ACQUIRING STYLE: THE DEVELOPMENT OF DIALECT SHIFTING AMONG AFRICAN AMERICAN CHILDREN

by
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ABSTRACT

JENNIFER RENN: Acquiring Style: The Development of Dialect Shifting among African American Children
(Under the direction of J. Michael Terry and W. Wolfram)

The dearth of research on style shifting in African American English (AAE) speakers during the early lifespan has left a number of unanswered questions related to the acquisition of and the ability to shift speech styles. This dissertation focuses on several of these questions, including when stylistic shifting is initiated, whether there are differential patterns of stylistic usage among children and adolescents, and how stylistic facility relates to school achievement and literacy. It further considers the influence of social, demographic, and self-regard factors to determine how they affect style over time.

As a basis for addressing these issues, this research utilizes data from a unique, longitudinal study of AAE and literacy. The analysis compares formal and informal language data from a sample of African American speakers collected at three temporal data points (Grade 1/2 (N=73); Grade 6 (N=125); and Grade 8 (N=164)) to compare linguistic behavior throughout the elementary and middle school years. Language samples representing different situational contexts were analyzed in terms of 42 morphosyntactic and phonological AAE features to determine the overall difference in dialect use across time and situation.

Analyses suggest that while there is a range of individual variation in the early use of style shifting, speakers progressively engage in an overall expansion of style shifting over time. Further investigation of the influence of gender, mother’s education, social contacts, school demographics, and the child’s score on a racial centrality index identifies which factors have a
greater impact and how the relative influence of these variables evolves during childhood and adolescence. Tests of the interaction effects of these various social, personal, and demographic factors indicate that while certain factors are significantly related to style shifting, the influence of others is instead associated with speakers’ overall dialect use.
ACKNOWLEDGEMENTS

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<td>3SA</td>
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<td>RPB</td>
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<td>SAE</td>
<td>Standard American English</td>
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<td>UDQ</td>
<td>Uninverted direct question</td>
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<td>UNI</td>
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<td>UOD</td>
<td>Use of object form for demonstrative</td>
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<td>XCO</td>
<td>Lack of zero coda feature where it can be grammatically used</td>
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<tr>
<td>XIT</td>
<td>Existential <em>it/they</em></td>
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<td>XNA</td>
<td>Lack of nasal fronting feature where it can be gra</td>
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CHAPTER 1
INTRODUCTION

The study of African American English (AAE) has been ongoing for several decades, and it continues to grow in importance as one of the most widely studied varieties of English. A recent topic of particular interest has been AAE speakers’ use of style, with a focus on how speakers adjust their language in response to internal factors, like the speaker’s portrayal of a particular personal identity, and external factors, like the audience and situational context. This interest is evidenced in current theoretical discussions of what exactly constitutes style, as well as in practical applications, like work investigating the link between AAE use and academic achievement and research seeking to better understand the influence of sociocultural variables like gender and socioeconomic status on AAE use. Although many of the earliest studies of AAE use sought to understand large group patterns of language use, there has been a trend toward focusing on the language of much smaller groups and, in many cases, individual speakers. While work like that of Labov (1966) and Guy (1980) looked to correlate style use within groups with various social factors, descriptive studies of smaller groups and intensive case studies have since moved to the forefront of AAE research. Such work has provided important information about discourse and style use by individuals rather than populations and has also provided vital insight into how individual speakers use language and the reasons behind their linguistic choices. Coupland (2007, in press) and others (Schilling-Estes 2004; Moore and
Podesva 2009) argue that it is only through the detailed analysis of how people use linguistic features in unfolding discourse that the answers to such questions concerning why people style shift can be found, and therefore, style shifting should be studied through the qualitative analysis of case studies. Out of these studies have come important discussions about how much of linguistic variation is in reaction to the audience and the context and how much is a proactive attempt to portray a particular personal identity, yet these debates have largely ignored questions about the linguistic behavior of groups of speakers.

A recent resurgence of more quantitative approaches to style has marked a return to the ideas suggested by the earliest studies of style by signaling an interest in group behavior. As a complement to the more qualitative work done in individual case studies, quantitative tools like the Craig and Washington Dialect Density Measure (DDM) (Craig et. al., 1998; Craig & Washington, 2004) have been developed with the aim to quantify AAE use and thereby study groups of speakers. This particular tool has become a sort of “industry standard” in the field of speech, language, and hearing sciences and has been used to investigate a number of issues involving language use, like the relationship between AAE use and literacy skills. This large-scale measure is computed by totaling the number of several dozen AAE feature tokens, making it fairly comprehensive but also limiting its statistical applicability and drawing the criticism that it oversimplifies the notions of both dialect and style. Many suggest that the variability that exists in AAE, as in any language variety, makes a composite measure unable to effectively capture the subtle shifts that truly represent linguistic style. This, in addition to the perhaps impossible task of individuating any language variety, makes agreeing on which set of features are truly representative of AAE a challenging feat.
While both the DDM and individual case studies have provided vital insight into the understanding of linguistic style, many questions remain. As most studies on style shifting have been restricted to adult language, lingering questions include the age at which children show sensitivity to stylistic manipulation and the types of linguistic structures that are utilized in effecting such shifts. The dearth of study on style use in younger speakers also means that little is known about the trajectories of style acquisition in children and adolescents. Thus, there has been little research addressing whether style shifting ability changes over time. Given recent work suggesting that children who are able to shift between AAE and a more standard variety of English have better academic outcomes (e.g., Craig et. al., 2009), it is increasingly important to determine whether children who shift minimally at an early age can become competent shifters by adolescence. Additionally, further knowledge about the role of sociopsychological and demographic variables is needed to identify the factors that play the largest part in influencing speakers’ linguistic style so that researchers and educators can more effectively identify children that might struggle in the classroom. Once those factors are identified, however, we cannot assume that the social and psychological factors that affect shifting are constant throughout life. For example, research on linguistic socialization indicates an increasing sociolinguistic awareness that may affect language shifting, so that while parents may largely influence language during early childhood, peers may take on a larger role as speakers enter adolescence. Thus, as speakers develop socially, there may be different phases of development that affect the range of and the rationale for stylistic shifting over the lifespan.

To address these issues, this dissertation uses data from a longitudinal study of language development among African American children. Language data from formal and informal contexts at three temporal data points are utilized in evaluating stylistic shifting development. A
comparison of linguistic behavior in Grade 1 and 2, Grade 6, and Grade 8 are used to identify several patterns of stylistic development during the elementary and middle school years. Further exploratory analyses assess the potential contribution of five social variables: gender, mother’s education, the speaker’s social contacts, the demographics of the speaker’s school, and the speaker’s self-reported score of racial identity. Relationships between style shifting and overall AAE use are explored to determine which of these variables have an effect on speakers’ language use.

Finally, several limitations related to the study of style are brought to light and discussed through this work. Given the limitations of case studies and DDMs, this work suggests the use of a subset of six AAE features as an additional way of quantifying style use. This subset measure, while highly correlated with larger DDMs also increases the opportunity for various statistical analyses and reduces the problems that accompany the use of all-encompassing AAE measures (Renn, 2007; Renn & Terry, 2009). Also, a close examination of an appropriate subset features may result in a better understanding of what the speaker is doing linguistically when he or she shifts speech styles because it highlights the features that play the largest role in shifting behavior. This points to the additional consideration of using individual vernacular features as a means of recognizing shifts in style. Incorporating the use of subsets and individual feature analyses into the study of style may add important information the field of sociolinguistics by identifying different kinds of shifting behaviors in both youth and adults. This research seeks to explore some of the possibilities that are available by applying such quantitative measures of style.

The structure of this dissertation is as follows: Chapter 2 examines literature on major theories of style, as well sociolinguistic approaches to the style of style and shifting. In addition,
it discusses some of the issues that are inherent in the study of AAE and the various quantitative methods that have been utilized in the study of speech communities. Chapter 3 presents data gathered from speech samples as part of a study on “African American English and Literacy” and details the methodology used in transcribing and coding that speech. Chapter 4 explains the various techniques and results of statistical analyses aimed at uncovering longitudinal shifting patterns and the function of social variables in style shifting and overall AAE use. Finally, Chapter 5 further discusses the implications of the analytical outcomes and Chapter 6 proposes future research directions for this work.
CHAPTER 2
BACKGROUND

The goal of this research is to add to the current understanding of how African American English (AAE) speakers develop the ability to shift their speech styles in relation to situational context.\(^1\) This work shares the aims of many of the earliest studies of stylistic variation which themselves sought to identify and to some degree explain group rather than individual patterns of variation (Labov, 1966; Guy, 1980). Operating in this tradition, the present study is meant to complement more recent research on style which has, in contrast, focused individuals and case studies (e.g. Rickford, etc.).

This section will review and discuss much of the research that has contributed to the study of style and style shift. In doing so, it will also note many of the issues that researchers have faced in investigating these linguistic behaviors. The first section (§2.1) provides a synopsis of three of the most influential theories on linguistic style use. The following section (§2.2) describes some of the common methodologies utilized by sociolinguists in their investigations of speakers’ use of style. The next section (§2.3) recounts some of the major issues that researchers must address in the study of a nonstandard language variety, like AAE. Next, many of the quantitative

\(^1\) I gratefully acknowledge funding support from National Science Foundation grants BCS-0544744 and BCS-0843865, and Maternal and Child Health Bureau grants MCJ-370599, MCJ-379154 & MCJ-370649, R40MC-00343.
methods used in the assessment of language use are discussed (§2.4). The final section summarizes key points (§2.5).

2.1 Major Theories of Style

Against a backdrop of studies on dialectal difference and its meaning, many scholars have worked to develop a better understanding of intra-speaker stylistic variation (i.e., speakers’ conscious and unconscious use of linguistic structures to situate themselves with respect to others and to express identity) and its role in language variation. This section will focus on three major theories of self-stylization: The “Attention to Speech” model (Labov, 1972) in §2.1.1, the “Audience Design” model (Bell, 1984) in §2.1.2, and the “Speaker Design” approach (e.g., Eckert, 2000; Schilling-Estes, 1998; Coupland, 2007) in §2.1.3. While these approaches offer useful insight into speakers’ use of style, they are not meant as models of style itself, but of the underlying conditions and attitudes that produce style shift. For example, the works of Bell (1984, 2001) and Preston (1991) looked at the influence of social differences on language use, finding that the range of linguistic variation in style within a given social group was smaller than the scope of their social differences. The remainder of this section will briefly describe each of these models of style.

2.1.1 The Attention to Speech Model

The “Attention to Speech” model initially proposed by Labov (1966) marked the first major attempt to account of speakers’ ability to modify their speech styles. Originally intended to identify conditions under which speakers produce their most vernacular style, this model contrasts speakers’ use of ‘casual’ and ‘careful’ speech. In his model, Labov defines casual
speech as “the everyday speech used in informal situations where no attention is directed to language” (92), while careful speech is more self-conscious, often altered as a result of the presence of an interviewer or for some other reason (100). These two speech types are revealed by paralinguistic cues such as differences in tempo, pitch, volume, and breathing as well as by the use of laughter in conversation. Labov’s initial investigations of style were conducted using sociolinguistic interviews, which attempted to specifically elicit these two speech types by effecting particular speech conditions during the interview. A key finding of that work was that in a more formal situation like an interview, speakers use fewer vernacular features, presumably because they are paying closer attention to their speech. Labov’s original intent notwithstanding, the Attention to Speech model has served as the basis for a great deal of work that focuses on the process of style shifting itself. The relative formality of circumstances of speech is often viewed as a primary trigger for style shifting.

2.1.2 The Audience Design Model

A different explanation of style shifting behavior was proposed by Bell (1984). Building upon Street and Giles’ (1982) notion of a speech accommodation model, he suggested that speakers adjust their speech to win the approval of other members of the conversation. Unlike Labov’s model the “Audience Design” approach focuses on others, both participants and non-participants (e.g., auditors or eavesdroppers) in the conversation, as the principal catalyst of style shifting behavior. In this view, both the speaker and the interlocutor play an integral role in contributing to style, though the initial formulation was grounded in speakers’ accommodation of their differential audiences.
More recent work has continued to build on the notion of speech conditions (which include the participants involved) as the main impetus for style shifting. Finegan and Biber (1994) found “systematic patterns of register variation and social dialect variation,” which were related to the linguistic environment, speaker demographics and characteristics, and the situation of use (315). Ervin-Tripp (2001) added to their work, indicating that particular circumstances, such as speech versus writing, planned versus unplanned speech, and face-to-face conversation versus a speech presented to a group of people, trigger style shifts among all monolinguals. For example, style shift has been noted to occur in response to a speaker’s conversational partner. On one account, speakers tend be less self-conscious and therefore use more “regular” or vernacular speech with addressees that they consider peers or are familiar to them. Reminiscent of Labov’s Attention to Speech model and his distinction between formal and informal context, Rickford and McNair-Knox (1994) argue that these significant shifts are not due to accommodation alone because they reflect the social characteristics of addressees rather than their linguistic behavior. In addition to such influences, discussion topic may also impact speech style. Using an interview situation to hold the speech conditions constant, studies by Labov (2001) looked at how the interviewer’s manipulation of topic resulted in changes in the interviewees’ vernacular use. In response to more typical interview questions about the interviewee’s background, subjects used more careful speech; when the interviewer directed the conversation toward topics that were of “maximal interest and emotional involvement” to the subject, a more casual speech style was used.

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2 See Milroy and Gordon (2003) for a discussion of the various attempts researchers have made to define “vernacular” in the literature.
2.1.3 The Speaker Design Model

A still more recent attempt at explaining style is the “Speaker Design” approach, which successfully addresses factors not fully brought to the fore by the Attention to Speech and Audience Design scenarios. While researchers like Bell (1997), using the notion of initiative style shift, have long recognized that speakers can and do shift styles to alter existing situations through the crafting of their own identities, proponents of the Speaker Design model (e.g., Coupland, 2007; Schilling-Estes, 2004) believe that the speaker’s identity and relationships with interlocutors are the prime motivators of shifts in speech style. Unlike the other theories, the Speaker Design approach focuses on the speakers themselves rather than outside influences as the reason for linguistic change. This model hypothesizes that in choosing to use or exclude certain linguistic features, speakers aim to project group membership and personal identity. Thus, a speaker’s style is the consequence of his or her own choices in seeking to promote a particular persona. For example, Coupland’s (1984) case study of a Welsh travel assistant found that she closely matched her clients’ use of several phonological variables, in spite of the fact that her interlocutors varied widely in their degree of standardness. Rather than attributing this merely to accommodation, he argues that she is asserting an identity, stating:

Sue is not attempting to reproduce the actual levels of standardness for particular variables that she detects in the speech of her interlocutors; rather she is attempting to convey via her pronunciation and presumably other behaviors, verbal and nonverbal, a persona which is similar to that conveyed by her interlocutors (1984: 65).

Similarly, Schilling-Estes’ (2004) North Carolina study, compares how an African American and Lumbee Indian vary their use of certain linguistic markers in response to the ethnic identity they are putting forth. Both the Lumbee speaker and the African American speaker she analyzed used features that highlighted their ethnicity when discussing topics like race relations, but
employed such features considerably less frequently when discussing more impersonal topics. Thus, each speaker used language as a way of reflecting his personal identity.

Each of these theories illustrates a major tack that has been taken in the study of style shift. Although each contributes important ideas about style shift that are neglected by its competitors, no one theory seems to completely capture the full richness of the phenomenon. Rather than indicating a weakness in any of the core ideas these theories are built on, this perhaps suggests that no single theory is capable of capturing the complex nature of style and style shift. It is certainly clear that the context, the audience, and the speaker’s individual, interpersonal, and group identities all have an impact on stylistic choices. It is equally clear that by noting when and how speakers change their speech, linguists have been able to better understand style, despite the fact that individual styles are elusive in terms of a unitary explanation.

2.2 Sociolinguistic Approaches to the Study of Linguistic Variation and Style

Most of the recent studies of style have been conducted using a qualitative approach at the level of the individual. While quantitative work on individual speaker variation has continued in recent years, there were at least two main reasons for the trend away from the focus on understanding group behavior promoted by the earliest sociolinguists. First, from a certain perspective, quantitative methods are admittedly limited in what they can explain. For instance, they have little to say in current debates about style, like those discussed in §2.1. Coupland (2007) and others (Schilling-Estes, 2004; Moore and Podesva, 2009) argue that it is only through the detailed analysis of how people use linguistic features that researchers can truly understand the reasons why speakers shift styles. Therefore, they maintain that style shifting should be studied through the analysis of case studies or small numbers of speakers in relatively
uncontrolled, natural situations rather than under experimental conditions. Typically, individual speakers of AAE, for example, are monitored for possible changes among a large number of features (e.g., Rickford & McNair-Knox, 1994; Weldon, 2004; Kendall & Wolfram, 2009), despite great interest in AAE speakers as a group.

A second reason that current methods of studying style shift have been largely limited to studying individuals rather than entire groups stems from the difficulty involved in individuating dialects such as AAE. The basic problem is that dialects are difficult to define precisely, so it is problematic to select which linguistic features should be observed to identify dialectal shifts. While this is a problem for the study of any dialect, the specific issues that emerge in the characterization of AAE are discussed in detail in §2.3. Rather than focus on defining styles, theories like those discussed previously have instead focused on identifying style shift, noting changes in linguistic features that speakers use in response to various social conditions that are thought to determine style. While this focus on style shift avoids directly defining styles, it does not evade the issue completely. The question of which linguistic features to look to as indicators of a shift remains a practical research matter. Initial notions of what defines a style (or dialect or language) play an important role in guiding research on intra-speaker language variation though it may not be explicitly recognized. For example, the study of style shift among speakers of AAE demands some sense of what constitutes AAE and how the selected linguistic variations for measuring variation are representative of this variety.

As a result of these difficulties, many studies of style shifting among adult AAE users have been conducted in such a manner, using small samples and limited variables in a case study format. While looking at a small number of speakers makes it difficult to make claims that can be generalized to larger populations, analyses such as these have proven very fruitful. For
example, a number of AAE studies have exposed an interesting phenomenon: certain AAE features are much more sensitive to situational differences than other linguistic variables. The features that demonstrate the greatest sensitivity to style are those that are more socially marked (Labov, 2001; Rickford & McNair-Knox, 1994). Thus, those features that are characterized as stereotypical vernacular features are more prone to shift depending on situational context. For example, the features “invariant be” (e.g., She be talking all the time) and “copula absence” (e.g., She nice for She’s nice) demonstrate greater amounts of shift than other AAE variables (Rickford & McNair-Knox, 1994); these are both particularly salient features of AAE. In contrast, prevocalic cluster reduction (e.g., bes’ apple for best apple) is not as closely associated with AAE in the minds of most English speakers and is thus less discernable as a vernacular feature than invariant be and copula absence (Labov, 2001). This patterning shows that shifts from AAE to more standard varieties of English are not merely dependent upon the situational context, but on the saliency and perception of individual linguistic features as well.

Recently, however, there has been a movement toward applying quantitative methods to the study of style. A few such studies have also contributed information about shifting styles in the language of younger speakers. Work by Craig et. al. (2009) compared the language of elementary school children in oral and written contexts to assess each child’s amount of shifting. They determined that the amount of AAE used was inversely related to the child’s score on a standardized reading achievement exam. Thus, they concluded that “AAE-speaking students who learn to use SAE in literacy tasks will outperform their peers who do not make this linguistic adaptation” (839). Work by Renn and Terry (2009) utilized multiple quantitative measures to assess contextual style shift among sixth graders. They found that speakers not only used more AAE overall in informal contexts, but they also used a wider variety of vernacular
features compared to situations where more standard language might be considered socially appropriate (e.g., speaking to a group of adults). In both of these works, the researchers had to contend with the issue of characterizing AAE as a dialect, a challenge that will be discussed further in the next section.

2.3 Issues in Characterizing AAE

In many respects, the steadily increasing interest in AAE has helped fuel the growth of sociolinguistics. One reason for this interest is a growing awareness of the role that vernacular plays in the African American community. Not only is AAE an important indicator of identity and group membership, but it also figures prominently in discussions of social and educational issues such as employment and academic achievement. This has become even more important in light of recent research showing that high AAE use is correlated with low academic achievement (e.g., Craig, Connor, & Washington, 2003; Craig & Washington, 2004); further, it has been suggested that speakers’ use of AAE may play a role in the academic achievement gap between African American students and their Caucasian peers. The relative effect of social demographic factors versus structural linguistic factors has not been determined. What is clear, however, is that as researchers attempt to better understand these and other issues regarding AAE, current methods of studying populations of speakers must continue to be refined and expanded. To further the investigation of the many issues surrounding AAE, a number of more fundamental matters first must be addressed, including the best way to characterize AAE and, given a characterization, how to accurately and reliably measure a speaker’s level of dialect use.

Despite the countless descriptions of the linguistic traits associated with African American speech, there has been little discussion of the precise linguistic parameters that define African
American English (AAE) as a variety. Operationally, it appears much more feasible to simply describe features that are associated with African American speakers and to assume that these features are integral to the definition of a largely unitary variety. The question of defining the essential and/or exclusive sets of AAE traits is, however, a much more elusive pursuit, both descriptively and theoretically. This definitional issue has haunted AAE for as long as linguists have attempted to describe it (e.g., Strang, 1970; Fasold, 2004). However, the dilemma in determining the parameters of a language variety is hardly unique to AAE; in fact, it is relatively common to confront definitional ambiguity and vagueness in delimiting languages and varieties.

It is well documented that speech patterns in African American communities tend to differ from those of European American communities. Early descriptive work by Labov et al. (1968) and Fasold and Wolfram (1970) noted that despite regional differences these patterns tend to share enough of a resemblance both in terms of linguistic structure and social use to be included under the rubric of African American English in the sociolinguistic literature. More recent work by Rickford (1999) provides a list of phonological, morphological, and syntactic features that are common to AAE, and an even more detailed account of the attributes that are typical to AAE speakers is provided by Green (2002). Green gives in-depth specifications of lexical, semantic, syntactic, morphosyntactic, and phonological properties that are characteristic of AAE. Despite the work of these and other linguists, like any other language or dialect, AAE resists strict definition. There is a great deal of truth in the words of Strang (1970: 227), who stated that “dialects are artifacts, fictitious entities invented by speakers, in which, for limited purposes, linguists suspend disbelief.” More recent work by Spears (2009) adds an additional level of

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2 Much of this early work used labels such as “Nonstandard Negro English” and later “Black English Vernacular,” a term coined by William Labov to refer to the variety we are calling “African American English” here. For further discussion and a more exhaustive list of the names that have been given to this variety, see Green (2002) pp5-8.
complexity, arguing that the notion of a singular AAE is overly simplistic and instead suggests that there are in fact at least two specific versions of AAE: African American Vernacular English (AAVE) and African American Standard English (AASE). This school of thought maintains that AAVE is a more informal style of AAE, while AASE is a more formal version.

