories on to PVI scores in constructed dialogue; finally, I compare my results with what is found in non-dialogue narrative discourse. Constructed dialogue is thus a discursive choice that aligns people in the story world and by extension in the social world. These choices, if they recur, contribute to an emerging speaking style, and the language patterns become ideologically linked with social meanings created in the discourse (Irvine 2001).

The following section provides examples (based on stance theory) of what I have classified as convergent and divergent alignment in the interview with Michael<sup>2</sup>. The first extract below concerns a case of convergent alignment involving constructed dialogue. Michael talks about who should pay in a relationship – the boy or the girl – when out on a date. The interviewer has just asked if it would be okay for a girl to pay on a date. The constructed dialogue, where Michael performs the speech of his girlfriend, shows convergence between Michael and his girlfriend (stance subject 1 and 2). The constructed dialogue appears in quotation marks (see Appendix A for transcription conventions):

*Extract 1*

1	<i>Michael:</i>	Yeah, I had a girl like that,
2		this girl named Crystal.
3		I[a:] told[øc] her[ø] I[a:] had[c#ø] no money.
4		She's like,
5		"I got money. I'll pay for[ø] you."
6		I was like,
7		"Okay, okay,
8		I- I[a:] ain't got no money."
9		And I'm and I- and she's like,
10		I- I- yeah,
11		"I'll do it [d]this time because,
12		you do it for[ø] me ever[crø]y time."
13		Girls should pay somet[i:a:]mes too.

In this example, Michael uses constructed dialogue in several cases to perform the speech of his girlfriend, Crystal. He also quotes himself, which increases the immediacy of a past utterance in a present conversation (e.g., Hymes 1977; Schiffrin 1981), thus drawing the listener into the story by making the past seem more vivid. Michael begins by talking about his girlfriend, Crystal (1, 2), who is paying for both when they are out on the date. Michael constructs (or reconstructs) the dialogue for the interviewer by quoting himself saying that on this particular date, he did not have any money (3). The constructed girlfriend says that she has money and will pay for Michael (5). Michael shows convergence with her suggestion by the use of the repeated discourse marker **okay** in, "Okay, okay" (7), but restates his lack of money. The girlfriend finally offers to pay for him, since he usually pays for her (11-12). The constructed dialogue is completed with many features of AAE including double negatives in (8) "ain't got no", stopping of an interdental fricative in (11) "[d]this" and a loss of /r/ after consonants in (12) "ever[crø]y". Thus, Michael is highly vernacular in his speech as he recontextualizes the dialogue.

Extract 2 shows divergence in the narrative. In this case, Michael

is performing the speech of a police officer, and the constructed dialogue imitates the line of questioning Michael and his friend are subjected to by the police officer. Michael's immediate response diverges from the speech of the performed police officer.

*Extract 2*

1 *Michael:* I[a:] don't[Øc] like [d]the pólice.  
 2 Like [d]the mar[Ø]shals,  
 3 they- they WILL hit you.  
 4 Downtown at the mar[Ø]shals,  
 5 they'll hit you.  
 6 if you do something,  
 7 like to- like do something BAD,  
 8 curse them out or something.  
 9 That's[Øc] why I don't like 'em the pólice [d]the:re.  
 10 Just come to you for no reason.  
 11 Like if you walk in a neighbor[Ø]hood,  
 12 where you don't live at,  
 13 they come at you with[c#Ø] like,  
 14 "Where [Øc] you at? Where [Øc] you going?"  
 15 It don't[Øc] MATTER[Ø] where[Ø] we [Øc] going[n]!  
 16 We didn't do nothing[mn] so why is[gen2] you,  
 17 asking[met] where we going?  
 18 So we was[gen] like,  
 19 it look[V] like we suspicious,  
 20 we look[V] suspicious,  
 21 walking[n] in the neighbor[Ø]hood.

The interviewer asks Michael what his general feeling is towards the police, which elicits the narrative in Extract 2. Michael's first response is that he dislikes the police (1), and continues to talk about how the marshals use violence (4-5). The constructed dialogue occurs in line (14), "Where [Øc] you at? Where [Øc] you going?", in which Michael performs the speech of a police officer who follows Michael and his friend around the neighborhood, and questions their intentions, which Michael finds unwarranted as shown in line (10), "Just come to you for no reason." It is evident from lines (14-15) that Michael is disaligned with the constructed dialogue of the

police in the story world and by extension with the police in the life world. The parallel dialogic syntax in (14) and (15) brings alignment to the surface between the interactional personas through "the act of reproducing words and structures of the prior speaker" (Du Bois 2007:166). Further, when there is a contrast between two similar syntactic constructions, the disaligned aspect of the parallel structure is emphasized with a contrasting element, which in this particular case is "It don't[cØ] MATTER[Ø]." This example is similar to Tannen's (1987) repetition with an additional expansion of the repetition. The repetition and expanded structural parallelism echo Michael's position and thus highlight his annoyance with the unwarranted line of questioning. The alignment diagram represented in Table 1 (which is based on Figure 2 and inspired by Du Bois 2007) demonstrates the divergent alignment between Michael and the police officers:

#	Speaker	Stance Subj. 1	Stance Subj. 2	Positions/Evaluates	Stance Object	Aligns (divergent)
14	Police	{we}	you	[Øc] going	where	
15	Michael	we	{you}	[Øc] going	where	{It don't[Øc] MATTER[Ø]}

