Phonological and Phonetic Characteristics of African American Vernacular English

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Abstract

The numerous controversies surrounding African American Vernacular English can be illuminated by data from phonological and phonetic variables. However, what is known about different variables varies greatly, with consonantal variables receiving the most scholarly attention, followed by vowel quality, prosody, and finally voice quality. Variables within each domain are discussed here and what has been learned about their realizations in African American speech is compiled. The degree of variation of each variable within African American speech is also summarized when it is known. Areas for which more work is needed are noted.

Introduction

Much of the past discussion of African American Vernacular English (AAVE) has dealt with morphological and syntactic variables. Such features as the invariant *be* (We be cold all the time), copula deletion (We cold right now), third-person singular *-s* absence (He think he look cool) and *ain't* in place of *didn't* (He ain't do it) are well known among sociolinguists as hallmarks of AAVE (e.g. Fasold 1981). Nevertheless, phonological and phonetic variables characterize AAVE just as much as morphosyntactic ones, even though consonantal variables are the only pronunciation variables in AAVE that have attracted sustained attention.

AAVE has been at the center of a series of controversies, all of which are enlightened by evidence from phonology and phonetics. One is well known among sociolinguists: the 'creolist/anglicist controversy', which concerns the origin of AAVE, whether as a plantation creole or as working-class speech acquired from plantation overseers, or perhaps a mixture of the two or even from another source, substrate influence from West African languages. Much discussion of this controversy (e.g. Rickford 1999; Poplack 2000) has concerned morphosyntax, but, as argued by Thomas and Bailey (1998), Sutcliffe (2003), and Thomas and Carter (2006), segmental and prosodic variables analyzable in the ex-slave recordings (Bailey, Maynor, and Cukor-Avila 1991) can provide vital clues as well. There have been other important controversies, too. The 'uniqueness

controversy' concerns whether AAVE differs from all European American vernaculars. It is now generally recognized that AAVE differs substantially from any European American vernacular, even in the South. Studies of speech production conducted with vernacular speakers in the South – for example, Wolfram (1974) – demonstrated that there were significant differences. This evidence is reviewed in Bailey (2001). Furthermore, speech identification experiments have shown that listeners are usually quite good at distinguishing the two ethnicities, with accuracy rates sometimes reaching the point of saturation; see the review in Thomas and Reaser (2004). The differences appear to span all realms of pronunciation, including consonantal and vocalic variation, prosody, and probably voice quality. Another controversy is the 'convergence/divergence controversy' over whether AAVE and European American vernaculars are currently becoming more or less like each other, or perhaps maintaining a roughly constant distance from each other. Labov and Harris (1986), Fasold et al. (1987), Bailey and Maynor (1989), Butters (1989), and Wolfram and Thomas (2002) are the most essential readings on this controversy. The failure or slowness of African Americans to adopt vowel shifting patterns that are spreading among European Americans has been cited as key evidence favoring the divergence position. Most recently, the 'uniformity controversy' has arisen. This controversy involves how uniform AAVE is across the USA, whether it has a single set of norms to which young African Americans aspire, and whether any geographic variation in AAVE is dependent on or independent of variations in the vernaculars of European Americans and other ethnic groups.

Some special considerations relate to AAVE. First, AAVE is often distinguished from African American English (AAE). AAVE relates specifically to a vernacular form, spoken principally by working-class African Americans. AAE refers to the speech of all African Americans, including middle-class African Americans. Middle-class AAE most often lacks the more stigmatized morphosyntactic variants, although some middle-class speakers may employ them for stylistic effect or to express solidarity. Most pronunciation variables are not as stigmatized, however, and, for many of them, there may be no meaningful distinction between AAVE forms and AAE forms. Throughout this article, I use AAVE only when referring specifically to vernacular forms and AAE otherwise. Second, it should not be assumed that AAVE, or AAE in general, is monolithic for any variable. Variation exists among African Americans for all the variables described here. What I discuss are the predominant patterns or, in some cases, uncommon variants that happen to occur more frequently in AAE than in European American speech. Third, AAVE (and AAE) have a unique migration history. They originated in the South, and specifically in the Coastal Plain and Piedmont sections of the South, and were at first tied to a rural lifestyle. However, beginning before World War I and continuing through World War II, the Great Migration occurred in which large numbers of

African Americans migrated to cities outside the South in order to find work and to escape Jim Crow laws (see, for example, Ellison 1974; Grossman 1989). A result was that the focus of African American culture shifted to urban life. Moreover, some dialect leveling undoubtedly also occurred as African Americans from different parts of the South mixed in the new urban communities. Recently, two new types of migration have developed. One is a migration outward from inner city areas to African American suburbs, such as in Prince Georges County, Maryland. Another type is reverse migration to the South as economic conditions there have improved and Jim Crow laws have faded into memory. The reverse migration has apparently been largely to urban centers, such as Atlanta, Charlotte, and Houston, however, and, for the most part, not to rural areas. Hence, any leveling processes that may have occurred in northern cities are likely to continue.

Phonological and phonetic variables may well represent the richest source of information for shedding light on how AAVE is changing. Not all kinds of pronunciation variables have received equal attention, however. The succeeding sections will begin with the best known domain, that of consonantal variables, and proceed through the successively lesser known realms of vowels, prosody, and voice quality. For vowel quality, the names of the vowel classes will follow the conventions of Wells (1982); for example, FLEECE represents the vowel sound in the word *fleece*, variously referred to as /i/, /iː/, /ij/, or /iy/. The Wells names have gained international currency in recent years and are used here for that reason. Whenever terms such as *mutation*, *deletion*, or *substitution* are used, they refer specifically to historical changes leading to AA(V)E and should not be taken to represent deviations from Standard English forms.

Consonants

CONSONANTAL LEXICAL VARIANTS

Segmental variants can be either systematic or lexical specific. Most of the variation described in this article is systematic. However, a few lexical variants are described here for consonants and later for vowels. Probably the most stereotypical of such variants in AAVE is *ask* pronounced as [æks]. The *Linguistic Atlas of the Gulf States* (Pederson et al. 1986–1992, henceforth LAGS) found it among 23% of African American informants but only 1% of European American informants in the Gulf states. Other studies (e.g. Gordon 2000; Wolfram and Thomas 2002: 131) have also found it to be strongly associated with African American speech. This metathesis (provided, that is, that [æks] is not a continuation of Old English *acsian*; [æks] has persisted in some British dialects) may reflect a somewhat systematic process: Miller (1986) and Bailey (2001) note that metathesis of /sp/, as in *wasp* and *grasp*, to /ps/ can occur in AAVE.

However, those cases may likewise represent survivals of older forms; metathesis has a long history in English.

Whether [æks] originated as a British dialectal form or spontaneously in AAVE is unclear. Nevertheless, one lexical variant associated with AAVE that is clearly a case of an old variant disappearing more rapidly in European American speech than in African American speech is the absence of /j/ or another palatal in *pasture*, so that *pasture* is homophonous with *pastor*. Kurath and McDavid (1961) show that this variant was once common in Southern White Vernacular English (SWVE). However, LAGS found this variant among 54% of African American informants and only 18% of European American informants.