Contributing to the difficulties in distinguishing and analyzing AAE as its own entity is the fact that the majority of an AAE speaker’s speech overlaps greatly with that of speakers of Standard American English (SAE) and other varieties of English. In Craig and Washington’s (2004) study of school-aged children, for instance, the child with the most vernacular speech style used only one AAE feature per 2.3 words. Thus, more than half of that child’s speech consisted of forms that are shared with other English varieties. In their 1981 study, Seymour and Seymour report noticeable phonological contrasts in these two dialect groups. They note, however, that many differences could be attributed to incomplete language development rather than dialect differences, since “unique error types were not exclusively characteristic of either group” (274). Though once again there were obvious contrasts showing that for various purposes AAE and SAE may be thought of as discrete varieties of English, this study once again highlights the considerable overlap between them.

Additionally, many distinguishing features of AAE are characteristic of other regionalized or socially stratified varieties of English. Comparisons with European Americans who utilize a regional southern dialect are of particular interest, as the degree of similarity between “black speech” and “white speech” is greatest in the southern United States. For example, double modals such as might could and the use of an auxiliary like the preverbal done construction in

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3 To some extent these findings are also a product of definitional issues. The Craig and Washington inventory is largely grammatical, ignoring vowels and other phonological traits in favor of morphosyntactic features, which affects the outcome of these investigations.
sentences such as *John done gone to the store* are common to both southern vernacular and AAE (Wolfram & Schilling-Estes, 2006). Most of these “shared” features, however, are found more frequently in AAE or occur in a wider range of linguistic environments in the speech of African Americans (Rickford, 1999).

Another problem is that although in practice AAE is often treated as a unitary dialect, it is well known that, like any other language or dialect, it varies depending on region, age, gender, and individual speaker characteristics. While it is possible that there is a core set of features that distinguishes AAE from other language varieties, AAE speakers can often be identified as hailing from certain areas of the United States based on the influence of region. For example, Wolfram and Schilling-Estes (2006) note the existence of regional AAE varieties such as Northern metropolitan, Southern rural, South Atlantic coastal, and Gulf region.

Other factors like gender have been found to affect variability in AAE use. Most investigations of AAE, such as Wolfram (1969), suggest that men use higher levels of AAE features than women. His study of third person singular –s absence in Detroit, for example, indicated that working class men tended to use the vernacular form significantly more frequently than women. There is, however, a great deal of individual variation, as shown in Rickford (1992). In this study, two women in East Palo Alto showed higher incidences of this feature than any of their male counterparts, demonstrating the unpredictability of language use.

Still other studies show the importance of membership in social networks and communities of practice in a speaker’s level of AAE use. Mallinson and Childs (2007) examined a rural Appalachian community where African American women were divided into two social groups, the “porch sitters” and the “church ladies.” Each group used a particular speech style that was indicative of their social ties, their group and individual identities, and their orientation toward
their local community. The language of the first group, the “porch sitters,” contained a large proportion of AAE features, while the “church ladies” utilized more SAE and regional Appalachian characteristics in their speech. These differences demonstrate the importance of social associations in the amount and type of vernacular employed by a speaker. Such linguistic behavior may also provide support for Spears’ (2009) notion that numerous subvarieties exist within a given dialect, if one contends that such variation constitutes the use of different registers within AAE.

Thus, if there is indeed a homogeneous core in AAE, it obviously is highly nuanced and exists more as a convenient, politically-based fiction rather than as a rigorous linguistic paradigm. In fact, in line with Lippi-Green (1997), Wolfram (2007) observes that the notion that a unitary, homogenous variety of AAE exists is a bit of sociolinguistic folklore. He argues it is a kind of strategic essentialism in the sense of Spivak (1988); in other words, the idea of a singular AAE variety is in fact a temporary foregoing of variation in the speech patterns of African Americans to highlight their commonality. This in turn allows for a more effective response to popular ideologies that have interpreted nonstandard language varieties associated with socially subordinate groups as linguistic deficient rather than possessing neutral linguistic differences (Lippi-Green, 1997).

2.4 Quantifying the Use of a Language Variety

Though the application of quantitative analysis techniques to the study of language variation and style has been used in research, it has largely been restricted to a focus on individual variables rather than composite metrics of dialect use. Such approaches, however, ignore questions that are not only of theoretical interest, but also affect practical matters. In order to
capture generalizations about AAE speakers as a group and not simply as individuals, some sort of composite measure is needed as way of identifying that group. Applying more comprehensive measures allows for inquiry into issues like the effect of language on the black-white academic achievement gap, which has become a cause for concern for many sociologists and educators.

To investigate this and other possible ramifications of style shift at the group or population level, one must be able to examine style shift at the level of social groups, communities of practice, and broader based communities. A brief overview of some of the more popular quantitative methods used during recent decades is provided in §2.4.1. The subsequent section, §2.4.2, describes the Dialect Density Measure (DDM) developed by Craig and Washington (2004). This dissertation draws heavily on their work, and notes the important contributions as well as the limitations associated with this measure. Finally, §2.4.3 details the justification for and applications of a measure that I developed through my earlier work, consisting of a subset of six characteristic features of AAE.

2.4.1 Early Composite Methods of Dialect Study

Historically, there have been three primary methods applied to the assessment of composite dialect use (Oetting & McDonald, 2002). The first is the use of listener judgments to assess dialect. This method provides listeners, either expert sociolinguistic judges or naïve language judges from representative populations of speakers, with speech samples and asks them to assess speaker characteristics such as age, ethnicity, region, and community. Despite minimal training and, often, very short speech samples, listeners’ responses tend to be quite reliable using this technique. A second quantitative approach is a type-based method, where researchers look for language patterns that they consider characteristic of a particular language variety; if a given
speaker utilizes a predetermined number of the selected patterns, he or she is classified as a speaker of that dialect. For example, Smith et al. (2001) classified subjects as AAE speakers “if they produced at least five nonmainstream AAE patterns.” Finally, token-based methods have been used to attain information about a speaker’s dialect type and degree of use. These approaches involve counting the number of utterances or words that contain a nonstandard feature and dividing them by the total number of utterances or words in the speech sample; thus, researchers are able to look at dialect as a continuum ranging from light to heavy use, rather than merely specifying a threshold value that categorizes speakers as dialect using or not.

2.4.2 The Dialect Density Measure

One of the more prevalent token-based methods used in the field of Speech-Language Pathology is the Dialect Density Measure (DDM) (Craig et al., 1998; Craig & Washington, 2004; Oetting, 2003). This instrument was developed specifically to gauge a speaker’s composite use of AAE. The Craig and Washington (2004, 2006) DDM uses a predetermined list of features based on the descriptive literature of AAE (e.g. Fasold & Wolfram, 1970; Labov, 1972; Rickford, 1999; Green, 2002), calculates the total number of features that occur in a speech sample, and divides that total by the number of utterances in the sample. In this way it accounts for the fact that an utterance may contain more than one AAE feature. Because young children’s utterances are much shorter than those of older children and adults, they also compute the total number of features divided by the total number of words.

A number of patterns in the vernacular use of African Americans have been identified using Craig and Washington’s DDM. In Craig and Washington’s (2004) study of school-aged children, 

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5 Utterances were determined based on the criteria set in Craig and Washington (2006) and Loban (1976), in which they were defined as “an independent clause plus its modifiers.”
there were two very clear changes in vernacular use based upon age. First, there was a sharp
decline in the use of morphosyntactic features among children between preschool and first grade.
Interestingly, though the overall use of AAE-specific morphosyntactic features decreased, the
children used a larger variety of features as they aged. The second shift was seen between third
and fourth grade. The use of total AAE features dropped at this point, largely because of a
reduction in phonological features (Craig, Thompson, et.al., 2003). Comparisons of different
community types also demonstrated significant differences. Studies found that African
Americans in a “mid-size central city” utilized AAE features half as often as those from an
“urban-fringe community”6 (Thompson et al., 2004; Craig & Washington, 2004). Finally,
differences in AAE use due to situational context have been revealed using a DDM. In studies of
younger children, it was determined that AAE features were used much more frequently in
situations where the children spontaneously described pictures versus when they either read SAE
text aloud or wrote a story (Thompson et al., 2004; Craig & Washington, 2004). These examples
illustrate the assorted ways that the DDM has been used to quantify AAE production.

The work of Van Hofwegen and Wolfram (in press) used a measure similar to the Craig and
Washington DDM to add to the literature on the development of style. While using a small
sample from the same dataset from which this dissertation draws, their case studies of AAE use
during childhood and adolescence illustrate several trajectories of AAE use. They assessed the
dialect use of 8 speakers at six time points: 48 months, Grade 1, Grade 4, Grade 6, Grade 8 and
Grade 10.7 In their analysis they identified “at least four different patterns of vernacular

4 The “mid-size central city” was a college town in Michigan (Ann Arbor) where the percentage of African
American students in the public schools was 16%; the “urban-fringe community” was in Detroit, Michigan, and
86% of the student body was African American (Standard & Poor’s School Evaluation Services).
7 The published version of that paper will use 32 different speakers, and it shows 3 primary trajectories: curvilinear,
roller coaster, and progressive.
optimization and change” (20). These patterns include one of relatively stable AAE use; one in which the speaker’s use of AAE declines during adolescence; a curvilinear pattern where the speaker’s use of AAE decreases during elementary school and subsequently intensifies during the middle school years; and a “roller coaster” pattern in which the speaker’s use of vernacular ebbs and flows over time (20). Using a case study methodology, this work illustrates the various paths AAE speakers may take while they progress through the school years.

While measures like these clearly provide useful insight into the study of language use, they have numerous restrictions that pose a challenge to their definitional and operational efficacy. First, the justification for including or excluding structures from a comprehensive measure is not always straightforward and consensual. As discussed in §2.3, there is much debate and little consensus about which features best characterize AAE and if all features are equally weighted in the definition of AAE, to say nothing of the overlap between many features of AAE and other vernacular varieties. Thus, it is not clear that the Craig and Washington DDM nor any similar measure could truly be considered “all-inclusive” or efficiently predictive. Additionally, the kinds of statistical analyses that can be undertaken with a measure containing dozens of features are extremely limited. Performing an exploratory factor analysis on a large number of features can very easily require such large sample sizes as to make a linguistic study impractical. Although there is much debate in the field of statistics regarding the minimal sample size required for an exploratory factor analysis, MacCallum et al. (2001) suggest that when the amount of variance that is explained by common factors is low, a subjects-to-variables ratio as large as 20:1 might be necessary for a stable solution. Thus, a study that uses only 30 linguistic variables, would call for a sample size of 600 participants, a number that would be extremely difficult to recruit for any kind of in-depth or longitudinal language study.
Finally, measures that conflate an assortment of features calculate a unitary score that pays attention only to the speaker’s overall vernacular use and ignores the inherent variability that is present in any language variety. While this methodology might effectively indicate that a shift has taken place, combining all the vernacular features glosses over the disproportionately larger role that certain features may have during style shift. In the process, a great deal of information about language and style use, as well as how particular features are used strategically in interaction, is missed with such measures. Additionally, critics of the DDM argue that large measures oversimplify the notion of shifting by assuming that only one kind of shift exists. Rather, it may be that speakers engage in a variety of shifting behaviors, like shifting between registers (e.g., AAVE to AASE) as well as between dialects (e.g., AAE to SAE). Analyzing the use of small numbers or individual features may help to tease apart these types of distinctions. Thus, while very useful, there is a clear need for other measures of language use to complement the information obtained through composite measures.

2.4.3 Subset Feature Measure

One way to combat the difficulties that accompany such large-scale quantitative measures is to reduce the inventory to structural features to a subset rather than the entire inventory of features. In previous work (Renn, 2007; Renn & Terry, 2009), I evaluated the efficacy of using a subset of features as a measure of dialect use as a possible way to avoid some of the difficulties of trying to define AAE as a language variety while operationally increasing the statistical possibilities for studying style. By focusing on a handful of features culled from a larger set, there is less need to argue over how AAE should be characterized as a dialect. Instead of dealing with this problematic objective, one may focus only on the features that are the most responsive
to context, gender, and other factors. Also, a measure utilizing a smaller number of features greatly increases one’s analytical manipulative options. The reduced number of variables allows for the application of factor analysis and other types of structural equation modeling techniques, while measures that include dozens of features are often limited to rudimentary analysis methodologies such as t-tests and Chi Square tests, thereby limiting the information that can be attained. Additionally, this subset method can be used to highlight those particular features that shift under particular conditions. If one is interested in which features shift as a result of the formality of a given situation, the researcher might identify several features that potentially play a prominent role in this linguistic behavior by noting those that seem to exhibit the greatest variation in usage across contexts.

Importantly, this technique builds on the information provided by large-scale instruments like the DDM. In selecting the most influential features, the DDM was used to suggest which features were worth considering, and its feature list was then subsequently pared down to determine whether the use of a subset to quantitatively analyze language is a valid approach. A close examination of what such subset features have in common may result in a better understanding of what the speaker is doing linguistically when she or he engages in style shifting. Additionally, large-scale measures like the DDM are important as a way to test the validity of a selected subset. A high positive correlation ($r=0.94$) between a large-scale measure and a subset of features, as found in Renn and Terry’s (2009) work, lend credence to the use of the selected features as a measure of style shift.
2.5 Summary

As this section has demonstrated, a great deal of work has been done on general style shifting behavior and on the characteristics of AAE. Studies have shown that several situational variables can trigger changes in the amount of vernacular used by all monolingual speakers; research has also shown that these behaviors were demonstrated by AAE speakers in particular and that certain vernacular features are more variable given changes in situational context.

AAE has been studied in great detail, as it is one of the most significant varieties in American English. Research has attempted to isolate those features that are characteristic of AAE, though the existence of different varieties of AAE and its overlap with SAE and other types of English can complicate this process. While both qualitative case studies and large-scale DDMs like the one developed by Craig and Washington (2004, 2006) have provided invaluable insight into speakers’ use of style, both of these approaches have limitations. Despite the advances in the study of AAE and style in general, there is little understanding of how and when young speakers acquire the ability to shift styles. This dissertation seeks to complement existing research to provide more insight into the linguistic behavior of youth who are learning the social ramifications of speech style.
CHAPTER 3

METHOD

In this chapter, I will first describe the goals, recruitment methods, and subject sample of the longitudinal study from which this dissertation takes its data (§3.1). I will then focus on the procedures for the Grades 1 and 2, Grade 6, and Grade 8 visits, as these were the three temporal data points used in this dissertation (§3.2). Next, I will describe the steps that were taken in developing an inventory of AAE features that were used to code the data (§3.3) as well as the protocol used in the transcription and coding of the data (§3.4). A short summary of the data is presented in the final section (§3.5).

3.1 Longitudinal Study: African American English and Its Relation to Literacy Skills in Early Adolescence

The data used in this dissertation were collected as part of a longitudinal study conducted at the Frank Porter Graham Child Development Center at the University of North Carolina at Chapel Hill (FPG). This project, initiated in 1990, examines the production and development of AAE use in African American children in central North Carolina from birth through high school. The majority of the funding for this project has been provided by the Maternal and Child Health Bureau (MCJ-370599, MCJ-379154 & MCJ-370649, R40MC-00343), and the project has recently been funded by the National Science Foundation (NSF BCS-0544744). Home environment characteristics included measures of language stimulation, responsivity, cognitive stimulation, and emotional support; School characteristics were level of poverty within the school district and racial composition of the school, as obtained from the National Center for Education Statistics (Snyder & Hoffman, 2003).
recruitment (§3.1.2), the methodology utilized throughout the study (§3.1.3), and a description of the specific social variables used for analysis in this dissertation.

3.1.1 Goals and Hypotheses of the Longitudinal Study

The longitudinal study has three main overall goals: a) to describe the use of AAE among young speakers; b) to determine whether a link exists between vernacular use and literary success in school; and c) to determine the extent to which the formality of a given situation affects AAE usage. The investigators of the original project hoped to gain a better understanding of variation in AAE and determine whether young AAE speakers that are more competent at shifting between standard and non-standard speech varieties perform better academically than those who do not shift. This information will subsequently be used to examine the issue of the academic achievement gap that exists between African American students and their Caucasian peers.

In formulating the study, the investigators specified several hypotheses. First, they speculated that children whose peers and/or mothers utilized more AAE features in their speech would exhibit a higher incidence of AAE than those with less exposure to AAE. They also suggested that all AAE speakers would use fewer AAE features in more formal situations and with unfamiliar partners. Additionally, they proposed that those middle school students who used less AAE in formal situations possess greater mastery of SAE and would therefore demonstrate more advanced reading abilities. A related hypothesis was that youth who generally use AAE less often over time would have more success in the acquisition of reading skills. Thus, African American students who are more proficient in SAE and/or at shifting between AAE and SAE would experience more academic success. Finally, they asserted that the relationship between vernacular use and reading ability in middle school would be partly
explained by demographic characteristics like gender and socioeconomic status, “youth characteristics” such as metalinguistic awareness, and attitudes toward school.

This dissertation considers one dimension of these broad-based hypotheses by explicitly addressing the research question about differences in the amount of vernacular used by adolescents in formal versus informal situations. It further explores the development of linguistic behavior through childhood and adolescence, specifically examining the ability to shift between standard and non-standard varieties of English. In attending to these questions, this work also seeks to validate a previously derived (Renn, 2007) quantitative measure of style shift that would not only act as an efficient way of studying language variation, but also in predicting a student’s likelihood of academic success. Thus, this work strives to both directly and indirectly take up the more expansive range of issues in the larger project.

### 3.1.2 Study Participants

The study originally recruited a “longitudinal sample” of 88 African American infants from low- and middle-income families during a 3-year period. The mean age of the subjects was 8.1 months, with an age range of 6 to 12 months at the time of recruitment. Criteria for recruitment were: a) subjects must be African American; b) subjects must have no genetic disorder or other serious complications at birth; c) subjects must have a birth weight greater than 2,500 grams; and d) subjects must attend one of nine local childcare centers. Upon entry into the study, 71% of participants came from families living below the poverty level according to federally defined guidelines.

In Grade 6, each of the study subjects from the longitudinal sample recruited a friend to participate in the study. These new subjects were the same sex, approximately the same age, and
most attended the same middle school as their counterparts. The primary purposes in recruiting these new subjects were to increase the sample size and to provide an informal peer situation so that the study could assess contextual shifting in speech styles. Three of the subjects selected a European American friend, and eight declined to have a friend participate. In the latter case, the investigators recruited additional youths of the same age and sex as the longitudinal subjects in question; this was done in order to enlist a total of 70 additional participants. This “newly recruited sample” will be followed through the completion of the study at the end of high school.

3.1.3 Longitudinal Methods

The investigators have documented the subjects’ language and literacy skills in family and school environments from infancy through the high school. (Note: As of Spring 2010, data were collected through 11th grade for all but 6 of the subjects and 12th grade for half the sample). The subjects were administered standardized and nonstandardized language exams annually. During this same time period, annual measurements of subjects’ home and school or childcare environments were taken. Standardized tests assessing early literacy skills were given from age 4 through fifth grade.

Beginning in middle school, the study added several other measures to study the youth, their parents, and their teachers. Additionally, several language samples were added to the protocol to assess formal and informal language use through peer and adult tester interactions. For example, in one visit subjects engaged in tasks with two different adult examiners. The formal task was a mock job interview, and the informal task was a discussion of music. Family and school measures at this age included family interviews, teacher questionnaires, and descriptions of home

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9 Home environment characteristics included measures of language stimulation, responsivity, cognitive stimulation, and emotional support; School characteristics were level of poverty within the school district and racial composition of the school, as obtained from the National Center for Education Statistics (Snyder & Hoffman, 2003).
environment and school characteristics. Other measures of literacy and metalinguistic awareness were assessed by means of standardized tests and more carefully directed interactions.

3.1.4 Social Variables

As discussed in the previous section, dozens of measures assessing the school and home environments, peer characteristics, and subject characteristics were collected throughout the initial longitudinal study. In Chapter 4, analyses investigating the influence of several of these measures on linguistic behavior will be described in detail. These variables are the speaker’s gender; the mother’s education in years as a proxy for socioeconomic status; the speaker’s African American social contacts, i.e., close friends, neighbors, acquaintances, and visitors; the demographic makeup of the speaker’s school; and the speaker’s self-reported racial centrality score. While the first two variables (gender and mother’s education in years) are self-explanatory, the other three variables require further description.

The number of African American contacts was determined using a self-reported questionnaire (Rowley et. al., 1998; Sellers et. al., 1997). Children indicated the number of close friends, neighbors, acquaintances, and visitors that were African American. A response of “zero” was coded as a 1; a response of “1-2” coded as a 2; “3-4” was coded as 3; and a response of “5 or more” was coded as 4 for each contact category.

The demographic makeup of the school was taken at one time point to represent the elementary school value (Grade 3) and at both middle school time points (Grade 6 and 8). The percentage of African American students and the percentage of Caucasian students were collected at each time point. To get a measure of the relative influence of each of these groups, I looked at the proportion of African American peers to Caucasians peers for each subject.
The final social variable is racial centrality, or a measure of how important race is as component of the respondent’s identity (Sellers et. al., 1997). This is a self-reported score, consisting of a composite score of 5 items: *I live in an area with other blacks, I like my friends to be black, I like to read books about black people, I feel close to other blacks, I am similar to other blacks*. The subjects responded to these statements using a typical Likert scale, where 1 stands for “strongly disagree” and 5 stands for “strongly agree”. Thus, subjects with lower scores indicate that they consider race to be a less important part of their identity. It is important to note that since these data were collected, there has been a great deal of interest in the notion of racial centrality as a predictor of psychological and physical behaviors; thus, the literature in this field has grown substantially over the last 20 years. While this project utilized a segment of Sellers et. al.’s (1997) Multidimensional Inventory of Black Identity to measure the degree to which speakers defined themselves with regard to race, looking at racial centrality in a quantitative way is a complex task. For example, researchers like Helms (1990) and Cross (1991) have proposed alternate methods of identifying an individual’s degree of connectedness with his or her ethnic group.

