

Addressee-Dependent Language Variation:
Speech Patterns of AAE-speaking Preschoolers

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Introduction

While adult African American English (AAE) is the most linguistically studied non-standard English dialect, academic literature on language acquisition of young AAE-speaking children is lacking. The topic of AAE as a legitimate dialect of English with a complete grammar system only emerged in the late 1940s, leading to a surge of interest through the 1960s and 1970s (Charity, Scarborough, and Griffin, 2004). Concentrated study was largely abandoned until linguists found rekindled interest in the 1990s in light of the continuing Black-White achievement gap occurring across the United States. Research on aspects of AAE pertaining to youth has been increasing notably since the Oakland School Board Ebonics Resolution was published (Oakland Unified School District Board of Education, 1996). The Oakland school resolved to use the vernacular AAE in order to teach Standard American English (SAE) to students who natively spoke AAE, which was greatly misunderstood across the United States, for people believed that the school was attempting to only teach lessons in “Ebonics.” Ebonics literally means “black sounds,” and while it was used in the resolution respectfully, it has become a largely politically incorrect term for AAE out of disdain for the dialect. The national controversy surrounding the misunderstanding has encouraged linguists to study the AAE dialect more extensively in order to better scientifically back the Oakland School Board's suggestion posed fifteen years ago. One field of study critical to the understanding of the AAE dialect and its usage is that of language acquisition. Linguists have approached many aspects of acquisition in African American children, including specific grammatical features, developmental speech disorders, and dialect variation. One topic of recent interest is that of second dialect acquisition of SAE by native speakers of AAE (Fogel and Ehri, 2000; Pearson, et al., 2009; Tagliamonte and Molfenter, 2007; Terry, Hendrick, Evangelou, and Smith, 2010).

In 2008, 85% of students in the United States attended public school, with 17% of those children being African American (Stockman, 2010). While not all African Americans speak the AAE dialect natively, a majority do, and that number increases as socioeconomic status decreases (Bloomquist, 2009; Charity, Scarborough, and Griffin, 2004; Craig and Washington, 1994; Kovac

and Adamson, 1990). In the United States, SAE is the language of prestige and the one therefore utilized in schools, with other dialects and languages treated as negative. Differences vary by state, but while students who speak a different language entirely attend ESL classes until they have a competent grasp of the English language, there is generally no correlating program or topic in English classes to teach AAE speakers the specific differences between their dialect and SAE. The public response to the Oakland Resolution of 1997 illustrated how negatively AAE is viewed by the general public (Stockman, 2010). Most people in United States society, including educators, do not realize that AAE has a reliable grammar system and is a dialect that children acquire natively as babies and toddlers just as they would SAE.

The literature section of this thesis will be arranged into ten sections. The first four sections (*Phonology, Morphosyntax, Tense-aspect and complex syntax, and Metalinguistic awareness*) will focus on grammatical and narrative features of the AAE dialect. The next two sections (*Socioeconomic status and Teachers*) will talk about the societal realities and stigmas surrounding AAE. The seventh and eighth sections (*Code-switching and Code-switching by AAE speakers*) will focus extensively on children who are bidialectal, and the circumstances keeping AAE-speaking children from becoming bidialectal in the United States. The last two sections (*Familiarity with SAE and Learning SAE*) will talk about why acquiring SAE is difficult for AAE-speaking students and how to successfully teach them. Following this, I will discuss my study recording the speech of preschool-age African American children in a day care on Long Island in order to determine their code-switching tendencies on account of immediate addressee.

Phonology

Young children who are acquiring AAE are not in any way developmentally behind those acquiring SAE (Bloomquist, 2009). According to Bland-Stewart (2003), AAE child speakers acquire phonological features at the same rate as SAE child speakers, and as two- and three-year-olds they exhibit similar variables in their speech while going through the processes of acquisition. The phonological and morphosyntactic aspects of AAE that contrast with SAE are acquired and regularly

utilized in preschoolers' speech no later than equivalent SAE aspects. Several studies have even indicated that children with strong usage levels of AAE forms in their preschool years exhibit a better understanding of language mechanisms, and therefore better language skills, than children with average usage levels (Connor & Craig, 2006; de Villiers, 2010; Jackson & Roberts, 2001; Stockman, 2010; Terry, Hendrick, Evangelou, & Smith, 2010).

Bland-Stewart (2003) observed the phonological development of two-year-old African American children. According to her results, it is difficult at that age to determine which variables in their speech indicate a forming dialect and which are regular speech development errors. Stockman (2008) used a technical system of measuring a phonological competence core in three-year-old children acquiring AAE, including dialect density measures, and concluded that they successfully acquire the fifteen base phonemes of the English language (i.e., /m/n/b/p/d/t/g/k/w/l/r/ j/f/s/ and /h/) and exhibit similar phonological properties as SAE child speakers of the same age. These properties include features of adult AAE, such as final consonant deletion (e.g., *chil'* for *child*) and unstressed syllable deletion (e.g., *gon* for *gonna*). In SAE child speakers, those features fall out of their speech patterns as they better acquire SAE; in AAE child speakers, those features remain while others that are not a distinguishing part of the AAE dialect disappear or sit alongside their AAE counterpart in each child's lexicon.

When evaluating the usage of AAE in young children, there are factors that prove this task more difficult than when evaluating SAE speakers (Wyatt, 1995). Dialects are heterogeneous, meaning not every feature needs to be utilized every time the linguistic opportunity arises, and features manifest themselves slightly differently in each individual's speech. The grammatical and phonological heterogeneity of AAE is different from that of SAE, but most speech pathologists are unfamiliar with the specific variabilities of AAE. Because of this, it is difficult for them to distinguish normal AAE development from instances of actual disorder in young children's speech. Phonology is often where speech language pathologists make decisions regarding whether or not AAE-speaking children possess speech disorders (Stockman, 2010). Aspects of AAE phonology such

as replacing voiceless /th/ with /f/ in word-medial and word-final position of words (e.g., *bath*, produced in AAE as *baf*) can indicate a speech disorder in SAE-speaking children. The distinctions between phonological features of AAE-speaking children who are normally developing linguistically and those who have speech disorders must be made clear to speech language pathologists and requires much more research. Wyatt (1995) has suggested a focus on pragmatic intent, and Bland-Stewart (2003) a greater focus on quantity than quality when evaluating pre-schoolers' overall utilization of AAE features. Another solution presented is to only evaluate features of English that are non-contrastive in both AAE and SAE in order to determine speech disorders in children (Seymour, 2004).

Interdental substitution

Linguists have debated the origins of AAE since the beginning of empirical study on the dialect over eighty years ago and continue to do so today (Rickford and Rickford, 2000). One main argument held is that most AAE features originate from West African languages that Africans spoke when they came into contact with slave traders, and the dialect that we hear today is a result of English as the dominant language affecting the substrate West African languages. As Africans were forced to learn English a creole between the languages was formed, and its evolution over the course of many subsequent years has resulted in today's English dialect. According to this Creolist theory, AAE features can be traced back to features of Niger-Congo languages such as Yoruba, Krio, and Wolof, and the creole that first formed in the United States most likely sounded like today's Gullah creole spoken on the Sea Islands and coastal plains of South Carolina and Georgia. The other main argument held is that AAE features are a result of Africans picking up the language features of lower class British, Irish, and Scottish settlers when acquiring English, and retaining these features after English evolved away from these forms into today's SAE.

According to Rickford and Rickford (2000), the Creolist theory maintains that interdental substitution by AAE speakers is a prevalent feature because the interdental sound never existed in West African languages. The sounds most close to the interdental voiced fricative /ð/ (eth as in

“those”) in African languages are /d/ and /v/ and those most close to its voiceless equivalent /θ/ (theta as in “think”) are /t/ and /f/. This substitution is also apparent in English creoles such as Jamaican and Gullah that clearly contain African language features. The Anglicist theory points out that non-standard Southern British forms of English spoken by those who became colonist settlers included such features as *de*, *dis*, and *dat* for *they*, *this*, and *that*. The Anglicist theory is lacking in the interdental substitution area due to evolution of English occurring for such features over the course of the time English settlers were collecting slaves from Africa, but even if it were more comprehensive the lack of clarity between whether African slaves transferred the equivalent sounds they knew from their native languages to English or copied English speakers remains unclear.

The voiced and voiceless interdental fricatives can be replaced with /d/,/v/,/f/, or /t/ in AAE. These substitutions are dependent on the placement of the interdental phoneme in a word. Word-initially, /d/ can replace /ð/, and word-medially or finally /v/ can replace /ð/. Nothing can replace /θ/ word-initially, but /t/ or /f/ can replace it word-medially or word-finally, with the difference between those two choices depending on other phonological environmental factors (Green, 2002). As with all features in AAE, speakers sometimes utilize the substitutions in their speech and sometimes utilize the interdentals of SAE, and the reasoning for one usage over another in specific instances is not yet well understood. Child AAE speakers often mirror adult AAE speakers in this way, creating what appears to be a variable usage of substitution features. As studied by Bland-Stewart in 2003, children surrounded produce the same phonological development up to age three whether they are surrounded by AAE or SAE. But as differences in frequencies of certain features begin to emerge in speech, the native dialect of a toddler begins to reveal itself.

Pearson, et al. (2009) discovered in research that AAE-speaking children ages 4-5 did not use the interdental sound except in word-initial voiceless position, such as in the word *think*. This kind of phonological speech pattern indicates that children who speak AAE are capable of producing the voiceless interdental sound, and therefore less likely to have a speech disorder. The use of substituted phonemes such as /t/,/f/, or deletion are indeed an aspect of the dialect, and not a resort due to

inability to produce the correct sound. While children who are acquiring speech employ considerable variation regardless of the language they are speaking, AAE children are known to use notably more contrastive phonological features than SAE speakers (Bland-Stewart, 2003). This is thought to be a sign of emerging dialect, for variation exists more frequently in AAE than SAE for the phonological features focused on in studies pertaining to AAE-speaking children. These studies have focused on interdental substitution, consonant cluster deletion, stopping of affricates, vocalization of /r/, and unstressed syllable deletion (Green, 2002; Bland-Stewart, 2003; Stockman, 2008; Pearson, et al, 2009).