VARIATION IN LIQUIDS

Of the systematic consonantal variables, one of the best studied is *r*–lessness, or non–rhoticity. *R*–lessness occurs when a historical /r/ in a syllable coda is realized as [ə] or is deleted, as when *four* is uttered as [foə], [foː], or [fou]. In European American speech, *r*–lessness predominates or formerly predominated in certain areas of the Northeast – the New York City metropolitan area and eastern New England (and a few other areas settled by *r*–less Northeasterners, such as San Francisco) – and in parts of the South where the plantation culture once predominated. However, *r*–lessness has been declining in European American speech, especially in the South. AAE, because of its historical connection with plantation areas of the South, is usually characterized by some degree of *r*–lessness. In fact, it has been suggested (Feagin 1997) that SWVE acquired *r*–lessness from AAVE. One of the most consistent findings in American sociolinguistics is that African Americans show greater rates of *r*–lessness than cohort European Americans. This result has been obtained both in the South (e.g. Williamson 1968; Foley 1972; Pederson et al. 1986–1992; Wolfram and Thomas 2002) and outside the South (e.g. Labov et al. 1968; Wolfram 1969; Myhill 1988; Baugh 1983; Edwards 1997). A number of other aspects of *r*–lessness appear consistently as well. *R*–lessness becomes less frequent as social level increases and as speaking style becomes more formal. The effects of phonetic contexts are fairly consistent as well. In AAVE, *r*–lessness is most common in unstressed syllables, as in *over*, *brother*, and *forget*, and in final and preconsonantal postvocalic positions, as in *four*, *hard*, *here*, and *scared*. The incidence of *r*–lessness in these contexts in AAE can vary tremendously, from close to zero, as in Columbus, Ohio (Thomas 1989/1993) and Davenport, Iowa (Hinton and Pollock 2000) to 90% or more, as in New York City (Labov et al. 1968) and Hillsborough, North Carolina (Anshen 1970), depending on the community.

In stressed, syllabic positions, as in *work* and *stir*, the norm for most African Americans today is an *r*–ful one (Labov et al. 1968; Wolfram 1969: 111–2; Myhill 1988; Hinton and Pollock 2000; Thomas 2001). Even in

this context, *r*-less variants still occur occasionally, especially in the Deep South (i.e. from South Carolina to Louisiana) and up the Mississippi valley (Williamson 1968). In that region, the variant [əɪ] was formerly the norm there in checked position, as in *work* and *third*, in AAE and in much European American speech, and it can still be heard among older African Americans (Wroblewski, Strand, and Dubois 2007).

The 'linking *r*' in which a word-final *r* may be pronounced when the next word begins with a vowel – for example, in *four eggs* – is quite often absent in AAVE, as is also the case in *r*-less varieties of SWVE. Its frequent absence contrasts with European American speech in the few Northern areas where European Americans may be *r*-less – as in New York City (Labov et al. 1968: 100) – which typically show linking *r*. Even more striking is the occasional absence of word-internal intervocalic *r* in AAVE, as in [kʰæi] for *carry* or ['fɬɑərə] for *Florida*. AAVE may also show absence of *r* after /θ/, as in *throw* or *through*, or after other consonants in unstressed syllables, as in the first syllable of *prefer*.

Analogous to *r*-lessness is *l*-lessness. *L*-lessness can occur in three forms. One is vocalization to a mid- to high-back, rounded vowel or semivowel in the range of /o/ or /w/, as in *feel* produced as /fio/. This variant is common and widespread in European American speech as well as African American speech. A second variant is vocalization to schwa, as in [fiə] for *feel*. This variant is strongly associated with African American speech. The third variant is deletion of historical /l/, as in [pʰʊ] for *pull*. Deletion is also decidedly more common in AAE than in European American varieties. Labov et al. (1968) examined *l*-lessness in New York City AAVE and reported that it was highly disfavored by a following vowel where a 'linking *l*' is preferred. They also noted that deletion is more common after a rounded vowel, as in *pull*, than after an unrounded vowel. However, especially in the South, deletion may likewise occur in certain words in which /l/ precedes a labial, such as *twelve*, *help*, and *-self* compounds.

MUTATIONS OF INTERDENTAL FRICATIVES

Various substitutions for what was historically /θ/, as in *think*, and /ð/, as in *that*, are common among African Americans. Today, /θ/ is commonly replaced with /t/, /ˌt/, /tθ/, or /f/ or is deleted and /ð/ is often replaced with /d/, /ˌd/, or /v/. /ð/ may also assimilate to a preceding consonant, such as [ɬaɪkːæʔt] for *like that* (Taylor 1997). Sporadic occurrences of /s/ for /θ/ in records of African American speech in the *Linguistic Atlas of the Middle and South Atlantic States* (LAMSAS) and in LAGS hint at a likely wider distribution for /s/ in earlier AAVE, most likely as a substrate feature. In AAE, /f/, /v/, and deletion occur only word medially or finally, as in [bouf] for *both* and ['mʌvə] for *mother*, never word initially. However, /t/ and /d/ can occur in any position for historical /θ/ and /ð/, as in [tɪŋk], [bout], [dæʔt], and ['mʌdə-'mʌɾə] for *think*, *both*, *that*, and *mother*, respectively.

Labov et al. (1968) analyzed substitutions for both /θ/ and /ð/ in the AAE of New York City. They found that substitutions for /ð/ were more common than those for /θ/ and that the frequency of substitutions was inversely correlated with social class and formality of speaking style. Wolfram (1969) examined substitutions for /θ/ in Detroit AAE. He found that the substitutions were less common among higher social levels, females, and speakers with extensive contacts with whites and more common among lower social levels, males, and speakers with limited contacts with whites. Butters and Nix (1986), working in Wilmington, North Carolina, also found an inverse relationship between /θ/ substitutions and social class, at least for some speakers. LAGS records show that the substitutions for /θ/ and /ð/ occur in both African American and European American speech in the Gulf states, but are more common in African American speech. Substitutions may attract more attention outside the South, where they – especially those of [f] and [v] – have a more restricted incidence in vernacular European American speech and, thus, set AAVE off more strongly.

CONSONANT CLUSTER SIMPLIFICATION

Simplification of consonant clusters in which the second consonant is a stop, as in *pas'* for *past*, *des'* for *desk*, *hol'* for *hold*, or *ac'* for *act*, has been studied extensively in AAE (see Labov et al. 1968; Wolfram 1969; Fasold and Wolfram 1970; Labov 1972; Baugh 1983; Miller 1986; Butters and Nix 1986; Pederson et al. 1986–1992 for the item *chest*, Gordon 2000; and Wolfram and Thomas 2002). A result is that AAVE can appear to have a smaller inventory of syllable codas than other varieties of English. Sociolinguists have found consonant cluster simplification especially intriguing because it interacts with both ethnicity and morphology. Speakers of virtually all dialects delete the stop when the following word begins with a consonant, as in *pas' the house*. However, deletion of the stop when the next word begins with a vowel, as in *pas' a house*, is far more common in AAVE than in middle-class AAE or in European American varieties at any social level. In these cases, it appears that some AAVE speakers may lack the stop entirely in their cognitive representations of the words, as indicated by plurals such as *poses* [ˈpʰousəz] for *posts* and *desses* [ˈdɛsəz] for *desks*. Plurals in which the continuant is lengthened, for example, [pʰousː] and [ˈdɛsː], are more common, however. Wolfram and Thomas (2002: 133–4) list various other constraints that have emerged. Simplification is less likely when both consonants are stops, as in *act*, than when the first member is a sibilant, as in *past*; less likely when the first member is a sibilant than when it is /l/, as in *hold*; and less likely when the first member is /l/ than when it is a nasal, as in *find*. It is also more likely in unstressed syllables than in stressed syllables. Furthermore, simplification is more likely when both members of a cluster agree in voicing, as in *past* and *find*, than when they do not, as in *lamp*.

The morphological interaction is most notable with preterits. For pret-erits, the final stop represents a separate morpheme, as in *laughed* /læf+t/, *knocked* /nɑk+t/, *closed* /kloz+d/, or *kept* /kip~kɛpt/. Various studies, such as Wolfram (1969), have shown that cluster simplification is less likely when the stop constitutes a morpheme than when it does not. Furthermore, as Wolfram and Thomas (2002: 134) note, simplification is more frequent for irregular preterits such as *kept* and *slept*, in which the tense is marked by a vowel change as well as the final stop, than for preterits for which the tense is marked solely by the final stop.

A different sort of consonant cluster simplification occurs with clusters of stop + /s/ or /z/, as in *box* and *that's* (Labov 1972: 17–8). In some cases, such as *that's* and *it's*, the stop may be deleted, yielding, for example, [dæs] for *that's*. In others, such as *box* and *six*, the sibilant may be deleted. Fasold and Wolfram (1970) assert that the latter reduction is more common in Southern AAVE than in Northern AAVE.