3.2 Three Temporal Data Points: Grades 1 & 2, Grade 6, and Grade 8

This section presents an in-depth description of the three temporal data points that were used in this dissertation. At each time point, data were collected from both a formal and an informal language sample. The criteria for formality of the contexts were based on creating environments that would contrast speakers’ use of formal and informal speech styles. Under this model casual speech is defined as natural speech, while careful speech is characterized as speech that is altered as a result of the presence of an observer. These two speech types are distinguished by such

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10 See Johnson (2002) for a review of many theories of racial centrality.
qualities as differences in tempo, pitch, volume, and breathing as well as by the use of laughter in conversation.

The first samples used in this dissertation were collected at the beginning of elementary school, in Grades 1 and 2 (§3.2.1); the second time point was at the start of middle school, in Grade 6 (§3.2.2); and the final language samples were taken at the completion of middle school, in Grade 8 (§3.2.3).

3.2.1 Grades 1 and 2

The data for the first temporal point were taken from language samples collected when the children were in Grades 1 and 2. Data from two different grades were used because there were no contrastive formal/informal activities in the study until the children reached middle school. The formal context was part of the Grade 2 visit and the informal context was taken from the Grade 1 visit. Data from the 73 children who participated in both visits were used in this analysis.

During the Grade 2 visit, the children engaged in several narrative storytelling tasks, responding to inquiries from an unfamiliar adult examiner. The first language sample was a picture description task, in which the examiner showed the child a picture depicting a circus scene. The child was then asked to describe the picture in enough detail so that another child could draw the picture without seeing it. The other language samples were part of a narrative elicitation task, where the examiner would introduce a topic and then ask the child to share a similar experience. For example, the first story was about losing a tooth. The experimenter prompted the child by saying “I know a little girl who just lost a tooth last week. Have you ever lost a tooth?” The child was then encouraged to elaborate with questions like “Tell me what
happened when you lost your tooth” or “Tell me what it’s like when someone loses a tooth.” Other topics of conversation were going to a basketball game, spilling juice at breakfast, and going on a trip. After each of these situations, the examiner gave two additional prompts: “Anything else?” and “Tell me more of what happened when you….” All of the language from each of these tasks was transcribed and combined to construct the formal language sample at the first time point.

The Grade 1 “mother-child interaction”11 was used as the informal task at the first temporal data point. While this interaction had five total components, only three were analyzed as the informal language sample.12 These three tasks were a discussion planning the child’s birthday party, a task where the caregiver and child played with magnets and various other materials (e.g., coins, paperclips), and a reminiscing task where the caregiver and child remembered special events like holidays and vacations that the caregiver and child had experienced together within the last year. These tasks were selected because they consisted of relatively natural speech between the caregiver and child. At the commencement of each task, an examiner entered the room to explain the activity. The caregiver and child were then left alone in the room to interact as normally as possible. All of the language from all three activities was used as the first informal data sample, though speech that occurred when the examiner reentered the room was excluded.

11 While in the majority of cases the mother participated in this task, there were a few instances in which the child’s father or grandmother took part in the interaction.

12 The other two activities in this interaction were a guessing game, which contained many one and two word utterances, and a letter writing task, which included a great deal of repetition and writing. These tasks contained little conversation and were therefore excluded from analysis.
3.2.2 Grade 6

As mentioned in the explanation of recruitment methods, at this stage of the study each participant was paired with a peer counterpart. Though various measures of home and school, as well as other child measures, were collected in Grade 6, this dissertation focuses on the portion of the visit that looks at the interaction between the peer dyads.

The Grade 6 peer protocol included tasks that were designed to create both formal and informal peer situations. Each of these tasks was recorded both on audio and videotape. The investigators determined the formality of each task using Labov’s “principle of attention to speech” (1966), which was explained in more detail in §2.1.1. This definition describes a formal situation as one in which the participant pays more attention to his or her speech; an example would be a conversation with a stranger about an unfamiliar topic. A more informal task would be one in which the subject converses with a peer about an issue of mutual interest.

Each pair of students (N=125) completed two formal tasks followed by two informal tasks. The first formal task was a mock speech directed toward parents of children who would be entering their school in the fall. The subjects were instructed to plan the speech together for several minutes. They were instructed to describe their school and provide information and advice that would be helpful for an incoming student. They then individually performed the speech in front of a one-way mirror/window, pretending that they were addressing a panel of teachers who were going to choose a student to give the speech. They were told that there was a 5-minute limit on the speech. After both subjects performed the speech, they were told to
address the panel again one at a time and explain why they were the most qualified to perform the speech.

The second formal task followed a similar procedure. In this task, the subjects planned and presented a “kids-only vacation.” The peers were told to plan a vacation for kids only in a locale where neither youth had been before. They were given a planning sheet that instructed them to list information about the trip (i.e., where they would travel, who would accompany them, what they would bring, what they would do, etc.). After an 8-minute planning period, the subjects were told to stand in front of a one-way window and to present the vacation to an author of a book about vacations for kids. Each subject presented individually and was allotted 4 minutes for the speech. After both subjects presented, they were instructed to tell the author why their vacation would be appropriate for kids and therefore should be included in his book.

In the formal context, transcription commenced when each subject began the speech and ended when the subject finished the speech. Each subject’s “follow-up” speech was also transcribed, but the period between the initial presentation and the follow-up speech was neither transcribed nor coded. During both speeches, any conversation between the two subjects or between the subjects and the examiner was not considered formal speech and therefore was not coded for AAE features; it was, however, noted in the transcripts.

The first informal task, a free talk period while the subjects ate a snack, was conducted directly after the “kids-only vacation” task in the majority of cases. At this time, the youths were provided with a choice of snack and were then left alone. They were given no instruction as to conversation topic; the examiner merely indicated that she would return when they were

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13 This task was based on a similar task from the NICHD Study of Early Childcare.
14 In a few cases, the children were given the option to have their snack as the last task in the peer interaction. The children were given this choice in cases where they had recently eaten lunch.
finished (approximately 5 minutes). The subjects were recorded for the entirety of the snack period but this was not explicitly mentioned in order to create a more comfortable environment for the participants. Only the language that occurred while the examiner was outside the room was included in the language sample.

The second informal task, an issue discussion, occurred at the end of the visit.\textsuperscript{15} It followed two other non-linguistic tasks that were not utilized in this research.\textsuperscript{16} In this task, the subjects were directed to discuss two issues or problems that they had selected at the beginning of the visit. Each subject was supposed to present one of his or her issues and explain why it is a problem. The other youth was then instructed to offer advice as to how the problem might be solved. The subjects alternated offering problems for discussion until the examiner reentered the room.\textsuperscript{17} Frequently the youth finished talking about their issues and the discussion digressed into gossip or other talk. This was allowed to continue for about 10 minutes.

For the informal context, the “Issue Discussion” was coded first for all subjects because of superior intelligibility.\textsuperscript{18} In cases where at least one subject did not have a total of 50 communication units in the “Issue Discussion,” the “Snack” portion of the interaction was transcribed until that number was attained.\textsuperscript{19} In these contexts, transcription began when the examiner left the room and ended when she reentered and announced the conclusion of the task.

\textsuperscript{15} As previously noted, in a few cases the snack was implemented as the final task of the peer portion of the visit.

\textsuperscript{16} Between the snack and the issue discussion, the subjects played two games: Jenga and Stomp & Share. These tasks were not meant to elicit a language sample, and were therefore not of interest to this study.

\textsuperscript{17} The participants were given up to 10 minutes for the issue discussion. In some cases, however, the subjects finished the task before the time limit and requested that the experimenter return to the room and end the visit.

\textsuperscript{18} Intelligibility was hampered in the “Snack” portion because the subjects were eating and making a great deal of background noise with wrappers, etc.

\textsuperscript{19} 50 communication units were available for all but 4 subjects. 50 communication units were not available for those 4 because of premature termination of the snack and issue discussion and/or technical problems that resulted in loss of audio data.
In some instances, the examiner returned to the room before the end of the task; any speech or interaction while the examiner was present was not transcribed.

### 3.2.3 Grade 8

The Grade 8 peer interaction protocol was identical to the Grade 6 protocol. As in Grade 6, the subjects (N=164) planned and presented two mock speeches as the formal context; language from a snack period and a discussion of personal issues was used as the informal context. Once again, the language collected during these activities created the formal and informal language samples.

### 3.3 Determination of AAE Features Used in Coding

In order to evaluate the amount of vernacular use among the study participants it was necessary to create an inventory of features that would quantify their AAE use. As mentioned previously, however, determining a list of characteristic AAE features is a difficult and controversial task. I began this task by evaluating Craig and Washington’s (2006) DDM. Their measure is divided into two lists: morphosyntactic features and phonological features. For reasons that will be discussed below, the entire list of morphosyntactic features was retained, but only three of the phonological features were included. The selected phonological features were nasal fronting, in which /n/ is substituted for /ŋ/ (e.g., swimmin’ for swimming); prevocalic cluster reduction, where a word-final consonant cluster is reduced when followed by a vowel (e.g., bes’ apple for best apple); and labialization, where /f/ is substituted for /θ/ (e.g., /maθf/ for mouth) or /v/ is substituted for /ð/ (e.g., /ʌvɹ/ for other). These particular phonological features were chosen because they have been shown in various studies, including the literature mentioned

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20 All of the features listed in Craig and Washington’s 2006 DDM are listed in Appendix III.
in Chapter 2, to be particularly prevalent in style shifting (Labov, 2001; Rickford & McNair-Knox, 1994).

The list of morphosyntactic features includes all of those listed in Craig and Washington’s DDM as well as six additional morphosyntactic features. These features are those that vary from SAE with regard to word order or involve free and bound morphemes (Craig & Washington, 2006). The additional morphosyntactic features were selected through consultation with various literary sources, including Rickford (1999), Green (2002), and Wolfram’s Dialect Profile Form (1993) from the Baltimore city school district.\(^{21}\) The inclusion of all of the Craig and Washington morphosyntactic features facilitated more direct comparison between their original DDM and other alternative measures proposed in this dissertation.

As mentioned previously, there was a strong emphasis on morphosyntactic features. Several theoretical considerations influenced this decision. First, morphosyntactic features generally are considered to have some kind of social salience; since people are more aware of them than phonological features, they may consciously manipulate them more frequently than phonological features, making them a better indicator of style use (Wolfram & Schilling-Estes, 1997:155–157).\(^{22}\) As Craig and Washington (2006) point out, younger speakers often do not possess the oral-motor skills necessary to reliably make use of phonological features like cluster reduction. Thus, it is unclear whether such speakers are using a phonological AAE feature or are simply exhibiting a delay in motor skills. Such problems are generally found in preschool and elementary grade students, and were therefore a cause for concern in evaluating the speakers in

\(^{21}\) The added morphosyntactic features were: past form for participle, regularization of irregular past tense form, zero relative pronoun, uninvited direct question, inverted question without if/whether, and regularized mines.

\(^{22}\) The idea of “salience” is an elusive construct for linguists. Different fields of linguistics (e.g., sociolinguistics and linguistic anthropology) view saliency differently. Additionally, what is “salient” to speakers is not equivalent to what is “salient” to those who study language. This project may contribute to the discussion of saliency by drawing attention to those linguistic structures people pay attention to, both consciously and subconsciously.
Grades 1 and 2, though they would not be an issue in Grade 6 and Grade 8. Additionally, phonological features may be more difficult to manipulate not only due to the lack of prominence to the speaker, but also because it is more difficult to consciously reproduce correct phonological patterns. Morphosyntactic features may also be more significant because they may relate to other parts of the syntax and play a larger role in the developing literacy skills of older speakers.

In addition to these theoretical concerns, there is the practical issue of the reliability of phonological features. Even under the best of circumstances, it can be difficult for a transcriber to hear a distinction between similar sounds and sound patterns. This problem was compounded by the fact that many of the earlier recordings used audio cassettes and therefore had somewhat mediocre sound quality. Thus, I was concerned that focusing on more than a few phonological features would result in inconsistent coding.

Additionally, I found it important to separate some features that are conflated in the Craig and Washington DDM. For example, while the Craig and Washington measure combines all forms of subject-verb agreement, this study separated this feature into four specific categories: addition of inflectional –s on non-third person singular subjects, absence of non-third person singular –s, generalization of is and was, and difference in number between the subject and the modal auxiliaries do and have. Separating certain features into more specific classes allows one to better ascertain the specific details of variable manipulation during style shifting.23 Additionally, some of the features that are conflated by Craig and Washington may be different

23 Other features that are divided in my proposed measure are the use of ain’t (into ain’t meaning did+not versus are+not, is+not, or have+not); undifferentiated pronoun case (into the use of nominative and objective pronouns used interchangeably versus the use of the objective form for the demonstrative); double marking (into multiple agreement on irregular plural nouns versus pronouns versus irregular verbs); zero possessive (into deletion of the possessive -’s marker versus the use of the nominative or objective pronounal form rather than the possessive pronoun); double copula/auxiliary/modal (into double copula or auxiliary versus double modal).
enough to show very dissimilar behaviors. For example, the absence of the possessive marker -‘s on a noun is a very different process from substituting a nominative or objective case pronoun for a possessive pronoun. By separating such features it is possible to not only consider them individually, but also retain the option of conflating them if desired. The complete list of coded AAE features is found in Appendix I.

3.4 Transcription and Coding Procedure

The language samples were first transcribed orthographically and then coded for the existence of certain AAE features. §3.4.1 details the data and equipment that were used in the transcription and the coding of the data. §3.4.2 outlines the procedures for transcribing the data, and §3.4.3 describes the methods for then coding the transcripts. In each section, the protocol for dealing with problems in that particular area is discussed. The complete transcription and coding protocol is included in Appendix II.

3.4.1 Data and Equipment

The peer interaction was recorded both on audio tape or CD and on 8mm video. The data from the audio files were coded for all subjects when available.24 When any aspect of the recording (e.g., speaker identification) was questionable or if large portions of speech were unintelligible, the information was verified using the video recordings of the interaction on an 8mm videocassette player. The Express Scribe program was used to listen to the audio recordings. This program was downloaded onto computers or laptops from the manufacturer’s

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24 Due to technical difficulties, some subjects did not have audio or video recordings. In cases where only one of the recordings was available, transcription and coding were attempted using the available medium.
The benefit of using the Express Scribe software was that it allowed the user to easily play, pause, fast-forward, rewind, and alter the speed of the recording using the Function keys on the computer. High quality headphones were used when listening to both the audio and video recordings in order to maximize intelligibility.

3.4.2 Transcription Procedure

The tasks detailed in §3.2 were orthographically transcribed using the Systematic Analysis for Language Transcription (SALT) software (Miller & Paul, 1995). Each speech or task was saved as a separate file in Grades 6 and 8; because the language sample from each task was so short in Grades 1 and 2, they were saved in a single transcript. The subjects’ language was separated into communication units, with one communication unit placed on each line. Communication units were determined based on the criteria set forth in Craig and Washington (2006) and Loban (1976). In these works, a communication unit is defined as “an independent clause plus its modifiers.” The main condition for determining segmentation in multi-clausal utterances was whether the second clause contained a subject. Thus, in the examples below (1) was scored as two communication units, while (2), (3), (4) and (5) were scored as a single communication unit.

(1) she made um like a circle / and then she made something
(2) um the peoples fall down and go in the snow
(3) I’ll play with anything here but no girl stuff
(4) I’m gonna change her clothes ‘cause she been baseballing
(5) and somebody helping somebody that’s bouta get in a in a ice puddle

In (1), there are two independent clauses, each with a subject. (2), (3), (4), and (5), each contain only one independent clause and a modifier, which is underlined: (2) and (3) contain a coordinate

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25 The website for the Express Scribe manufacturers is http://www.nch.com.au/scribe/. The link to download the installation software is available on this page. The software is then downloaded onto the computer and creates an installation icon, which then prompts the user on how to finish installation.
clause; (4) contains a subordinate clause; (5) contains a relative clause. A repetition in the middle of an utterance was considered as part of that communication unit, but was excluded from analysis.

(6) She said (that I) that I should work harder.

There were several exceptional cases that had to be considered when transcribing the data. First, when a communication unit was repeated verbatim, the second repetition was counted as a separate communication unit. The exception to this was cases such as (7), where the communication unit consists of only one repeated word. In this instance all consecutive repetitions were counted as one unit.

(7) Why why why why?

In certain cases, an utterance that was not a complete clause was considered to be a communication unit. Based on Hughes et al. (1997), there are three such instances. First, an answer to a question was considered a communication unit provided that the answer only lacked the repetition of the question elements, as in (8) and (9).

(8) Went home (in answer to What did you do then?)
(9) Down their hole (in answer to Where did they go?)

Second, each elliptical yes or no answer was counted as one communication unit.

(10) Yes (in answer to Have you ever been sick?)

Additionally, if a phrase followed yes/no to expand on it, this was considered a single communication unit.

(11) Yes (pause)….and my momma is go/ing too.

Third, each utterance that was not a main clause but was preceded and followed by a terminal silence was counted as one communication unit.
(12) Could’n’t understand what he was say/ing. (where the previous communication unit was *He wanted something* followed by a pause)

(13) A whole lot of hyena/s (where the previous communication unit was *He has hyenas who are his friends* followed by a pause)

As described previously, each line of the SALT transcript contained one communication unit. The speaker was indicated in each line by citing the subject ID number. After completing reliability training\(^{26}\), the transcriber listened to each task 4-5 times before moving on to the next task. On the first run, the transcriber listened to the audio and transcribed it as well as possible, replaying as necessary. Next, the transcriber listened to the audio for the task in its entirety again to check the validity of morpheme boundaries in accordance with SALT’s conventions. Following SALT’s conventions, transcribers marked various bound morphemes, including plural –*s*, possessive –*s*, past tense –*ed*, progressive –*ing*, third person singular –*s*, negative contractions (e.g., –*n’t*), and contractible verb forms (e.g., –‘ll, –‘ve). The transcriber then listened to the audio 2-3 more times to check for phonological features, focusing on specific features on each run. As it is necessary to actually hear a phonological feature, these codes were noted by transcribers by putting a code on the relevant word during the transcription process. Example (14) illustrates a case of nasal fronting ([NAS]), and example (15) illustrates an instance of labialization ([LAB]).

(14) No I’/m play/ing[NAS]. (G6 K268 I2)
(15) And then you could put it in your mouth[LAB] and then just swallow it. (G6 1092 I2)

When sections of the audio were unintelligible, additional runs were necessitated.

With regard to typical punctuation, the marks that were utilized were periods to indicate statements, ‘?’ to indicate a question, ‘!’ to indicate exclamations, commas to indicate a list, and

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\(^{26}\) To become reliable, transcribers practiced listening to and transcribing at least four total transcripts. They then transcribed two Grade 6 transcripts independently; these were compared with a transcript completed by an experienced transcriber. Reliability was at least 80% for all transcribers. Any transcriber that scored below 80%, completed an extra reliability transcript until scoring a minimum of 80% agreement.
apostrophes to indicate possession and contractions. Use of all other punctuation (i.e., commas, semicolons, etc.) was left to the discretion of the transcriber, as suggested in the SALT training guide.

Several other conventions were used when transcribing. First, when subjects spoke at the same time, this was indicated with angled brackets as in (18).

(18) 2001: You might just have to <XX> all them girl/s in his video/s.
    1010: <Girlfriend...girlfriend> (G6 I2)

Verbal disruptions, or cases where the speaker does not complete an utterance, were not counted as communication units and were identified by placing the utterance in parentheses ( ). When a subject started an utterance, paused in mid-sentence and then repeated and subsequently finished the utterance, it was transcribed as follows:

(19) (I didn’t know) I did/n’t know he was gonna be there.

A protocol for dealing with problems common in transcribing audio files was available for all transcribers. First, it was occasionally difficult to identify which subject was speaking, especially in the informal context. If this occurred, the transcriber was instructed to watch the DVD/video of the session to determine the speaker. Also, it was often not evident in the initial stages of transcription which ID number should accompany which speaker. To determine this, the transcriber had to verify the subject’s first name from the audio. This information was then compared with a list of subject names and ID numbers to match up the speaker with the ID number. If this still did not clear up the matter, the transcriber was told to consult with a staff member at FPG who was familiar with all of the study subjects to help with identification. Finally, it was difficult to hear or understand the speakers in some cases. As discussed above, all of the data were also available on DVD or 8mm video. After transcribing as much as possible

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27 See Appendix II for the transcription training protocol.
from the audio tapes, the transcriber looked for inaudible portions of the transcripts and used the videos to try to fill in any gaps in the data. After listening to a given audio segment three times, any unintelligible words were marked X’s, with a single X indicating an unintelligible word, two X’s indicating an unintelligible phrase, and three X’s indicating an utterance that is completely unintelligible.

(20) Yeah X is your house XX. (G6 2001 I2)

3.4.3 Coding Procedure

Both the phonological and morphosyntactic features described in §3.3 were coded using the feature inventory in Appendix I. Before beginning, all coders completed an additional reliability protocol in addition to the transcription reliability procedure\textsuperscript{28}. Word-level codes like the absence of a plural marker (/s) were marked on the word itself as in Example 21; codes that indicated a missing word, like copula absence (*CO) and modal auxiliary absence (*MA) were inserted where the missing word would typically be placed in SAE, as in Example 22; phrase level codes like multiple negation ([NEG]) were placed at the end of the utterance, as shown in Example 23. If a communication unit contained no AAE features, this was marked with a code of [OOO].

(21) They[0PP] hat/*s was[LEV] gone. (G8 I2 2036)
(22) You *MA gotta watch who you *CO with. (G8 I2 2036)
(23) He just did/n't say nothing [NEG]. (G8 I2 1054)

Additionally, the absence of certain AAE features when they could have been optionally used by the speaker was coded. This allowed for the calculation of the proportion of actual AAE

\textsuperscript{28} To attain coding reliability, coders coded two previously completed transcripts. They were then compared to the same transcripts, coded by the same experienced coder. Kappas for all coders indicated substantial reliability, ranging from 0.62-0.71. An experienced coder subsequently checked approximately 75% of all coded transcripts to maintain consistency.
feature use over the total number of occasions where the feature might have been used, better indicating the degree of the speaker’s variability. In many cases (e.g., plural –s, third person singular –s, past tense –ed, progressive –ing, possessive –s, etc.), this was done by simply following the SALT conventions for marking morphemes. Two additional features were coded for these “potential” cases, that is instances where the process might have taken place but did not (cf. Wolfram, 1992): nasal fronting and copula absence. These final two features were selected because they were found to be the most commonly used features in a subset of 12 subjects.