Table 1. *An alignment diagram showing divergent alignment*

If we take a closer look at the performed sentence (14), "Where [Øc] you at? Where [Øc] you going?", it is evident that Michael is disaligned with the statement based on the counterstance in line (15) "It don't[Øc] MATTER[Ø] where[Ø] we [Øc] going[n]!" The stance object in (14) is the interrogative pronoun "where," which is realized with a deleted copula plus the present progressive "going", thus positioning the stance subject 2 "you" in relation to the object. The implied stance subject 1 is the police officers, which can be deduced from the previous discourse ("they") in (13) "they come at you with[c#Ø] like", and earlier references to the police. In other words, the officers want Michael and his friend to account for their behavior, and are thus disaligned with Michael and his friend. This



divergence is amplified in (15), in which Michael quickly counters the police officers' stance act (14) with a counter stance. The evaluation and the stance object are echoed through the parallel syntactic structure, but now stance subject 1 is changed to reflect Michael and his friend's point of view, making the implied stance subject 2 the police "{you}". The evaluation and the stance object resonate with "[Øc] going" and "where", but the parallelism is contrasted with the expanded structure "It don't[øc] MATTER[ø]", which negates the previous stance act set forth by the police, while highlighting the divergence in alignment.

### 7. Method

Twenty-four cases of constructed dialogue were analyzed in the interview, in which Michael performs the speech of another person. Constructed dialogue was identified by locating quotatives<sup>3</sup>, which are words in the narrative discourse that signal a reported context and thus a constructed dialogue (Tannen 2007, Johnstone 2008). The constructed dialogue in the narratives were introduced by quotatives **be like/like** (N=16), **say** (N=5), and **tell/telling** (N=3). The three lines below illustrate how Michael uses **like** in (1), **say** (2), and **tell** (3) to introduce constructed dialogue. The quotatives are marked in boldface:

- (1) They come at you with[c#ø] **like**, "Where [Øc] you at? Where [Øc] you going?"
- (2) They- [d]they **said**, "Don't[øc] DO it!" [d]They gonna sit us in this PROgram.
- (3) She **tell** me straight up, "I ain't got AIDS."

A total of 282 measurements were made of vowel nuclei using PRAAT (version 5.1.30; Boersma & Weenink 2010), which resulted in 141

PVI calculations, as it took two syllables to calculate a PVI score. The measurements included the vowel nuclei in the constructed dialogue (N=88) and in the non-dialogue narrative discourse (N=194) immediately preceding and following the quote to investigate if rhythmic style shifts occur in connection with constructed dialogue. Consequently, PVI measurements were taken before the constructed dialogue in the non-dialogue narrative discourse and after the constructed dialogue in the non-dialogue narrative discourse; as a result, more than twice as many non-dialogue measurements were made, compared to dialogue measurements. Several cases of constructed dialogue were excluded from the analysis – especially the cases where Michael's speech is not fluent due to long pauses, false starts, and inaudible language – the aim being to find passages of speech in which both the constructed dialogue and the surrounding non-dialogue discourse gave the percept of a fluent rhythm. The total number of measurements (N=282) well exceeds the 200 token threshold established in current PVI studies for averaging out deviations, "due to segmental factors, such as intrinsically longer or shorter vowels (Peterson and Lehiste 1960) or the voicing of the following consonant (e.g. House and Fairbanks 1953)" (Thomas & Carter 2006).

As mentioned, PVI scores are a measure of the degree to which speech is more or less syllable-timed or stress-timed. The method for calculating PVI was adopted from Low and Grabe (1995), which was later modified by Low, Grabe, and Nolan (2000). The original method was adopted for this study due to concerns about recording quality, which is a similar concern voiced by Carter (2007). The equation used to calculate PVI scores is presented in Figure 3; it compares the duration of two adjacent syllables, and controls for speaking rate by taking the difference in duration of two syllables, and dividing it by their mean duration.

$$PVI = \frac{[\text{syllable } a - \text{syllable } b]}{\frac{a + b}{2}}$$

Figure 3. Equation for calculating PVI

Low and Grabe (1995) used laboratory speech and were able to include consonant syllable onsets and codas due to the high recording quality. By contrast, the data in the present study made it difficult to determine the onsets of many consonants; likewise, it was difficult to determine which syllable an intervocalic consonant should be assigned to. Accordingly, as was the case in Carter's (2007) study, only vocalic nuclei were measured in the present study. The only consonants included were the coda liquids /l, r/. These liquids were treated as glides (and thus as part of the preceding vowel), since segmenting vowel and liquid was virtually impossible. Due to the effect of pre-pausal lengthening, syllables in pre-pausal feet were excluded from the analysis, with pauses being determined as perceptible breaks. T-tests were conducted to determine significant difference between constructed dialogue and non-dialogue discourse.