OTHER CONSONANTAL VARIABLES ASSOCIATED WITH AAE

Some speakers of AAVE share with some SWVE speakers the mutation of historical /ʃr/, as in *shrimp* and *shrub*, to [sɹ]. However, a different mutation of /ʃr/, to [ʃw~sw], appears to be nearly unique to AAVE (Labov 1972: 20; Pederson et al. 1986–1992). Pederson et al. (1986–1992) found [ʃw~sw] in *shrimp* among 19% of African American informants but only 1% of European American informants.

Another consonantal variable associated with AAVE is deletion of final /n/, with only nasality on the preceding vowel remaining, as in *man* produced as [mæ̃]. This variable is sometimes mentioned in lists of African American features, for example, by Bailey (2001: 76), who characterizes it as 'apparently unique to AAVE'. Nevertheless, it has received little quantitative analysis aside from Ash and Myhill (1986). Deletion of nasals in non-final contexts, as in [kʰən'viənt], can also occur.

A fairly common feature of AAE is devoicing, often accompanied by glottalization, of morpheme-final /d/, /g/, and /b/, as in *mud* produced as [mʌʔt] or [mʌʔ]. Outright deletion of morpheme final voiced stops is possible, too, for example, [mʌː], and the deletion can extend to voiceless stops, for example, [ɹæ] for *rack*. Fasold (1981) asserted that devoicing of voiced stops is unique to AAE among Southern dialects. Wolfram (1969) examined the social and linguistic conditioning of devoicing and deletion of morpheme-final /d/ in Detroit AAE. He found that they became more common as socioeconomic level decreased and that they were for the most part more frequent in adolescent speech than in adult speech, but that they were only slightly less common in reading style than in inter-view style. He also found that they were less common before vowels than before consonants or pauses and that, while devoicing occurred more often before pauses than before consonants, deletion was more common

before consonants than before pauses. Devoicing and deletion of voiced stops are rare or unknown in other American dialects.

Yet another consonantal feature that occurs in some African American speech but is unknown in other North American dialects is substitution of /skr/ for /str/, as in *street* /skrit/ and *strong* /skrɔŋ/. This feature has been reported by several authors (Fasold and Wolfram 1970; Labov 1972: 20; Wolfram and Fasold 1974: 144; Bailey and Thomas 1998; Bailey 2001; Wolfram and Thomas 2002: 131). Green (2002: 122–3), citing Dandy (1991), provides a number of further examples.

A final consonantal variable that has been identified with AAVE is the loss of /j/ after non-coronal consonants. Loss of /j/ after coronal conso-nants, as in *new*, *tune*, and *sue*, is, of course, widespread in American English. Bailey and Thomas (1998) and Bailey (2001), however, report that some African Americans also show loss of /j/ after other consonants, as in *computer* [kʰəmˈpʰurə]. It is unclear how common this variant is in AAVE. Thus far, it is not known from any other North American dialects. A possibly related variant is mutation of /j/ to /r/ after a consonant, as in [ˈmɹuzik] for *music*, reported by Pollock (2001).

AAVE consonants have not attracted acoustic study. Nevertheless, acoustic study could reveal various other consonantal factors as variables. Examples of potential variables are voice onset time and the degree and nature of glottalization.

Vowels

VOCALIC LEXICAL VARIANTS

A few lexical-specific vowel variants are associated with African American speech. Most are also found in SWVE. For example, *can't* with the vowel of FACE is quite common in AAVE, but it is also common in SWVE. It tends to draw attention from non-Southern Whites who are unfamiliar with it and may assume that it is an African American variant instead of a general Southern variant. However, other variants really are correlated with African American speech, even in the South. One is *aunt* with the vowel of LOT instead of the usual American form with the vowel of TRAP. This [ɑnt] form, with the 'broad *a*', occurs in some Southern White speech, but is much more common in African American speech. In LAGS, for instance, it accounted for 74% of African American pronunci-ations of *aunt* but only 9% of European American pronunciations. African Americans brought this form with them when they left the South, as Gordon (2000) notes in his study of northwestern Indiana. It appears to have begun as a prestige pronunciation used by plantation owners, who then spread it to their slaves, and at one time the 'broad *a*' could be heard in numerous other words, for example, *pasture*, *master*, *half*, and *mass*, especially in Virginia (McCormick 1900). Another lexical variant strongly

correlated with AAE is *sister* with the ꜰᴏᴏᴛ vowel, that is, ['sʊstə]. This variant began as retraction of the ᴋɪᴛ vowel when the following syllable contained schwa, as in *sister*, *mister*, *ribbon*, *crystal*, *Christmas*, and *dinner*, which was once widespread in Southern speech (Sledd 1966). The similarity of the retracted allophone to the vowel of ꜰᴏᴏᴛ led to the transfer of *sister* to the ꜰᴏᴏᴛ vowel in some African American speech. Foley (1972) found that *whip* with the ꜰᴏᴏᴛ vowel was also more common in African American than European American speech. This difference is reflected in LAGS, where *whip* showed the ꜰᴏᴏᴛ vowel in 19% of African American responses and 6% of European American responses.

Pederson et al. (1986–1992) notes two other lexical variants that were correlated with African American speech. In both cases, they are once-common variants that have not disappeared in African American speech as quickly as in European American speech. The first is *jaundice* with the ᴛʀᴀᴘ vowel, found among 32% of African American LAGS informants and 13% of European American LAGS informants. The other is *deaf* with the ꜰʟᴇᴇᴄᴇ vowel, found in LAGS among 29% of African Americans and 13% of European Americans.

ᴏʟᴅ ꜱʏꜱᴛᴇᴍᴀᴛɪᴄ ᴠᴏᴡᴇʟ ǫᴜᴀʟɪᴛʏ ᴅɪꜰꜰᴇʀᴇɴᴄᴇꜱ

Among systematic vocalic differences between AAVE and SWVE, some are quite old. Dorrill (1986a,b), using records from LAMSAS, noted that African Americans in Maryland, Virginia, and North Carolina showed a greater incidence of monophthongal variants of the ꜰᴀᴄᴇ, ɢᴏᴀᴛ, and ᴛʜᴏᴜɢʜᴛ vowels, for example, [feːs], [goːt], and [θɔt], than did European Americans from the same communities. The informants whose speech he tabulated were born in the mid- to late-nineteenth century. In Thomas and Bailey (1998), using an acoustic analysis of the ex-slave recordings discussed in Bailey et al. (1991), we also found evidence for monophthongal forms of the ꜰᴀᴄᴇ and ɢᴏᴀᴛ vowels in earlier AAVE. Furthermore, we pointed out that the LAMSAS records, the same ones that Dorrill had used, show monophthongal variants in southern European American speech to be restricted to areas with high concentrations of African Americans and not to be correlated with Ulster Scots settlement. Monophthongal variants of the ꜰᴀᴄᴇ and ɢᴏᴀᴛ vowels are the norm in Ulster English. This finding suggests that monophthongal forms of the vowels in ꜰᴀᴄᴇ and ɢᴏᴀᴛ in SWVE might have spread from African American speech rather than deriving from dialects of the British Isles. We suggested that their occurrence in AAE could represent substratal influence from West African languages. Monophthongal forms of the ꜰᴀᴄᴇ and ɢᴏᴀᴛ vowels have virtually disappeared in AAE today. Their primary occurrence seems to have been among speakers born before World War I, although they persisted longer in some regions, such as southern Louisiana.