Several other codes were used to indicate utterance characteristics that were not associated with AAE. As discussed in §3.4.3, elliptical utterances were counted as one communication unit. These non-clausal responses to a direct question (e.g., yes, uh-uh, pizza, after school) were marked with a separate code ([ELL]). In cases where less than twenty percent of an utterance was unintelligible, it was marked as “partially unintelligible” ([PUN]) and was counted as a viable communication unit. When twenty percent or more of the entire unit was unintelligible, it was considered “fully unintelligible” and was not counted as a communication unit and was not included in any analyses. Verbal disruptions were noted by ending the communication unit with an angled bracket in cases where the speaker abandoned the utterance (see Example 24) and were indicated using a carrot (^) when the utterance was interrupted by another speaker. Both types of verbal disruptions were excluded from analysis and not counted as communication units.29

(24) A typical day in Brogden Middle School you> (2023 F1)

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29 Even disrupted utterances containing a complete clause were excluded from analysis.
Fillers were also coded as [FIL], but were discounted for analysis purposes. These are words like OK, yeah, and uh-huh which are not in answer to a direct question but are used as space fillers.

Other relevant information was included in the SALT file. The speaker’s ID number, gender, and target grade were listed at the top of each transcript. Additionally, the initials of the examiner, transcriber, and coder were included, as were the context of the language sample, the date of testing, and the date of transcription\textsuperscript{30}. The subject’s actual grade and initials were entered to ensure that information for the correct person had been entered.

The start and stop time of the dialogue was noted. The time of any gaps in the audio (i.e., long gaps of time where the recording was inaudible) or the presence of the examiner was noted. The speaker ID number was entered for each communication unit. Additionally, the SALT program counted the total words in each utterance and calculated the mean length of utterance for each speaker in each transcript.

\subsection{3.5 Summary}

Although the data used in this study relied on the methodologies of Loban (1976) and Craig and Washington (2006), this project attempted to further their work by looking at additional AAE features, utilizing stringent coding procedures and focusing specifically on style shift. Using these data, I sought to better understand the development of style use in children and adolescents and investigated the influence of several social variables on linguistic behavior. Chapter 4 will detail the results of the analysis of these data.

\textsuperscript{30} Transcribers and coders included the author, as well as several undergraduate and Master’s students who worked on the project for independent study credit. All transcribers and coders underwent reliability training and were at least 80\% reliable with the author.
CHAPTER 4
ANALYSIS & RESULTS

In this chapter I report the results of statistical analyses conducted on the data discussed in
Chapter 3 and discuss the implications of these findings. The first section details the
methodology used to calculate the summary variables and looks at the correlations among all of
these values (§4.1). Next, I discuss two possible techniques that might be used to assess style
shifting behavior for each of the 164 speakers in this study (§4.2). In the following section I
provide a description of the raw data and discuss some apparent patterns in this data (§4.3). The
subsequent section looks at longitudinal patterns of style shift over the three temporal data points
(§4.4). I then individually examine the association between style use and each of the social
variables (§4.5). The final section presents a brief summary of these results (§4.6).

4.1 Calculation of the Summary Variables

Two summary variables were used and compared in this project, a full measure of the DDM
and a subset measure of six features selected from the DDM. For each measure, the total number
of instances of certain AAE features was counted. As previously noted, the features that were
studied in this project were initially based on those that were used by Craig and Washington
(2006). The first of the summary measures (Full Measure) was an adapted version of the Craig
and Washington measure. In this measure, all of the morphosyntactic features from the Craig

31 See Appendix I for a complete list of AAE features.
and Washington measure were included, but only the three selected phonological features of nasal fronting, prevocalic cluster reduction, and labialization from the original feature set were used.\footnote{32} As discussed in §3.2, a few additional features were also added to this measure to look at the possible contributions of certain morphosyntactic features that were not included by Craig and Washington. The hope was that if any of these additional vernacular features do play a vital role in style shift, this measure would unearth them.

The other measure (Subset Measure) consisted of a subset of six AAE features that were taken from the larger set of features. The six features were selected because they were used somewhat regularly by speakers and seemed to be the most sensitive to changes in context. Nasal fronting (NAS), copula absence (*CO), modal auxiliary absence (*MA), third person singular –s absence (*3S), multiple negation (NEG), and \textit{ain’t} for \textit{is+not} (AI1) were selected for the Subset Measure. While not as “comprehensive” as the Full Measure, there were several advantages to using this measure. First, choosing the features that appeared to be the most affected by contextual differences resulted in a measure that was especially attuned to style shift. Also, a measure utilizing only six features greatly increases the analysis options. The reduced number of variables allowed for the application of factor analysis and other types of structural equation modeling techniques; measures that include dozens of features are often limited to rudimentary analysis methodologies like t-tests. In addition, attaining intercoder reliability is considerably more challenging with a measure that includes over 50 features, as opposed to one that focuses on only six. A possible drawback to this method, however, is that it excludes many other AAE features. This could be a valid point if one hopes to use this measure to quantify

\footnote{32 The reasons for the including all morphosyntactic features and only a reduced set of phonological features were discussed in §3.3.}
overall vernacular use, but it may not be an issue if it is specifically used as a measure of style shift.

It is important to note that each of these measures was calculated in two ways: once as a proportion of AAE features over the total number of words and once as a proportion of features over the total number of communication units. Both calculations were performed because each method was imperfect but had its advantages. The total number of words was used in the first approach because there was a context-based imbalance in the number of words per communication unit. The mean number of words per communication unit was 8.54 in the formal contexts and 5.31 in the informal contexts. This discrepancy meant that in each formal communication unit there were over 60 percent more opportunities for a vernacular feature to occur. Some features, like multiple negation, require the existence of a multi-word utterance to exist, however. Thus, the total number of communication units was used as the other calculation method. This method is also the standard system used by researchers like Craig and Washington (2006). Therefore, calculating the summary variables in this way allowed for greater opportunity for direct comparison with other studies. Using both methods allowed for the detection of patterns that were strong enough to be seen using all of the summary variables.

Preliminary work using a portion of the Grade 6 data from the same project (N=46) compared these summary variables (Renn, 2007). Analyses indicated a nearly perfect Pearson correlation among the variables regardless of whether they were calculated using words or communication units. The correlation between the two Subset Measures was $r=0.96780$ and between the two Full Measures was $r=0.95726$. In addition, there was also a strong positive relationship between the Full Measure and the Subset Measure using both calculation methods. Using the total number of communication units, the correlation between the Full and Subset
Measure was \( r=0.91614 \); for those calculated using the total words, the correlation was

\( r=0.92708 \). The values of the correlations for all of the summary variables are shown in Table 1.

| Table 1. Correlations among all summary variables using part of the Grade 6 data (N=46) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                | Subset Measure (# Utterances) | Subset Measure (# Words) | Full Measure (# Utterances) | Full Measure (# Words) |
| Subset Measure (# Utterances)  | 1.00000          | 0.96780 <.0001     | 0.91614 <.0001     | 0.90567 <.0001     |
| Subset Measure (# Words)      | 0.96780 <.0001     | 1.00000           | 0.86566 <.0001     | 0.92708 <.0001     |
| Full Measure (# Utterances)   | 0.91614 <.0001     | 0.86566 <.0001     | 1.00000           | 0.95726 <.0001     |
| Full Measure (# Words)        | 0.90567 <.0001     | 0.92708 <.0001     | 0.95726 <.0001     | 1.00000           |

Given the findings in this earlier work, the first goal of this dissertation was to validate these preliminary results. To do this, the same correlations were compared using all of the Grade 6 data, as well as the data from Grade 1, Grade 2, and Grade 8. Combining data from all three time points resulted in a total of 723 observations, a considerable increase over the 92 observations used in the original study. Results of the more complete follow up analysis, shown in Table 2, mirrored the preliminary findings.

| Table 2. Correlations among all summary variables using all data from the 3 temporal data points |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                | Subset Measure (# Utterances) | Subset Measure (# Words) | Full Measure (# Utterances) | Full Measure (# Words) |
| Subset Measure (# Utterances)  | 1.00000          | 0.85483 p<.0001 | 0.92335 p<.0001 | 0.78409 p<.0001 |
| Subset Measure (# Words)      | 0.85483 p<.0001 | 1.00000           | 0.76876 p<.0001 | 0.93849 p<.0001 |
| Full Measure (# Utterances)   | 0.92335 p<.0001 | 0.76876 p<.0001 | 1.00000           | 0.82244 p<.0001 |
| Full Measure (# Words)        | 0.78409 p<.0001 | 0.93849 p<.0001 | 0.82244 p<.0001 | 1.00000           |
As before, the correlations between the Full and Subset Measures are extremely high, with $r=0.92335$ for the measures calculated using communication units and $r=0.93849$ for those calculated with total words. Thus, the extremely strong linear relationship between these two summary variables suggests that the Subset Measure effectively captures speakers’ use of AAE, while avoiding many of the challenges associated with large-scale variables like the Full Measure. While this result is very promising, in order to remain consistent with previous work on variation and style, I have used the Full Measure as the dependent variable in the majority of the subsequent analyses.

Additionally, these results once again indicated that measures calculated with total communication units were strongly related to those computed with total words. While the values were slightly lower ($r=0.85483$ for the Subset Measure; $r=0.82244$ for the Full Measure), the high correlations suggest that it would be somewhat redundant to run all of the subsequent analyses using measures calculated with both words and communication units. In light of this finding, for the remainder of this dissertation, I will use only the measure calculated using total communication units.

### 4.2 Methods of Defining Style Shift

Looking at the ability to shift from AAE to SAE in formal situations in a quantitative way is vital to answering the questions posed in this dissertation. But in order to study shifting behavior, it is necessary to define “style shift” itself. This term is largely discussed in the literature in a descriptive way, talking about how speakers alternate their speech among multiple dialects. A definitive method for approaching the study of style use in a way that is useful for quantitative analysis has not been agreed upon, however. Just as how the best way to define
style has been debated widely in the variationist literature, there are many possibly ways one might define “style shift” operationally. In §2.4.2, it was noted that one of the problems often cited with respect to large-scale DDMs is the fact that they only track overall shifts in language use. This likely oversimplifies the true nature of shifting behavior, which may exist on numerous levels given the intrinsic variability of AAE and all language varieties. For example, as discussed in §2.3, AAE not only overlaps considerably with SAE and other nonstandard varieties like Southern English, but also has a great deal of grammatical and regional variation within itself. Additionally, there is variation surrounding individual features, like copula absence, where in many cases it is grammatical within AAE to either include or omit it. While these concerns are valid, it is somewhat unavoidable at this stage in the study of language. As I will discuss in this chapter, as well as in §5.1, other complementary methods of quantifying language use should be employed to add to the information garnered through more comprehensive measures of AAE. As this and other research work toward this end, however, it is necessary to operationalize style shift in some manner. In this dissertation, then, I will first look at style shift as a difference between the DDMs calculated using language data from the informal contexts and the DDMs computed from the formal data (§4.2.1); in subsequent analyses, I will look at the ratio of the informal DDM to formal DDM for each speaker at each time point to gauge style shift (§4.2.2). The rationale for utilizing each method will be discussed in its respective subsection.

4.2.1 Style Shift as a Difference Score

Although style shift might be defined in a variety of ways, one recent operational definition reduces it to a “difference score” (Craig et al., 2009). Craig et. al. conducted an analysis of the
unstandardized DDM scores from oral and written contexts using the following calculation: Oral DDM – Written DDM = Individual DDM Shift Score (849). In their analysis, a positive individual shift score meant that a speaker had used more AAE in the oral context and then shifted to a lower DDM in the written context. They considered a speaker with a negative or no difference in individual shift score as a nonshifter. They found that speakers with a positive difference score, i.e., those who shift to SAE during reading tasks, outperformed their nonshifting peers on standardized measures of reading assessment. While this work compared the use of AAE in oral and written language contexts, this type of comparison is similar to the formal vs. informal dichotomy used in this dissertation. In §4.3, this technique is utilized to provide a basic description of individual speakers’ contextual style shifting behavior at all three temporal data points by comparing speakers’ DDM difference scores in informal and formal situations.

4.2.2 Style Shift as a Ratio

Another way to consider shifting is as a ratio of two DDM scores; in the case of this work, style shift was assessed as a ratio of the informal DDM to the formal DDM. While this method is similar to the idea of a difference score, it has some added benefits. First, a ratio accounts for the fact that a difference of 10 AAE features may in some cases be a large difference but in others a small one. For example, if one speaker uses 10 AAE features in formal situations and 20 in informal ones, there is a 100% increase in nonstandard feature use from the formal to informal context. Another speaker might use 100 AAE features in the formal and 110 in the informal context. As with the first speaker the difference in the feature count is 10, but there is
only a 10% increase from the formal to the informal context. Thus, one could argue that a ratio offers a more precise method of capturing the extent of change in linguistic behavior.

A related benefit is that a ratio is an interpretable value that has a clear meaning. For instance, a ratio of 1.6 would indicate that the speaker used 60% more AAE in informal scenarios versus formal situations; thus, the researcher knows not only that the speaker uses more AAE in informal situations, but he or she also has an indication of how much more AAE is used. A difference score, however, is not as easily interpreted. A difference of 0.02, for example, only signifies that the speaker uses more AAE in informal contexts; it unclear whether this is a large change in language use or a small adjustment. As a result of the reasons discussed here, the ratio score was used for the statistical analyses in this project.

4.3 Description of the Raw Data

This section provides a description of speakers’ style shifting behaviors across the three temporal data points. For each speaker in this project, the difference score between the informal and formal DDMs was calculated in a fashion similar to that Craig et. al. (2009). This difference score was then used to graphically depict speakers’ use of style shifting in varying contexts across Grade 1/2, Grade 6, and Grade 8. Figure 1 below shows the difference score (i.e., Informal DDM - Formal DDM) on the y-axis and grade on the x-axis:
The raw data graphed in Figure 1 indicate several patterns in style shifting. The first item of interest is that the majority the speakers did not engage in a significant amount of shifting in Grade 1/2. This is demonstrated by the fact that all of the speakers except one have difference scores of 0.15 or less at this first data point. In fact, more than half of speakers had difference values that were less than 0; this indicates that they were using more AAE in formal contexts than informal situations. This is the converse of the usual pattern exhibited by adult speakers, who generally use more nonstandard language in informal situations.

Second, there appear to be three main trajectories of shifting behavior during elementary and middle school. There is a general increase over time, indicating that speakers are engaging in more and more shifting as they age. There is also an inverted V pattern, which shows that by Grade 6, shifting ability has increased, but in Grade 8 they are shifting less. Since these speakers are engaging shifting behavior in Grade 6, it seems unlikely that they lose the ability to shift in
Grade 8; instead, perhaps other outside factors may be influencing their linguistic behavior. Unearthing the reasons for this pattern would require further investigation, but they may be the result of factors like linguistic accommodation to their peer partner or changes in the speakers’ goals or focuses over time (i.e., an interest in college or in African American culture). While exploring these questions is beyond the scope of this study, the results do suggest that these speakers have developed an increased ability to shift their language in response to contextual differences by the time they reach middle school. Finally, a few speakers demonstrate a V pattern in which they shift less in Grade 6 than they do at the beginning of elementary school and subsequently exhibit an increase in shifting in Grade 8. Only a handful of speakers follow this trajectory, but once again a non-shifting interlocutor may be responsible for the decrease in shifting at Grade 6; future analyses must be conducted to test this theory.

The graph of the raw data also illustrates an apparent general increase in shifting over time, as evidenced by the overall upward trend in the graph. This observation is supported by the mean values at each time point. In Grade 1/2, the mean individual difference score is -0.027 (SD=0.121), a value that is close to, but actually slightly below zero. This indicates that, on average, children were not engaging in style shifting and in fact were using slightly more AAE in formal situations than informal ones. In Grade 6, the mean shifting score increased to 0.073 (SD=0.245), showing that children began using more AAE in informal contexts and then utilized fewer nonstandard forms in formal situations. This shifting behavior intensified in Grade 8, with the mean individual difference score increasing to 0.112 (SD=0.210) by the end of middle school. Thus, speakers not only continued shifting but increased their degree of shifting between Grades 6 and 8. Figure 2 shows the mean of the individual shifting scores at each time point:
4.4 Longitudinal Patterns of Style Shifting: The Effect of Grade

For reasons discussed in §4.1, the Full DDM calculated using total communication units was used to investigate the effect of age on style shifting behavior. Analyses were run using the SAS 8.2 statistical analysis software program. Since this measure is a count variable (i.e., it is calculated by counting the total number of AAE features in a given speech sample), a log-linear regression model was selected as the appropriate method to use in analysis. With this approach, the count of AAE features was the dependent variable in all analyses; it was then offset by the total number of communication units. The estimates attained using a log-linear approach were then interpreted and compared easily because they were also output in count form. Since the data consist of multiple observations of the same subject the PROC GENMOD command was used with the REPEATED statement. This statement accounts for any correlations among the standard errors, which may be an issue with repeated measures data.
The log-linear model was utilized for all of the social and demographic variables, but in order to obtain a general picture of overall patterns of shifting acquisition, the speaker’s grade was the only independent variable of interest in the first stage of analysis. Results of the regression indicated that overall, a significant interaction between grade and contextual shifting exists ($p<0.0001$). Thus, the amount of shifting that speakers engaged in did not stay consistent over time. The DDM ratios and results of a test of context difference at each grade are shown in Table 3:

Table 3. Comparison of formal and informal AAE use at each grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>Ratio of Informal to Formal DDM</th>
<th>Test of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 (N=73)</td>
<td>0.827</td>
<td>.0501</td>
</tr>
<tr>
<td>6 (N=125)</td>
<td>1.311</td>
<td>&lt;.0001*</td>
</tr>
<tr>
<td>8 (N=164)</td>
<td>1.511</td>
<td>&lt;.0001*</td>
</tr>
</tbody>
</table>

More extensive analyses compared the formal and informal language use at each grade. The ratio value of 0.827 at Grade 1/2 indicates that speakers actually used more AAE in formal than informal situations, a finding that supports the visual representations in Figure 1 and Figure 2. A test of difference found that while speakers actually used almost 20% fewer standard forms in informal situations in Grade 1/2, this difference was not significant at a level of $p<0.05$. This means that the amount of AAE that speakers used at this age did not differ significantly as a result of the context. In Grades 6 and 8, however, speakers engaged in a more typically adult shifting pattern and used considerably more AAE in informal situations, about 30% more in Grade 6 and 50% more in Grade 8. This context-based difference was statistically significant in both Grade 6 and Grade 8 at a level of $p<0.0001$. 
The subsequent analyses directly compared shifting behavior at each of the time points. A comparison of shifting in Grade 1 and Grade 6 indicated significantly higher amounts of shifting in Grade 6 ($p<0.0001$), with speakers engaging in approximately 60% more shifting at the beginning of middle school. This difference was not statistically significant in a comparison of Grades 6 and 8 ($p=0.0703$). While speakers did engage in approximately 15% more shifting in Grade 8, this increase was not notably different. These results will be discussed in more detail in Chapter 5, but they suggest that in general, speakers seem to develop the ability to shift styles at some point between the entry into elementary school and the beginning of middle school. Once they reach middle school, however, shifting ability is somewhat fixed and does not develop much further. The next section will investigate the potential role that several demographic and sociopsychological variables play in these patterns.

4.5 Longitudinal Patterns of Style Shifting: The Effect of Social Variables

This section will assess the influence of five social and demographic variables on style shifting. These variables, described in §3.1.4, were gender (§4.5.1), the mother’s level of education (§4.5.2), the number of African American social contacts (§4.5.3), the percentage of African American students in the speaker’s grade (§4.5.4), and the speaker’s racial centrality score (§4.5.5). Each of these variables was individually investigated using the log-linear model described in §4.4. Since there has been very little research on the relative influence of demographic, socio-psychological, and personal factors on style use at different temporal points during childhood and early adolescence, this work is exploratory. For this reason, the goal of this dissertation is not to recommend or test a particular statistical model, but instead it seeks to
determine which, if any, of these variables should be considered for inclusion in a predictive model.

To evaluate the possible contributions of each variable, the marginal main effect of each variable was assessed, as well as the two-way interaction between each variable and the context and the three-way interaction among each variable, the context, and grade. A significant main effect would indicate the that variable was related to overall AAE use; a significant two-way interaction effect would mean that there was a relationship between that variable and shifting based on context (e.g., the amount of overall shifting might increase as mother’s education increases); and a significant three-way interaction term would be interpreted as a relationship between the variable and context, which changes over time (e.g., there might be a difference in the degree of shifting related to mother’s education, and the amount of this shifting changed over time).

4.5.1 The Role of Gender

As mentioned previously, all of the social variables were analyzed using a log-linear regression model, evaluating a main effect and interaction effects with context and with grade and context. Results for the analysis of gender are shown in Table 4. Estimates for each category are reported as the mean number of AAE tokens used per 100 utterances (i.e., on average, Grade 6 females use 29 AAE tokens in every 100 utterances in the informal context). The last column shows the difference in the mean AAE counts per 100 tokens in formal and informal contexts, calculated as Informal AAE - Formal AAE, to illustrate different patterns of use across context.
Tests of the marginal effect of gender on overall AAE use were not significant ($p=0.2652$). Thus, males and females used similar amounts of AAE forms overall. The interaction of gender and context, however, did reveal a significant result ($p=0.0006$), meaning that boys and girls exhibit differing overall shifting behavior. This result is borne out in the data shown in Table 4. In particular, the difference values shown in the last column in the table indicate that females tend to engage in a greater amount of shifting than boys. Finally, there were no statistically significant gender differences in shifting patterns over time ($p=0.1927$). According to the raw data, both males and females do not shift in Grade 1/2, actually using more AAE in the formal context in both cases, but speakers do shift in Grades 6 and 8 regardless of gender. A closer inspection of the data, however, does appear to indicate that females tend to shift to a greater extent with age. More data, in particular more male subjects, would result in greater statistical power, which might then detect a significant three-way interaction effect.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Gender</th>
<th>Informal AAE Forms</th>
<th>Formal AAE Forms</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>Females (N=40)</td>
<td>14/100</td>
<td>17/100</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td>Males (N=39)</td>
<td>18/100</td>
<td>22/100</td>
<td>-4</td>
</tr>
<tr>
<td>6</td>
<td>Females (N=76)</td>
<td>39/100</td>
<td>29/100</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Males (N=49)</td>
<td>39/100</td>
<td>31/100</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Females (N=101)</td>
<td>42/100</td>
<td>24/100</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Males (N=63)</td>
<td>41/100</td>
<td>33/100</td>
<td>8</td>
</tr>
</tbody>
</table>
4.5.2 The Role of Mother’s Education

To assess the role of mother’s education on language use, mothers with a high level of education, an average level of education, and a low level of education were compared. The mean education level of 13.57 years ($SD=2.20$), i.e., about one and half years beyond a high school diploma, was used as the “Average” education value. An education level of 15.77 years, or one standard deviation above the mean, was used as the “High” education value. A person with this value would have attained a level of education that is just shy of a Bachelor’s degree. An education level of 11.37 years, or one standard deviation below the mean, was used as the “Low” level of education. This value corresponds to a person who has started but not completed his or her final year of high school. This method of comparing high, average, and low values was also applied to investigate the remaining social variables (i.e., African American social contacts, school demographics, and racial centrality).