### 8. Results

Referring to the original research questions, the results of the first question (involving differences in PVI between constructed dialogue and non-dialogue narrative discourse) are presented in Figure 4 and Table 2:

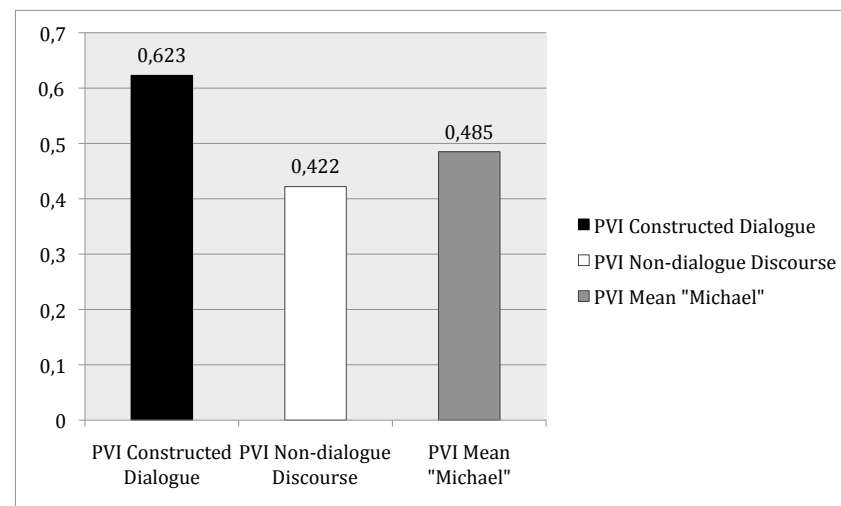


Figure 4. PVI constructed dialogue vs. PVI non-dialogue discourse

PVI Types	N	Mean	t	t stat	st dev	df	p-value
PVI Constructed Dialogue	88	.623	1.977	3.165	.386	138	*0.002
PVI Non-dialogue Discourse	194	.422			.330		

Table 2. PVI results for constructed dialogue and narrative discourse

(Note: \* = significant at  $p < 0.05$ )

It is evident that Michael's rhythm in constructed dialogue is much more stress-timed compared to the surrounding non-dialogue narrative discourse. Michael's speech in constructed dialogue has a higher mean PVI, and thus greater variability in the duration of syllable nuclei, which places his constructed dialogue speech towards the highly stress-timed end of the rhythm continuum. In contrast, the surrounding non-dialogue discourse approaches the syllable-timed end of the continuum. Table 2 shows that the average PVI-score for constructed dialogue is .623 compared to .422 for narrative discourse; the difference is significant, statistically speaking, with a p-value at .002 ( $p=0.002$ ). Note also (cf. Figure 4) that Michael's mean PVI score was .485, which places him in the lower end of the stress-timed continuum.

While Michael's scores cannot be compared directly to Thomas and Carter's (2006) study of African American prosodic rhythm in North Carolina, it is still interesting to speculate about the similarities and differences. Not surprisingly, Michael's overall score is in the low end of stress-timed speech, since Michael talks very fast throughout most of the interview, and a fast speech rate tends to correlate positively with syllable-timed speech in otherwise stress-timed languages (Dellwo & Wagner 2003; Callier 2011). Thomas and Carter (2006) found that African Americans in North Carolina have a clear tendency to move towards stress-timed speech over time. Michael's rhythm varies depending on discourse function, which is evident from his higher PVI scores in constructed dialogue compared to the surrounding non-dialogue discourse. Accordingly, the discourse context should be investigated in greater detail, with speaker alignment taken into account (which was the goal of research question number 2).

As to research question number 2: "Does rhythm in a narrative depend on speaker alignment?" the answer is likewise affirmative, as is evident from Figure 5:

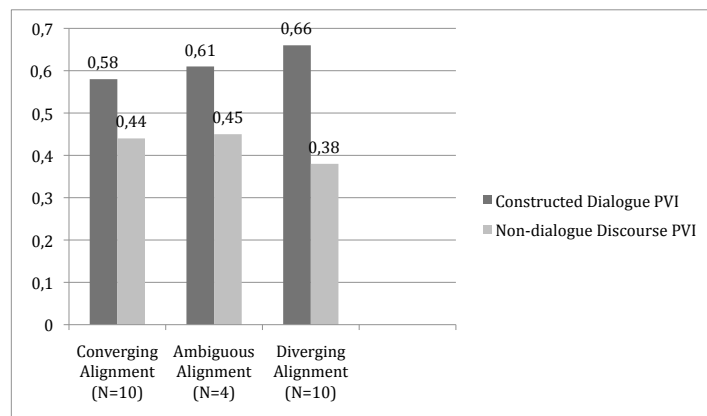


Figure 5. *Constructed dialogue vs. non-dialogue narrative discourse based on alignment*

PVI Types	N	Mean	t	t stat	st dev	df	p-value
PVI Divergent Alignment	39	.659	0.021	2.649	0.231	12	*0.02
PVI Non-dialogue Discourse	79	.379			0.159		

Table 3. *PVI scores for constructed dialogue in divergent alignment compared to non-dialogue discourse.*

Figure 5 illustrates that the rhythm in constructed dialogue and non-dialogue narrative discourse is similar when the constructed dialogue occurs in stance acts in which Michael shows either convergent alignment (in 10 cases; N=10), or ambiguous alignment (N=4). When the constructed dialogue is performed in a stance act in which Michael conveys divergent alignment (N=10), the PVI score for constructed dialogue reveals highly stress-timed speech (0.659), compared to the surrounding syllable-timed speech (0.379). The difference is significant with p=0.02, as illustrated in Table 3.