Morphosyntax

Morphosyntactic features, or those involving grammatical features as opposed to specific sound production, generally do not emerge as deliberate aspects of a dialect until the age of three or older. At three years of age, children produce many of the morphosyntactic features of adult AAE, including copula deletion, third person singular /s/ deletion, using a singular copula with a plural subject, and remote time *BIN*; at four years, reflexive pronouns forms such as *hisself* and sentences using double negation are clearly developing; at five years, expletive pronoun forms such as *it's* for *there's* are apparent (Wyatt, 1995). AAE features appear to emerge in young children in a systematic fashion, the same as SAE features emerge. de Villiers and Johnson (2007) conducted a study of awareness and production of third person /s/ acquisition in children ages four through six, both AAE-speaking and SAE-speaking. When testing sensitivity to /s/ as a marker of various grammatical forms (i.e., subject number, verb versus noun-noun compound status, and generic aspect), the African American children never found the need to produce this morphological feature because it is not a feature of the AAE dialect in those forms. The SAE-speaking children consistently produced the marker when necessary, but were not able to explain any of its various purposes until age five or six. When considering non-contrastive forms of the English language between the two dialects, AAE-speaking children performed right on par with SAE-speaking children. In 1990, Kovac and Adamson conducted a study of finite *be* deletion in children ages three, five, and seven (e.g., *She going to the*

store instead of *She is going to the store*). The usage of this feature is considerably frequent, for Jackson and Roberts (2001) concluded that out of a large group of preschool-age African American children, 97.5% of three-year-olds and 95.2% of four-year-olds utilized copula deletion at least once in one fifteen-minute conversation. Between ages three and five, there was a marked increase in such forms in lower-class African American children, while Caucasian and middle-class African American children decreased the number of forms produced. According to Wyatt (1995), Kovac and Adamson hypothesized that the time between three and five years indicates a change from developmental to dialect-influenced production patterns. The frequency of deletion in lower-class children indicates not a developmental issue, but a conscious sociodialectal process (Kovac and Adamson, 1990). While the copula deletion increase in lower-class Caucasian children was due to the social need to be accepted by the African Americans in their community, the decrease in the middle-class children may have been because they felt the need to assimilate more to the speech of their Caucasian socioeconomic peers for the sake of credibility in their environment. More research on the longitudinal trends of feature usage frequency in young AAE-speaking children is still required.

Copula/Auxiliary *be* Deletion

When considering the possible origin of the AAE feature of copula and auxiliary *be* deletion, evidence very strongly suggests influence from African languages (Rickford and Rickford, 2000). British dialects of English are devoid of copula deletion patterns in present or past forms, and very few white Americans use copula deletion at all. The only white American dialects known to use copula deletion are in the South, and were discovered in recent studies to only use *is* deletion one percent of the time compared to AAE speakers' 15 to 20 percent, and *are* deletion four percent of the time compared to AAE speakers' 30 to 58 percent (Rickford and Rickford, 2000). Many West African languages as well as basilectal varieties of Creole English in the Caribbean have copula deletion in speech patterns. For example, in the Niger-Congo language Ewe, *ati la kɔ* translates directly to "tree the tall," and from there to "the tree tall." Following grammatical environment is an important aspect in determining copula usage in Creole varieties that were heavily influenced by West African

languages in places such as Guyana, the Caribbean islands, and the Sea Islands where Gullah is spoken. Jamaican Creole is a solid example of an Atlantic Creole that formed from interactions between British settlers and the African slaves they controlled (Patrick, 2004). The syntax structure closely follows that of English, employing an SVO and head-initial word order, but there are differences in focus structures. Jamaican Creole uses *a* as the copula before a noun, *deh* before a locative, and zero copula preceding an adjective, as well as various other copula forms. Jamaican Creole also uses *a* as the form of the progressive aspect marker such that it appears as the auxiliary *be* in English but is not accompanied by *-ing*. This variable usage of copulas is unlike forms of English spoken by Caucasians in both the United States and Great Britain, but harbors similarities with AAE. While AAE uses *is/are* as the form of *be* consistently when it is spoken in a present-tense sentence, studies have and continue to focus on the significance of frequency usage differences of copula and auxiliary *be* in accordance with following grammatical environment (Patrick, 2004; Green, 2011). African American diaspora varieties in Samana, Liberia, and Nova Scotia as well as Creole varieties use copula deletion at the same relative frequency in specific following grammatical environments as AAE (Rickford and Rickford, 2000). Auxiliary *be* deletion before *gonna*, the abbreviated version of *going to*, occurs quite prevalently across the board, and in Liberian Settler is a mandatory feature. Copula deletion before an adjective occurs about half the time that the environment shows up in speech, which in turn is considerably more than copula deletion preceding a noun. According to Green, Wyatt, and Lopez (2007), auxiliary *be* is not necessary in present tense because *-ing* indicating the progressive makes inclusion of “is” redundant, since one can assume present tense when there is not an overt form indicating a different tense. Interestingly, Jamaican Creole lacks *-ing* while AAE can lack auxiliary *be*, both in order to avoid redundancy.

Variation of copula production is an interesting phenomenon, the cause of which continues to be unclear to linguists. Variable production of over, contracted, and deleted copula by children generally matches that produced by adults, but to assume that children are immediately acquiring adult language may be too simplistic. Young AAE speakers may very well be acquiring speech

patterns particular to the adult AAE dialect, or they may be primarily continuing to exhibit developmental patterns beyond age three, or they may be displaying developmental features that are particular to AAE but do not match adult patterns for underlying reasons (Green 2011). Lisa Green wrote in her most recent book on the acquisition of AAE about the possibility that the copula is not being deleted from the surface structure of sentences, but rather being added to the deep structure as a result of influence from SAE. For example, in auxiliary *be* usage, it is possible that because the *is/are* insertion in present progressive sentences is redundant, that *be* usage would not develop in very young children until they were exposed to it in SAE. The fact that at the age of three the production of auxiliary *be* in present tense sentences exists in the speech patterns of both SAE and AAE speakers suggests that this is not the case. However, research on the topic is too scant to know for sure; speakers may be adding non-mandatory features to their syntactic structures when they realize their variability, or they may be deleting those same structures when they realize their non-mandatory nature. There is no way at this point to fully understand the reasons for observed developmental patterns, particularly because no AAE-speaking child acquires language completely separate from SAE influence.

Many linguists do not believe that AAE patterns can employ free variation, and that there must be a syntactic or pragmatic reason for the percentages of variations of given phonemes or morphemes that present themselves in a person's speech patterns. A focus on the grammatical environment following a copula deletion in AAE is one attempt to find a syntactic reason, in that other syntactic features in the surrounding environment are largely considered to not significantly affect the probability of which copula production feature is utilized in a given situation (Seymour and Roeper, 1999). Rickford (1999) determined that copula deletion occurs more often immediately following a personal pronoun than a noun phrase or other pronoun, but very little other information regarding preceding grammatical environment is readily available. Charity conducted a study in 2005 evaluating the speech of lower class African American children, and concluded that the children utilized copula deletion before a progressive verb 48 percent of the time, before the verb form *gonna*

50 percent of the time, and before a locative phrase 40 percent of the time. The percentages of copula deletion were lower before noun phrases and adjective phrases, where deletion occurred 21 and 22 percent of the time, respectively. According to Green (2011), Becker in 2000 observed that in developmental SAE, copula deletion correlates with following grammatical environment in such instances as those preceding prepositional phrases. This could indicate that copula variation occurring on account of following grammatical environment is a natural component of English acquisition, and it becomes one of the features included in AAE but removed in SAE, just as third person singular –s is included in SAE but general removed in AAE (de Villiers and Johnson, 2007). A copula cannot be deleted in several syntactic instances. At this point the list of mandatory syntactic environments for overt copula consists of: nonfinite contexts, imperatives, ellipsis, emphasis, past tense, inversion, and complement extraction (Frassica, 2009). Frassica, in her Honors thesis, determined that null copula is used in AAE in cases of making a contrary statement in discourse. When a sentence's purpose is to correct a false claim, or address a doubt, then null copula is commonly utilized over contracted or full copula. This level of pragmatic discourse may not be observed in young children who are not only still developing basic syntactic constructs, but also just learning how to interact with people and make their reasoning understood to others. Pragmatic instances for null copula usage are not to be confused with emphasis, when the full copula is stated in order to focus on an existence in the predicate that was recently stated as not existing, e.g. Speaker 1: "He ain't a good man"; Speaker 2: "He *is* a good man."

Tense-aspect and complex syntax

Green and Roeper (2007) studied the acquisition of two tense-aspect features in AAE: habitual *be* and remote past *BIN* (indicates emphasized *been*). Habitual *be* indicates that something usually occurs, so that *She walkin'* means that a woman is currently walking, whereas *She be walkin'* would mean that she walks often. Remote past *BIN* is stressed in pronunciation and indicates an occurrence that happened a long time ago and continues to be relevant, so that *They BIN married* indicates that they got married a considerable amount of time earlier and are still together. Children

recognize grammatical properties such as these as lexical items first, seeing them purely in their semantic, or meaningful, contexts. When children are able to justify the regular necessity of the feature in their dialect, they begin to see it as a syntactic, or grammatical, feature, and utilize it in their speech as such. A question for future research is how children account for contrasts and variations of features that are present in the AAE dialect at this stage of acquisition. Complex syntax production is another field of study regarding language acquisition in AAE-speaking children. Complex syntax in English indicates a type of sentence containing a dependent clause introduced by a subordinating conjunction such as *that*, *because*, or *while*. An example of a complex sentence would be *She often tells the doctor that she didn't forget her medicine* and its AAE equivalent would be *She be tellin' the doctor that she ain't forget her medicine*. The fundamental sentence structure of AAE is the same as SAE, because they are dialects of the same language; production increases of complex syntax occur as easily within the morphosyntactic and phonological parameters of AAE as within those of SAE (Jackson and Roberts, 2001). Although the dialect of English that a child is speaking at their acquisition stage does not determine the number of complex syntax features exhibited (Jackson & Roberts, 2001), Craig and Washington observed in 1994 that a higher usage of AAE forms correlated with a higher usage of complex syntax forms. This could be due to the discovery made by Wyatt (1995) and Connor and Craig (2006) that AAE-speaking children with greater AAE usage or greater SAE usage have an overall better linguistic understanding than those with an average grasp of AAE. Both studies determined that there was a sharp increase in complex syntax usage from age three to four in observed African American children, but after four years the rate of increase in forms slowed considerably, as the acquisition rate of such forms naturally slowed. As with phonology and morphosyntax of both AAE and SAE speakers, the most abundant acquisition of complex syntax occurs at the preschool age. Children with actively involved and responsive parents acquired complex syntax more quickly and efficiently than those without, and girls produced more complex syntax at the age of three than boys (Jackson & Roberts, 2001). These statistics are very interesting, for a number of reasons. In general, males produce AAE features more often than

females do, and children living in households of lower socioeconomic status produce more AAE than middle-class children (Washington & Craig, 1998). The number of types of features produced is the same, while the frequency in which they are produced is the observed difference. The majority of preschool-age children have an average grasp of the phonological and morphosyntactic features of their dialect, and therefore they typically have an average grasp of complex syntax as well. Because preschool-age girls tend to produce significantly less AAE and more SAE in their speech than their male peers, according to Jackson and Roberts (2001), girls are more inclined to better understand and more quickly produce complex syntax. However, this does not follow with the fact that complex syntax is essentially the same within both SAE and AAE. More research is required to determine why girls utilize less AAE and more complex syntax at the preschool age.