A second old vocalic feature of AAVE is resistance to the fronting of the nucleus of the diphthong of MOUTH. LAMSAS data and our analysis (Thomas and Bailey 1998) of ex-slave recordings, both of which involve speakers born in the nineteenth century, indicate that earlier AAE did not typically show fronting of the nucleus of the MOUTH vowel to [æ]. LAM-SAS records of European American speech show [æʊ~æʊ~a^o~a^ʊ] as the predominant realizations of the MOUTH vowel in most parts of the South Atlantic states, except where the MOUTH vowel showed the form [əʊ~əu] before voiceless consonants, and even in those regions [æo~æʊ~a^o~a^ʊ] predominated in other contexts. For African American informants, conversely, the predominant LAMSAS transcriptions were [a˃ʊ~ɑ˂ʊ]. [əʊ~əu] occurred in AAE before voiceless consonants in the same regions where it occurred in European American speech, that is, Virginia and adjacent areas and the Low Country of South Carolina and Georgia. Unlike monophthongal forms of the FACE and GOAT vowels, however, non-fronted forms of the MOUTH vowel have retained their currency in AAVE. LAGS, whose corpus of speakers is much younger than that in LAMSAS, shows, for *cow*, the transcription [æo] among 41% of European Americans but only 18% of African Americans. Other studies (Bernstein 1993; Thomas 2001; Labov et al. 2006) corroborate the finding that southern European Americans show fronting of the MOUTH vowel far more than southern African Americans.

The vowel of MOUTH shows another ethnic difference as well. In the South, at least, African Americans are more likely than European Americans to show weakening or monophthongization of the glide. LAGS data for *plow* show glide weakening or monophthongization among 25% of African Americans and 15% of European Americans. Moreover, European Americans with that feature were concentrated in eastern and middle Tennessee, an area with relatively few African Americans, so the difference was actually starker in regions with heavier concentrations of African Americans. Wolfram and Thomas (2002) noted a similar trend in Hyde County, NC, where young African Americans showed a movement toward weak glides of the MOUTH vowel, rendering the diphthong as [aɐ].

Denning (1989) discussed an old feature that once occurred in all older forms of English, realization of what Wells (1982) terms the *happ*Y vowel, as /ɪ/. This is the high unstressed vowel, as opposed to the mid unstressed vowel, which is usually represented as /ə/, or as Wells calls it, *comm*A. Raising of *happ*Y to /i/ has occurred generally across English. However, it has occurred more rapidly in some dialects than in others, and, as Denning shows, /ɪ/ forms persisted particularly long in AAE, although AAE has been shifting to [i] as well. /ɪ/ is still common in the speech of older African Americans.

A final older feature is the deletion of unstressed vowels in initial syllables, as in *'nough* for *enough* and *'head* for *ahead*. Vaughn-Cooke (1986) discussed this process and noted that, in many cases, entire syllables can

be deleted, as in *'come* for *become* or *'spect* for *expect*. Some of these deletions, such as *'cause* for *because* and *'member* for *remember*, are pervasive in European American speech, of course. In general, though, the deletions are decreasing in AAE, as Vaughn–Cooke, using data from Mississippi, demonstrated. She noted that deletions of both a consonant and a vowel were disappearing more rapidly than deletions of just a vowel.

FEATURES SHARED WITH SOUTHERN WHITES

AAVE shares some vocalic variants with SWVE. This fact is unsurprising, considering that AAVE originated in the South. Perhaps the most stereo-typical vocalic feature of SWVE is glide weakening or monophthngization of the vowel of PRICE. Glide weakening of the PRICE vowel commonly occurs in two basic forms, however: one in which it is weakened or lost unless the following consonant is voiceless (e.g. *price*, *sight*, *spike*, *life*, and *type*), in which case the glide remains strong; and one in which the glide is weakened or lost in all phonetic contexts. The former might be called PRIZE/PRY glide weakening and the latter PRICE/PRIZE/PRY glide weaken-ing. PRIZE/PRY glide weakening typifies southern European American varieties in areas where the plantation culture once dominated, especially among the higher social classes, but it also typifies AAVE. PRICE/PRIZE/PRY glide weakening is most common in SWVE in areas where the plantation culture never predominated – the Appalachians, the Ozarks, the Piney Woods or wiregrass belt from southern Georgia and northern Florida to southern Mississippi, and much of Texas and southern Oklahoma – but it also occurs among lower social levels of European Americans in other areas and has spread (McNair 2005). General overviews of the distribution of the two types in southern European American varieties can be found in Kurath and McDavid (1961), Pederson et al. (1986–1992), Thomas (2001), and Labov et al. (2006).

The predominance of PRIZE/PRY glide weakening in AAE is well documented. Records from LAGS show that glide weakening before voiceless consonants is far less common among African American informants than among European American informants – in *right*, it occurred among 8% of African Americans and 25% of European Americans – although they also showed glide weakening in other contexts to be slightly less common among African Americans than among European Americans. Bernstein (1993), likewise, based on evidence from a telephone survey of Texas, finds a large disparity, with European Americans much more likely to exhibit glide weakening in *night* than African Americans. In Thomas (2001), I included vowel formant plots for African Americans from loca-tions across the South, and they consistently show stronger PRICE glides (before voiceless consonants) than PRIZE glides (before voiced consonants).

Glide weakening tends to be strongest before /r/ and /l/, as in *fire* and *file*. Myhill (1988) notes that African Americans in Philadelphia with little

contact with Whites tend to merge *fire* and *far*, with the resulting vowel a low unrounded [ɑ]. Some African Americans, probably as a reaction against a perceived stigma, strengthen the glide before /r/ and /l/ so that they realize *fire* as disyllabic [faɪə̆~faɪɹ̩].

The occurrence of glide weakening in northern AAE (e.g. Ash and Myhill 1986; Deser 1990; Edwards 1997; Gordon 2000) is especially noticeable, because the matrix European American varieties there lack it. Edwards (1997) reports a class difference in Detroit, with fuller glides more common among higher social classes within the African American community. In some non-Southern urban areas, the incidence of PRIZE/PRY glide weakening among African Americans may be decreasing. However, in Detroit, Anderson (2002) reports that the glide weakening is spreading to contexts before voiceless consonants among African Americans, apparently because of contact with Appalachian Whites in inner city areas.

The CHOICE vowel shows some of the same patterns as the PRICE vowel, although it has been studied much less. It is not entirely clear whether glide weakening of the vowel of CHOICE is less common before voiceless consonants than other contexts. Unlike with the PRICE vowel, lowering of the glide does not necessarily entail weakening of it, and a common realization of the CHOICE vowel in AAVE is [ɔɛ]. As with SWVE, monophthongation before /l/ is common and it causes *boil* to sound like *ball* or *bowl*.

Two other vocalic variants that AAVE shares with SWVE are backing and rounding of the nucleus of the START sequence, so that *start* is pronounced [stɒːʔt~stɒɹʔt], and upgliding of the vowel of THOUGHT, so that *thought* is pronounced [θɒɔʔt]. Both of these variants occur inconsistently in AAE, as data in Pederson et al. (1986–1992) and in Thomas (2001) show. For the THOUGHT vowel, monophthongal and ingliding variants are also quite common in AAE. Their sociolinguistic and geographical status has yet to be worked out.

The merger of the DRESS and KIT vowels before nasals, as in pairs such as *pin* and *pen* or *him* and *hem*, predominates in both AAE and SWVE. In European American speech, it occurs throughout the South and into the southern Midwest, but it appears to occur virtually everywhere in African American speech (Labov et al. 2006). Localized studies of AAE in the North, for example, Edwards (1997) and Gordon (2000), have found its presence in AAE there to be vigorous.

Mergers of vowels before /l/ have been spreading in various dialects of the USA since the mid-twentieth century (see Thomas 2001 for a review). Some of them are common in AAE. In northwestern Indiana, Gordon (2000) found that African Americans were the only group he surveyed in which the *heel/hill* and *whale/well* mergers predominated. However, data in Bernstein (1993) show that African Americans in Texas are less likely than European Americans and much less likely than Mexican Americans there to show laxing of the vowels in *field*, *sale*, and *school*; laxing is a correlate of mergers with the corresponding lax vowels.
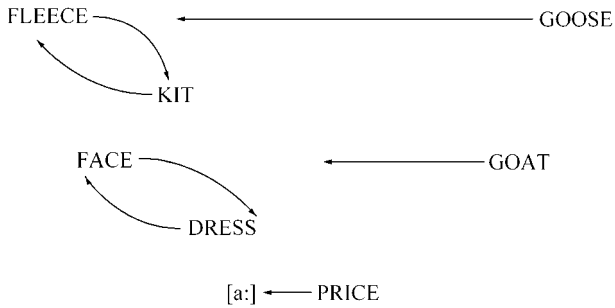
Fig. 1. The Southern Shift, after Labov (1991, 1994). Arrows indicate diachronic shifts of vowels.