Figure 6 illustrates the relationship between prosodic rhythm and alignment type. The trend lines reveal that the more Michael distances himself from the other stance subject in the dialogic syntax, the bigger the stylistic shift is found in his speech between syllable-timed and stress-timed speech, thus creating a more dramatic style shift.

The variation in prosodic rhythm based on alignment in the interview discourse suggests that identity work is at play in divergent alignment. It appears that Michael is using stylistic shifts in rhythm to convey a particular type of social meaning in these specific moments of interaction. The final research question in this study seeks to uncover rhythm's social meanings, especially of rhythmic style shifts in narrative discourse.

This last research question is more difficult to answer, but when we take a closer look at the locations of the biggest differences between stress-timed and syllable-timed speech, a pattern starts to emerge. I will propose that rhythmic style shifts in general are used to be expressive in constructed dialogue, and great variation in syllable

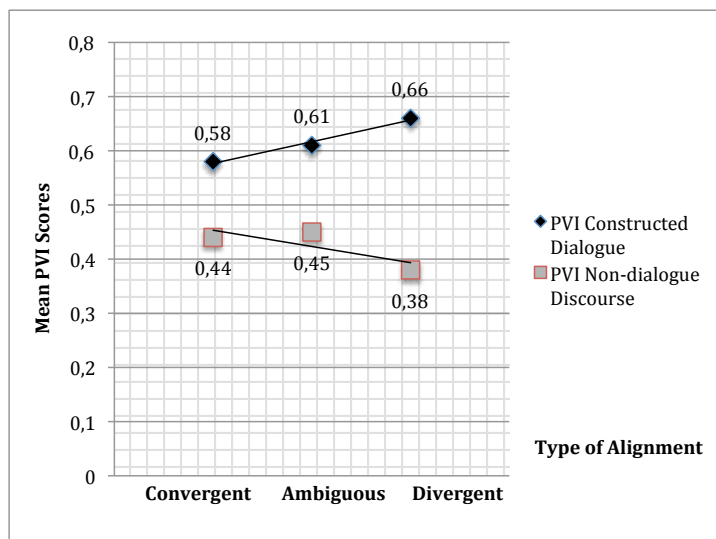


Figure 6. *The relationship between PVI scores and alignment type*

timing in diverging alignment may be part of the African American verbal strategy **marking**, especially in cases where Michael uses paralinguistic mimicry to construct caricatures of certain recognizable social types, such as a police officer. The most extreme rhythmic shifts between stress-timed and syllable-timed speech were found in topics that involved run-ins with the police, contact with the correctional system, and getting into fights – all topics that trigger highly divergent stances in Michael's case. Most cases of ambiguous and converging alignment were found in narratives involving dating and gender ideology as, for example, when Michael performs the speech of his girlfriend. It is evident that performative, stylistic behavior is at play in divergent alignment, and the more Michael distances himself from antagonists in the interactional world, the greater the distance is in PVI scores between syllable-timed and stress-timed speech. For the remaining sections of this study, I turn to cases of divergent alignment for a more in-depth analysis of the

most extreme rhythmic shifts. Table 4 below shows all ten cases of constructed dialogue in divergent alignment along with a description of the discourse context in which the quoted speech appeared in the interview.

From Table 4, it is evident that Michael uses constructed dialogue to perform the speech of various people, including the police and other legal officials (1-3), the antagonist in a fight that Michael got into (4), his girlfriend (5-9), and his grandmother (10). Example 10 is different from the others, as it involves Michael performing his grandmother talking to a girl who accused Michael of getting her pregnant. The biggest difference between constructed dialogue and the surrounding non-dialogue discourse is found in examples 1-4, with an average PVI score of 0.814 for constructed dialogue and 0.259 for non-dialogue discourse, meaning that the performed speech is highly stress-timed compared to the highly syllable-timed surrounding non-dialogue discourse. The four examples thus represent extreme cases of stylistic shifts in prosodic rhythm, which I will argue are part of a marking verbal strategy. All ten examples could potentially be part of a marking strategy, since stylistic shifts in rhythm are used to perform and recontextualize the speech of other individuals, which partly meets Mitchell-Kernan's (1972) description of marking. However, examples 1-4 are different from the other six examples, as they involve performances of personas that represent sociocultural challenges to Michael's everyday life, including the police, correctional officers, and a violent antagonist, and therefore trigger a particularly indignant stance.

In order to illustrate Michael's indignant stances, example three (Extract 3) from Table 4 is analyzed in greater detail below as it epitomizes Michael's performance of a persona that is subject to scorn and derision. In this example, Michael once again performs the speech of a police officer following him and his friend around the neighborhood. Again, we see that the performed speech is highly