Metalinguistic awareness

Narrative skills are known to be more developed in preschool-age children who speak AAE than those who speak SAE, though more research is needed for understanding how narrative skills work within the AAE dialect (de Villiers, et al., 2010). Narrative skills and quick recall of phrases are an important part of African American culture – children of preschool age have already begun to compose simple raps and take part in a word game called “playing the dozens,” wherein people playfully insult each other in the most creative ways they can conjure in rapid time (Wyatt, 1995). Narrative aptitude indicates a strong grasp of phonological and morphosyntactic features of a young child's native dialect. Those children who exhibit a strong AAE dialect illustrate a better understanding of language structure than those who have a weaker grasp of the AAE dialect but do not speak SAE. A child's oral narrative skills are a predictor of good literacy development, and those African American children who scored highest on emergent literacy tasks exhibited either the most AAE features in their speech or the least, with a higher competence of SAE instead (de Villiers, et al., 2010). Similarly, in a correlational study conducted by Connor and Craig (2006) wherein African American preschoolers of lower socioeconomic status were tested for emergent literacy skills, those with the greatest and least amount of utilization of AAE both possessed the greatest potential for

future reading ability. A child's overall linguistic skills and awareness have a significant effect on that child's language use and objective academic potential, rather than which dialect he or she speaks. A sentence imitation task in the study explicitly expected responses in SAE, while an oral “wordless storybook” task only implicitly expected SAE responses. Only twenty-seven percent of the children used one or more AAE features in their speech in the sentence imitation task, but eighty-seven percent did in the storybook task. This implies that many AAE-speaking preschoolers have an emerging but not fully realized awareness regarding the level of preference of their native dialect in different social situations. Those children who exhibited the most AAE usage in the oral storybook task were among those who spoke in AAE the least on the sentence imitation task. This again indicates that those children who exhibit the most features of their native dialect in their speech patterns have the greatest metalinguistic awareness, which also lends itself to the possibility that they have the greatest potential to be successfully bidialectal, if efficiently instructed early on in their educational careers (Connor & Craig, 2006; de Villiers, 2010; Stockman, 2010; Terry, Hendrick, Evangelou, & Smith, 2010).

Socioeconomic status

Lower socioeconomic status households are under much more financial stress than those of greater economic means, and this has an effect on language acquisition of children. Bloomquist (2009) conducted a study of how children in different socioeconomic classes described composite images that couldn't be labelled without multi-word descriptions (e.g., a frog with a rabbit's head). Regardless of race, working-class children were reluctant to use several words, instead opting to label the pictures with short phrases such as *rabbit-frog* or just *frog*, even when they clearly comprehended the picture and knew their answer was not exactly correct. The reason behind this may be because working-class parents spend less time working with children on development of expression and critical thinking skills than middle-class parents (Bloomquist, 2009). Lower-class adults focus on teaching children how to answer “correctly” in a simple manner rather than encouraging linguistic elaboration. They also are several times more likely to reprimand their children than middle-class

parents, who focus more on encouragement. The reasons behind these phenomena are unclear and require more research, but lower-class parents may spend less time working on speech development because they are more distracted by hardship than middle-class parents, and consequently they teach their children to use short, quick modes of speech when answering questions. Lower-class parents often have less education than middle-class parents because financial hardship limits opportunity, and parents with lower education levels spend significantly less time on language instruction with their children (Bloomquist, 2009). Due to lingering inequality stemming from the racism and segregation before the Civil Rights Movement, African Americans are three times more likely to be living in low-income homes than Caucasians in the United States (Connor & Craig, 2006). These statistics indicate that the majority of lower-class African American children are at a significant disadvantage when it comes to succeeding academically. They are more likely to come from homes where critical thinking skills are not honed on the same level as in middle-class homes, and are less likely to have the same exposure to SAE as middle-class children in the public schools they attend.

Teachers

Teachers in the United States rarely understand the workings of the AAE dialect. Teachers are usually not trained in non-standard English dialects and foreign languages common in public school districts (e.g. Spanish) as part of their study to become educators. When a child speaks a different language, they are placed in English as a Second Language (ESL) classes, while those with different dialects are either ignored or incorrectly diagnosed with speech disorders and placed in consequent classes. Teachers are found to be biased against the AAE dialect in that they often have predetermined lower expectations for their African American students who speak it natively and do not have a grasp of SAE (Charity, Scarborough, & Griffin, 2004; Fogel & Ehri, 2006). According to Charity, Scarborough, and Griffin (2004), teachers who speak SAE become impatient with students who use the AAE dialect in an academic setting regardless of their own race.

Fogel and Ehri (2006) conducted a study wherein they taught elementary school teachers AAE in three separate groups: exposure to the dialect in written form; exposure and an overview of

its grammatical rules; exposure, an overview, and practice exercises (including feedback) designed to test proficiency of the dialect. The teachers in the third group scored significantly better on an aptitude test than those in the other two groups, and received a much more thorough understanding of the dialect. Even so, their overall views of the dialect only changed from negative to neutral. Those teachers still felt a bias against the dialect in the classroom even after being taught its grammatical structure. The exposure group only experienced the confusion and inability to succeed on the tests that AAE-speaking children experience with SAE, but their opinions on the importance of intervention programs that teach African American students the dialect differences between AAE and SAE did not significantly change. Most continued to favour the method of immediate correction upon hearing an AAE feature in the classroom, even though this approach is not known to actually improve SAE performance in AAE-speaking students. Future research is required to determine whether or not improved programs for teachers focusing on the difficulties that AAE speakers experience in school as well as potential methods to assuage this problem would improve their outlook on the dialect and its child speakers. While Connor and Craig (2006) state that a teacher's bias does not determine an AAE-speaking child's success, it does invariably have a significant effect on their enthusiasm to study, as well as on their outlook of the school system and its treatment of African American students. While AAE-speaking children and SAE-speaking children have the same potential to succeed initially, several factors play into why AAE-speaking students so often fall below grade reading levels. Predetermined low expectations by teachers, inadequate instruction of SAE, and inappropriate methods of evaluating the abilities of AAE-speaking children all play substantial roles in why African American children feel marginalized in the public school system (Charity, Scarborough, & Griffin, 2004).

Code-switching

Code-switching is the linguistic act of a multilingual/multidialectal person changing his or her speech from one dialect or language to another, due to various social and narrative reasons. Wyatt (1995) mentioned briefly that she noticed code-switching due to self-consciousness in pre-schoolers

talking with SAE-speaking adults, indicating an acute awareness of the social unacceptability of their dialect from a very young age. Some research has been conducted recently on dialect variation in children with stigmatized dialects (Khattab, 1999; Tagliamonte & Molfenter, 2007; Youssef, 2002; Youssef, 2003), and very limited research has been conducted with regard to African American children (Connor & Craig, 2006; Terry, Hendrick, Evangelou, & Smith, 2010). Children with familiarity of two dialects will usually vary their speech to more closely match that of their intended audience, or the expectations of that audience (Youssef, 1993).

Youssef studied children who code-switched between TC and SE in Trinidad, and analysed how they code-switched in response to their environments. In 1992, she studied Kareem, a preschool-age boy from Trinidad who successfully became bidialectal in Trinidadian Creole (TC) and Standard English (SE). His mother was a linguist who believed he should acquire both dialects and know in which situations to employ which dialect. She spoke both dialects around Kareem from infancy, each in their appropriate settings, so that he would acquire them as such. Kareem developed a very keen sense of when to utilize which dialect in his speech patterns, and also acquired such a competence that he would often speak in TC in casual situations even when those around him spoke in SE, because he was aware that TC was still allowable in that particular setting. This sort of competence is key to success for young AAE speakers entering the world of academia, where AAE is no longer acceptable for use when speaking to adults or completing assignments.

In 1993 Youssef studied Janet, a four-year-old girl who became bidialectal against her mother's will in order to assume the identity she preferred. Janet's mother insisted that she only speak SE, but Janet was surrounded by enough TC when acquiring language to have a competence in both. She would obediently speak complete SE around her mother, and when speaking with most adults who spoke SE, but when her mother left she would switch to TC, even occasionally around SE speakers she did not know very well. When playing with her brother, Janet would become excited or angry and consequently speak in TC, indicating that this was her vernacular despite her mother's attempts to avoid that development. While Kareem successfully code-switched depending on the

expectations of his audience and the manner in which he was speaking (e.g. for immediate future Kareem used TC, and for hoped/imagined future he used SE), Janet determined her dialect use based mainly on whether or not her mother was present. According to Bell (1984), audience design is the modification of speech by a person in accordance with his or her addressees. The characteristics of Kareem and Janet support Bell's theory that dialect variation is determined by audience design in several different ways: toward convergence, on account of social value of codes, level of emotion, contradictory behaviors due to conflicting social factors, most important listener in the room rather than most immediate, and others. More research needs to be conducted for these factors and how they influence dialect variations in fully bidialectal child speakers of other dialects, including those of AAE and SAE.

Tagliamonte and Molfenter (2007) studied three children under the age of five who were learning British English (BE) after first acquiring Canadian English (CE). While those who acquire a new dialect while under the age of eight should be able to reach native-like competence, there are often small pronunciation differences that remain. While these children acquired native-like patterns of variables of BE that contrasted with CE very quickly, they did not utter those variables with the same frequency as native BE speakers until much later, instead falling back into CE patterns. While internal linguistic constraints were not a problem for their second dialect acquisition process, sociolinguistic factors took much longer to attain. Khattab (1999) conducted a study on the phonological features of two brothers who spoke Arabic for the first three years of their lives, then moved to Leeds, England with their parents and learned English. While these children became bilingual and not bidialectal, the focus was on phonological differences in their speech. While they were able to become fully bilingual, they never truly acquired the glottal stop patterns of Leeds English, instead retaining the patterns of Arabic for that phoneme. The boys were around their parents very often, who spoke a form of English that was heavily accented by Arabic, and this may have influenced their speech patterns.