On a larger scale, Labov et al (2006) found that African Americans nationwide were more likely to show the *heel/hill* and *pool/pull* mergers than European Americans.

Finally, some researchers, particularly Fridland (2003), Fridland and Bartlett (2006), and Andres and Votta (2007), have explored the extent to which AAE participates in the Southern Shift. The Southern Shift, described at length in Labov (1991, 1994), is a series of vowel mutations that are common over much or all of the South. Figure 1 plots the various shifts associated with it. The nuclei of the DRESS and KIT vowels become tensed and raised, while the nuclei of the FACE and FLEECE vowels become non-peripheral and lowered. PRICE either monophthongizes to [aː], the usual outcome in the South, or has its nucleus backed. The GOOSE and GOAT vowels are fronted. AAE seems to participate in the different components of the Southern Shift to varying degrees. The situation for the PRICE vowel was described above. As will be discussed in the next section, AAE has been slow to front GOOSE and GOAT. With regard to the front vowels, the Southern Shift is often discussed in terms of whether the nuclei of the FLEECE and KIT vowels switch places and whether the FACE and DRESS vowels switch places. As data in Thomas (2001), Fridland (2003), and Labov et al. (2006) have shown, the FLEECE/KIT switch has a limited distribution in SWVE and is exceptionally rare in AAE. Nonetheless, the FACE/DRESS switch has some currency in AAE, as Fridland (2003), Fridland and Bartlett (2006), and Andres and Votta (2007) demonstrate. Lowering of the vowel of FACE to [ɛi] is apparently fairly common in AAE, although the more extreme lowering that occurs in some SWVE is rare in AAE. Raising of the DRESS vowel also occurs, as will be seen later.

NEWER FEATURES THAT SET AAE OFF FROM SWVE

In addition to lowering of the FACE vowel, another process named by Labov (1991, 1994) as a component of the Southern Shift is fronting of

the GOOSE and GOAT vowels. Fronting of the GOOSE vowel is a long-established feature of SWVE (e.g. Kurath and McDavid 1961). Fronting of the GOAT vowel, in contrast, is long-established in European American speech in only one Southern region, eastern North Carolina, but has spread recently in European American English throughout the rest of the South. For both the GOOSE and GOAT vowels, both the nucleus and the glide are fronted in parts of the South east of Texas. In Texas and in regions outside the South where the GOOSE and GOAT vowels are fronted, the fronting applies mainly to the nucleus (see discussion in Thomas 2001). For the GOOSE vowel, fronting is now common everywhere except in New England and in Minnesota and adjacent areas (Labov et al. 2006). For the GOAT vowel, fronting is most prevalent from the North Midland or Lower North region (southern New Jersey to Kansas) southward, although some speakers elsewhere also show it (Thomas 2001; Labov et al. 2006).

Fronting of the GOAT and GOOSE vowels is far less common in African American speech. Some studies of fronting of the GOAT vowel have even reported it to be absent in local varieties of AAE (Graff, Labov, and Harris 1986 in Philadelphia; Thomas 1989 in Wilmington, North Carolina). In some communities, such as Wilmington (for younger speakers) or Silsbee, Texas (unpublished data), African Americans and European Americans may show little or no overlap in their realizations of the GOAT and GOOSE vowels. The evidence as a whole, however, suggests that, while African Americans widely show some resistance to fronting of the GOAT and GOOSE vowels, they are not entirely impervious to it in regions where European Americans front the GOOSE vowel or both the GOAT and GOOSE vowels. Data from LAGS show fronting of the GOOSE vowel (indicated in LAGS by the central vowel, [ʉ]) to be a majority feature among both European Americans and African Americans in the Gulf states and show fronting of the GOAT vowel to be a minority feature among both ethnic groups. For both vowels, African Americans are about 10% less likely to show fronting. Similarly, in Columbus, Ohio, I found fronting of the GOAT vowel to predominate among both European Americans and African Americans, but to be less common among African Americans (Thomas 1989/1993). In Memphis, Fridland (2003) and Fridland and Bartlett (2006) reached essentially the same conclusion for fronting of both vowels: they occur among both ethnicities but are significantly less advanced among African Americans. In Thomas and Coggshall (forthcoming), analyzing speakers from three widely separated counties in North Carolina, we found significant differences between the two ethnicities for both the nucleus and glide of the GOAT vowel among young speakers but only for the glide among older speakers. Perception experiments suggest that speakers of both ethnicities, in the South and certain other areas, associate fronting of the GOAT vowel with European American speech (Graff et al. 1986; Thomas and Reaser 2004, forthcoming; Torbert 2005; Thomas forthcoming; Thomas et al. forthcoming).

In a few unusual cases, the ethnic difference for fronting of the GOOSE and GOAT vowels virtually disappears. Anderson (2002) found a considerable amount of fronting of the GOOSE vowel among Detroit African Americans. In long-isolated Hyde County, North Carolina, Wolfram and Thomas (2002) found that both ethnicities fronted the nucleus of the GOAT vowel equally, even though African Americans did show less fronting of the glide of the GOAT vowel. Childs, Mallinson, and Carpenter (2007) documented nearly complete accommodation to local SWVE norms by African Americans in two Appalachian communities in western North Carolina. Nevertheless, cases with little or no ethnic differentiation are clearly exceptional.

Another development of European American varieties that AAE has resisted to some extent is the merger of the LOT and THOUGHT vowels, in which words with the THOUGHT vowel are pronounced with an unrounded vowel, for example, *thought* [θɑʔt], just as words with the LOT vowel are (e.g. *lot* [ɬɑʔt]). The strongest evidence for this resistance is presented by Bernstein (1993), who finds that unrounded variants in *walk* and *lost* have spread rapidly among European Americans and Mexican Americans in Texas, but are considerably less common among African Americans. Other evidence for resistance to the merger of the LOT and THOUGHT vowels by African Americans is found in Thomas (1989/1993) and Labov et al. (2006).