Results of the main effect of mother’s education were significant ($p<0.0001$), indicating that there is a negative relationship between the mother’s level of education and overall AAE use. Thus, the more educated a speaker’s mother is, the less likely he or she is to use AAE forms in his or her overall speech. This result is seen in the raw data in Table 5, where at all three time points, speakers with mothers at a low level of education used the most AAE forms per 100 utterances and speakers whose mothers had attained a high level of education used the fewest AAE forms. Notably, this relationship between AAE use and mother’s education is evident in both the informal and formal contexts.
<table>
<thead>
<tr>
<th>Grade</th>
<th>Education Level</th>
<th>Informal AAE Forms</th>
<th>Formal AAE Forms</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>Low</td>
<td>19/100</td>
<td>23/100</td>
<td>-4</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>16/100</td>
<td>19/100</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>13/100</td>
<td>15/100</td>
<td>-2</td>
</tr>
<tr>
<td>6</td>
<td>Low</td>
<td>47/100</td>
<td>36/100</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>38/100</td>
<td>29/100</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>31/100</td>
<td>24/100</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Low</td>
<td>50/100</td>
<td>33/100</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>41/100</td>
<td>28/100</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>33/100</td>
<td>23/100</td>
<td>10</td>
</tr>
</tbody>
</table>

A further look at the data in Table 5 shows that shifting patterns were somewhat similar in all three education groups. Again, there was no shifting in Grade 1/2, with speakers in all three education categories using slightly more AAE in formal situations. In Grades 6 and 8, all three groups engaged in noticeable shifting behavior, so it is perhaps not surprising that a test of the interaction effect of mother’s education and context was not significant ($p=0.5838$). In spite of the non-significant result, there is in an interesting pattern in both middle school grades: children with mothers in the low education category both used more AAE forms in informal situations and also engaged in the largest amount of shifting while children in the high education category used the fewest AAE forms in informal contexts and shifted the least.

A test of the three-way interaction was also not significant ($p=0.4328$), indicating that there is no variability in shifting over time as a result of the mother’s education. As shown in Table 5, all three education groups engaged in no shift in Grade 1/2, engaged in a typical shifting pattern in Grade 6, and shifted even more in Grade 8. Once again, however, there does seem to be a
trend in the data, with the speakers in the low education category showing the largest change in
their shifting behavior, growing from -4 in Grade 1/2 to 11 in Grade 6 to 17 in Grade 8, and the
high education group exhibiting the smallest change, from -2 to 7 to 10 over the three time
points. While neither of the interaction effects were statistically significant, then, there are some
very interesting patterns related to mother’s education that are certainly worth investigating,
particularly if more data are available.

4.5.3 The Role of Social Contacts

As discussed in §3.1.4, each subject completed a questionnaire about the number of African
American contacts in a variety of categories (e.g., friends, neighbors, visitors, parents’ friends,
etc.). A score of 1 meant that there were no African Americans in that given category and a
score of 4 indicated the speaker knew five or more African Americans in that category. A
composite score was then calculated by averaging all of the categories to create an overall social
contacts score. As with the mother’s education variable, the mean value was compared with the
values one standard deviation above and one standard deviation below the mean. Thus, the
“Average” value was $M = 3.26$ ($SD = 0.57$), the “High” value was 3.83 and the “Low” value was
2.69. Table 6 shows the AAE form counts per 100 utterances by context for each of these
contact levels, as well as the difference between these informal and formal count values.
Table 6. Analysis results for African American social contacts and grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>AA Social Contacts</th>
<th>Informal AAE Forms</th>
<th>Formal AAE Forms</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>Low</td>
<td>16/100</td>
<td>18/100</td>
<td>-2</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>17/100</td>
<td>20/100</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>18/100</td>
<td>22/100</td>
<td>-4</td>
</tr>
<tr>
<td>6</td>
<td>Low</td>
<td>34/100</td>
<td>25/100</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>39/100</td>
<td>29/100</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>45/100</td>
<td>35/100</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Low</td>
<td>34/100</td>
<td>22/100</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>40/100</td>
<td>28/100</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>46/100</td>
<td>34/100</td>
<td>12</td>
</tr>
</tbody>
</table>

Once again, a test of the main effect was significant \((p=0.0008)\), though in this case there was a positive relationship between the social contacts score and overall AAE use. Thus, speakers who had more African American social contacts were more likely to use AAE forms, regardless of the context, a trend that can be seen at all three time points and across both contexts. The test of the interaction between social contacts and context was not significant \((p=0.4126)\), which is consistent with the difference values in Table 6. In Grade 1/2, the difference values were very similar, ranging from -2 to -4; in Grade 6, the values ranged from 9 to 10; and in Grade 8, they were all 12. Thus, speakers engaged in similar shifting behaviors at each time point, regardless of their African American social contacts. Given these data, it was not surprising that the three-way interaction was also not significant \((p=0.9115)\). Thus, speakers’ shifting behaviors did not differ over time as a result of their social contacts.

While it may be the case that a speaker’s social contacts do not affect his or her shifting behavior, one reason for the non-significant findings for the interaction terms may be the way in
which the data were collected. As noted above, the highest possible score for each category was a 4, which represented a response of “5 or more;” the mean value for the composite score was 3.26, a value that is very close to that maximum score. In addition, the standard deviation was only 0.57, which suggests that there was not much variability in the speakers’ responses. Many respondents therefore reported values of 5 or more, so it would seem that a value of 5 might be too low to effectively investigate this variable. A questionnaire that had a maximum response score of “10 or more” or perhaps a number even greater than that might do a better job of teasing apart the influence of social contacts on language use.

4.5.4 The Role of School Demographics

The next variable looked at the influence of speakers’ peers, specifically their classmates. To investigate this, the percentage of African American students in the speaker’s grade at each time point was analyzed. Again, the mean value was compared with values that were one standard deviation above and below the mean. The overall mean value for school demographics was 47.68% African American ($SD=25.17$). This was set as the “Average” value; the “High” value, then, was 72.85% and the “Low” value was 22.51% African American. Table 7 below shows the AAE values and difference scores for these three demographic values.
Table 7. Analysis results for percentage of African American students and grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>% African American</th>
<th>Informal AAE Forms</th>
<th>Formal AAE Forms</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>Low</td>
<td>13/100</td>
<td>16/100</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>15/100</td>
<td>18/100</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>18/100</td>
<td>21/100</td>
<td>-3</td>
</tr>
<tr>
<td>6</td>
<td>Low</td>
<td>34/100</td>
<td>26/100</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>39/100</td>
<td>30/100</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>46/100</td>
<td>35/100</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>Low</td>
<td>37/100</td>
<td>25/100</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>43/100</td>
<td>29/100</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>50/100</td>
<td>34/100</td>
<td>16</td>
</tr>
</tbody>
</table>

The results of this variable mirror those of the social contacts variable. The main effect was significant (p<0.0001) and indicated a positive relationship between overall AAE use and the percentage of African American students in the speaker’s grade. Thus, speakers who attended a school with a greater percentage of African American students were likely to use more AAE in both formal and informal contexts. Once again, this is seen in each grade and in both contexts, as speakers with a low percentage of African American peers used the fewest AAE forms and speakers with a high percentage of African American classmates used the most AAE in all cases.

As with the social contacts variable, the results of both interaction effects were not significant. In each grade, the difference values were similar: all three groups had values of -3 in Grade 1/2; they ranged from 8 to 11 in Grade 6; and they varied from 12 to 16 in Grade 8. Thus, there does not appear to be a relationship between school demographics and contextual style shifting (p=0.1439) nor do speakers’ shifting behaviors vary over time as a result of the percentage of African American students in the speakers’ grade (p=0.3159).
4.5.5 The Role of Racial Centrality

The final social variable of interest for this project is the speaker’s racial centrality score. As explained in §3.4.1, this score was obtained by means of a self-reported score from a questionnaire. The questionnaire contained questions related to the importance of race as a component of the speaker’s personal identity. Participants responded with a score between 1 and 5, with 1 representing a response of “strongly disagree” and 5 indicating a response of “strongly agree.” These values were then averaged to create an overall racial centrality score. Like the previous three social variables, high, average, and low values were compared to investigate patterns of behavior. The “Average” value was the mean score of 3.75 ($SD=0.73$); the “High” value was 4.48; and the “Low” score was 3.02. Table 8 provides the AAE counts per 100 utterances in each context as well as the difference values.

Table 8. Analysis results for racial centrality and grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>Racial Centrality</th>
<th>Informal AAE Forms</th>
<th>Formal AAE Forms</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low</td>
<td>16/100</td>
<td>19/100</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>16/100</td>
<td>20/100</td>
<td>-4</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>17/100</td>
<td>20/100</td>
<td>-3</td>
</tr>
<tr>
<td>6</td>
<td>Low</td>
<td>39/100</td>
<td>29/100</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>39/100</td>
<td>30/100</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>40/100</td>
<td>30/100</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Low</td>
<td>40/100</td>
<td>28/100</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>41/100</td>
<td>28/100</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>42/100</td>
<td>29/100</td>
<td>13</td>
</tr>
</tbody>
</table>

Analyses indicated a non-significant result for the main effect of racial centrality ($p=0.4092$), and again this is evident from the data in Table 8. In each grade and context, the count values
are nearly identical in all three racial centrality categories. For example, in the informal context in Grade 1/2, speakers with low and average racial centrality scores used 16 AAE forms per 100 utterances and those with high racial centrality scores used 17 AAE forms. Similarly, eighth graders in the formal context used either 28 forms (low and average) or 29 forms (high). This indicates that the speaker’s racial centrality score does not affect overall AAE use.

Results of the two-way interaction were also not significant \( p=0.0859 \). Again, this can be seen in the lack of variability in the difference scores for each grade. In each of the three grades, the difference scores were almost exactly the same across all there racial centrality groups. In addition, the three-way interaction term was not significant \( p=0.7599 \), confirming the fact that there is no difference in shifting patterns over time based on racial centrality scores. As with the social contacts measure, these results may be related to the way in which the data were collected. This will be discussed further in Chapter 5.

4.6 Summary of Results

These results illustrate several patterns and trends in language use. First of all, while there appears to be a range of individual variation in shifting patterns, there is clearly a general increase in style shifting with age. This increase is indicated both in terms of the number of speakers who become shifters and in the amount of their shifting. In addition, while individual variation seems to outweigh the influence of traditional demographic variables such as gender, mother’s education, ethnic contact, school demographics, and racial centrality, several of these variables do affect language use in young speakers. While the only the speaker’s grade and gender were related to different patterns in shifting, other variables (i.e., mother’s education, African American contacts, and school demographics) influenced overall AAE use. A more
complete discussion of these results and their implications will be conducted in the subsequent chapter.
CHAPTER 5
DISCUSSION

This chapter provides a more detailed reflection on the findings ascertained in Chapter 4. While the last chapter described and interpreted the results of various statistical analyses, this one will discuss a number of the implications of these findings, as well as issues and ideas to be considered in future work on style and style shifting. The first section will discuss some of the difficulties inherent in the study of style shift among AAE speakers and explain how the use of techniques like the subset variable may provide more insight into this behavior (§5.1). This is followed by a review of the various trajectories of shifting behavior revealed in the analysis and some suggestions for future research that might help to better explain these patterns (§5.2). The final section will evaluate the results related to the five social and demographic variables, observing why they might have exhibited certain patterns of linguistic influence and how this information might eventually be useful in building a statistical model predicting style shift (§5.3).

5.1 Support for the Use of Alternate Measures of Style

Investigating speakers’ use of style is an extremely complicated process. Many of the problems that researchers face in studying style are a consequence of the complex nature of language itself and the inherent variation that exists within language. As expressed in §2.3,
defining AAE, or any language variety, is neither obvious nor simple, and there are many difficulties that come with trying to define individual styles. AAE, for instance, has a great deal of variation within itself since the use of many forms is variable. For example, while the copula can be optionally excluded in AAE, it is also grammatical to include it (Wolfram & Schilling-Estes, 2006). Such complexities are in addition to coexisting varieties of AAE, the existence of numerous registers within AAE, not to mention the large amount of overlap between AAE and other varieties of English like Southern English.

In response to indiscrete character of all language varieties, many variationists have turned to style shifting as a clearer way to evaluate style use. As mentioned in §2.4.2, while measures like the Full Measure used here or the DDM used widely in speech pathology have proven somewhat successful at highlighting shifts in overall language use, critics argue that they may look too broadly at language and style. These measures make the simplifying assumption that there is only one kind of style shift; that is, all changes in language use are equivalent. The variability that exists within AAE, or any language variety for that matter, suggests that this is likely not the case. For example, the DDM includes features that are common to many varieties of English, such as nasal fronting and the use of ain’t, as well as forms like invariant be and third person singular –s absence, which are unique to AAE. Given this differentiation, can one truly argue that when an AAE speaker shifts his or her use of nasal fronting, this holds the same sociolinguistic meaning as a change in third person singular –s use? Similarly, such measures do not take into account possible structural differences that may affect shifting. It is possible that some markers are more or less likely to shift than others due to their differing grammatical roles.

Labov (1998) presents a comparison of AAE and “Other American Dialects” of English (OAD). He notes that while there is considerable overlap among AAE and OADs (e.g., multiple negation, double modals, etc.), research has indicated that there is a “core” set of features that are unique to AAE. Additionally, some features that common to many nonstandard American dialects are not found in AAE. Thus, Labov argues that the commonalities among these systems coupled with their distinct qualities make them “distinct but interdependent” (117).
alone. Thus, while this is not to say that composite measures like the DDM do not make an important contribution to the study of style, in practice it may make more sense to look at style shift from a number of different perspectives.

In addition to these challenges is the issue that comes from the vagueness within the notion of variability itself. In general, this work makes the assumption that any movement away from the use of AAE features is a shift to a more standard variety of English. While this assumption is useful because it allows for a way of operationalizing the study of style shift, it is admittedly overly simplistic. In fact, using fewer AAE features may represent a change to another, more standard variety of English, but it may be the case that speaker is simply moving to a more formal register within AAE or even a more or less regional variety of English apart from AAE. As Labov (1998) contends, when looking at any sort of surface variation, it is unclear what is behind this change; it may be that the speaker is engaging in “the alternating use of two separate systems, each comprising in itself a complete and coherent grammar” or it may be the case that the variation is the result of “competing rules” within a single variety (113). The main issue, then, is how to best think about shift, particularly in light of the issues surrounding language varieties like AAE.

Focusing on the use of a subset of features is one way to begin this more multi-pronged approach to the study of style. The results of this investigation suggest that the use of a subset measure could contribute greatly to the study of style; it would complement current measures while providing additional information about style by highlighting the individual features that make the largest contribution to style shifting. As previous work has showed, the majority of AAE features included in the Full Measures were rarely used by speakers in Grade 6 (Renn, 2007; Renn & Terry, 2009). Additionally, this earlier study found that these infrequent features
were utilized significantly more often in the informal situations than in formal contexts. This result was reinforced by findings regarding the variety of features used in the two contexts, which indicated that speakers’ vernacular feature use was more diverse in the informal situations; that is, they used almost twice as many different AAE forms in the informal peer environment. This indicates that the speakers possessed a varied inventory of vernacular features, but chose to draw on a restricted range of these forms under formal circumstances (Renn, 2007). Thus, a few features seem to provide the bulk of the work when speakers shift styles.

Given these findings, one of the primary goals of this work was to evaluate the effectiveness of the Subset Measure through comparison with more comprehensive measures of AAE use. This was done by validating previous work on this project, which suggested a subset of features can effectively capture language use (Renn, 2007; Renn & Terry, 2009). A direct comparison between the Subset Measure and the Full Measures evaluated the degree of success that a carefully selected subset of features could have in quantifying AAE use in general and style shift in particular. The very strong positive correlation between the Subset Measure and the Full Measure supports the use of this smaller collection of features in identifying style shifts. Another benefit of the Subset Measure is the fact that it contains fewer variables. This is extremely useful given that measures with many variables greatly limit the statistical analyses that can be conducted. Therefore, the use of factor analysis and other varieties of structural equation modeling with a measure like the Full Measure would require an extremely large number of participants, which can be difficult and often is not possible for a project in need of extensive language samples. Limiting the analysis to a handful of relevant features allows for more sophisticated analysis methods with sample sizes as small as a few dozen speakers, making
analyses of longitudinal language studies that focus on language use over time more practical. This in turn might allow researchers to learn more about vernacular use and would complement important work that has been previously conducted in sociolinguistics. Additionally, the very strong correlation between the Subset Measure and the Full Measure, coupled with the fact that most of the AAE features studied occurred very infrequently, suggests that little information would be lost in choosing this measure over a more comprehensive alternative. Finally, focusing on a small set of AAE forms would reduce the time and training necessary to achieve reliably coded transcripts. Despite its own limitations (e.g., it provides very limited information when used as a type measure), the Subset Measure would therefore become an invaluable tool for language analysis, adding useful information about groups of speakers to information gathered through existing approaches.

While the utility of a subset of features has been one of the foci of this dissertation, other tactics might also provide useful information about style shift. An in depth examination of individual features could help to identify different types of style shift by looking at subtle changes in language use. For instance, a large shift in a more general vernacular feature might indicate different linguistic behavior than changes in a feature that is exclusive to AAE like invariant *be* or third person singular *-s*. Additionally, all diagnostic variables are not weighted equally in a social sense. For example, the use of features *ain’t* or multiple negation may have more different social consequences than nasal fronting. Isolating individual features allows for investigation into such differences.

The examination of individual features may also be useful in ascertaining whether speaker variation represents shifts within the same variety or between different varieties. As noted above, formal and informal registers exist within the same language variety, so it can be unclear
whether a surface variation truly represents a dialectal shift. Work by Terry et. al. (in press) suggests that there seems to be a higher cost associated with the shifting of certain AAE forms. Their analysis of second graders showed a significant negative relationship between AAE use and performance on standardized mathematical word problems containing third person singular –s. This effect was not seen on other traditionally variable AAE forms like past tense –ed absence, participle –en absence, and past was leveling, suggesting that perhaps there is a higher processing load associated with third person singular –s and other forms that are systematically absent in AAE. This may in turn indicate that the use or disuse of features like third person singular –s signify a shift between varieties, while the other features they studied are representative of within-variety variation. Thus, looking at individual features may help to clarify the whether the speaker is engaging in within or between variety shifting behavior.

Additionally, individual features could then be compared with larger measures like the DDM and the Subset Measure to assess their effectiveness at identifying certain kinds of shifts. For example, comparing the results of the Subset Measure with patterns in a non-AAE-specific feature like nasal fronting, would be useful in evaluating whether the subset is capturing a shift in AAE use or simply a general shift to a more informal speech style. Preliminary work by Van Hofwegen and Wolfram (in press), for example, used this sort of assessment method by comparing “core AAE features” like nasal fronting with “more obscure AAE features” like remote past been. Their work found that while nearly all speakers used the “core” features, high vernacular users were more likely to employ the “more obscure” features (12). With these and other possible avenues for exploration in their early stages, the study of style shifting is really just beginning.
5.2 Patterns in the Acquisition of Style Shift

As the previous chapter showed, there appear to be multiple trajectories of style shifting behavior over the course of childhood and adolescence. Based on the data in this study, at least three patterns of shifting behavior exist. Even in light of this variability in shifting behavior, some noticeable trends are evident in the data that merit additional comment.

First, children at the commencement of elementary school tended to engage in little to no shifting. This was not only seen in the visual representation of the data, but also in the results of statistical analyses. While some speakers did use more nonstandard language in the informal contexts, a statistical test of difference showed that any such discrepancies are not large enough to represent truly divergent behavior. Interestingly, many children actually used more AAE forms in the formal contexts than they did in the informal situations. This may indicate a lack of pragmatic awareness, suggesting that perhaps children in early elementary grades have not become attuned to the social cues that indicate when it is appropriate to use a nonstandard language variety as opposed to a more standard grammar. Alternately, it may be related to the fact that the grammars of bidialectal speakers may not be totally distinct or fully developed at this age. Further work, including data from additional time points before and during elementary school, would help to determine how much of this is a lack of sociolinguistic competency and how much is the result of other aspects of linguistic development.

The next major trend was the overall increase in style shifting between the beginning of elementary school and middle school. While at each age the average amount of style shifting increased, the key transformation appears to occur between early elementary school and the beginning of middle school. At some time between these two temporal points, speakers seem gain a social awareness or develop the ability to begin adjusting their language in response to the
context. Once speakers reach middle school, however, shifting ability appears to plateau. Thus, while the mean shifting value did increase between Grades 6 and 8, this difference was not large enough to indicate a considerable change in speakers’ use of language. While preliminary, this result may indicate just how vital it is to target children as early as possible in order to maximize their ability to become competent SAE speakers. Since, as previously mentioned, numerous studies have linked speakers’ adroitness with SAE to stronger literacy skills, it seems that any educational interventions would be most effective when implemented as early as possible. A program supporting the acquisition and development of SAE should most likely, then, be started early in elementary school or perhaps even during preschool to facilitate bidialectalism in students that primarily use AAE at home. Classroom interventions like these may turn out to be an essential tool in closing the academic achievement gap between African American children and their peers.

It must be noted that a clear limitation of this work is the large time gap between the first 2 temporal data points. The four to five year gap between these two time points encompasses the majority of the elementary school years, a period during which considerable social and linguistic development occurs. The inclusion of at least one or two additional data points would help to more fully illuminate trajectories of developing style and perhaps more clearly pinpoint the stage at which speakers become shifters. This additional information may help to highlight an age range in which children will be most cognitively receptive to acquiring the ability to shift between dialects.