Code-switching by AAE speakers

Whether or not young AAE speakers change the frequency of dialectal features in their speech depending on addressee has not been well-studied. Connor and Craig in 2006 studied preschool-age African American children in the Head Start program and declared that they exhibited code-switching behaviors in tasks that were built to expect a response in SAE rather than AAE. With sentence imitation tasks that explicitly asked for an SAE response, 27% of the children used at least one AAE feature; with wordless storybook tasks that implicitly asked for an SAE response, 87% used at least one AAE feature. This suggests that young AAE speakers are beginning to respond to dialectal expectations in different contexts but does not determine if they are responding directly to any characteristics of their addressees. Etter-Lewis (1985) referenced a study in which a five-year-old AAE-speaking girl was determined to not change her speech patterns when talking with a white adult rather than a black adult. Wyatt and Seymour (1988) recorded a five-year-old AAE speaker in several situations and evaluated his frequency of production of various AAE features. While on average he used AAE features 25% of the time and their SAE equivalents 75% of the time, when talking with either one Caucasian teacher or more than one adult of any race simultaneously he did not use any AAE features. Both of these case studies are important additions to the repertoire of information on code-switching in young AAE speakers, but few conclusions can be drawn from them.

Children's stable command over the prestige dialect or language of a society at the time of language acquisition indicates a higher likelihood of societal success in the future (Connor & Craig, 2006). The children studied by Youssef, Khattab, and Tagliamonte and Molfenter all acquired the dialect or language considered to be the dominant mode of speech in their society. According to Tagliamonte and Molfenter (2007), successful second dialect acquisition is possible through sustained exposure to the target dialect. Living in African American communities comprising people who speak primary in AAE makes it particularly difficult for children to acquire SAE on their own when they become students. While ideally AAE would be recognized as a legitimate dialect across the country, the stigmatization actually connected to it, especially within in the education system, has

proven extremely difficult to dismantle. In today's society, children must acquire SAE in order to be taken seriously by professionals and succeed, not only as children but for the rest of their lives.

Familiarity with SAE is an important factor in the future success of African American students, and African American children who are able to code-switch from AAE to SAE perform better academically (Terry, Hendrick, Evangelou, & Smith, 2010).

While Kareem received ample exposure to both dialects from a crucial age, many African American children do not have that same exposure to SAE in their households and neighborhoods, particularly those of lower socioeconomic status (Washington & Craig, 1998). Children living in families of lower financial means do not have the same opportunities as others of higher means to travel outside of their immediate communities enough to expand their exposure to dialects. Middle-class African Americans use AAE features less often in their speech due to their being in environments where AAE is stigmatized. By extension, their children are more likely to grow up listening to SAE enough to acquire key aspects of the dialect, and have a better awareness of when which dialect is socially appropriate than children who are only surrounded by AAE until they enter preschool or kindergarten. The middle-class children in Kovac and Adamson 's study (1990) may have decreased their usage of copula deletion between ages the three and five because they had more exposure to SAE speech in daily life, due to living in neighborhoods and attending schools with more people who speak SAE.

Familiarity with SAE

While they may have better dialect awareness and be more capable of code-switching between SAE and AAE, middle-class African American children do not necessarily become fully bidialectal. Because of this, and the results of the correlational study wherein lower-class children could not acknowledge implicit expectations for SAE, instruction in dialect shifting and awareness may be key for young students growing up in an academic environment where AAE is stigmatized. Grammar is the last component of language sensitivity to develop, after stress, pitch, and phonology (Youssef, 1992), and SAE grammar is a critical component of academic language structure. Perhaps

exposing children to SAE grammatical features while they are developing in that field of language would be a productive step in improving their academic performance. Longitudinal research needs to be conducted on how dialect awareness lessons with preschoolers who speak AAE would affect their future reading skills.

Evidence indicates that students with more previous exposure to SAE perform better academically (Charity, Scarborough, & Griffin, 2004; Fogel and Ehri, 2000). In AAE-speaking children ages five through eight, increased familiarity with SAE – as indicated by sentence imitation tasks – correlated strongly with better reading achievement (Charity Scarborough, & Griffin, 2004). Scholars have disagreed on how a child's use of AAE inhibits their reading abilities, and according to this study as well as that of Connor and Craig (2006), it seems to be that the use of AAE is not the problem, but rather the lack of use of SAE before entering school. The mismatch hypothesis states that a difference between the spoken dialect of a child and the dialect that a child is expected to read can hinder their reading performance. While students are able to understand the SAE dialect when spoken, several phonological features become confusing to AAE-speaking children when they are written, because the symbols written denote a different sound than they are used to producing. For example, AAE speakers usually pronounce *that* as *dat* - *th* symbolizes a different sound than they produce, and they expect to instead see *d*. This mismatch is a significant problem for African American children of lower socioeconomic class, because they experience the least amount of exposure to SAE before school of any economic class of AAE speakers (Washington & Craig, 1998). When young students are only reprimanded by teachers for their “mistakes” and the differences between the dialects are never fully explained, those students have already been placed on the path to reduced academic achievement.

Learning SAE

In 2000, Fogel and Ehri conducted a study with African American elementary students who spoke AAE, teaching them SAE with three different approaches: exposure to the dialect in written form; exposure and an overview of its grammatical rules; exposure, an overview, and practice

exercises (including feedback) designed to test proficiency of the dialect. (This was the basis for the study conducted in 2006 on SAE-speaking teachers in order to teach them AAE.) The students in the third group performed significantly better on subsequent tests than those in the other groups, and gained an understanding of SAE as a strategic process that they could fully comprehend. With all of the rules of SAE that diverge from those of AAE laid out before them in clear contrast to each other, and the ability to practice writing those forms with one-on-one, concentrated feedback, they were able to focus on the dialect differences alone and improved their understanding considerably. One interesting effect of this exercise was that of the students' self-efficacy tests. Before the SAE lessons, the students took a pre-test in SAE competence, and the average grade was 32% (Fogel & Ehri, 2000). However, their self-efficacy ratings of their prowess in written SAE averaged at 80%. It seems that the students perceived that they were more competent in SAE than they actually were, because the specific form differences had never been explicitly taught to them. After the lessons and post-test, the students were given the same self-efficacy tests. This time, those who were in the third group and improved the most significantly on their written performance of SAE scored themselves much lower on their self-efficacy tests. This was not, however, determined to be a negative result. Through this approach the students received a more clear and objective outlook on where they needed to improve in their SAE language usage than they had received attending public school up until that point. Lessons like these may also improve African Americans' receptivity to the idea of SAE writing help, because they will be able to see exactly how and where improvement in SAE competence is needed. More research needs to be conducted in order to determine if more extensive training of this sort would improve students' overall academic performance and if the knowledge gleaned would be maintained over time.

Literature Review Conclusion

Linguistic research conducted recently has determined that AAE-speaking children possess much potential to succeed academically and close the Black-White achievement gap in the United States. They acquire AAE naturally and at the same rate as SAE speakers acquire SAE in terms of

phonology, morphosyntax, and complex syntax. They develop more quickly than SAE-speaking children in terms of narrative skills, and studies indicate that preschoolers with particularly strong usages of AAE features have a better linguistic and metalinguistic understanding than other AAE-speaking children due to a strong competence of their language. Young AAE-speaking children possess an awareness early on that their dialect is stigmatized and have been seen to make attempts to vary their dialect usage in order to more closely reflect SAE in academic situations. Older students, even though they will most likely never become fully bidialectal, still retain the ability to improve their SAE skills once they are taught the specific differences between the two dialects.

While those children with a strong competence in AAE have a higher likelihood of possessing strong reading skills, a lack of awareness of SAE means that they will most likely fall behind academically in their first year of schooling. Explicit instruction in the grammatical differences between AAE and SAE for AAE-speaking pre-schoolers appears to be the best approach to improving AAE-speaking children's understanding of SAE and potential for bidialectal prowess. A competent grasp of SAE achieved in preschool would allow for many African American students to begin their education much closer to the same level as their peers who acquired SAE as their native dialect. The ability to understand dialect differences and to potentially code-switch between them results in stronger literacy development, and is critical for students who do not speak SAE natively in order to close the achievement gap currently plaguing the United States. One goal of linguists studying the AAE dialect is for young AAE speakers to become as bidialectal in both AAE and SAE as possible, so that they can preserve their culture and still succeed in academia and the job market.

Current Study

My thesis focused mainly on variable forms of copula production in young AAE speakers, as well as variable forms of interdental fricative production. Because the threshold of percentage of AAE features needed to be used in a person's speech on average for them to be considered an AAE speaker is 40 percent (Connor and Craig, 2006), I considered a percentage of usage of given features matching or exceeding this number to indicate a competent usage of the studied dialect feature by the

child speakers and a likeness to adult AAE speech. I worked with four African American boys ages three to five who attend a day care on eastern Long Island, as well as two young women who grew up in the same town on Long Island. A number of Caucasian and African American children from the ages of six weeks to five years attend this day care in Riverhead throughout the year. I'd hoped to work exclusively with four-year-old children, because they are more mature in terms of paying attention to their adult audiences than three-year-olds, and have more fully established speech patterns. Three-year-olds are just at the age where their own speech is beginning to form into either SAE or AAE, and the variables in their speech can easily be too great to glean legitimate evidence from speech tokens that may be examples of AAE usage or lingering developmental features. Regularly developing four-year-olds and five-year-olds have a good handle on their acquired language at this age, but are still more dialectically malleable than school-age children (Stockman, 2010). They may be more likely to change speech patterns freely than older children who have entered into the institutionalization of academia, which explicitly condemns non-SAE varieties of English. As it turned out, there were very few African American children attending the day care in question in May 2012, and I was unable to conduct research at any other day care nearby for various reasons. The owner of this day care agreed to let the two women who volunteered as my adult speakers and me spend time in the classroom and work with the children who became the focus of my study in the days preceding the actual recording. Allyson as the adult SAE speaker – she was 21 years old and speaks in a particularly standard manner, often enunciating words more fully than other SAE speakers. Kerrysha acted as the adult AAE speaker – she was 18 years old, and speaks with a moderate amount of AAE features. She notably utilized interdental substitution, possessive –s deletion, unstressed syllable deletion, and liquid vocalization. Copula/auxiliary deletion was not typically part of her speech pattern, which may have had an adverse effect on my study results. However, she was the only young AAE speaker I could work with, for I did not have enough time in the town to go through the process of finding an AAE speaker with the specific features I wanted and who was able to take part in my study. Both Allyson and Kerrysha were aware of the goals of my

study before the study took place, and knew to focus on producing present-tense questions during the study that would invoke copula/auxiliary *be* tokens in responses made by the children.