One possible reason for the low incidence of the merger of the LOT and THOUGHT vowels in AAE is that the LOT vowel tends to be somewhat more fronted in AAE than in SWVE. Evidence for this tendency can be seen in the vowel formant plots in Thomas (2001). Although the origin of the fronting of the LOT vowel is unclear, it appears to be part of a chain shift in AAE in which the TRAP and DRESS vowels, and perhaps (but less obviously) the KIT vowel, are raised. This chain shift, depicted in Figure 2, might be called the African American Shift. It is the mirror image of the Canadian Shift first identified by Clarke, Elms, and Youssef (1995), in which the same four vowels move the opposite directions. While upward shifting of the KIT and DRESS vowels are parts of the Southern Shift, raising of the TRAP vowel is only weakly associated with the Southern Shift and fronting of the vowel of LOT is not at all. Formant plots of two African Americans, one from Brooklyn, New York, and the other from rural North Carolina, who exhibit this shifting system are shown in Figures 3 and 4. In Thomas and Bailey (1998) and Thomas (2001), we described components of this chain shift. In Thomas and Coggshall (forthcoming), we found a significant difference between African Americans and European Americans for the TRAP vowel among young speakers but not among older speakers in North Carolina. Perception experiments have shown that listeners – in North Carolina, at least – associate raising of the TRAP vowel (Thomas forthcoming; Thomas et al. forthcoming) or both the TRAP and DRESS vowels (Grimes 2005) with African American speech.
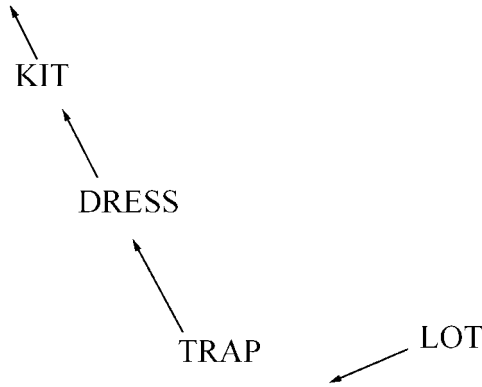
Fig. 2. The African American Shift. Arrows indicate diachronic shifts of vowels.
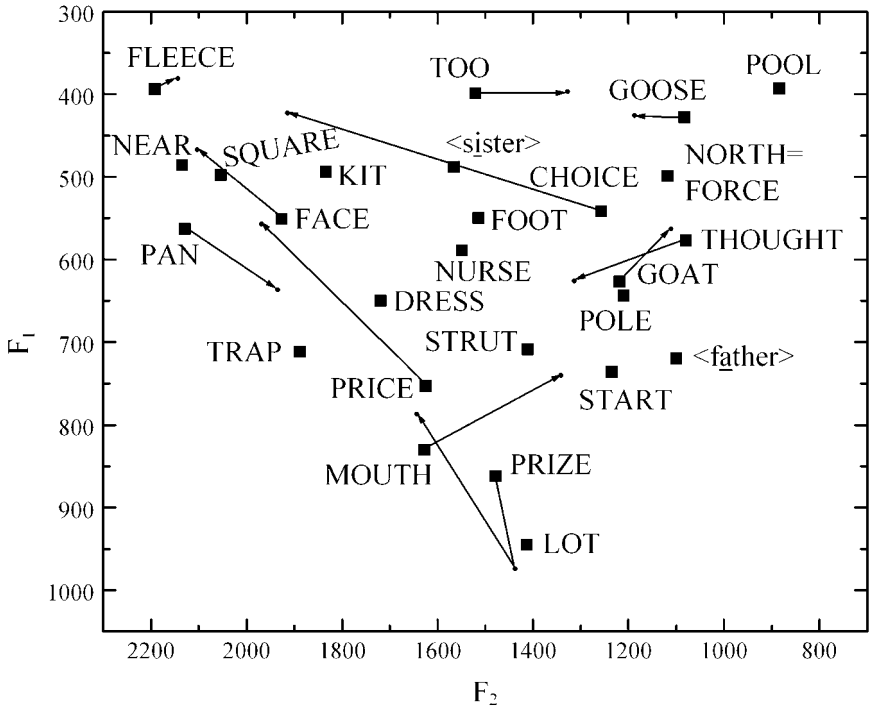

Fig. 3. Mean values of the vowels of an African American female, born 1981, from Brooklyn, New York. Arrows indicate the gliding of diphthongs.
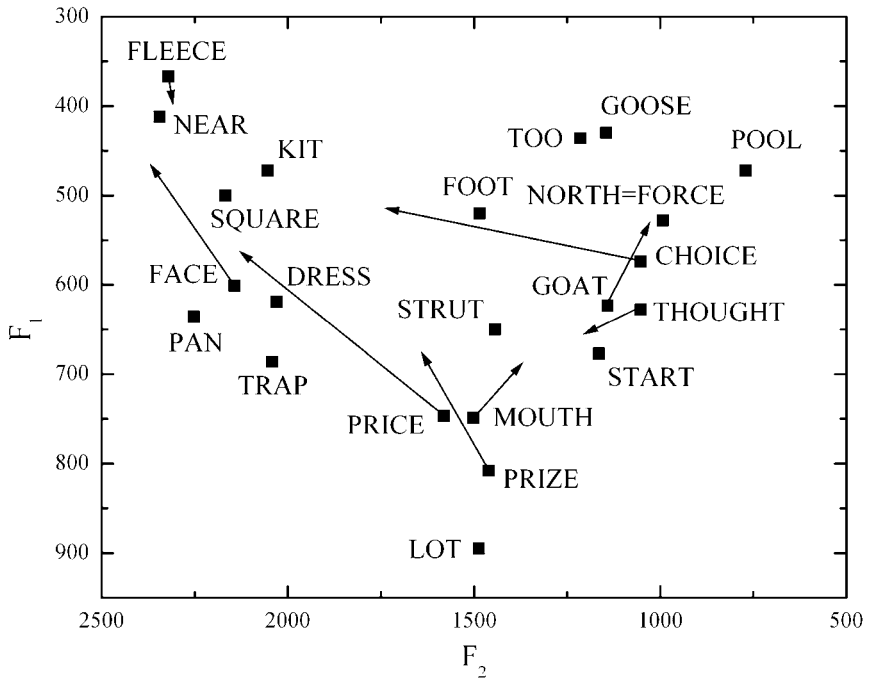
Fig. 4. Mean values of the vowels of an African American female, born 1974, from Maxton, North Carolina. Arrows indicate the gliding of diphthongs.

A recent development reported for some AAE (in Memphis, but likely found elsewhere) is centralization of the SQUARE and NEAR vowels so that they approach or possibly merge with the NURSE vowel (Hinton and Pollock 2000; Pollock 2001). Examples that Pollock (2001) gives are bear [bɚ] and here [hɚ]. Hinton and Pollock (2000) and Pollock (2001) also report the appearance of schwa off-glides after SQUARE, NEAR, and NURSE vowels, as in chair [tʃɛɚə] in AAE.

Prosody

Prosody has been studied far less in all dialects of English than segmental variation. The methods of describing and analyzing it are considerably less well developed than those for studying segmental variables and, for the most part, have a shorter history. Nevertheless, prosody in AAE has received at least as much attention as that in any other American dialects.

WORD STRESS

One of the better known prosodic processes associated with AAVE is shift of word stress to the first syllable in words that are stressed on other

syllables in the standard (e.g. Fasold and Wolfram 1970; Baugh 1983: 62–4). Examples of such words are *December*, *July*, *police*, and *hotel*. This process is also well known in SWVE. Pederson et al. (1986–1992) found it among both African Americans and European Americans in the Gulf states and more commonly among lower social levels.

TIMING FACTORS

Timing patterns are another possible area for prosodic variation. Numerous potential timing variables, such as the degree of pre-pausal lengthening, await study in AAVE. The best known timing variable is prosodic rhythm. Prosodic rhythm involves the relative degree of syllable timing and stress timing in a language or dialect. Syllable timing is said to occur when each syllable has roughly the same duration, and it characterizes most Romance languages. Stress timing, conversely, characterizes Germanic languages and is defined as the state in which each prosodic foot has approximately the same duration; within a foot, the stressed syllable is expected to have a much greater duration than any unstressed syllables. Physical measurements have shown the real situation to be considerably more complex. However, methods have been developed for measuring prosodic rhythm, and one method was employed in Thomas and Carter (2006) to examine AAE. We found that contemporary AAE and southern European American English are both quite stress timed. In contrast, nineteenth-century AAE, as represented in the ex-slave recordings described by Bailey et al. (1991), was apparently more syllable timed, to a degree comparable with Jamaican English and Mexican American English, both of which have previously been described as relatively syllable timed and both of which show substrate language influence. Because White varieties, both American and British, are strongly stress timed, this finding suggests that the rhythm of earlier AAE may have been influenced by some substrate, either Caribbean or West African. As we note in Thomas and Carter (2006), the few West African languages that have been examined for rhythm have proved to be syllable timed.

INTONATION

Intonation has been studied more extensively in AAE than in any other North American dialects of English. Considering the rudimentary state of inquiry into dialectal variation in intonation in North America, however, this is faint praise. A mere handful of studies have addressed AAE intonation; they use differing transcriptional systems, and their results are often difficult to reconcile with each other to form a unified picture. Nevertheless, AAE does exhibit salient intonational features, as perceptual studies have demonstrated (Foreman 2000; Thomas forthcoming; Thomas et al. forthcoming).

Two important early studies of AAE intonation are Tarone (1973) and Loman (1975). These studies used an older transcription system employing four pitch levels that has now fallen into disfavor among intonation specialists. Tarone (1973) and Loman (1975) each made some generalizations about AAE intonation. Tarone (1973: 35), based on data from Seattle, posited that African Americans show (i) a wider pitch range, often involving falsetto; (ii) more level and rising final contours than European Americans in all types of sentences; (iii) a tendency for *yes/no* questions to show falling final contours in formal situations but level or rising final contours in informal situations; and (iv) the use of certain contours in conditional clauses when the word *if* was omitted. Loman's (1975: 242) main conclusions, based on data from Washington, DC, were that African Americans show (i) a 'high frequency of primary stresses'; (ii) a 'constant and marked shift between pitch levels /3/ and /2/ which basically is correlated with the shift between syllables with primary stress and with weaker stress. . .'; and (iii) use of the highest pitch level, often as falsetto, 'typically occurring in the excited speech of Negro men'.