Finally, the three patterns of shifting seen in this work suggest some possible influences and causes of linguistic behavior. As discussed in §4.3, while many speakers consistently increased the amount of shifting over the course of the three time points, mirroring the overall trend, there
were two additional shifting patterns. A few speakers decreased their shifting in Grade 6 and subsequently increased it in Grade 8, creating a V-shaped pattern; nearly all of these speakers ultimately used more AAE forms in the Grade 8 informal context. A more widespread configuration is the inverted V pattern, wherein speakers increased the degree of shifting in Grade 6 but shifted less in Grade 8. Both of these patterns suggest that even when speakers have the ability to shift, additional factors may influence their stylistic behavior. One potential speculation is that the speaker may be accommodating to the language of his or her conversational partner. A cursory look at a few of the speakers in this dataset has suggested that this may indeed be the case for at least some speakers. One speaker in particular had the highest individual difference score in Grade 6 but that difference dropped to nearly 0 in Grade 8. An examination of the language of her peer partners indicated that she was paired with a friend who used a large number of AAE forms in Grade 6, but her partner in Grade 8 used mostly SAE forms. It seems reasonable, then, that in an effort to match her partner, her informal DDM in Grade 6 was a great deal larger than in Grade 8; this resulted in her divergent shifting patterns. More work investigating the role of the interlocutor, as well as other factors like life goals and membership in social networks may help to explain these patterns. A better understanding of such influences would help to identify other variables that should be considered as part of a model of style shift, in addition to the social and demographic variables assessed in this dissertation. In addition, such patterns suggest that it may be valuable to select a few individual speakers as individual case studies to help pinpoint such variables. Combining some case studies with the overall results of this work may result in a clearer picture of what exactly stimulates stylistic choices.
5.3 Building a Model of Style Shift

The exploration of the five social and demographic variables in this work provides a starting point in working toward a predictive model of style shift. Age clearly plays an important role, with speakers shifting more as they get older, but gender also proved to be a relevant factor in style shift. When combining the data from all three time points, females indicated more variation in their language use, shifting to a larger extent than males on average. While statistical tests indicated that patterns of shifting over time did not differ based on gender, the data do suggest that females shift more and more with age while males remain relatively consistent in their shifting once they reach middle school. An unequal number of participants, namely, a larger number of females than males, may have affected this outcome. More data, in particular more male participants, might be required to validate this pattern. Regardless, gender is certainly a variable of interest in the study of style.

Mother’s education, while not statistically significant with respect to shifting, does merit consideration as a possible influence in style shifting behavior. There is a clear pattern in the data here: the more educated the speaker’s mother, the less likely they are to shift their speech. While this may seem counterintuitive, the reason may be understood by looking at speakers’ overall AAE patterns. Analyses did indicate a negative relationship between the mother’s education and overall AAE use; thus, speakers tend to use more AAE if their mothers are less educated. Importantly, this is true in both formal and informal contexts. On average, a speaker whose mother does not have a high school diploma uses a little more AAE in formal settings than a speaker whose mother has a college degree, but he or she uses a lot more AAE in informal settings. So, speakers in the “High Mother’s Education” category do not shift as much on average because they do not use as much AAE to begin with.
Results for the percentage of African American students are very similar to those for mother’s education, but are in the opposite direction. That is, the higher the percentage of African American students in a speaker’s grade, the larger the degree of shifting. Speakers with few African American classmates use less AAE in both contexts on average and therefore shift less than those who have a larger percentage of African American peers. Again, this finding is based only on patterns in the data, as the analysis produced a non-significant result for this relationship, but it deserves further investigation using more data.

Both African American contacts and the measure of racial centrality used here showed absolutely no relationship with style shifting, both in the statistical analyses and in the patterns seen in the raw data. While this may simply indicate that these variables are unrelated to speakers’ use of style, it may also highlight a larger issue related to the challenges of data collection. As discussed in §4.5.3, the structure of the social contacts questionnaire may limit its usefulness. Since the mean value for all participants was close to the maximum response of “5 or more,” this measure most likely did not effectively capture the variability that truly exists for this characteristic. Rethinking this measure and perhaps considering an expanded questionnaire or another method of evaluating speakers’ social networks might result in different results for this variable. Similarly, the use of a racial centrality measure is somewhat controversial. As mentioned in §3.1.4, a number of measures have been developed in an attempt to depict racial identity and little consensus exists on how to best encapsulate this latent variable. In fact, the racial centrality measure used in this work is actually only one component of a larger measure of identity. Thus, other measures of individual identity may be needed to effectively determine whether a relationship between racial centrality and language use exists.
This work underscores the inherent difficulty in studying variables that cannot be directly measured, yet it still provides insight into some of the factors that most likely influence style use. Age and gender are clearly relevant, and the influence of parents and peers seem noteworthy, as shown in the results for mother’s education and school demographics. In addition, more work on the influence of a speaker’s conversational partner and social networks may recommend these variables as important components in a global model of style shift. While there is clearly still a lot more work to be done, some of the major motivators for style use are starting to become clearer.
This work opens up numerous possibilities for future research in contextual style shift. First, it recommends using methods that focus on a small number of vernacular features as a way to complement larger composite measures that look at group language use. Additionally, trends in the longitudinal data and the exploratory work on the influence of social factors in this dissertation suggest independent variables that may be included in a model predicting style shift. Finally, while this work looks specifically at style shifting among AAE speakers, the ideas proposed here are not limited to AAE and could be applied to the study of other nonstandard language varieties. This chapter will briefly discuss some potential plans to follow up on these matters.

As the correlations among the subset measures and the larger, full measures showed, a subset of features can effectively recognize style shifting behavior in speakers while being more time efficient and requiring less extensive coder training. In addition, the use of a subset helps to identify the features that play the largest role in speaker’s shifts in style by focusing on just a handful of features. As discussed in Chapter 5, this notion could be expanded further though the in depth analysis of individual features. Not only could individual features be used as a way to better understand the what specifically changes during a linguistic shift, but by selecting particular features it may be possible to get a clearer picture of the different types of variability
that exist. As discussed in §5.1, much of the study of style shift has historically made the assumption that any movement away from the use of vernacular features is a kind of shift between two language varieties. This, however, is an oversimplification, since any language variety has formal and informal registers within itself. As mentioned in §2.3, Spears (2009) contends that there are in fact two types of AAE, AAVE and AASE, which are somewhat related to formality. Thus, when a speaker uses fewer AAE features it may indeed indicate a shift to a more standard variety of English; it could also, however, signify a shift to a more formal register within a single variety, as from AAVE to AASE. Presently, little experimental research has been undertaken that explicitly addresses this type of question.

An important extension of this work, then, will be to further investigate how this sort of register shift differs from a change from one variety to another. Additional studies, designed to tease apart this distinction, would provide new and important insight into speakers’ use of style. To address the question of register versus variety shifting, a new study would also have to carefully take into account many of the major factors that, according to the leading theories, influence style. In particular, the audience, the context, and possible identity must be considered and controlled as much as possible within the experimental framework. For example, the language and attitude of the examiner may not only result in accommodation effects in the language of the speaker, but it might also influence the type of persona the speaker would choose to portray. The use of subsets could prove particularly useful in this endeavor, as it may show that while certain features are utilized in register shifts, other features play a larger role in movement between language varieties. In addition, more work like that of Terry et. al. (in press), focusing on the impact of individual features, may be useful determining which features
may truly indicate a shift from one variety to another. Approaches such as these may offer researchers a way to garner information about various modes of style use.

An additional avenue for future work stems from the fact that the longitudinal study was not originally created to study language use; instead, it was a primarily a study on the effects of otitis media on African American children. It was not until middle school that the focus of the project was adjusted to investigate dialect use. Thus, many of the language samples from the early years of the study do not perfectly fit into the formal/informal paradigm and make it more challenging to truly compare shifting behavior at different ages. Even the sixth and eighth grade language samples, which were created with the intention of comparing formal and informal language, have their shortcomings. For example, during the formal speeches the peer remained in the room. In many cases, it was clear that the presence of a friend affected the language of the speaker, particularly if the peer interrupted the speech. These issues illustrate the necessity of conducting further research on style shifting throughout childhood and adolescence. A longitudinal study focusing on style shifting from its inception and carefully crafting formal and informal environments would result in much more consistent sample of data over time and is an essential next step to truly understanding contextual style shifting.

Another important objective for future research is the development of subsets for specific purposes. The measure put forth in this dissertation is tailored to identifying style shifting behavior based on differences in the formality of a given situation; thus, the features that were selected for the subset measure were chosen because of their apparent sensitivity to context. This idea could be applied to investigate the difference between shifting registers and shifting varieties, as discussed above. The identification of features that seem to require a greater cognitive load, as suggested in Terry et. al. (in press), might be combined to identify shifts
between individuated varieties, while features that are less costly from a cognitive perspective could be used to create a subset that isolates features used within the same language variety. Further, this technique might be implemented to address other questions, like differences based on gender and socioeconomic status. As shown in Chapter 4, factors like age and gender seem to play a role in style shifting behavior. Thus, distinct subsets might be created for use with these different factors. For example, it may be the case that when males shift styles they manipulate different features from females. Indeed, large DDMs do not allow for such investigation of variation based on speaker characteristics.

Another area for further development is a deeper investigation into the factors that influence style shifting is needed to work toward creating explanatory models of linguistic style. While the results of this dissertation explored the impact of several variables, certainly others merit consideration. The value of including more traditional sociolinguistic methods in the study of style shift is highlighted here, as one way to approach this question is to utilize individual case studies to formulate theories on the influences of language use. This idea has already proven fruitful, by suggesting that accommodation the speaker’s conversational partner may influence language use during the middle school years. A more thorough examination of individuals’ patterns of language use may inform hypotheses on group behavior, further highlighting the possible balance that combining case studies with the quantitative analysis of groups may bring to the study of style.

The results of the analyses conducted in this dissertation also raise additional questions regarding the factors that were explored. For example, it will be important to delve more deeply into the nature of the negative relationship between mother’s education and children’s overall AAE use. While it is not surprising that women with higher levels of education have children
that use less AAE overall, the reason for this outcome is unclear. It could be that children with more educated mothers are predominately exposed to SAE and thus have more access to it at an earlier age. This may be the direct result of parental input, as well as a function of socioeconomic status and the types of jobs, friends, etc. that women with higher levels of education would have. Another possibility is that more educated women might inherently have a higher linguistic aptitude on average, which might result in a stronger capacity for language processing; therefore their children are innately better prepared to acquire the language of the classroom, regardless of the dialect used at home. Questions such as these are among the many issues that have been brought to light through this and related work on language and style. The answers will be crucial in attaining a fuller understand of how young speakers gain and employ their linguistic skills.

Another consideration for future thought is how well the subset suggested in this work would characterize AAE in other regions. Given the regional differences in AAE discussed in this thesis, it would be interesting to apply the Subset Measure to data taken from other regions of the United States. The subjects used in this study were all raised in central North Carolina; features that are common to Southern English and AAE may therefore be overrepresented as compared to speakers from other regions. Looking at speakers from other areas would thus further indicate the degree of generalizability of the measure proposed in this work. Again, a closer look at individual features could prove fruitful in this endeavor as well. As Wolfram (2007) notes, the notion that only one type of AAE exists is a commonly held misconception. Thus, the examination of individual features may be useful in more clearly characterizing regional varieties of AAE and help to dispel this sociolinguistic myth.
Although this work focuses solely on AAE, the ideas that are promoted here are not specific to AAE can be applied to other nonstandard language varieties as well. As work on other nonstandard dialects like Latino English becomes more prevalent (e.g., Wolfram, 2004; Kohn, 2008), it becomes possible to create feature sets that are specific to other language varieties. This extension of this work is particularly exciting, as it has the potential to expand researchers’ more general understanding of the development of language and style use in young speakers, rather than being restricted to a single dialect.

Finally, this work should be extended and applied to explore questions from education and psychology. One important application is the use of these findings to address the academic achievement gap between African American students and their Caucasian peers. While many of the sociological factors that contribute to this discrepancy have been identified, incorporating data from standardized test scores and other achievement measures may help researchers to better understand the role that language and dialect use play in this issue. While this dissertation has examined the role of several demographic and sociopsychological factors, the results illustrate the need to continue exploratory analyses to identify other factors that potentially influence linguistic style. By continuing these types of studies, it will be possible to better understand how language and dialect use, as well as other sociological and psychological factors, play a role in creating positive educational and general life outcomes for children. This knowledge, in turn, may then ultimately be employed to affect education policies and early intervention programs for young children.

As mentioned in the previous chapter, the trajectories and trends in style shifting behavior may also be useful in making important decisions involving education policy and curricula. Since speakers appeared to show little change in their shifting behavior after sixth grade, this
suggests that any intervention would be most effective before children begin middle school. This time frame is certainly in line with the more general idea of a “critical period” for language, which ends at the onset of adolescence (Penfield & Roberts, 1959). Clearly, more data between second and sixth grade with be particularly useful in determining the best point at which to implement any sort of intervention plan; thus, while these results are useful, there is more to be done in the investigation of patterns and trajectories of style during the early lifespan.

The work in this dissertation opens up many avenues for further research on style and variation. Building on previous studies of style and applications of composite language measures like the Craig and Washington DDM, the approach to studying style shift advocated in this paper allows researchers to go beyond the examination of individuals’ style shifting behavior and look at this use of language at the group level. What is presented here is not meant as a replacement of the prevailing method of analyzing case studies. Such studies are uniquely able to answer a range of important questions concerning both the nature of style shift and the reasons why speakers engage in it. Instead, the technique discussed here is meant to work with and complement these more traditional techniques, and in doing so expand the possibilities for understanding the use of style and its broader implications for speakers. Tracking style shift using a subset of features gathered from a larger composite dialect measure increases the number and kind of statistical techniques that can be use to probe patterns of language use, and thus gives researchers the opportunity capture generalizations about groups of speakers in order to better understand the use of language in society. In addition, the use of a subset also provides more information about what exactly varies during a style shift, perhaps further clarifying the nature of the shift itself. The ability to isolate the features and factors that are crucial to style shift could tell us a great deal about the underlying causes of speakers’ linguistic behavior. This, in turn,
will be useful in understanding how language affects speaker outcomes, like the development of literacy skills and academic success in children and adolescents. Thus, this paper provides a contribution to the canon on style and hopes to provide insights that might stimulate some of the considerable work that remains to be done on the study of stylistic variation.
APPENDIX I

AAE FEATURE CODE KEY

Morphosyntactic Features:

1. Zero Copula (*CO) = is, am, are, and other forms of the verb to be are variably included or excluded in either copula or auxiliary form

   e.g. the bridge ___ out the bridge *CO out
        they ___ ugly they *CO ugly
        because he ___ cold because he *CO cold

2. Zero Modal Auxiliary (*MA) = will, can, do, and have are variably included or excluded as modal auxiliaries

   e.g. how ___ you do this how *MA you do this
        when ___ my dad get here when *MA my dad get here
        maybe we ___ take this off maybe we *MA take this off
        I ___ never seen it I *MA never seen it
        they ___ been do/ing that they *MA been do/ing that

2. Subject-Verb Agreement = A subject and verb that differ in either number or person
   a. Addition of inflectional –s on non-3rd person singular subject ([P3S], coded on word)
      e.g. we likes them we like/3s[P3S] them
   b. Absence of 3rd person singular –s (/3s)
      e.g. she like_ her she like/_3s her
   c. Leveling = is/was generalization ([LEV], coded on word)
      (e.g., we was[LEV] there, the dog/s is[LEV] in the house)
   d. Difference in number between subject and modal auxiliaries do and have ([3SA], coded on word)
      (e.g., he don’t[3SA] wanna move; his wheel have[3SA] busted open)

3. Finta/(S)poseta/Bouta ([FBS], coded on word) = Abbreviated forms of fixing to, supposed to, and about to
   (e.g., she finta[FBS] backward flip; when does it sposeta[FBS] go; they don’t poesta[FBS] go; this one bouta[FBS] go in the school)

4. Ain’t = Use of ain’t as a negative auxiliary
   a. Ain’t used as a negative auxiliary in are+not, is+not, and have+not ([AI1], coded on word)
      (e.g., why she ain’t[AI1] come/ing; the car/s ain’t[AI1] gonna move)
b. Ain’t used as a negative auxiliary in did+not ([AI2], coded on word) 
(e.g., he ain’t[AI2] go)

5. Undifferentiated Pronoun Case = Nominative, objective, and demonstrative cases of pronouns occur interchangeably
   a. Nominative and objective pronouns are used interchangeably ([UNO], coded on word) 
      (e.g., him[UNO] did and him; and then them[UNO] fall; that car ran he[UNO] over; me[UNO] don’t know; and him[UNO] lose him paper/s)
   b. Use of object form for demonstrative ([UOD], coded on word) 
      (e.g., them[UOD] dogs; that boy drop/ed all them[UOD] paper)
   c. Use of personal/benefactive dative construction ([BDA], coded on word) 
      (e.g., you love you[BDA] some boys; I got me[BDA] a drink)

6. Multiple Negation ([NEG], coded on utterance) = Use of two or more negative markers in a clause for a single negative proposition (i.e., do NOT code he didn’t do nothing, he did was always busy)
   e.g.     I don’t got no brothers [NEG].
             they didn’t do nothing [NEG].

7. Zero Possessive = Possession is coded by word order alone
   a. The possessive marker –‘s is deleted (/^z)
      e.g.        he hit the man/^z car
                  somebody/^z bike *CO broke
   b. The nominative or objective case of the pronoun is used rather than the possessive ([0PP], coded on word) 
      (e.g., they[0PP] house; kids just go/ing to walk to they[0PP] school)

8. Zero Past Tense
   a. The past tense marker –ed is not always used to denote regular past constructions (/^ed)
      e.g.        and this car crash_. and this car crash/^ed.
                  they mess_ up before. they mess/^ed up before.
   b. the present tense form is used in place of the irregular past tense ([0PT], coded on word) 
      e.g.        and then them fall. and then them[UNO] fall[0PT].
                  I come there yesterday. I come[0PT] there yesterday.

9. Zero –ing (/^ing) = The present progressive morpheme –ing is deleted
   e.g.        the lady is sleep_. the lady is sleep/^ing.
               and here/’s a lady that’s wear_ and here/’s a lady that’s wear/^ing
               pink. pink.
10. **Invariant/Habitual be ([IBE], coded on word)** = Unconjugated be with a variety of subjects coding habitual action or to state a rule (e.g., this one be[IBE] flying up in the sky; they be[IBE] messing up)

11. **Zero to (*TO)** = The infinitive marker to is deleted
   e.g. now my turn __ shoot you now my turn *TO shoot you
        he was try/ing __ run after you he was try/ing *TO run after you

12. **Zero Plural (/s)** = Variable inclusion of plural marker –s
   e.g. wait ten minute__ wait ten minute/*s
        two dog__ two dog/*s
        some kids got their lunchbox__ some kids got their lunchbox/*s
        and books and stuff and books and stuff

13. **Double Copula/Auxiliary/Modal**
   a. **Double Copula or Auxiliary ([DCA], code on word)** = Two copula or auxiliary forms of the verb “to be” are used where a single form is needed (e.g., I’m is[DCA] the last one riding on; there is[DCA] play/ing in the snow)
   b. **Double Modal ([DMO], code on word)** = Two modal forms (i.e., verbs that express certain “moods” such as certainty, possibility, obligation, or permission) for a single verb form (e.g., I might could[DMO] go there; you oughta mighta[DMO] take that)

14. **Regularized Reflexive ([RRF], code on word)** = Reflexive pronouns himself and themselves are expressed using hisself and their/theyselves or their/theyself (e.g., he stand/3s by hisself[RRF]; everybody stop and hurt theyself[RRF]; they *CO skate/ing there all by theirself[RRF].)

15. **Indefinite Article ([INA], coded on word)** = Use of a regardless of whether the first sound in subsequent noun is a vowel or a consonant (e.g., a boy is giving his friend a[INA] airplane)

16. **Appositive Pronoun ([APP], coded on word)** = A pronoun that is used in addition to a noun or a second pronoun to signify the same referent (e.g., the crossing guard she[APP] *CO whistle/ing to him; this one he[APP]’s down on the ground)

17. **Past Form for Participles ([RPF], coded on word)** = Substitution of the regular past tense form for the past participle; this should be coded when the speaker is referring to an event that has completed before another past action (e.g., I had went[RPF] down there for SAE “I had gone down there”; he may have took[RPF] the wagon for SAE “he may have taken the wagon”)

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18. Preterite had ([HAD], coded on word) = 'had' + verb in past tense form where Standard American English would use the simple past form (e.g., My mama, she was about to go to Bible study, and on the way back there her car had[HAD] stopped. And then she had[HAD] called the house because somebody let her use the phone. And then she had[HAD] called the house, and then I said, “Hello. Who’s this?” for SAE “My mama, she was about to go to Bible study, and on the way back there her car stopped. And then she called the house and because somebody let her use the phone. And then she called the house, and then I said ‘Hello. Who’s this?’”

**Note that in the above example, the car stopping does not occur BEFORE going to Bible study. (In Standard American English the use of "had stopped" would require the stopping to have occurred before going to Bible study.)

19. Regularization of Irregular Past Tense Form ([IPT], coded on word) = Substitution of regularized past tense form for an irregular verb (e.g., everybody know/ed[IPT] he was late; they throw/ed[IPT] out the old food)

20. Zero Relative Pronoun (*RP) = Absence of the relative pronoun when it is refers to the subject of the sentence

\[\begin{align*}
\text{e.g.} \quad \text{that/’s the man __ come here} & \quad \text{that/’s the man *RP come here} \\
\text{that/’s the dog __ bit me} & \quad \text{that/’s the dog *RP bit me}
\end{align*}\]

21. Uninverted Direct Questions ([UDQ], coded on entire utterance) = Formation of a direct question without I-to-C inversion (e.g., Why I can/’t go [UDQ]?)

22. Inverted Question without if/whether (INQ, coded on utterance) = Inversion of elements in a question without a complementizer whether/if (e.g., she ask/ed could she go [INQ]?)