At the day care, I ran into several problems that hindered my data collection. Between limitations on the consent form due to IRB template rules, very few African American children in the age range I needed, and another child who had no intention of leaving his classroom to talk with strangers, I ended up only recording four children. Once each child had become acquainted with Kerrysha, Allyson, and myself, I began the recording sessions. The young speaker would sit in a small playroom right off the main classroom with either Allyson or Kerrysha, while I listened attentively outside the door in order to abide by laws that children in day care cannot be left alone with people who have not been employed at the day care in question. The perceived one-on-one atmosphere was important for my study, for I did not want a second addressee to influence how each child spoke to their immediate addressee. The child then proceeded to have a fifteen-minute conversation with either Allyson or Kerrysha, focusing on the plot in a wordless storybook. The books I provided were *Flotsam* by David Wiesner and *Carl's Afternoon in the Park* by Alexandra Day for Allyson, and *Tuesday* by David Wiesner and *Follow Carl!* by Alexandra Day for Kerrysha. Interestingly, Lisa Green also used books in the Good Dog, Carl series when conducting a similar study recording the speech of AAE-speaking pre-schoolers (Green, 2011). The two books used by Allyson were of similar styles and by the same authors as the two books used by Kerrysha so as to avoid significant differences between the books, such as the style in a book being used by one speaker lending itself well to questions of characters and plot while that in a book being used by the other speaker did not. I also wanted to avoid the children seeing the exact same book twice because they may have parroted their previous statements to the second person they worked with, including the syntax and pronunciation in their first answers. These conversations were allowed to be on any topic, but the books helped the adults to have something solid to refer to conversing about if a child became quiet. After fifteen minutes of recorded conversation, the child returned to their normal daily activities. On a different day within the two-week time frame in which I conducted my study, the

same child would then repeat the procedure with the adult they did not talk with before. No child spoke with both Allyson and Kerrysha in the same day, in order to avoid their becoming tired and reluctant to take part in conversational analysis of pictures in wordless storybooks.

The goal of my research was to determine if there is substantial evidence that very young AAE-speaking children are self-aware of their dialect enough to change their speech patterns in order to more closely match that of their addressee. People change their speech depending on addressee in various situations for various sociological reasons. For example, a person who speaks very informally around friends will talk quite more formally when in the workplace, and particularly when being interviewed for a job. These changes are for the purpose of fitting into different social environments and forming solidarity with people (Washington and Craig, 1998; Kovac and Adamson, 1990). Preschoolers are not typically known to employ these tactics in their speech. However, children who speak AAE usually become aware of the way society views their native dialect through observation and life experience at this age, and may try harder than a child who speaks SAE to accommodate and match the speech patterns of their addressee as a result. Children exposed to more than one dialect begin to show ability to change speech style according to dialect expectations in different contexts (Washington and Craig, 1998; Youssef, 1993). My study allowed for race and dialect to be complementary characteristics of both addressees – Allyson is Caucasian and speaks SAE, while Kerrysha is African American and speaks AAE. In future research, one might separate these characteristics by working with four addressees: a white SAE speaker, a black SAE speaker, a white AAE speaker, and a black AAE speaker. In this way, whether children were responding to race or dialect might be clarified.

In this study, I tested for the AAE features of both interdental substitution in words and copula deletion of finite /be/ in present tense sentences. As research shows, these variables are widely used in AAE and generally acquired by the age of three. The features of copula deletion and interdental substitution are not typically utilized by SAE speakers in the Northeastern United States, including at this particular day care, so instances of deletion were either those of AAE speech patterns or

continuing developmental patterns. Considering the children studied ranged from ages three to five, the chances of such features being a cause of developmental processes were considerably lower than if they had been under three years. In terms of the interdental substitution, I was looking for instances in which the voiced or unvoiced interdental phonemes were replaced with /d/, /v/, /f/, or /t/, depending on position in a word. I evaluated every instance within the recordings wherein an interdental phoneme would be placed in SAE, by taking note of the phoneme used, its position in the word spoken (initial, middle, or final), the preceding phonological segment type (consonant, vowel, or nothing), the following phonological segment type (consonant, vowel, or nothing), style of speech (excited or relaxed), speaker, and addressee. This was so that we could determine not only if the children changed their feature usage depending on the person they were talking with, but in what phonological environment changes happened, so that we could follow any linguistic trends in their code-switching decisions. In terms of copula/auxiliary *be* deletion, I evaluated all instances wherein a copula/auxiliary *be* would be present in SAE, and recorded whether the instance was full, contracted, or deleted. I also took note of following grammatical environment (noun phrase, adjective phrase, pronoun, verb + -ing, verb *gonna*, locative prepositional phrase, and general prepositional phrase), the sentence subject (pronoun, noun, or wh-question word), person and number of speaker (1st, 2nd, or 3rd person, singular or plural), preceding phonetic environment (consonant, vowel, or nothing), style of speech (excited or relaxed), speaker, and addressee. After differences in frequency dependent on addressee, I was mostly looking for differences based on following grammatical environment, due to linguists' interest in discovering if this is a factor in the decision to include or delete the copula/auxiliary *be*. For both of these features, many factors could have been involved in the children's speech patterns. Living situation, age, and individual development level all affect the linguistic choices of young children, regardless of dialect.

Children

Four children were recorded, recordings from three of which were included in the final analysis. While I do not know the exact socioeconomic status of any of the children, this day care

typically caters to families from lower to middle socioeconomic status level. Pseudonyms were used for all four child speakers. Malik was the first child to talk with either Allyson or Kerrysha, and he was 3:10 years old. He is growing up with two young African American parents who speak AAE, and displayed prominent AAE features throughout both of his recorded conversations. Within the first few minutes of conversation with Allyson, he stated in description of the dog Carl in the book lying down: “He be up on his stomach. Doi-doggie, he, he be sick,” which demonstrates usage of habitual *be*. He later asked “Wha’ him doin’?” several times, which, along with zero copula, also features a common construction in AAE involving the use of an objective pronoun in place of a subjective one (Wolfram, 2000). While talking with Kerrysha, he utilized possessive –s deletion as well as copula deletion in the phrase “This my mom pot” while talking of cooking crabs to eat. Similarly he stated that “they doggie” sounded a certain way, rather than “their doggie,” indicating the third person plural form of possessive morpheme deletion. He also stated that “it get dirty” while talking of why you should not put a stick in your mouth as dogs do, which demonstrates third person singular –s deletion. Malik made use of the AAE construction in which a singular copula is used with a plural subject multiple times, such as in his phrases “They is children,” and “Where’s ‘e swings?” He made an unstressed syllable deletion in “I ‘bout to make a phone call,” a phrase which also features copula deletion in the first person. First person copula deletion is not a typical AAE construction, but is understandable in a young speaker who must learn exceptions to rules in any dialect. He switched a considerable amount between using the voiced interdental and substituting it with /d/ throughout both interviews, and also deleted the phoneme altogether often in phrases such as “What is ‘at?” Malik used copula deletion considerably throughout both interviews, and more often when talking with Kerrysha. At one point while speaking with Allyson Malik spoke the sentence “Hin’ ey’re washin’ up” in response to a question and later proclaimed “I turn the light on” before doing so when the light needed to be switched on, and both times the intonation and pronunciation sounded exactly like Kerrysha. While sentence intonation is a difficult feature to clearly quantify, the fact that he sounded so like an adult AAE speaker indicates his development is toward that of fully acquired AAE. Almost

four-year-old Malik produced this wide range of AAE features so abundantly within two fifteen minute sessions that I have concluded them to not only be coincidental features of his development as an English speaker, but also dialectal features of his burgeoning AAE dialect.

Moses was another boy who was recorded, and he was 3:7 years old. He is growing up with his mother, who seems to speak AAE but with fewer morphological features than Malik's parents. His speech patterns revealed that he is still developing competence in phonology, since he tended to pronounce words with phonemes atypical in both SAE and AAE, such as "ting" for "thing," "cass" for "crash," "fordot" for "forgot," "tynto" for "trying to," "bery" for "very," and other similar substitutions. He, like Malik, alternated quite often between using the voiced interdental fricative in words and replacing them with the voiced stop /d/. He also used the fricative /f/ word-finally much more regularly than the standard voiceless interdental, but this can easily be attributed solely to developmental processes. Moses utilized habitual *be* twice, once with each addressee, in the sentences "The little fiss be stared of dat one," and "when it be's day." He used a singular verb or pronoun with a plural noun on a few occasions, such as "These one is," "Dis stairs?" and "This is little balloons" – while using a singular copula for an otherwise plural sentence is an AAE feature, using a singular pronoun as well is not, because such a sentence lacks number agreement between a pronoun and its predicate nominative. He also used the objective pronoun as part of a nominative statement, in the phrase "Her looking for..." and exhibited possessive –s deletion in the phrase "The dog name." He used copula deletion in a first person statement once, in the phrase "I gonna do the laundry." Moses used AAE copula deletion in both interviews, but interestingly did so much more when talking with Allyson than with Kerrysha. When considering his speech patterns as a whole, I must conclude that Moses is not necessarily developing into an AAE speaker, and his speech is still in too much of a developmental stage to be able to definitely determine usage of AAE features as that of burgeoning adult dialect. The features were present, but not utilized nearly as often as in Malik's speech, and accompanied by features that are not present in either SAE or AAE but merely indicative of a child still in the process of acquiring language. If this were a longitudinal study, I would be more

likely to be able to determine within a year of when Moses was first recorded whether or not he is developing into an AAE speaker.