Discourse Context	Constructed Dialogue (Divergent)
(1) Talking about being charged in court (Quoting court official)	"Don't do it! They gonna sit us in this program"
(2) Police following Michael and his friend (Quoting police)	"Where you at? Where you going?"
(3) Police following Michael and his friend (Quoting police)	"If the school not open, can't sit right there"
(4) Getting into a fight (Quoting antagonist in fight)	"You gonna help him? I thought you was with us"
(5) Arguing with girlfriend about why he got into a fight (Quoting girlfriend in argument)	"Why did you do that? He was just playing"
(6) Arguing with girlfriend because he got into a fight (Quoting girlfriend in argument)	"I don't think we should go together for a while"
(7) Arguing with girlfriend because he got into a fight (Quoting girlfriend in argument)	"These are my friends that go to my school"
(8) Arguing with girlfriend because he got into a fight (Quoting girlfriend in argument)	"Why you do that?"
(9) Arguing with girlfriend because he got into a fight (Quoting girlfriend in argument)	"We was just playing"
(10) Performing grandmother arguing with girl who accused Michael of getting her pregnant (Quoting grandmother)	"You called this house last night and said you pregnant"

Table 4. *Constructed dialogue in divergent alignment*

stress-timed whereas the non-dialogue discourse is more syllable-timed. Michael has just been asked if he has had run-ins with the police concerning things he did not do. He answers that one time the police asked him and his friend to move away from school property after opening hours, the officer having first stated that Michael and his friend were close to being locked up for trespassing. The constructed dialogue is presented in Extract 3:

*Extract 3*

1 Michael: Yeah.  
2 Like a whole[voc] rack of police,  
3 told us to leave.  
4 Interviewer: Why is that?  
5 Michael: Cause like we didn't- CAUSE they say[V],  
6 "if the school [Øc] not[?] open,  
7 can't sit right [d]there."  
8 And they told us to move.  
9 And I was- I MOved.  
10 But [d]that's like,  
11 they- they could- they could have locked us up for[Ø]  
12 trespassing,  
13 but they told us they was gonna give us a chance to leave.  
14 Don't come back.  
15 That's it..about [d]that.

The alignment diagram in Table 5 demonstrates the divergence in alignment, as the police officer instructs Michael and his friend to leave school property if they do not want to get arrested.

#	Speaker	Stance Subj. 1	Stance Subj. 2	Positions/ Evaluates	Stance Object	Aligns (divergent)
7	Police	{we}	{you}	can't sit	right [d]there	{can't}

Table 5. *Divergent alignment in police narrative*

Michael's emotional involvement in the narrative and oppositional stance to the police are evident in the overall response to the question if the police confront Michael without reason. In Extract 3, Michael's sudden commitment and involvement in the narrative appears in line (5) when Michael self-repairs (Schiffrin 2006) his initial response with emphatic phonology on "CAUSE," which introduces the constructed dialogue "If the school not open, can't sit right there". In line (9) after the performed quote, Michael once again self-repairs in, "And I was- I MOved" with emphatic stress on "moved", showing that Michael does not want to face the con-

sequences of not complying with police orders, as he has previously been struck by the police in Washington, D.C. The disaligned aspect is completed by the threat in lines (11-12), "they could have locked us up for trespassing", in which the police inform Michael and his friend of the possible consequences for not complying with police orders. The police do not take action, but the threat remains: Do as we say or you will go to jail. The expressive nature of the rhythmic style shift clusters with other expressive stress patterns in "CAUSE" and "MOved", and Michael shows highly vernacular speech with the use of a verb stem to denote past tense "say[V]" (5), copula deletion "if the school [Øc] not[?] open" (6) as well as phonological features, such as stopping of interdental fricatives (7, 15), r-lessness (11), and l-vocalization (2). In this example, the performed speech is significantly more stress-timed compared to the more syllable-timed surrounding speech in the non-dialogue discourse (PVI stress-timed speech = 0.71; PVI syllable-timed speech = 0.29; p=0.03). This rhythmic difference is used to mark the police officer.

way it was said, in order to offer explicit comment on the speaker's background, personality, or intent." A switch in rhythm for Michael is a stancetaking strategy that occurs in oppositional alignment, and the marking that emerges from a skillful manipulation of syllable timing, or rhythm, creates an ideological link between Michael and the sociocultural challenges he faces in the urban landscape. I maintain that the changes in rhythm are part of a marking verbal strategy in which he not only performs or constructs the voice of a police officer, but, simultaneously, imbues the officer with intentions of unnecessary aggression and unreasonable behavior.

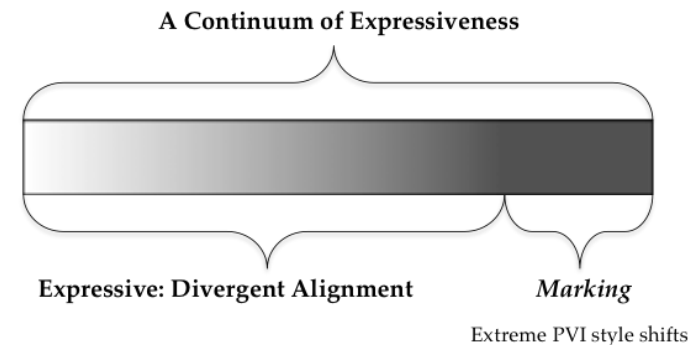
To summarize these findings, Figure 8 below formalizes the social meanings of rhythm in Michael's speech, which may be indicative of how rhythm is used in African American English in general. The light area of the continuum in Figure 8 symbolizes that there is little difference in variation between syllable-timed and stress-timed speech, whereas the dark area of the continuum symbolizes great variation in syllable timing. Marking occurs where the most extreme PVI style shifts are found:

9. *The Social Meanings of Prosodic Rhythm*

A stylistic shift in Michael's rhythm from highly syllable-timed speech to stress-timed speech conveys expressiveness in general and marking in severe cases of divergent alignment. The most extreme cases of rhythmic style shifts in constructed dialogue occur when Michael discusses topics of sociocultural constraints – such as run-ins with law enforcement and going to jail. In these examples, he uses variation in prosodic rhythm to position his antagonists in the storyworld and imbue certain authoritative character traits, while subjecting the characters to scorn and derision. Michael is not only reproducing the words of individual actors, he also mocks the voice of the actors.