23. Existential it or they ([XIT], coded on word) = The use of it or they to denote the existence of something (equivalent to Standard English there is) (e.g., it[XIT]’s a doughnut in the cabinet; it[XIT] ain’t no spoon; they[XIT]’s a good show on TV)

24. Regularized mines ([MIN], coded on word) = Regularization of the possessive pronoun mine to mines, through analogy with yours, his, hers, etc. (e.g., mines[MIN] is nice; that book is mines[MIN])

25. Remote past “been” ([RPB], coded on word) = been is used to mark action in the remote past; in such cases the word been is always stressed (e.g., he been[RPB] had that job; I been[RPB] bought her clothes)

26. Completive done ([DON], coded on word) = done and did are used to indicate a completed action and are in a preverbal position (i.e., they are not the main verb) (e.g., he done[DON] fall down; they did[DON] fell)
27. Double Marking = Multiple agreement markers are used for forms
   a. Multiple agreement markers for irregular plural nouns (i.e., addition of plural –s on irregular form) ([DMN], coded on word)
      (e.g., then the peoples[DMN] in the car is smashed)

   b. Multiple agreement markers for pronouns ([DMP], coded on word)
      (e.g., what'/s thems[DMP] doing?)

   c. Multiple agreement markers for irregular verbs (i.e., addition of past tense –ed or plural marker for number on irregular form) ([DMV], coded on word)
      (e.g., a boy was hurted[DMV] on the floor; they fells[DMV])

28. Zero Preposition (*PR) = Prepositions are variably deleted
   e.g. what happen/ed __ the tree? what happen/ed *PR the tree?
        I play __ home I play *PR home
        he got runned over __ a car he got runned over *PR a car
        the boy fell out the car the boy fell out *PR the car
        the boy he got __ an accident the boy he got *PR an accident

29. Zero Article (*AR) = Articles are variable included and excluded
   e.g. I’/ll set them up in __ minute I’/ll set them up in *AR minute
        police officer/s and __ police officer/s and *AR
        ambulance was there ambulance was there
        can you push it into __ bottom can you push it into *AR bottom
        for me for me

**Phonological Features:**

1. Nasal Fronting ([NAS], coded on word) = Substitution of /n/ for /ŋ/
   (e.g., and this boy *CO get/ing[NAS] ready to fall: “getting” = [gɛtɪn])

2. Prevocalic Cluster Reduction ([PCR], coded on word) = Word-final consonant cluster
   ending in a stop is reduced, even when followed by a word beginning with a vowel
   (Note: Do not code “and” & “just” for this feature)
   (e.g., best[PCR] apple)

3. Labialization ([LAB], coded on word) = Substitution of /f/ for /θ/ and /v/ for /ð/
   (e.g., everybody had they mouth[LAB] open: “mouth” = [mɔuf];
    let the other cars: “other” = [ʌvɔr])
Potential Features Codes:

1. Copula Use ([XCO], coded on word) = Use of the copula where it could be deleted under the rules of AAE grammar.
   **This should be coded wherever the copula could be contracted in SAE (e.g., What his name should be coded because it could be What’s his name in SAE; I don’t know where he is should not be coded because *I don’t know where he’s is ungrammatical in SAE).**
   **Cases where only the phonological environment precludes contraction in SAE should be coded (e.g., His nice should be coded, even though *His’s nice does not exist in SAE for phonological reasons)**
   **Do not code first person singular cases (e.g., “I’m”)

2. Lack of Nasal Fronting ([XNA], coded on word) = Use of /ŋ/ in a multisyllabic word (e.g., “going” = [gowŋ])

Miscellaneous Codes:

1. No Feature ([OOO]), coded on utterance) = No AAE feature within a particular C-unit

2. Fully Unintelligible ([UNI], coded on utterance) = More than 20% of a particular C-unit is unintelligible

3. Partially Unintelligible ([PUN], coded on utterance) = Part of a given C-unit is unintelligible, but it is 20% or less of the entire C-unit

4. Elliptical Response ([ELL], coded on utterance) = The speaker’s utterance is not a complete C-unit, but it is in response to a question (e.g., yes, uh-uh, pizza, after school—as response to a question)

5. Abandoned Utterance (> ) = The speaker abandons an utterance, even if it contains a complete clause. (e.g., when he was marooned on an island with all shark he>)

6. Interruption (^) = The speaker abandons an utterance because he or she is interrupted. (e.g., I was on my way to the store when^ )

7. Filler ([FIL], coded on utterance) = Words like “OK”, “yeah”, “uh-huh”, etc. that are not in answer to a direct question and are used as a space filler

8. Casual Article ([CAR], coded on word) = When the subject omits an article because he is reading a list, not because of a vernacular feature. Be sure to note the difference between this and the “Zero Article” feature.
APPENDIX II

TRANSCRIPTION AND CODING PROTOCOL

I. Data

Data from audio CD’s of the interaction will be coded. If any aspects of the recording are in question (e.g., difficulty identifying a speaker or parts of the interaction are unintelligible), this information may be verified using the video/DVD recordings of the interaction. This verification will be done after all audio CD’s are coded.

II. Equipment

The audio recordings will be heard through the Express Scribe program on a computer or laptop. This program can be downloaded for free from the manufacturer’s website, http://www.nch.com.au/scribe/. To download the software, click on the link that says, “Click here to install Express Scribe for Windows.” That will download the installation software and will put an installation icon wherever you choose on your hard drive. Double-click that icon, and follow the prompts to finish installation.

To play a CD in Express Scribe, one must:

a. Put CD in disk drive
b. Open the “File” menu, and select “Load Audio CD track(s).”
c. A box will open. Select the track you want to hear, and click “Load.”
d. The track you wish to will appear in the Express Scribe window. You may play, pause, fast forward, rewind, and increase or decrease the speed of the recording in this window.
e. The function keys can be used as shortcuts:

<table>
<thead>
<tr>
<th>Key</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Display Help</td>
</tr>
<tr>
<td>F2</td>
<td>Play Slow Speed</td>
</tr>
<tr>
<td>F3</td>
<td>Play Fast Speed</td>
</tr>
<tr>
<td>F4</td>
<td>Stop</td>
</tr>
<tr>
<td>F7</td>
<td>Rewind</td>
</tr>
<tr>
<td>F8</td>
<td>Fast Forward</td>
</tr>
<tr>
<td>F9</td>
<td>Play</td>
</tr>
<tr>
<td>F10</td>
<td>Play Real Speed</td>
</tr>
<tr>
<td>F11</td>
<td>Play Slow Speed</td>
</tr>
<tr>
<td>F12</td>
<td>Play Fast Speed</td>
</tr>
</tbody>
</table>

The DVD/video recordings can be viewed using any DVD player or 8mm VCR.

When coding both audio and video recordings, the coder should use good quality headphones. If the coder does not own quality headphones, they are available at FPG or NC State labs.
III. Method

A. What to Transcribe and Code

1. Grade 6 & 8 Peer Interaction
   The coder will code four total contexts: two formal and two informal. The two formal contexts are the “Speech to Parents of New Children” (F1) and “Kids Only Vacation” (F2); the two informal contexts are “Snack” (I1) and “Issue Discussion” (I2). The coder will code all four contexts for each speaker initially, in order to assess reliability. After initial reliability is determined, the coder will code “Speech to Parents of New Children”, “Kids Only Vacation”, and “Issue Discussion.” If necessary, the coder may then code “Snack”.

2. Grade 10 Peer Interaction
   The entire interaction will be transcribed and coded. It consists of the selection of a picture to create a character for a “MySpace” or “Facebook” page and the creation of the page. If this is not long enough the youth were told to discuss anything they wanted to.

3. Adult Formal/Informal Tasks, Grades 6.8. & 10
   This consists of 2 parts with 2 different examiners. The formal interaction included the signing of the assent form and a practice job interview. The practice job interview will be transcribed.
   In addition the CELF-3 Formulated sentences subtest will be transcribed in order to provide additional utterances for the formal interaction.

4. Age 4 Language Sample
   The language sample at age 4 is an interaction between the child and an examiner. In this interaction the examiner puts out a toy playground for the child to play with. It begins with the examiner saying: “Have you ever played on the playground? I have some children who want to play on the playground”. She then puts out a plastic slide, bench, and 2 children. She then proceeds with putting out other items that the child chooses and lays with the child.

5. Grade 1 Mother Child Interaction
   The interaction at Grade 1 is between the primary caregiver (usually mother but there are some fathers and grandmothers) and the child. There are 5 parts to the interaction:
   Guessing Game
   **Birthday Party planning** and thank you note
   **Magnet Task**
   Child Book reading/Book Report
   **Parent Child Reminiscing.**
You will be transcribing both the mother and child. You will not transcribe the entire interaction. First transcribe the Magnet Task and Parent Child Reminiscing. If you do not have 50 utterances each for the mother and for the child, then transcribe the Birthday party planning.

6. Grade 4 Mother Child interaction
   The interaction at Grade 4 is between the primary caregiver (usually mother but there are some fathers and grandmothers) and the child. There are 5 parts to the interaction:
   - Guessing Game
   - Child Book reading/Book Report
   *Magnet Task
   - Letter Writing
   *Parent Child Conversation – Favorite teacher and What do you want to be when you grow up.

You will be transcribing both the mother and child. You will not transcribe the entire interaction. First transcribe the Magnet Task and Parent Child Conversation. If you do not have 50 utterances each for the mother and for the child, then transcribe the Letter Writing.

B. How Much to Code

   a. For the two formal contexts, coding will commence when each subject begins his/her speech and will end when the subject finishes the speech. These contexts also include the “follow up” speeches after the initial presentations, but the period between the presentations need not be transcribed or coded. Any conversation between subjects or between the subject and the experimenter will not be coded for AAE features, but may be noted in transcription. Any speech from the other subject (the subject not giving the speech) will not be coded, but should be noted in the transcription.

   b. For the two informal contexts, coding will commence when the experimenter announces that she is leaving the room. Coding will end when the experimenter returns to the room and announces that the task is over. (Any speech by or interaction with the experimenter may be included in the transcript, but should NOT be coded.) The “Issue Discussion” segment should be transcribed first, followed by “Snack” if necessary.

   c. The coder should transcribe at least 50 C-units per speaker for each context if possible. This would result in a minimum of 100 C-units per subject. Please transcribe a few extra C-units to be sure enough data is collected.

C. Transcribing Speech
Using SALT or notepad, the coder will orthographically transcribe the speech from the tasks indicated above in III a & b. Each line of the transcript will contain one “Communication Unit” as defined in Craig & Washington, 2006.

a. Defining a “Communication Unit” (C-unit)

A C-unit is defined as “an independent clause plus its modifiers.” The main criterion for determining segmentation in multi-clausal utterances was whether the second clause contained a subject. Thus, in the examples below (1) was scored as two C-units, while (2), (3), (4) and (5) were scored as a single C-unit.34

i. she made um like a circle / and then she made something
ii. um the peoples fall down and go in the snow
iii. I’ll play with anything here but not no girl stuff
iv. I’m gonna change her clothes ‘cause she been baseballing
v. and somebody helping somebody that’s bouta get in a ice puddle

In (1), there are two independent clauses, each with a subject. In (2), (3), (4), and (5), each contains only one independent clause as well as a modifier, which is underlined: (2) and (3) contain a coordinate clause; (4) contains a subordinate clause; (5) contains a relative clause.

If a C-unit is repeated verbatim, the second repetition should be counted as a separate C-unit. The exception to this is cases where the C-unit consists of only one word. In this instance count all consecutive repetitions as one C-unit.

(e.g., Why why why why? = 1 C-Unit)

There are certain cases in which an utterance that is NOT a clause may be considered as to be a C-Unit. They are:35

1. An answer to a question, provided that the answer only lacks the repetition of the question elements
   (e.g., Went home in answer to What did you do then?; Down their hole in answer to Where did they go?)

2. Each elliptical “yes” or “no” answer is one C-unit
   (e.g., Yes in answer to Have you ever been sick?; If a phrase follow “yes”/“no” to expand on it, considers them to be a single C-unit e.g., Yes (pause)…and my momma is going too)

3. Each utterance that is not a main clause but is preceded and followed by terminal silence is one C-unit

---


(e.g., Couldn’t understand what he was saying where the previous C-unit was He wanted something followed by a pause; A whole lot of hyenas where the previous C-unit was He has hyenas who are his friends followed by a pause)

b. What NOT to Count as a C-unit

In some cases, part of a C-unit may be unintelligible. If the utterance maintains a Subject-Verb structure it is to be scored as a C-unit. Each inaudible or unintelligible word should be marked as “X” in the transcript. Inaudible or unintelligible segments should be marked as “XX” and inaudible or unintelligible segments should be marked as “XXX”. If it does not maintain a Subject-Verb structure and is not one of the exceptions listed above, or if less than 80% of the utterance is intelligible, it should NOT be scored as a C-unit, and therefore should not be coded. Additionally, words like “alright”, “OK”, “yeah” etc. should not be counted as C-units if they are used by the speaker as fillers (and are not answers to questions), and rote phrases and ejectives should not be counted as well (e.g., dang, oh man).

c. Transcribing

The coder should code each task separately and save each to its own text or SALT file. The title of the SALT document should be the subject’s Target grade, context, and ID Number (e.g., G6_F1_1010 or G7_I2_2001) and the document should be in a folder that denotes the numbers of the subject pair (1010-2001). This folder will contain all of the data files for the subject pair. It is very important that all of the SALT files in this folder be named using the same convention.

1. Creating the SALT file

When a new SALT file is created, a box will appear prompting the user for information about the transcript to be included in the transcript’s header. Not all of this information is necessary for our purposes. It is usually easier to copy a header from another file and change the information to match the new file. Here is a sample formal header:

```
$ Child, Examiner
+ Language: English
+ SubjectId: 1015
+ Gender: M
+ Context: F1
+ DOE: 07/07/2004
+ Examiner: DW
+ Transcriber: AT
+ SubjectInitials: AM
```
Language: Language used during interaction
SubjectID: ID number of the subject of interest.
Gender: Child’s gender
Context: F1=school speech; F2=vacation speech; I1=snack; I2=issue discussion
DOE: Date of examination (written on CD)
Examiner: Initials of examiner (found on list inside of Cabinet B)
Transcriber: Initials of transcriber
SubjectInitials: Initials of subject (found on list inside of Cabinet B)
TGrade: Child’s target grade (i.e., the grade the child should be in if he/she has not been held back or skipped a grade; found on list inside of Cabinet B)
AGrade: Child’s actual grade (found on inside of Cabinet B)
Coder: Initials of Coder
Transcription Date: Date that transcript is completed

For the informal settings, there are two target speakers. The subjects should be identified in the Target Speaker box by their ID numbers and should be separated within the box only by a space. Because there are two subjects, you must enter relevant information for both speakers. You will essentially need two versions of the same file, one for each child. For example, in the file below Subject 1015 is the target speaker (t) and Subject 2060 is the peer speaker (p). This file would be saved as G7_I2_1015:

$ 1015, 2060, Examiner
+ Language: English
+ SubjectIdt: 1015
+ SubjectIdp: 2060
+ Gender: M
+ Context: I2
+ DOE: 07/07/2004
+ Examiner: DW
+ Transcriber: AT
+ SubjectInitialst: AM
+ SubjectInitialsp: KB
+ TGradet: 7
+ AGradet: 6
+ TGradep: 8
+ AGradep: 7
+ Coder: EE
+ TranscriptionDate: 07/05/2007
- 51:57

103
You will also save the same transcript, but with a header that has 2060 as the target speaker and 1015 as the peer. This file would be saved as G8_I2_2060:

```
$ 2060, 1015, Examiner
+ Language: English
+ SubjectIdt: 2060
+ SubjectIdp: 1015
+ Gender: M
+ Context: I2
+ DOE: 07/07/2004
+ Examiner: DW
+ Transcriber: AT
+ SubjectInitialst: KB
+ SubjectInitialsp: AM
+ TGradet: 8
+ AGradet: 7
+ TGradep: 7
+ AGradep: 6
+ Coder: EE
+ TranscriptionDate: 07/05/2007 - 51:57
```

Differences from the formal header are:

- **SubjectIdt**: Target subject’s ID
- **SubjectIdp**: Peer’s ID
- **SubjectInitialst**: Target subject’s initials
- **SubjectInitialsp**: Peer subject’s initials
- **TGradet**: Target subject’s target grade
- **AGradet**: Target subject’s actual grade
- **TGradep**: Peer’s target grade
- **AGradepe**: Peer’s actual grade

2. **Time**
   The default time at the beginning of a transcript is 0:00. This should be changed to the time of the first transcribed utterance of the transcript. If the transcript it very long, the time should be noted at least every five minutes. The time of the last utterance should also be noted at the end of the transcript. Gaps in the transcript should also be noted. For example, if the examiner enters, the time of her entrance and exit should be noted. Times are always entered in the same format (- 0:00).

3. **Entering C-units**
   SALT identifies a line as an utterance by a single character at the beginning of the line. This character should be the first letter or number of the speaker’s label. If the speaker is labeled as Child in the header, then the speaker’s utterances must be identified by C within the transcript. If the speaker is labeled as K256 his lines
must begin with K. Each utterance line should consist of the identifier (such as C or K), a space, and then one C-unit:

C I told my momma that I didn’t want to go.

The examiner should always be identified by the letter E. In the formal transcripts, the child should be identified as C. In the informal transcripts, the children should be identified by the first letter or number of their ID number.

4. In the transcription process, the coder should listen to each task 4-5 times before moving on to the next task. On the first run, the coder should listen to the audio and transcribe as well as possible, rewinding as necessary. Only relevant C-units should be included in the transcript. Thus, any utterances directed at the experimenter should not be included. Additionally, in the formal contexts do not include any communication between the two subjects.

5. Next, the coder should listen to the audio for the task in its entirety again to check the validity of the morphosyntactic features in the transcript.

6. The coder should listen to the audio 2-3 more times to check for phonological features (focusing on 1-2 features on each run).

During the transcription process, it may be helpful to mark the African American Features in the transcript itself (see “AAE Feature Key” for feature list). Morphosyntactic features and “missing” sounds may be placed in parenthesis (e.g., singin(g)). Be sure to remove the parentheses from the finalized version of the transcript.

Several conventions will be used when transcribing. When subjects speak at the same time, this should be indicated with angle brackets <>.

Cases where the speaker abandons an utterance are not C-units and should be punctuated by a greater than sign >. Likewise, cases where the speaker is interrupted are not C-units and should be punctuated by a caret ^.

Sometimes utterances are not abandoned, but they are revised or repeated within the same utterance. In such cases, the revised or repeated word(s) should be placed in parentheses.

(I didn’t know) I didn’t know he was gonna be there
She said (that I) that I should work harder.
Daddy and me we went (to the store) to the grocery store.

The last character of each utterance must be ending punctuation, which may be a period (.), an exclamation point (!), a question mark (?), a greater than
sign (>) or a caret (^) (see above). If there are characters after the punctuation, or there is no punctuation, the SALT program will register it as an error. Minimal punctuation should be used in the transcript. The only punctuation marks that should be used within an utterance are quotation marks (" ") and commas (.). All other punctuation has unique meaning for the program. For example, do not use periods for abbreviations, as they signify the end of an utterance.

Enter any points of interest as transcriber comments. If the comment is within an utterance, it should simply be surrounded by brackets {}. If the comment should stand on its own line, identify the note with an equal sign = and enter it as any other line. Comment lines do not need punctuation (e.g. = examiner enters).

d. Coding Phonological Features during Transcription
   All transcribers will listen for three phonological features when working on a transcript. These are:
   i. Nasal Fronting: the replacement of “ng” with “n” (e.g., “goin’” for “going”). When you see this, type [NAS] after the word. **Anytime Nasal Fronting DOES NOT occur on an “ing” word, you should mark it [XNA]**
   ii. Labialization: the replacement of “th” with “f” or “v” (e.g., “brover” for “brother”). When you see this, type [LAB] after the word.
   iii. Prevocalic Cluster Reduction: the replacement of 2 or more consonants with a single consonant BEFORE A VOWEL (e.g., “Wes’ Avenue” for “West Avenue”). When you see this type [PCR] after the word.

e. Potential Problems in Transcribing

Several potential problems may arise in transcribing the audio files:
   i. First, it may be difficult to identify which subject is speaking, especially in the informal context. If this occurs, the coder should watch the DVD/video of the session to determine the speaker.
   ii. Also, it likely will not be evident which ID number should accompany which speaker. To determine this, the coder should try to determine the subjects’ first name from the audio. This information can then be compared with a list of subject names and ID numbers to determine who is who. If this is still not possible, the coder can check with Dr. Susan Zeisel at FPG, who is familiar with all of the study subjects and should be able to help identify them.
   iii. Finally, it may be difficult to hear or understand the speakers in some cases. As discussed above, all of the data is also available on DVD or 8mm video. After transcribing and coding all of the tapes, the coder
should then look for inaudible portions of the transcripts and use the videos to try to fill in those gaps in the data.

f. Reliability

Initial reliability checks will be done by having two coders code all four contexts for 5 subjects. Once the coders are deemed reliable, they should regularly check reliability by coding the same tape every 5 subjects at first and later increasing to every 8-10 subjects. Reliability must be assessed for the coding, as well as the transcript itself. To differentiate these two types of reliability, coders should check the reliability of transcripts before running reliability assessments on the coding. This will prevent transcript errors from causing false unreliability findings in the coding portion. Reliability checks will be done in SAS by statisticians at FPG.

D. Coding Transcribed Data (for select students only)

When coding transcript, you will look for morphosyntactic features listed in the code key below.