The third child whose speech was analysed was named Talin, and he was 5:4 years old. While his father is African American, he spends the majority of his time with his Caucasian SAE-speaking mother, and this was apparent in his recorded speech. His speech was not only more developed than the three-year-old speakers, but very standard. At the time of my study, Talin was doing interviews and tests at schools to measure his preparedness for kindergarten, so he may have been monitoring his speech to some degree on account of pressure to do well in his evaluations. Talin's phonology was very developed, as could be seen particularly clearly in his consistent usage of the voiceless interdental fricative, word-medially in words such as "somethin'" and "without," and word-finally, in words such as "teeth." A couple of times he pronounced the word "the" incorrectly, once as /bʌ/ and once as /dʒi/ as well as giving a voiced substitute for a voiceless interdental in the word "widout," but both times he was speaking in an excited voice. These things indicate that when he did use AAE features, such as his token of "sometin'," these may have been lingering developmental features rather than dialect features. On the other hand, his usage of /d/ in place of voiced interdental fricative occurred more much often than the other phonological instances that only occurred once each. He did not use the feature enough that his speech patterns are clearly AAE usage, but enough that the influence of his environment, possibly from his father's speech, is apparent. If Talin is to become a fully-fledged SAE speaker, his usage of /d/ will decrease more as he grows older. Out of thirty minutes of conversation, he used a small handful of AAE features. He used copula deletion only five times altogether, for example in the sentence "They goin' underwater," and used a singular copula for a plural subject four times, such as in the phrase "We was waiting." He used *be* once in a way that may have been habitual, but the phrase "Because she doesn't be scared," which in context meant "So that she doesn't get scared," seems to be a phrase that a young child would construct due to not having a complete grasp of the word forms involved. Talin also utilized the preterite form for a past tense sentence in the phrase "I only seen this kid," as well as the grammatical equivalent of third

person singular –s deletion by using the bare form of the verb *have* in “He have a hat” and auxiliary verb *has* deletion/replacement in “He got three sons.” Like with the phonological features, his usage of morphosyntactic AAE features were rare enough that I hesitate to classify him as an AAE speaker, although the small amount of influence from his environment must be a factor in his speech patterns.

Amber was the fourth child that I recorded talking with the addressees, and she was to be turning three one month after the study. Because she was more comfortable in a classroom with the older three-year-olds than the two-year-olds, I believed she could take part in the study and be considered a pre-schooler rather than a toddler. However, she not only contentedly spoke in whispers for one recording session, she did not talk at all for the second, except to say that she wanted to go back to the classroom. We of course let her return, but unfortunately could not include her in the study due to lack of tokens.

Results – copula deletion

Copula deletion results were only significant in a couple of studied contexts. When analyzing the tokens with Goldvarb X, a multivariate analysis program for sociolinguistics, the preceding grammatical environment and the child speaker turned out to be the only significant factors. Quantitative analysis programs such as Goldvarb needs a large number of tokens as well a high percentage of feature applications within those tokens in order to determine a given factor as significant. The preceding grammatical environment factors for copula deletion were pronoun, noun phrase, or question word. Below is a table illustrating the percentages and resulting significance of preceding grammatical environment in my study. For this and all other tables, M stands for Malik, O stands for Moses, and T stands for Talin.

Table 1: Copula Deletion in Terms of Preceding Grammatical Environment

Speaker	Prec. Gram. Environment	Application /Total	%	Probability	x ²	p <
M,O,T	Noun phrase	15/55	27.3	0.654	ns	
M,O,T	Pronoun	44/273	16.1	0.556		
M,O,T	Wh- question	3/62	4.8	0.174		
M,O	Noun phrase	15/41	36.6	0.696	21.89	p < .001
M,O	Pronoun	39/177	22.0	0.529		
M,O	Wh- question	3/44	6.8	0.225		
M	Noun phrase	11/20	55	0.688	180.1	p < .001
M	Pronoun	22/59	37.3	0.498		
M	Wh- question	2/23	13	0.339		

Results indicated that deletion happened 16.1 percent of the time following a pronoun, 4.8 percent of the time following a question word, and 27.3 percent of the time following a noun phrase. This follows the expectations of AAE features because copula is usually present when a sentence is in question order, and only likely to be absent from a question when the inquiry is in statement form, such as when Moses asked ‘Dey teef from deir?’ According to AAE dialect, the copula would be needed to overtly precede the rest of the statement, so I concluded that the question was in statement form in order to allow for the copula deletion following the noun phrase. Because Talin employed very few AAE features, I removed his tokens from the analysis in order to see the results when only Malik, an AAE speaker, and Moses, a possible AAE speaker, were analysed. The results determined that preceding grammatical environment was still the most significant factor, and percentages of all three preceding environment types increased but did not reach significance. When considering Malik on his own, patterns emerge that closely follow those expected from an adult AAE speaker. Unfortunately the number of tokens is too low to be considered significant, but the trends are suggestive. Out of a total of 102 tokens over the course of the two recording sessions, Malik used copula deletion 35.5 percent of the time that a copula would be used in SAE. In terms of which environmental factors did result in copula deletion more than 40 percent of the time, Malik accrued a substantial list. For example, Malik used deletion 55 percent of the time after a noun phrase, which adds to my evidence that preceding grammatical environment may affect speakers’ subconscious decisions to utilize copula deletion in the AAE dialect.

When preceding grammatical environment was taken out of the analysis, following grammatical environment surfaced as a significant factor in copula deletion. However, this does not indicate that following grammatical environment was significant overall in this study, for the tokens would have appeared in the initial analysis if that were so. As they stood, copula deletion occurred most often before a locative prepositional phrase. Deletion occurred here 36.8 percent of the time preceding a locative phrase, and 33.3 percent of the time preceding any other prepositional phrase. Interestingly, deletion only occurred preceding the word “gonna” once during the recordings, although copula deletion before this abbreviated version of “going to” is considered to be a common form in AAE. The high percentages of deletion before a locative or other prepositional phrase approach the 40 percent threshold of AAE competence, so it makes one wonder if those features would have been considered significant by Goldvarb if the number of tokens collected were higher. After subtracting Talin from the equation, the percentages of following grammatical environment increased in some aspects and decreased in others, in such ways that follow the trends of adult AAE. Copula deletion following a noun phrase increased to 21.6 percent of the time, following an adjective phrase to 26.3 percent of the time, and following a locative phrase increased to 50 percent. The notable increase of locative to 50 percent again begs the question of whether if there were a greater number of tokens this environment would be identified by Goldvarb as significant. Malik used deletion before an adjectival phrase 45.5 percent of the time, before a prepositional phrase 60 percent of the time, and before specifically a locative phrase 75 percent of the time. The very high percentages of deletion before prepositional phrases, and especially locative phrases, is undeniably an indication that if such phrases are more likely to result in copula deletion in adult AAE, then Malik is acquiring these aspects of the feature of copula deletion.

Number of copula used or deleted was another environmental factor considered as part of my tokens. This one is difficult to quantify because in AAE a singular copula form can be used in a sentence with a plural subject provided the plurality is still clear when the copula form is single. When a child utilized a singular copula in an otherwise plural phrase I counted the token as singular;

however, when a child deleted the copula in a phrase with a plural subject I counted the deleted copula as plural. Because copulas in those cases might have been singular had they been present in the surface structures, my resulting percentages of copula number must be considered hesitantly. Plural forms in first, second, and third person were evaluated together, and resulted in deletion 18.2 percent of the time. Copula deletion resulted in the third person singular form 14.7 percent of the time, a percentage number lower than one would expect in adult AAE speech. A second person singular copula form only occurred twice out of all six recording sessions, one of which was deleted and one of which was overt. A first person singular copula form also occurred twice out of all recording sessions, and was deleted both times, once by Malik and once by Moses.

Preceding phonological environment was another factor considered as part of environment that may affect copula deletion. As a vowel following a word with a final consonant cluster will result in a lower likelihood of final consonant cluster deletion in AAE, a vowel preceding a copula form may cause a decrease in copula deletion in favor of using a contracted copula form instead so as to not increase the chances of a subject ending in a vowel being immediately followed by a word that begins with a vowel. In my recordings, copula deletion occurred 17.6 percent of the time after either a word ending with a consonant or a pause in speech, and 12.2 percent of the time after a word ending in a vowel. When observing Malik's speech alone, he utilized copula deletion after a consonant or pause in speech 33.8 percent of the time and after a vowel exactly 40 percent of the time. This sharp increase in deletion following a vowel in Malik's speech was interesting because it went in the opposite direction as the percentages that resulted when the tokens of either Moses or Moses and Talin were included with those of Malik. The lack of huge difference between consonantal and vowel preceding phonological environments indicates that this environmental factor does not have a strong influence on copula deletion. The difference in occurrence order between Malik's speech and the other percentages calculated either indicates an AAE feature that Malik possesses and the other children do not, a feature specific to Malik's speech, or an insignificant number sequence. The cause of the number difference is impossible to determine with the amount of information

collected in this study.

Tone of voice was also included as a considerable environmental factor, due to the fact that people are more likely to speak in their native dialect when excited or angered. When feeling strong emotions, people speak more emotively and less deliberately, which results in speech patterns that are not as affected by social factors that would otherwise cause a person to speak more closely to the standard form of their language. The percentages indicated an increase across the board in deleted forms when the children spoke in an excited tone, and the distance between the two percentages increased with each successive evaluation of the children. When all the children were included, copula deletion occurred in a relaxed tone 15.8 percent of the time and in an excited tone 16.7 percent of the time. After removing Talin’s tokens from the analysis, deletion in a relaxed tone occurred 21 percent of the time and in an excited tone 27.3 percent of the time. When Malik was speaking in an excited tone he personally utilized copula deletion 50 percent of the time, and 33.3 percent when using a regular tone of voice.

Like with tone of voice, the difference between each of the three child speakers was drastically significant in terms of copula deletion, which was not a surprise when considering the speech patterns of each child. Below is a table indicating the percentage of copula forms spoken by each child and combinations of the children, either deletion or a full/contracted form.

Table 2: Copula Deletion in Terms of Addressee

Speaker	Addressee	Application/Total	%	Probability
M	Allyson	18 / 64	28.1	N/A
M	Kerrysha	19 / 39	48.7	N/A
O	Allyson	16 / 78	20.5	N/A
O	Kerrysha	6 / 83	7.2	N/A
T	Allyson	1 / 59	1.7	N/A
T	Kerrysha	4 / 69	5.8	N/A
M,O,T	Allyson	34 / 200	17	0.455
M,O,T	Kerrysha	28 / 190	14.7	0.616
M,O	Allyson	33 / 141	23.4	0.524
M,O	Kerrysha	24 / 121	19.8	0.472
M,T	Allyson	19 / 123	15.4	0.392
M,T	Kerrysha	23 / 108	21.3	0.622

Malik used copula deletion with Kerrysha 48.7 percent, which is quite significant and he used deletion with Allyson 28.1 percent. He also utilized alternative forms “a” or “eh” in place of “is” four times in his speech, which are included in the analysis as overt copula forms. Talin used copula deletion with Kerrysha four times, or 5.8 percent, and with Allyson exactly once, or 1.7 percent of the time. Both of these followed the pattern this study sought, of the children using the AAE features in question more often with Kerrysha than with Allyson, so as to more closely match their speech with that of their immediate addressee. However, Moses did the opposite in terms of copula deletion, using deletion with Allyson 20.5 percent of the time, but only with Kerrysha 7.2 percent of the time. Such a large difference in the opposite direction than was expected indicates that another factor may have influenced Moses’ speech. Combined copula deletion percentage when speaking with Kerrysha equalled 14.7 percent, and combined deletion when speaking with Allyson equalled 17 percent to result in an overall percentage of 15.9. When Talin’s tokens are not included in the analysis, overall deletion percentage increases to 21.6 percent of the time, but Allyson still results in greater copula deletion at 23.4 percent while Kerrysha results in 19.8 percent. When Moses’ tokens are not included in the analysis, deletion when speaking with Allyson equals 15.4 percent and deletion when speaking with Kerrysha equals 21.3 percent; overall deletion percentage becomes 18.4 percent. These numbers without Moses’ tokens in the analysis indicate the results I was originally expecting when formulating this study, but none of the numbers are significant.