To revisit Mitchel-Kernan's (1972) observations on marking, "[t]he marker attempts to report not only what was said but the

Figure 8. *The social meanings of prosodic rhythm*



An additional meaning to Michael's style shifts could be **clarity**. That is, Michael's highly stress-timed speech often gives a percept

of a slower rhythm, when compared to his syllable-timed speech. If we draw upon Eckert's (2008) notion of indexical fields, the fact that Michael speaks slower and with a different rhythm when he marks an authority could be tied to the ideological notion of standard versus vernacular speech. Standard speech is ideologically associated with formal institutions of power and to the characters holding such power. Hence, Michael could be using stress-timed rhythm to signal standardness, institutional power, which indexes the speech of, for instance, a police officer in the story world.

### 10. Conclusion

The current study set out to investigate rhythmic style shifts in African American English from the perspective of intraspeaker variation. The data came from Michael – a fourteen-year-old African American and a highly vernacular speaker of the African American English variety found in South East Washington, D.C. Michael's rhythmic style shifts were investigated to shed light on the poorly understood area of AAE prosody, as prosody and rhythm are viewed as highly salient factors of AAE. The analyses of 24 cases of constructed dialogue and 282 PVI measurements demonstrate that Michael throughout the interview is a stress-timed speaker, in line with previous group findings on African American prosodic rhythm (Thomas and Carter 2006). However, the distinction between stress-timed and syllable-timed speech is accentuated even more clearly when rhythm is viewed in specific moments of interaction. The current study shows that Michael's rhythm in constructed dialogue is highly stress-timed compared to the surrounding syllable-timed discourse: the constructed dialogue occurs in an oppositional stance act expressed with diverging alignment compared to converging alignment.

In addition, the study demonstrates that Michael in general uses rhythmic style shifts to be **expressive** in constructed dialogue, and

that great variation in prosodic rhythm is an essential part of the African American verbal strategy **marking**. Marking is found in cases in which Michael uses paralinguistic mimicry to construct caricatures of common, recognizable social stereotypes, such as a police officer. Accordingly, Michael uses variation in rhythm to distance himself from antagonists in the interactional world by constructing personas and evaluate these personas in a certain light.

As to the convergence vs. divergence debate, I would be very reluctant to say that there is a convergence between AAE and EAE in prosodic rhythm even though Michael's overall PVI score is similar to varieties of EAE. The present study demonstrates the importance of case studies for understanding larger group patterns of internalized variation, and it suggests that overall PVI scores can be similar between ethnic groups, yet verbal strategies may be arranged in a completely different manner and be used for completely different interactional purposes. However, such an interactional perspective is obscured if only PVI scores are compared, without investigating the discourse in greater detail. I have argued here that in narratives, great variation in rhythm may be part of the verbal strategy marking, especially in severe cases of divergent alignment, in which Michael mocks social stereotypes, such as police officers in inner city Washington, D.C. neighborhoods.

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## Notes

- 1 I would like to thank Carissa Froyum Roise and Christine Mallinson for kindly sharing the data with me. I am also grateful for the input and feedback I have received from Natalie Schilling, Deborah Schiffrin, Heidi E. Hamilton, Robert J. Podesva, Patrick Callier, Nicolai Pharaos as well as audiences at NWAV 40 and Sociolinguistic Symposium 19 for feedback on previous versions of this paper. I am also grateful for the feedback I have received from the editors of this volume. The author, however, takes full responsibility for any flaws and shortcomings.
- 2 Due to lack of space, cases of ambiguous alignment will not be discussed further; also, only four cases were noted in the interview.
- 3 Obviously, constructed dialogue is not always introduced by quotatives, and other linguistic resources such as shifts in deixis can introduce constructed dialogue, but only cases with quotatives were included in the current study for the purpose of methodological consistency.

## References

- Alim, H. Samy. 2004. *You Know my Steez: An Ethnographic and Sociolinguistic Study of Styleshifting in a Black American Speech Community*. Publication of the American dialect society 89. Duke University Press.
- Bakhtin, Mikhail. 1981[1953]. *The Dialogic Imagination* (ed. Michael Holquist, Tr. Caryl Emerson & Michael Holquist). Austin: University of Texas Press.
- Bakhtin, Mikhail. 1984. *Problems of Dostoevsky's Poetics*. (ed. and Tr. Caryl Emerson). Minneapolis, Minnesota: University of Minnesota Press.
- Callier, Patrick. 2011. *Social Meaning in Prosodic Variability*. University of Pennsylvania Working Papers in Linguistics, Vol. 17(1).
- Carter, Phillip. 2007. *Phonetic Variation and Speaker Agency: Mexicana Identity in a North Carolina Middle School*. University of Pennsylvania Working Papers in Linguistics, 13(2).
- Dellwo, Volker & Petra Wagner. 2003. *Relations Between Language Rhythm*