The only point of overlap in the findings by Tarone (1973) and Loman (1975) is that both reported that African Americans use a wide pitch range, often becoming falsetto and usually in 'excited' states or, as Tarone (1973: 32) put it, in 'competitive . . . speech events.' This finding was corroborated by Hudson and Holbrook (1981, 1982), who additionally noted that the pitch range is narrower in read speech than in spontaneous speech. Tarone's and Loman's other conclusions seem unrelated to each other. Tarone's second and third generalizations relate to final contours. Loman's first and second concusions involve features that essentially occur before the final contours. Subsequent studies have tended to focus on final contours or on non-final contours, but not on both.

Jun and Foreman (1996), using data from Los Angeles, examined AAE intonation using the currently popular Tone and Break Index (ToBI) transcription system. Like the previous studies, they reported that AAE shows a wider pitch range, realized as expansion into higher pitches. Most of their other conclusions relate to final contours or to boundary tones in general. They found that African Americans are more likely to show a high tone at the beginning of a sentence, either as a boundary tone (transcribed as %H) or as a high initial pitch accent, that is, pitch prominence (H⋆). In addition, they noted that declarative sentences and *wh*-questions typically end in a low tone, transcribed as L–L%, for both African Americans and European Americans. However, in *yes/no* questions, they reported an important ethnic difference. European Americans consistently show a rising final contour, transcribed as H–H%. African Americans, however, showed a variety of final contours in *yes/no* questions. Moreover, they found that the up-stepped boundary tone H% was located in the final syllable in European American speech but at the beginning of the final word in AAE, where it was followed by a slight

fall. The difference in *yes/no* final contours was explored further by Green (2002:127–31, summarizing work conducted in 1990). Using data from a small city in Louisiana, she corroborated Jun and Foreman's (1996) findings that both ethnic groups show similar final contours in *wh*-questions but that AAE, unlike European American speech, often shows falling or level final contours in *yes/no* questions.

With regard to non-final tones, Loman's (1975) report that AAE shows more primary stresses and striking shifts between higher and lower tones has received some follow-up work. In Wolfram and Thomas (2002), using data from Hyde County, North Carolina, we found that African Americans showed a statistically significant tendency to raise fundamental frequency (F_0) from one stressed syllable to the next more often than European Americans. This finding reflects Loman's report of alternating high and low tones in AAE, as opposed to a more consistently downstepping pattern found in European American speech. Loman (1975) suggested, and Sutcliffe (2003) argued extensively, that this pattern represents substratal influence from the tone systems of West African languages. Jun and Foreman (1996) also listed one tone characteristic of AAE that does not relate to boundary tones. They reported that 'AAE tends to have a post-nuclear pitch accent and/or phrase boundary, especially when [the] focus is in sentence-initial position.' Cole et al. (2005, forthcoming) focused on the non-final tones. They posited that AAE intonation shows a level of prosodic boundaries, which they termed the 'accentual phrase', that European American varieties lack. It is shorter than the phrases found in European American varieties but is characterized by a resetting of pitch at its beginning. This phrase type would seem to account for Loman's (1975) report of more primary stresses, as well as those of Wolfram and Thomas (2002) and perhaps the post-nuclear pitch accents or phrase boundaries that Jun and Foreman (1996) report. Cole et al. (forthcoming) also noted an interaction between ethnicity and gender. European American females showed a greater range of pitch than European American males when the F_0 was normalized, but no such relationship appeared among African Americans. African American males showed a greater F_0 range within stress feet than European American males and tended to show lower minimum F_0 values.

Further research is certainly warranted on AAE intonation. One unresolved question is whether there are any unifying principles between the final contour patterns and those in non-final contours. An important goal is to develop methods that will allow sociolinguists to use intonation regularly as a sociolinguistic variable.

Voice Quality

Sociolinguists often dismiss voice quality as a physiological factor. It can vary sociolinguistically, however, as Stuart-Smith (1999) demonstrates for

Glasgow English. A few studies have reported distinctive voice quality features in AAE. Hollien and Malcik (1962), Hudson and Holbrook (1981), Hawkins (1993), and Walton and Orlikoff (1994) presented evidence that African Americans, or at least African American males, may tend to show lower overall F_0 than European Americans of the same sex. Walton and Orlikoff (1994) also reported that their African American subjects showed greater degrees of jitter (local F_0 variation) and shimmer (local amplitude variation) than their European American subjects. Purnell, Idsardi, and Baugh (1999) found a decreased harmonics–to–noise ratio to be correlated with the African American guise of a speaker impersonating different ethnic guises. The harmonics–to–noise ratio is a rough measure that subsumes numerous other factors, including jitter and shimmer. Findings in Thomas and Reaser (2004) suggest that African American males may tend more toward breathiness, and European American males more toward creakiness, in their speech. Numerous as yet unidentified voice quality factors, such as the degree of nasality (perhaps lower than for European Americans), may characterize AAE as well. Clearly, much more work remains to be done on African American voice quality, and there are opportunities for researchers here.

Conclusions

AAVE has received a tremendous amount of scrutiny from language variationists. This study has not been evenly distributed, however. The largest share of attention has gone to morphosyntactic variables. Other linguistic domains lie in various degrees of neglect. Fairly limited work has taken place on lexical variation and discourse style. Among phonetic and pho-nological variables, consonantal variables have received substantial attention, and vowel variation has recently received considerable inquiry, but a great deal of work remains to be conducted on prosody and voice quality.

A more evenly balanced approach to the variables that characterize AAVE, and AAE in general, will be necessary to shed light on the various controversies that still surround AAE. Data on monophthongal forms of the face and goat vowels and on prosodic rhythm have already contributed evidence toward resolving the 'creolist/anglicist controversy'. It is not yet clear to what extent AAVE and vernacular varieties of European American English are converging or diverging. However, data on vowel shifting have played a key role in the 'convergence/divergence controversy'. The degree of geographical variation in AAE is poorly known. Are the main differences between rural and urban speakers, or have regional variations in urban AAE developed? How much of the extant variation is correlated with regional and social differences in European American speech? What effect is suburbanization having on AAE? Which variables are highly affected by or relatively impervious to social class and stylistic variation among African Americans? How much

do speakers vary in their adeptness at style shifting? Complete answers to these questions will have to address the full range of phonological and phonetic variables.

Such questions may seem to hold relevance mainly for sociolinguists. Clearly, use of a wider range of linguistic variables will improve sociolinguistic studies of AAE. However, there are broader applications as well. A fuller understanding of what makes the pronunciation of AAE distinctive would help speech scientists to develop better speech synthesis programs, especially for patients who are unable to speak. It could also help speech therapists to be able to distinguish pathological problems from dialectal features. Furthermore, a thorough knowledge of how phonological and phonetic variables are realized in AAE could aid the prosecution of ethnic profiling cases. For these reasons, it is important for sociolinguists to explore the frontiers of AAE pronunciation.

Acknowledgments

Short Biography

Erik R. Thomas conducts research on the phonetic aspects of sociolinguistics, or sociophonetics. He has authored or co-authored papers that have appeared in *American Speech*, *English World-Wide*, *Canadian Journal of Linguistics*, *Journal of Phonetics*, *Journal of Pidgin and Creole Languages*, *Laboratory Phonology*, *Language in Society*, and *Language Variation and Change*, as well as the *Encyclopedia of Language and Linguistics*; *Focus on the USA*; *Handbook of Language Variation and Change*; and *Language Variation and Change in the American Midland*. His book *An Acoustic Analysis of Vowel Variation in New World English* presents vowel formant plots and discusses historical developments for a wide range of Western Hemisphere dialects of English, and *The Development of African American English*, co-authored with Walt Wolfram, examines what data from an isolated community say about the history and current development of African American English. His recent research has focused on speech identification and on phonetic factors distinguishing dialects of African Americans, European American Anglos, and Mexican Americans. He has taught at North Carolina State University since 1995. He holds an AB in Botany from Duke University, an MA in English from Texas A&M University, and a PhD in Linguistics from the University of Texas at Austin. He is married and has two children.