Lisa Green spoke of her observation in a very similar study that the children seemed to consider certain common question words and pronouns to be intrinsically connected to the contracted copula when such a form would be present in SAE (Green, 2011). The forms *what’s*, *I’m*, *it’s*, and *that’s* rarely resulted in a copula deletion when the children she recorded spoke them, causing her to make her tentative conclusion about them being unanalysable, or intrinsically connected. I decided to make note of every such form that arose in my recordings. In doing so, I discovered that the trends of child speakers in my study suggest that these forms are much more likely to be intrinsically connected in SAE than AAE. These forms did not notably influence Malik’s decision to delete the

copula, while Moses and especially Talin barely utilized deletion in these forms at all. This suggests that an AAE-speaking child finds deletion of a copula contracted with *what*, *I*, *it*, or *that* grammatical, while an SAE-speaking child would not find such deletion grammatical regardless of whether it was contracted or full. The usage for the full copula form in adult speech, both for SAE and AAE, is typically reserved for emphasis on the positivity of the statement. For example, in the sentence “she is my sister,” the full copula would be chosen over the contracted form in order to counteract a statement made specifically insinuating that the woman in question was not the speaker’s sister. In my study, the children’s use of the full form did not necessarily coincide with emphasis on that form, but was used most commonly when casually asking “what is that?” The question stands of whether the deleted copula forms would manifest themselves in full or contracted forms in SAE, but this is impossible to tell from observation.

Results – interdental substitution

I analysed interdental substitution as well as copula deletion, in order to have calculations from more than one single relevant feature and therefore create a more balanced view of the recorded speech tokens. After analysing both copula deletion and interdental substitution, it became clear that environmental factors surrounding interdental substitution had much more significant percentages than those surrounding copula deletion. This was very likely because the number of interdental tokens was much higher than the number of copula tokens, 867 versus 328, respectively. If the number of copula tokens were higher, more factors may have been indicated as significant. The environmental factors of interdental substitution were: position of the interdental in the word (word-initial, word-medial, or word-final), preceding phonological environment (consonant, vowel, or pause), following phonological environment (consonant, vowel, or pause), tone (excited or relaxed), child speaker, and addressee. The standard interdental phonological form voiced /ð/ was realized by the children I recorded as /d/, /v/, and omitted. The other standard interdental phonological form, voiceless /θ/, was realized by the children recorded as /f/ or /t/. A few alternative voiced forms were used by the children, which seemed to be part of their developing speech. These forms were /h/, /b/,

/l/, and /dʒ/, and showed up about once each. They were not classified as samples of AAE interdental substitution.

The first factor, position of interdental phoneme in the word in which each phoneme was spoken, resulted in the highest amount of substitution in the word-final position. Below is a table illustrating the percentages and probabilities of interdental substitution in word-initial, word-medial, and word-final positions.

Table 3: Interdental Substitution in Terms of Position of Phoneme in Word

Speaker	Position in word	Application/Total	%	Probability	χ^2	p <
M,O,T	Initial	235/803	29.3	0.483	6.924	p < .01
M,O,T	Medial	6/41	14.6	0.407	6.924	p < .01
M,O,T	Final	15/23	65.2	0.954	5.781	p < .05
M,O	Initial	205/486	42.2	0.493	17.890	p < .001
M,O	Medial	2/14	14.3	0.181	16.012	p < .001
M,O	Final	15/18	83.3	0.870	5.002	p < .05
M	Initial	84/224	37.5	N/A		
M	Medial	1/5	20	N/A		
M	Final	3/4	75	N/A		

Substitution in word-initial position occurred 29.3 percent of the time, and in word-medial position 14.6 percent of the time. In word-final position, substitution occurred 65.2 percent of the time, well within the range of usage percentage by an adult AAE speaker. This high number may have been due to the fact that the interdentals are the last phoneme to be acquired by English speakers of both SAE and AAE dialects, and the voiceless interdental that occurs at the end of words is particularly difficult for young children to acquire, so that they often utilize the phoneme /f/ in place of the standard interdental. When Talin’s tokens were removed from the analysis, word-initial interdental substitution increased to 42.2 percent of the time, word-medial substitution remained about the same at 14.3 percent, and word-final substitution increased to a substantial 83.3 percent. When considering Malik on his own, interdental substitution occurred 37.5 percent of the time word-initially, 20 percent of the time word-medially, and 75 percent of the time word-finally.

The factors of both preceding and following phonological environment were also analysed, but preceding environment did not yield significant results. An interdental preceded by a vowel

resulted in a substitution form 27.6 of the time, preceded by a consonant resulted such a form 29 percent of the time, and preceded by nothing or a pause resulted in a substitution 31 percent of the time. After removing Talin’s tokens, percentage of substitution after a consonant increased to 42.1 percent, percentage after a vowel increased to exactly 42.1 percent as well, and percentage of substitution after a pause increased to 44.2 percent. Such similar relating numbers across the board indicate that preceding phonological environment had minimal effect on the underlying choice to utilize an interdental or a substitution phoneme.

Following phonological environment of an interdental did yield significant results in terms of substitution patterns that follow AAE phonological rules, as shown in the table below.

Table 4: Interdental Substitution in Terms of Following Phonological Environment

Speaker	Following Phon. Envir.	Application/Total	%	Probability	χ^2	$p <$
M,O,T	Consonant	3/12	25	0.047	ns	
M,O,T	Vowel	243/842	28.9	0.513	7.852	$p < .01$
M,O,T	Pause	10/13	76.9	0.353	7.852	$p < .01$
M,O	Consonant	3/8	37.5	0.456	ns	
M,O	Vowel	209/500	41.8	0.501	ns	
M,O	Pause	10/10	100	N/A		
M	Consonant	0/2	0	N/A		
M	Vowel	85/228	37.3	N/A		
M	Pause	3/3	100	N/A		

Substitution before a consonant occurred 25 percent of the time, before a vowel 28.9 percent of the time, and before a pause 76.9 percent of the time. Only considering Malik’s and Moses’ tokens, substitution occurred before a consonant 37.5 percent of the time, before a vowel 41.8 percent of the time, and before a pause 100 percent of the time, or ten total times. Malik’s results on his own exhibited a very low number of consonant tokens as the following grammatical environment, so the percentage of 0 is not necessarily indicative of Malik’s speech patterns overall. He utilized substitution before a vowel 37.3 percent of the time and before a pause 100 percent of the time. The high percentages of substitution preceding a pause was due to the same reason for the high percentages of substitution word-finally, mainly that a pause occurs after a word and the standard word-final voiceless interdental is difficult for pre-schoolers acquiring any dialect of English to

pronounce.

As explained in the corresponding section within the copula deletion results, tone of voice can indicate a heightened emotional state, which often results in a speaker’s patterns to more closely follow their native dialect. When the children in my study became more excited, as determined by the tone of their voices becoming louder and more dynamic, I made note of the change. Results indicate that the children were more likely to use interdental substitution when speaking in an excited tone than when speaking in a normal, more relaxed tone. Below is a table indicating these percentages.

Table 5: Interdental Substitution in Terms of Tone of Voice

Speaker	Tone of voice	Application/Total	%	Probability	x ²	p <
M,O,T	Excited	43/108	39.8	0.628	6.556	p < .05
M,O,T	Relaxed	213/759	28.1	0.481	6.556	p < .05
M,O	Excited	37/70	52.9	0.619	8.326	p < .01
M,O	Relaxed	185/448	41.3	0.481	8.326	p < .01
M	Excited	20/38	52.6	N/A		
M	Relaxed	68/195	34.9	N/A		

At this point in their linguistic development, such a change could be due to less focus on speech resulting in a slight regression of development as a child becomes an SAE speaker, or a change to speech patterns that they use most often that they may not have been using fully in day care. A differentiation of speech that occurs according to environment and reveals itself in an unexpected environment through tone of voice is a common phenomenon in adult speech, but advanced for the level of acquisition that exists in pre-schoolers. The percentage of interdental substitution in an excited tone of voice was 39.8 percent, and the percentage in a relaxed tone of voice was 28.1 percent. The percentage of substitution after Talin’s tokens were removed was 52.9 percent in the excited tone, and 41.3 percent in the relaxed tone. Malik’s speech alone resulted in 52.6 percent substitution in the excited tone almost identical to the percentage of his and Moses’ tokens, and 34.9 percent in the relaxed tone.

Addressee did not turn out to be a significant factor in interdental substitution or copula deletion. The percentages between Allyson and Kerrysha in terms of substitution were quite close,

and did not seem to have an effect on whether the speakers used the standard interdental forms or an AAE pattern of substitution. Substitution occurred with Allyson 27.7 percent of the time, and with Kerrysha 31.9 percent of the time; when considering Malik and Moses, substitution occurred with Allyson 41 percent of the time and with Kerrysha 45.3 percent of the time. Each child alone utilized substitution slightly more with Kerrysha than with Allyson, but each set of numbers has a negligible difference.