- and Speech Rate. *Proceedings of the International Congress of Phonetics Science, Barcelona*. 471-474.
- Deterding, David. 2001. *The Measurement of Rhythm: A Comparison of Singapore and British English*. *Journal of Phonetics* 29. 217-30.
- Du Bois, J. W. 2007. *The Stance Triangle*. In Robers Englebretson (ed.). *Stancetaking in Discourse: Subjectivity, Evaluation, Interaction*. Amsterdam: Benjamins. 137-182.
- Eckert, Penelope. 2008. *Variation and the Indexical Field*. *Journal of Sociolinguistics* 12 (4). 453-76.
- Fasold, Ralph & Walt Wolfram. 1970. *Some Linguistic Features of Negro Dialect*. In Ralph Fasold & Roger Shuy (eds.), *Teaching Standard English in the Inner City*. Washington, DC: Center for Applied Linguistics. 41-86.
- Fought, Carmen. 2006. *Language and Ethnicity*. Cambridge: Cambridge University Press.
- Green, Lisa. 2002. *African American English: A Linguistic Introduction*. New York: Cambridge University Press.
- Gut, Ulrike. 2002. *Prosodic Aspects of Standard Nigerian English*. In Gut, Ulrike & Dafydd Gibbon (eds.). *Typology of African Prosodic Systems*. Bielefeld University. 167-78.
- Gut, Ulrike, Eno-Abasi Urua, Sandrine Adouakou & Dafydd Gibbon. 2002. *Rhythm in West African tone languages: A study of Ibibio, Anyi and Ega*. In Gut, U. & D. Gibbon (eds.). *Typology of African Prosodic Systems*. Bielefeld University. 159-65.
- Hymes, Dell. 1977. *Discovering Oral Performance and Measure Verse in American Indian Narrative*. *New Literacy History* 5. 431-57.
- Irvine, Judith. T. 2001. *"Style" as Distinctiveness: the Culture and Ideology of Linguistic Differentiation*. In Eckert, Penelope & John Rickford (eds.). *Style and Sociolinguistic Variation*. Cambridge: Cambridge University Press.
- Johnstone, Barbara. 2008. *Discourse Analysis*. Malden, MA: Blackwell.
- Labov, William. 1972. *Language in the Inner City: Studies in the Black English Vernacular*. Philadelphia: University of Pennsylvania Press.
- Loman, Bengt. 1967. *Intonation Patterns in a Negro American Dialect: A Preliminary Report*. Washington, DC: Center for Applied Linguistics.
- Loman, Bengt. 1975. *Prosodic Patterns in a Negro American Dialect*. In Håkan Ringbom, Alfhild Ingberg, Ralf Norrman, Kurt Nyholm, Rolf



- Westman & Kay Wikberg (eds). *Style and Text: Studies Presented to Nils Erik Enkvist*. Stockholm: Språkförlaget Skriptor AB 219–42.
- Low, Ee Ling & Esther Grabe. 1995. Prosodic patterns in Singapore English. In K. Elenius & P. Branderud (eds.). *Proceedings of The XIIIth International Congress of Phonetic Sciences*. Vol. 3. Stockholm: KTH and Stockholm University. 636–639.
- Low, Ee Ling, Esther Grabe & Francis Nolan. 2000. Quantitative characterizations of speech rhythm: Syllable-timing in Singapore English. *Language and Speech* 43. 377–401.
- Mitchell-Kernan, Claudia. 1972. Signifying, Loud-talking and Marking. In Kochman, T. (ed.). *Rappin' and Stylin' Out: Communication in Urban Black America*. Urbana, IL: University of Illinois Press. 315–335.
- Nielsen, Rasmus. 2010. "'I ain't Never Been Charged with Nothing!': The Use of Falsetto Speech as a Linguistic Strategy of Indignation. *University of Pennsylvania Working Papers in Linguistics*: Vol. 15(2), Article 13.
- Nielsen, Rasmus. 2011. "If the School not Open, Can't Sit Right there": Direct Quotes and Prosodic Rhythm in African American English. Paper presented at *New Ways of Analyzing Variation (NWAV) 40*, Georgetown University, Washington, D.C., USA.
- Ramus, Franck, Marina Nespore & Jacques Mehler. 1999. Correlates of Linguistic Rhythm in the Speech Signal. *Cognition* 73. 265–92.
- Rickford, John R. 1999. *African American Vernacular English*. Malden, MA: Blackwell.
- Rickford, John. R. & Russell J. Rickford. 2000. *Spoken Soul*. New York: John Wiley and Sons.
- Schiffrrin, Deborah. 1981. Tense Variation in Narrative. *Language*, 57 (1).
- Schiffrrin, Deborah. 1987. *Discourse Markers*. Cambridge: Cambridge University Press.
- Schiffrrin, Deborah. 2006. In *Other Words: Variation in Reference and Narrative*. Cambridge: Cambridge University Press.
- Schilling-Estes, Natalie. 2006. Constructing Responses to Social Constraints in Narrative and Non-narrative Discourse. Paper presented at LSA.
- Schilling, Natalie & Jermy Jamsu. 2010. Real-time Data and Communal Change in Washington D.C., African American Vernacular English. Paper presented at *NWAV 39*, San Antonio, TX.
- Smitherman, Geneva. 1977. *Talkin and Testifyin: The Language of Black America*. Detroit, MI: Wayne State University Press.
- Spears, Arthur K. 1988. Black American English. In Cole, J. B. (ed.). *Anthropology for the Nineties*, New York: The Free Press. 96–113.
- Tannen, Deborah. 1987. Repetition in Conversation: Toward a Poetics of Talk. *Language* 63(3). 574–605.
- Tannen, Deborah. 1989. *Talking Voices: Repetition, Dialogue and Imagery in Conversational Discourse*. New York: Cambridge University Press.
- Tannen, Deborah. 2007. *Talking Voices: Repetition, Dialogue and Imagery in Conversational Discourse*. 2nd Edition. New York: Cambridge University Press.
- Tarone, Elaine. 1973. Aspects of Intonation in Black English. *American Speech* 48. 29–36.
- Thomas, Erik R. 2007. Phonological and Phonetic Characteristics of AAVE. *Language and Linguistics Compass* 1. 450–475.
- Thomas, Erik R. & Phillip Carter 2006. Prosodic Rhythm and African American English. *English World Wide* 27(3). 331–335.
- Torgersen, Eivind & Anita Szakay. 2011. A Study of Rhythm in London: Is Syllable-timing a Feature of Multicultural London? *University of Pennsylvania Working Papers in Linguistics*, 17(2). 165–174.
- Udofot, Inyang. 2003. Stress and Rhythm in the Nigerian Accent of English: A Preliminary Investigation". *English World-Wide* 24. 201–20.
- Wolfram, Walt & Erik R. Thomas. 2002. *The Development of African American English*. Oxford: Blackwell.