When the coding process is complete, the transcript should be checked for coding issues by being reread in its entirety. Finally, check the transcript for formatting errors by using the “check transcript” function in SALT.
APPENDIX III

CRAIG & WASHINGTON (2006) DIALECT DENSITY MEASURE FEATURES

Phonological Measures
1. Postvocalic consonant reduction
2. “g” dropping (i.e., Nasal fronting)
3. Substitutions for /T/ and /D/ (i.e., Labialization)
4. Devoicing final consonants
5. Consonant cluster reduction
6. Consonant cluster movement
7. Syllable deletion
8. Syllable addition
9. Monophthongization of diphthongs

Morphosyntactic Measures
1. Ain’t used as a negative auxiliary in have+not, do+not, are+not, and is+not constructions
2. Appositive pronoun
3. Completive done
4. Multiple agreement markers for regular nouns and verbs and hypercorrection of irregulars
5. Double copula/auxiliary/modal
6. Existential it
7. Finta/sposeta/bouta
8. Preterite *had*
9. Indefinite article
10. Invariant *be*
11. Multiple negation
12. Regularized reflexive pronoun
13. Remote past *been*
14. Subject–verb agreement
15. Undifferentiated pronoun case
16. Zero article
17. Zero copula/auxiliary
18. Zero –*ing*
19. Zero modal auxiliary
20. Zero past tense (i.e., *-ed* markers are variably included on regular past verbs and the present forms of irregulars are used)
21. Zero plural
22. Zero possessive (i.e., possessive -*s* is deleted or a possessive pronouns is changed)
23. Zero preposition
24. Zero infinitival *to*
APPENDIX IV

GRADE 1 MOTHER CHILD INTERACTION PROTOCOL

The interaction at Grade 1 is between the primary caregiver (usually mother but there are some fathers and grandmothers) and the child. There are 5 parts to the interaction:
1. Guessing Game
2. Child Book reading/Book Report
3. *Magnet Task
4. Letter Writing
5. *Parent Child Conversation – Favorite teacher and what do you want to be when you grow up

Parts to Transcribe:
Magnet Task
Mother Child Reminiscing
Planning a Birthday Party

Orientation to Activities

I. Guessing Game
A. Guessing Game Orientation 2 minutes
B. Guessing Game - Mother 3 minutes
C. Guessing Game - Child 3 minutes

II. Birthday Party
A. Birthday Orientation 1 minute
* B. Plan a Birthday Party 3 minutes
C. Thank you Note 4 minutes

*III. Magnet
A. Magnet Play Orientation 1 minute
B. Magnet Play 5 minutes

IV. Book Reading
A. Book Reading Orientation 1 minutes
B. Book Reading 1 5 minutes
C. Book Report Activity 4 minutes
D. Book Reading 2 5 minutes

*V. Mother Child Reminiscing

Total time 44 - 57 minutes

*Transcribe
Prior to starting taping of Tasks, speak with mother and complete the Event Information Sheet for the Mother Child Reminiscing. The child should be out of earshot during this portion if possible. Give the child some toys to play with.

“For this task, we are interested in how much and what kinds of information children can remember about their past experiences. We are going to ask you to talk with your child about 3 past events today. The kinds of events we are interested in are one-day, unique events that you and your child have experienced together within the past year. So, these should be special events that your child has experienced only once. Other people could have been at these events but they must be something that you and your child participated in. What kind of things come to mind?”

ORIENTATION TO ACTIVITIES
WELCOME OF CHILD AND SEATING OF PAIR

Examiner says to child, “Hi _____. I’ve brought along some activities for you and your mom to do together today!” There are several activities that will last about 50 minutes.”

I. GUESSING GAME

A: GUESSING GAME ORIENTATION

Examiner says, “First, I’m going to ask you to play a guessing game. In this game, you will have a set of cards with a picture and a word.”

Examiner holds up picture cards
The purpose of this game is to have _____ guess what the word is on each card. To play the game you will give clues to _____ until (he/she) guesses the word on that card. You can say anything you think might help (him/her) do that. But do not say the word on the card and do not show the card to (him/her).

Hand practice card to mother, and say, “Let’s try one. Go ahead and give a clue.”

If mother shows the card or says the word, say “Remember, don’t say the word or show the card. Besides that, you can say anything. Let’s try it again.”

After mother gives a clue, say “OK, you’ve got it!!”

A little later, _____ will have a set of cards and (he/she) will try and get you to guess the word on each card.

“Do you have any questions about the guessing - game?”
B: GUESSING GAME -- MOTHER

Examiner says to mother, “Here is your set of cards. You will get _____ to guess what is on them by giving clues one at a time. Remember, you can not show the card to (CHILD) or say the word.”

“You will have three minutes to do as many cards as you can -- but don’t worry if you don’t get through all the cards.”

TAKE PRACTICE CARD OFF DECK.
GIVE MOTHER “MOTHER’S CARD DECK” WITH CARDS ORDERED AS NUMBERED.

Please begin with the card on top.
BEGIN TIMING -- 3 MINUTES

Mother’s Card Deck (Blue cards):
Ball (Practice card)
Flower
Dance
Diamond
Vegetables
Nail
Wheel
Furniture
Thief
Stool
Goat

If Mother says the word or shows the card, the first time ONLY that she does this, say, “Remember, you cannot say the word or show the card. Besides that you can say anything.”

STOP AFTER THREE MINUTES OR ALL CARDS ARE USED UP.

Say to mother, “Okay, let’s go on.”

TAKE BACK “MOTHER’S CARD DECK”.

C: GUESSING GAME -- CHILD

Examiner says to mother, “Now, I’ll give _____ a different set of cards, and (he/she) can get you to guess what is one them. Please take a moment to explain to _____ what (he/she) should do, and then I will give (him/her) the cards.”

Hand practice card to mother and say, “Here is a card for _____ to practice with.”

AFTER MOTHER’S EXPLANATION, GIVE CHILD “CHILD CARD DECK” WITH CARDS ORDERED AS NUMBERED.

Say to child “_____ , you have three minutes to get your mom to guess as many of the cards as she can.” Remember not to show your mom the card or say the word on the card.
TAKE THE PRACTICE CARD OFF THE DECK
Please begin with the top card.

BEGIN TIMING -- 3 MINUTES

Child’s Card Deck (Yellow cards):

<table>
<thead>
<tr>
<th>Book (Practice card)</th>
<th>Clock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle</td>
<td>Mouse</td>
</tr>
<tr>
<td>Butterfly</td>
<td>Cry</td>
</tr>
<tr>
<td>Money</td>
<td>Airplane</td>
</tr>
<tr>
<td>Umbrella</td>
<td>Knife</td>
</tr>
<tr>
<td>Fruit</td>
<td></td>
</tr>
</tbody>
</table>

If child says the word or shows the card, the first time ONLY that (he/she) does this, say, “Remember, you cannot say the word or show the card. Besides that you can say anything.”

STOP AFTER THREE MINUTES OR ALL CARDS ARE USED.

TAKE BACK CHILD’S CARD DECK AND SAY, “Okay! Now let’s go to the next activity.”

II. BIRTHDAY PARTY

A: BIRTHDAY PARTY ORIENTATION

Examiner says, “The next thing we’d like you to do is to help _____ plan a pretend birthday party for (himself/herself). There are lots of different things the two of you can talk about. You could talk about who might be invited, and what you would do during the party, or anything else about the party.”

After you’ve planned the party, we’d like you to help _____ write a thank you note for one of the presents from the party.

If mother says child doesn’t have birthday parties, say, “Well, we’d just like you to plan a pretend celebration or gathering. Do you have any questions?”

*B: PLAN A BIRTHDAY PARTY
(THERE ARE NO PROPS FOR THIS TASK)

Examiner says, “You can start planning your party now. I will be back in a few minutes.”

Stop after three minutes, by saying, “Okay!”

If discussion stops before two and a half minutes, prompt before going on, “We still have a little more time, have you covered all your plans?”
If mother asks for a pad, say, “We’d like you just to talk about it.”

C: THANK YOU NOTE

Examiner says to the child, “Now that you’ve planned the party, I’d like you, _____, to pretend that one of your friends or relatives gave you a special present at your party and you want to send that person a thank you note.”

“I’m going to give you some paper and a pencil so that you can write the thank you note.

HAND CLIPBOARD WITH BLANK SHEET OF PAPER AND PENCIL DIRECTLY TO CHILD.

Examiner says to mother, “Please take a few minutes to help _____ write the note.”

BEGIN TIMING -- FOUR MINUTES

End task by saying, “Okay!”

Take back clipboard and pencil. Collect note and record ID number and date in top corner.

III. THE MAGNET ACTIVITY

A: MAGNET PLAY ORIENTATION

Examiner says to child, “I have some toys for you and your mom to play with.”

*B: MAGNET PLAY

Examiner hands toys to child.

Examiner says to child, “I will be back in about 5 minutes.”

BEGIN TIMING--5 MINUTES

Set of Toys
- powerful red horseshoe magnet
- An assortment of small metal and plastic objects
- 2 small corks
- 2 colored hard plastic balls with centers that were magnets
- 2 pennies
- 2 nickels
- 1 plastic sheep
- 2 dinosaur erasers - one with magnetic strip, one plain
- 1 plastic ice cream cone with magnet on back
- 7 1/2 inch yellow oblong magnet
- 2 metal washers
- 2 rubber washers
- 1 large screw
- 2 paper clips
- 3 foam cylinders - 2 small, 1 large
- 1 plastic seal

A tape recorder is left near the mother-child pair during the interaction.
IV. BOOK READING

A: Book Reading ORIENTATION

Examiner says, “Now I have some books for you to read. “I would like you to read these two books with ______.”

B. Book Reading 1/ Book Report

Examiner hands book to mother and says, “I’d like you to begin with this book, Curious George and the Pizza. Please read it to ________.”

Examiner says to child, “______, when you have finished the book, I’d like you to pretend that your teacher has asked you to tell your class about this book. You and your mother will have a few minutes to practice what you would say to your class about this book.”

After reading, begin timing 4 minutes for book report.

Repeat book report directions if needed.

IF DISCUSSION STOPS BEFORE THREE MINUTES, PROBE BEFORE GOING ON, “You still have a little more time--have you covered all you want to tell the class about the book?”

STOP AFTER 4 MINUTES. Take BOOK BACK, “Okay, we’re finished.”

C. Book Reading 2

Examiner hands book Sharing Time Troubles to mother and say: “Now I would like ______ to read this book to you. “You can help ______ anyway that you would like with his/her reading.

If mother asks if she can help the child, say “Yes”.

When child finishes reading, take back book and say “Good job. Now let’s go on to our last task.”

*V. MOTHER CHILD REMINISCING TASK

Hand mother list of Event Information Sheet.

“Here is the list of events we talked about when you arrived. I’d like you to ask (child) to remember the 3 events in as natural way as possible. I’ll be in the other room. Feel free to talk for as long as you wish about each event.”

• If the parent asks how long they should talk: “As long as you want to talk about these events.”
• If the parent asks any questions about how they are doing, whether they talked enough, etc., give general assurances.

• The parent-child conversation will end when the parent indicates they are through talking.
APPENDIX V  
GRADE 2 NARRATIVE PROTOCOL

1.  Frog Story

Today we're going to play some games. (Take out Frog Story) We're going to do some things and use the tape recorder. Administer Frog Story

"Here is a book. This book tells a story about a boy \(\textit{point to picture cover}\), a dog \(\textit{point}\), and a frog \(\textit{point}\). First, I want you to look at all the pictures. Pay attention to each picture that you see and afterwards you will tell the story."

After child has had sufficient time to look through book, say:  
"Tell me the story, looking through the book." Examiner looks at each picture with child as the child tells the story. Examiner says, "Uhhuh" after child tells about each picture. Examiner also uses the following neutral prompts as needed: "Anything else?", "And…?", "Go on."

Transcribe later (additional coding sheet)

2.  Bear Story

Now we're going to do something different. Look at these pictures (show slides) and see if you can make up a story about what is going on. Look at all of them more than once and keep them in this order. (follow # sequence). Wait until you look at all of them before you begin your story. (after C has had sufficient time to look at the slides in sequence say): Now you make up a story.

(If C need more time to view the pictures, let C look, but viewer must be away during storytelling).
(Use three prompts) Is that all? Anything else you want to tell me? What else?

Transcribe later (additional coding sheet).

3.  Picture Description Task – Circus Description

“In this folder there's a picture. I would like you to open the folder and look at the picture very carefully. When you're ready, describe the picture so that another kid can draw it. Now this other kid can't see the picture, so you have to tell him or her exactly what it looks like. Take as much time as you want before you begin.” (C looks at photograph in a folder)

(Use four prompts) “Tell me about the picture. Tell me what you see. What else? Anything else?

Transcribe later (additional coding sheet)
4. Nonword Repetition Task

No practice nonwords are provided and the child hears each nonword only once.

Introduce the words by saying: Now you will hear some made-up words from this tape player (point). I want you to follow the woman's instructions and say the words exactly the way they are said on the tape recorder."

Go to form. Audiorecord the child's responses onto a portable cassette recorder to be transcribed later using broad phonetic transcription.

5. Narrative Elicitation Task

Now we’re going to talk about things we have done. After each situation, give 2 additional prompts: Anything else? Tell me more of what happened when you...

Transcribe later (additional coding sheet).

1) “I know a little girl who just lost a tooth last week. Have you ever lost a tooth?” (pause for response) (If no, say, “Tell me what it’s like when someone loses a tooth.”). “Tell me about what happened when you lost your tooth.”

2) I went to a basketball game last week. Have you ever been to a basketball game? (pause for response) (If no, say, Tell me what happens when someone goes to a basketball game). Tell me about it.

3) I spilled juice all over me at breakfast today. Did anything like that ever happen to you? (pause for response) (If no say, Tell what happens when someone spills his juice) Tell me about it.

4) I went on trip to see my mother a few weeks ago. Have you ever been on a trip? (pause for response) (If no, say, Tell me what happens when someone goes on a trip). Tell me about it.
APPENDIX VI

GRADE 6 AND 8 PEER INTERACTION PROTOCOL

The peer interaction is composed of 6 parts. However, for this project, only the parts starred below will be transcribed. The 6th and 8th grade protocols included two tasks designed to elicit language in both an informal and a formal language context with the youth’s friend. Our operational definition of formal versus informal tasks is linked to the familiarity of the task, the nature of the task itself, and the audience.

*a. School Speech*

1. The youths are asked to plan a speech to be given to parents of children who are just starting their school. *This first part is not transcribed.*

2. Each is then asked to present the speech to a group of teachers who will choose the student who will present it. They are then asked why they should be the student chosen for the presentation.

*b. Vacation Planning*

1. The youth are asked to plan a kids only vacation. They can go anywhere in the world they would like to go to but it must be a place neither one of them has been to before. They are given a guide to complete for the planning. *This first part is not transcribed.*

2. Each is then asked to present the plan to someone who is planning a book on vacations for kids. They are then asked why they think their vacation should be chosen for the book.

*c. Snack*

The youth each chose a drink and snack from a basket. They have 5 minutes to eat and talk.

d. Jenga

The youth play the game Jenga. *This is not transcribed.*

e. Stomp and Share

They youth play a game “Stomp and Share”. *This is not transcribed.*

*f. Problem Discussion*

Earlier in the day, each youth was asked to pick two problems or issues that they would like to discuss with their friend. These were written down and are given to the youth now. They are asked to discuss why this is a problem, what they have done to try to solve it and if it worked, and how their friend can help them solve it. Each youth discusses one problem. If time allows they then talk about their second problem.

*Transcribed*
Peer Interaction Protocol

General Introduction
Now we have several games and things for you to work on together. We will also have a snack for you.

I. Speech to Parents of New Children (15 Minutes)
A. Set-up
Lined paper
2 pencils
Directions

B. Instructions: Planning Speech
“First I would like you to plan a speech. The speech will be presented to the parents of new children who will be starting your school in August. You need to first welcome the parents and then tell them what your school is like. For example, tell them about a typical day. Then I would like you to give any advice about your school that you think would be helpful for them to know such as classes to take, lunch and other activities. You can take notes as you plan your speech – you don’t have to write the whole speech out. You will have about 6 minutes to prepare your speech. Later I will come back and ask each of you to present your speech.

C. Prompt Planning Speech
If youths are finished in less than 4 minutes, enter room and prompt: “Is there anything else you want to tell the parents? Or What else can you think of to add to your speech?”
At 5 minutes “You have about a minute to finish planning your speech. If you are not finished then you can still add more things when you present the speech.”

D. Doing Speech
After 6 minutes or when youths are done, enter room and say, “Now I would like EACH of you to practice presenting the speech. Imagine that you are really in front of a group of teachers who will be choosing the student to present the speech to parents. The speeches do not have to be identical – they may vary somewhat. I would like you to stand and face the panel while presenting your speech. You will have about 5 minutes to present your speeches.”

E. Prompt Presenting Speech
If youths are finished in less than 3 minutes or both did not present, enter room and prompt: “Is there anything else you want to tell the parents? Or “You both need to present.”

F. “Now I would like each of you to say why you think the panel should chose you to give the speech.”

G. End of Speech
“That would be a wonderful speech.”
II. Plan a Kid’s Only Vacation (15 minutes)

A. Set-up
Planning sheet to give to youth.
2 Pencils
Directions

B. Instructions for Vacation Planning
“You are going on a vacation. You can go anywhere you want but it should be a place neither one of you have been to before. This will be a kids only vacation. You can pick who you would like to go with, how long you will go, how you will get there, how much money you will be able to spend and what you will do when you get there. You will have about 8 minutes to plan your vacation.

We want you to talk about this a lot before making a decision. Consider all the choices that you have. Then you will write your plan on this sheet. (Give youths planning sheet). Later I will ask you to present this vacation plan to somebody who is writing a book on vacations for kids. Please be sure to go over your plan that you wrote on this form when you are done. Make sure it really says what you want.”

C. Prompt Vacation Planning
If completed before 5 minutes prompt: “Please review all of your plans to see if you want to make any changes and that you have included everything you want.

D. Presenting Vacation to Author
Now I would like EACH of you to present your vacation plans to somebody who is writing a book about kids vacations. The presentations do not have to be identical – they may vary somewhat. You will have about 4 minutes to do this presentation.”

E. Prompt Vacation Planning Presentation
If completed before 3 minutes or both youth did not present, prompt: “Are you sure you have said everything you want to about your vacation plans?”

F. Presentation of why this is a great vacation
“Now I would like each of you to present to the author why you think this would be a great vacation for kids and should be included in the book.”

G. End of trip Planning
“That trip sure sounds great.”

III. Snack (5 minutes)

A. Set-up
Hand wipes
Basket with snacks, only one of each kind.
A variety of juice boxes, only one of each kind.
B. Instructions
Give youths a basket of snacks
“Now it is time for snack. Here are some snacks for you to eat. You may each have only one. When you are finished we will go on with next game.”
Allow youths to pick one each.

C. End of snack
“Now let’s play a game.”

IV. Jenga Game (6 minutes)

A. Set-up
Jenga game
Easel with directions

B. Instructions
“Here is the game Jenga. Have you ever played it before? The object of the game is to remove one block at a time, and then stack it on top. The last player to stack a block without making the tower fall wins the game.

These are the rules DEMONSTRATE:
On your turn: (Point to rules on easel rule sheet).
• Carefully remove a block from anywhere BELOW the highest completed story.
• Use only one hand!
• Then stack the block on top of the tower at right angles to the blocks just below it.
• Remove and stack only one block per turn.
• Remember – use only one hand (you can switch hands whenever you wish).
• As the game proceeds and the weight of the tower shifts, some blocks become looser than others and are easier to remove. You can touch other blocks to find a loose one – but if you move a block out of place, you must fix it (using one hand only) before touching another block.
• While stacking, always complete a 3-block story before starting a higher one.

Your turn starts 10 seconds after you stack your block or as soon as the other player touches one.
You can play for 6 minutes. This may mean you get to play it once or many times, depending on fast the blocks fall. I will be back to tell you when the time is up.
Any questions about playing Jenga? Can you explain the rules back to me?

C. Prompt
If game ends before 5 minutes, prompt: “Restack the blocks and try another game.”
If the youths are not talking while playing, prompt: Can you explain why you are choosing a certain block when you try to take it out?”

D. End of Jenga
“Was that fun? Now we are going to play another game.”
V. Stomp and Share (10 min)

A. Set-up
2 sets of Stomp and Share cards
Score sheet
Easel poster of how to earn points

B. Instructions
“The object of the game is to win points towards a prize. The most points you can win is 30. The least amount of points you can get is 0. Here is how the game works. At the beginning of each round you will have two cards in your hands. One card says “Stomp” and the other says “Share.” Here are the cards (Show youths the cards). Every turn you will pick a card that you will turn over. On the count of three, both players will turn over their chosen card. Hold the cards in your hand facing you. Here is how you earn points: (Point to easel poster with points rules and DEMONSTRATE)

a. If you both turn over the card that says, “Stomp,” neither one of you will get a point.
b. If both of you turn over the card that says “Share,” you will each get 1 point.
c. If one of you turns over the “Stomp” card and the other person turns over the “Share” card, the person with the “Stomp” card gets 2 points. The person with the “Share” card will not get a point.
d. After turning over your card, return them to starting position.

- You will take turns saying “go” to turn over your cards.
- There will be 15 rounds.
- You will keep track of your points on this score sheet.
- You are free to discuss the game with your friend while you are playing.
- Do you have any questions? Can you tell me how you play the game?
- At the end of the game whoever has the most points gets to have first choice picking a prize.

Let’s do a practice hand.” Examiner counts “1-2-3-go” and explains score achieved.

C. End of Stomp and Share
“That was great. ______ will get to pick a prize first but you will both get prizes.”

Allow youths to pick from prize box – person with higher score goes first.

VI. Issue Discussion/how Friend Can Help

A. Planning for Activity – occurs during an earlier session.

B. Materials:
List of issues
   Index cards
C. Planning for Activity
“We would like you to think of 2 things that are issues for you and that you would like to discuss with (friend). I will write these down for you so you can discuss them later. (Pause, give chance to think). An issue is something like not getting along with your brother or sister. If you can’t think of any, here is a list of issues that many youths typically face.

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<tbody>
<tr>
<td>1.</td>
<td>Bedtime</td>
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<td>2.</td>
<td>Playing computer or video games</td>
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<td>3.</td>
<td>Television</td>
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<td>4.</td>
<td>Swearing</td>
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<td>Privacy</td>
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<td>6.</td>
<td>Pets</td>
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<td>After-school activities</td>
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<td>Honesty or lying</td>
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<td>Eating habits</td>
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<td>Respect for others</td>
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<td>Taking responsibility</td>
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<td>School, homework</td>
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<td>18.</td>
<td>Clean room</td>
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<td>19.</td>
<td>Personal appearance</td>
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<td>20.</td>
<td>Fighting with brothers or sisters</td>
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<td>21.</td>
<td>Friends</td>
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| 22. | Other

C. Issue Discussion (8 minutes)
“Earlier you looked at a list of issues and chose two of them that applied to you. On these cards are those issues. I would like the two of you to talk about one that (YOUTH) identified. I will come back in about 4 minutes and then ask you to talk about one that (FRIEND) named. Be sure it is a different one than the first issue you discussed. For both issues, please talk about why it is an issue. Then, if you have tried to solve it, what you did and if it worked. Then talk with FRIEND about ways you might solve the problem and ways FRIEND might help.”

D. Prompt Friend
If completed before 3 minutes prompt: “Is there anything else you want to talk about in regard to this issue”

E. Friend’s Issue
After 4 minutes, examiner enters and tells children to discuss FRIEND’s issue.

F. Prompt Friend
If completed before 3 minutes prompt: “Is there anything else you want to talk about in regard to this issue”
REFERENCES