Discussion

The results of my study indicate that addressee has no significant effect on the speech patterns of young male AAE speakers. None of the token combinations analysed by Goldvarb resulted in significant numbers in terms of addressee, while when analysing only one child speaker at a time a binomial analysis indicating significance was not possible. However, the copula deletion results of Malik alone indicate that future research with a larger number of children who speak AAE would be beneficial to understanding if young male speakers do in fact attempt to code-switch according to addressee. The difference between copula deletion usage when talking with Allyson and copula deletion usage when talking with Kerrysha was 20.6 percent, a considerable number. At the same time, the difference between the same factors in Moses' speech was 13.3 percent in the opposite direction. The speech patterns of Moses may not have indicated an effort to code-switch in either direction, for he was furthest behind out of all three children in the process of acquiring speech. His tokens did not clearly indicate with dialect he is most likely to speak, never mind whether or not he was code-switching from one to the other in different environments. Talin's usage of copula deletion was so low that his numbers only indicate that he does not appear to have competence in that AAE feature. However, it is true that of the five times he utilized copula deletion, he was speaking with Kerrysha four of those times. Because Malik by far utilized the most AAE features in his speech and had the highest percentages of copula deletion and interdental substitution across almost all environmental factors, I am inclined to consider his copula deletion results most applicable to answering the question of code-switching in terms of addressee. Such evidence is only within a case

study, however, and cannot lend any conclusive information concerning the speech characteristics of AAE-speaking pre-schoolers in general. Interdental substitution employed results that were quite similar across the board of the three child speakers in terms of difference in usage between talking with Allyson and talking with Kerrysha. The greatest difference between addressee by any one child speaker or combination of children was 6.9 percent, by Malik, and the smallest difference was 2.9 percent, by Moses. The percentages of interdental substitution were very similar for both Malik and Moses, which indicates either that Moses may indeed be developing into an AAE speaker, or that the usage of substitution by those still acquiring SAE is similar to the usage of substitution by those using AAE. While it is also possible that Malik is at a similar stage of phonological development as Moses in terms of interdental substitution, Malik's proficient use of syntactic AAE features indicates that he is further along in speech development than Moses. In any of these cases, the fact remains that addressee did not notably influence the surface form of interdental spoken by any of the three children.

The fact that the AAE features used by the children did not seem to be closely connected to Kerrysha's AAE features is another indication that the speaker's speech pattern did not have a notable effect on the children's speech. Kerrysha's most prominent AAE features were her vowel elongation and possessive -s deletion. Neither of these features were heavily utilized by the child speakers, nor were utterances notably different in these ways depending on addressee. There was one noticeable instance in which, while copying a phrase Kerrysha had stated, Malik used copula deletion where Kerrysha did not. She commented "Tha's bæəd," and he replied in agreement "Yeah, that bæəd." The pronunciation of "bad" by Kerrysha is very typical of adult AAE, and Malik copies it almost exactly, though with some rhoticization before the final consonant. However, he utilizes a copula deletion, which suggests not only that copula deletion is an established feature of Malik's speech, but also that modifying speech to more closely match that of immediate addressee is not a notable factor in his conscious or subconscious speech choices. Another clear indication of this is the fact that Moses utilized copula deletion much more with Allyson than Kerrysha – 20.5 percent of the time versus 7.2

percent of the time. Moses had a large number of copula tokens, decreasing the chances of such usages being anomalies. While it is possible that Moses was increasing his copula deletion amount when talking with Allyson in order to differentiate himself from her dialect, it is much more likely given his development level that his deletion usage was not yet regularized and the fact that he used full and contracted forms more often with Kerrysha was merely a coincidence. The results of this study were inconclusive regarding code-switching depending on addressee, but I will hesitantly conclude, barring research containing a much greater number of child speakers, that addressee has no notable effect on the speech of AAE-speaking pre-schoolers. While Wyatt in 1995 observed code-switching by preschool-age AAE speakers when speaking with an adult SAE speaker on account of self-consciousness, I wonder if the racial diversity and accepting social environment of the day care in which I conducted my study eliminated feelings of self-consciousness on the part of the children I recorded, to the point where they simply have not yet experienced stigma against their dialect.

The high percentages of copula deletion exhibited by both Malik and Moses before a prepositional phrase and particularly before locative phrases may be connected to Becker's observation in 2000 that copula deletion before a prepositional phrase is a common aspect of acquisition in SAE-speaking children. While Malik is not becoming an SAE speaker and it is unclear whether Moses is becoming one, copula deletion in this specific grammatical environment may be a common occurrence in the speech of pre-schoolers in general. The facts that Malik's speech development is established enough to determine him to be an AAE speaker and his copula deletion amount preceding prepositional phrases and locative phrases were 60 and 75 percent respectively indicate that deletion in these environments will remain to be characteristics of his speech. Moses' usage of these features surfaced at 25 and 16.7 percent respectively, which again leave his trajectory of speech development unclear at this point of his acquisition level.

The only finding related to copula deletion considered significant by Goldvarb was that of deletion after a noun phrase. When considering the tokens of Malik and Moses, deletion following a noun phrase occurred 36.6 percent of the time, which is practically at the 40 percent threshold needed

to indicate AAE competency. This defies Rickford's 1999 finding that personal pronouns result in copula deletion more often than noun phrases. This discrepancy may be because I analysed for all pronouns together, and should have differentiated between personal pronouns and other pronouns. In future research considering environmental factors that affect copula deletion patterns of young AAE speakers, personal pronouns and other pronouns should be two separate categories in terms of preceding grammatical environment. If these two had been separate in my study, it is possible that personal pronouns would have exceeded noun phrase in terms of deletion usage percentage.

The environmental factors surrounding interdental substitution closely followed expected trends based on adult AAE, and were significant in terms of four different environmental factors. When an interdental was at the end of a word an AAE substitution, typically /f/, occurred 65.2 percent of the time, as opposed to the 29.3 and 14.6 percentages of word-initial and word-medial interdental substitution phonemes. All three children were capable of using the voiceless interdental word-medially even when they typically did not word-finally, indicating that standard pronunciation of the feature was possible and the usage of /f/ or /t/ instead could be determined to be burgeoning dialect. Malik's usage of substitution word-finally amounted to 75 percent, but when Moses' tokens were included in the calculation that number rose to 83.3 percent. Malik's percentages of tokens that follow AAE features were typically notably higher than those for Malik and Moses or for all three children combined, so this higher number may have resulted because Moses had not yet fully acquired the standard interdental forms and was therefore using substitutions even more often than would be expected of a developing AAE speaker, or because Malik simply did not use them as often as his own other speech pattern trends would suggest. Following phonetic environment was significant in terms of how often an interdental substitution followed a pause, which was 76.9 percent when analysing all three children together. This high number is partially due to the fact that a pause can only happen after a word-final interdental, and word-final interdentals were substituted as /f/ 65.2 percent of the time. Malik and Moses both utilized interdental substitution every one of the times a pause followed an interdental in their speech. To what extent a feature utilized completely is due to

dialect or development is difficult to determine with the amount of information available.

Word-initial substitution was usually in the form of /d/ in words such as *that*, *this*, *those*, or *they*, and was the AAE feature that Talin used most consistently, at 9.5 percent. These words had a large amount of variation between the voiced interdental form and the substitute /d/ amongst all three children, so I ran a Goldvarb analysis on word-initial substitution alone. The environmental factor that seemed to have the greatest effect on the word-initial phoneme was tone of voice, with an excited tone resulting in substitution 41.3 of the time. This indicates that perhaps tone of voice causes a decision to code-switch in young children. When considering all three children, excited tone of voice resulted in substitution an average of 11.7 percent more than relaxed voice, but only resulted in deletion an average of 0.9 percent more. These numbers suggest that perhaps tone has an effect on phonological surface forms, but not morphosyntactic. Interestingly, when analysing Malik's tokens alone deletion occurred 16.7 percent more often in excited voice and substitution occurred 17.5 percent more often, which suggests that tone may indeed have an effect on both phonological and syntactic forms. While the percentages pertaining to tone of voice collected from this study do not represent particularly substantial numbers, they are still different enough from each other that I would be interested in conducting a study analysing the usage of AAE features in young children when they are speaking in different tones of voice.

The significance of four out of six environmental factors is a good indication of the effect number of available tokens has on sociolinguistics invariate analysis. The fact that there were over 2.6 times more interdental tokens than copula tokens (867 versus 328) suggests that more copula tokens may have resulted in more significant results. In future studies I would strive to make interview sessions slightly longer so as to collect more tokens from individual speakers, as well as include many more children into the study. The low number of children who were available to participate in the study was a consequence of circumstance, for originally I intended on recording the speech of ten four-year-old children. Recording both male and female children would have been ideal, for this study now only indicates possible results for male child speakers. In the future,

recording children of both sexes and differentiating their speech tokens would allow me to consider if certain tokens are more common in male or female child speech. It would also be interesting to observe in which ways preschool-age girls exhibit greater amounts of complex syntax than boys, and in which ways boys exhibit a greater quantity of features than girls. The reality that Moses' level of development was not at a point where his speech patterns were clearly dialect as opposed to developmental processes, and that Talin turned out to not be an AAE speaker, were not ideal. However, these problems would not have been so substantial had there been more AAE-speaking children included in the study. Malik was the only child speaker who was clearly acquiring AAE, and his tokens not only indicated a change in speech patterns dependent upon addressee, but generally followed all the known expectations of one acquiring adult AAE. This suggests that a study including many more speakers like Malik would have resulted in a larger number of significant environmental factors.

Conclusion

With the speech of only three children analysed over the course of this study, and with much variation in the presence of AAE features among the children, this study could not present conclusive evidence for or against change of speech patterns by young AAE speakers when speaking with addressees of different races and dialects. The information I was able to glean was that young AAE speakers follow trends generally matching those of adult AAE speakers, and differences between the two forms of the AAE dialect appear to be on account of continuing development by individual young child speakers rather than a dialectal form that all young children speak. It is possible that young AAE-speaking children are collectively more likely to utilize copula deletion when a noun phrase precedes it, but more research is required to determine the validity of this trend observed in my study. An excited tone of voice appeared to cause a higher percentage of interdental substitution, but again, more research is required to make a conclusive statement.

As children age, they become more aware of dialectal expectations and are more likely to code-switch in institutional settings, but at the young ages of 3-5, it seems that such awareness is not

generally prevalent enough to significantly affect speech patterns. The implications of this for education are that young AAE-speaking children acquire speech as a young SAE-speaking child would, and become competent in the dialect that they are surrounded by at home. When they enter grade school and are expected to speak SAE, they have never been explicitly expected to do so before. While AAE speakers then become acutely aware of the stigma against their dialect, after their initial acquisition period has passed they may need explicit instruction in SAE in order to fully acquire the standard dialect that they must utilize in order to be successful in academia.

Implementing activities in preschools that allow young children to understand the differences between SAE and AAE may give them a linguistic awareness that allows them to more easily become bidialectal and more readily succeed in academia. Alternatively, implementing contrastive analysis programs into public schools will help students and teachers alike to not only understand the dialect they do not speak natively, but to have a greater respect for that dialect and its speakers as well.

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