## Appendix A: Transcription Conventions

Phonological Features of AAE	Transcription Symbols	Example	Reference
R-lessness (r-Ø) in post-vocalic environments	[o] (lower case ø)	Car[o], mor[o]ning	Fasold and Wolfram (1970)
Monophthong /ay/	[a:]	Pie[a:], I[a:]	Rickford (1999)
Velar nasal realized as alveolar nasal	[n]	Playing[n]	Rickford (1999)
Stopping of interdental fricative eth -> /d/	[d]	[d]hat	Rickford (1999)
Stopping of interdental fricative eth -> /t/	[t]	With[t]	Rickford (1999)
Alveolar stops /d/ realized as glottal stop	[ʔ]	did[ʔ]n't	Fasold and Wolfram (1970)
Falsetto speech	Bold	<b>"I ain't had sex with the girl."</b>	Alim (2004)
Consonant cluster reduction	[œc]	And that[œc]s when he went[œc] home	Rickford (1999)
Vocalization of /l/	[voc]	Oak Hill[voc]	Fasold and Wolfram (1970)
Loss of single final consonant	[c#ø]	I was MAD[c#ø]	Bailey and Thomas (1981).
Loss of /t/ after consonants	[cro]	Ever[cro]y	Fought (2006)
Grammatical Features of AAE: Syntax and morphology	Transcription Symbols	Example	Reference
Copula Deletion	[Øc] (capital Ø)	she [Øc] pregnant	Labov (1972), Rickford (1999)
Generalization of was/were	[gen]	you was[gen] with us	Wolfram (1993)
Generalization of is/are	[gen2]	why is[gen2] you asking	Wolfram (1993)
Use of ain't for negation	ain't	I ain't gonna let him go out like that	Rickford (1999)
Absence of possessive 's marking	[ø's]	I cut somebody[ø's] grass	Rickford (1999)
Use of verb stem as past tense or preterite form	[V]	They say[stem] it wasn't ours and.	Wolfram (1993:12)
Multiple Negation	[mn]	We didn't do nothing[mn]	Labov (1972)
Transcription Conventions	Transcription Symbols	Example	Reference
Sentence-final falling intonation	ˌ	It was self-defense.	Schiffrin (1987, 2006) Tannen (1989)
Clause-final intonation ("more to come")	ˋ	And I tell him,	Schiffrin (1987, 2006) Tannen (1989)
Exclamatory intonation	!	And I got MA:DI,	Schiffrin (1987, 2006) Tannen (1989)
Final rise as in a yes/no question	?	In your own neighborhood they do?	Schiffrin (1987, 2006) Tannen (1989)
Short pause	...	they found out it wasn't.me and my friend[œc].	Schiffrin (1987, 2006) Tannen (1989)
Primary stress	ˈ	Cause one day I was fighting.	Schiffrin (1987, 2006) Tannen (1989)
Emphatic stress	CAPS	I said, "Because he SHOT me."	Schiffrin (1987, 2006) Tannen (1989)
Overlapping speech	[	So she's not preg[nant? [[a:] was-	Schiffrin (1987, 2006) Tannen (1989)
Elongated vowel sound	ː	And I got MA:DI,	Schiffrin (1987, 2006) Tannen (1989)
Dialogue, quoted words	" "	I said, "Because he SHOT me."	Schiffrin (1987, 2006) Tannen (1989)
At right of line indicates segment to be continued after another's turn; at left of line indicates continuation of prior segment after another's turn	=	[I was MAD[c#ø]=	Schiffrin (1987, 2006) Tannen (1989)