Note

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Works Cited

Anderson, Bridget L. 2002. Dialect leveling and /ai/ monopthongization among African American Detroiters. Journal of Sociolinguistics 6.86–98.

Andres, Claire, and Rachel Votta. 2007. AAE and Anglo vowels in a suburb of Atlanta. Paper presented at the annual meeting of the Linguistic Society of America, Anaheim, CA, January 7.

Anshen, Frank. 1970. A sociolinguistic analysis of a sound change. Language Sciences 9.20–1.

Ash, Sharon, and John Myhill. 1986. Linguistic correlates of inter-ethnic contact. Diversity and diachrony, ed. by David Sankoff, 33–44. Amsterdam/Philadelphia, PA: John Benjamins.

Bailey, Guy, and Erik Thomas. 1998. Some aspects of African-AmericanVernacular English phonology. African American English, ed. by Salikoko S. Mufwene, John Rickford, John Baugh and Guy Bailey, 85–109. London: Routledge.

Bailey, Guy, and Natalie Maynor. 1989. The divergence controversy. American Speech 64.12–39.

Bailey, Guy, Natalie Maynor, and Patricia Cukor-Avila. 1991. The emergence of Black English: text and commentary (Creole language library, vol. 8). Amsterdam, The Netherlands/Philadelphia, PA: John Benjamins.

Bailey, Guy. 2001. The relationship between African American and white vernaculars in the American South. Sociocultural and historical contexts of African American English (Varieties of English around the world, general series 27), ed. by Sonja L. Lanehart, 53–92. Amsterdam, The Netherlands/Philadelphia, PA: John Benjamins.

Baugh, John. 1983. Black street speech. Austin, TX: University of Texas Press.

Bernstein, Cynthia. 1993. Measuring social causes of phonological variables. American Speech 68.227–40.

Butters, Ronald R. 1989. The death of Black English: divergence and convergence in Black and White vernaculars (Bamberger Beiträge zur englischen Sprachwissenschaft 25). Frankfurt am Main, Germany: Peter Lang.

Butters, Ronald R., and Ruth A. Nix. 1986. The English of Blacks in Wilmington, North Carolina. Language variety in the South: Perspectives in black and white, ed. by Michael B. Montgomery and Guy Bailey, 254–63. Tuscaloosa, AL: University of Alabama Press.

Childs, Becky, Christine Mallinson, and Jeannine Carpenter. 2007. Vowel phonology and ethnicity in North Carolina. Paper presented at the annual meeting of the Linguistic Society of America, Anaheim, CA, January 7.

Clarke, Sandra, Ford Elms, and Amani Youssef. 1995. The third dialect of English: some Canadian evidence. Language Variation and Change 7.209–28.

Cole, Jennifer, Erik R. Thomas, Erica Britt, and Elizabeth L. Coggshall. 2005. Intonational distinctiveness of African American English. Paper presented at New Ways of Analyzing Variation XXXIV, New York, October 23.

Cole, Jennifer, Erik R. Thomas, Erica Britt, and Elizabeth L. Coggshall. forthcoming. Gender and ethnicity in intonation: a case study of North Carolina English.

Dandy, Evelyn B. 1991. Black communications: breaking down the barriers. Chicago, IL: African American Images.

Denning, Keith. 1989. Convergence with divergence: a sound change in Vernacular Black English. Language Variation and Change 1.145–67.

Deser, Toni. 1990. Dialect transmission and variation: an acoustic analysis of vowels in six urban Detroit families. Boston, MA: Boston University dissertation.

Dorrill, George T. 1986a. Black and White speech in the South: evidence from the Linguistic Atlas of the Middle and South Atlantic States (Bamberger Beiträge zur Englische Sprachwissenschaft 19). New York, NY: Peter Lang.

——. 1986b. A comparison of stressed vowels of Black and White speakers in the South. Language variety in the South: Perspectives in black and white, ed. by Michael B. Montgomery and Guy Bailey, 149–57. Tuscaloosa, AL: University of Alabama Press.

Edwards, Walter F. 1997. The variable persistence of Southern vernacular sounds in the speech of inner-city Black Detroiters. Language variety in the South revisited, ed. by Cynthia Bernstein, Thomas Nunnally and Robin Sabino, 76–86. Tuscaloosa, AL: University of Alabama Press.

Ellison, Mary. 1974. The Black experience: American Blacks since 1865. New York, NY: Harper and Row.

Fasold, Ralph W. 1981. The relation between black and white speech in the South. American Speech 56.163–89.

Fasold, Ralph W., and Walt Wolfram. 1970. Some linguistic features of Negro dialect. Teaching Standard English in the inner city, ed. by Ralph Fasold and Roger W. Shuy, 41–86. Washington, DC: Center for Applied Linguistics.

Fasold, Ralph W., William Labov, Fay Boyd Vaughn-Cooke, Guy Bailey, Walt Wolfram, Arthur K. Spears, and John Rickford. 1987. Are Black and White vernaculars diverging? Papers from the NWAVE XIV panel discussion. American Speech 62.3–80.

Feagin, Crawford. 1997. The African contribution to Southern States English. Language variety in the South revisited, ed. by Cynthia Bernstein, Thomas Nunnally and Robin Sabino, 123–39. Tuscaloosa, AL: University of Alabama Press.

Foley, Lawrence M. 1972. A phonological and lexical study of the speech of Tuscaloosa County, Alabama (Publication of the American Dialect Society 58). Tuscaloosa, AL: University of Alabama Press.

Foreman, Christina. 2000. Identification of African-American English from prosodic cues. Texas Linguistic Forum 43.57–66.

Fridland, Valerie, and Kathy Bartlett. 2006. The social and linguistic conditioning of back vowel fronting across ethnic groups in Memphis, Tennessee. English Language and Linguistics 10.1–22.

Fridland, Valerie. 2003. Network strength and the realization of the Southern Vowel Shift among African-Americans in Memphis, Tennessee. American Speech 78.3–30.

Gordon, Matthew J. 2000. Phonological correlates of ethnic identity: Evidence of divergence? American Speech 75.115–36.

Graff, David, William Labov, and Wendell A. Harris. 1986. Testing listeners' reactions to phonological markers of ethnic identity: a new method for sociolinguistic research. Diversity and diachrony (Amsterdam studies in the theory and history of linguistic science, vol. 53), ed. by David Sankoff, 45–58. Amsterdam, The Netherlands/Philadelphia, PA: John Benjamins.

Green, Lisa J. 2002. African American English: a linguistic introduction. Cambridge, UK: Cambridge University Press.

Grimes, Andrew, and Gelvin Burley. 2005. In search of ethnic clues: the status of /æ/ and /ɛ/ and their implications for linguistic profiling, master's thesis. Raleigh, NC: North Carolina State University.

Grossman, James R. 1989. Land of hope: Chicago, Black Southerners, and the Great Migration. Chicago, IL: University of Chicago Press.

Hawkins, Francine Dove. 1993. Speaker ethnic identification: The roles of speech sample, fundamental frequency, speaker and listener variations, dissertation. College Park, MD: University of Maryland.

Hinton, Linette N., and Karen E. Pollock. 2000. Regional variations in the phonological characteristics of African American Vernacular English. World Englishes 19.59–71.

Hollien, Harry, and Ellen Malcik. 1962. Adolescent voice change in Southern Negro males. Speech Monographs 29.53–8.

Hudson, Amelia I., and Anthony Holbrook. 1981. A study of reading fundamental vocal frequency of young black adults. Journal of Speech and Hearing Research 24.197–201.

——. 1982. Fundamental frequency characteristics of young black adults: Spontaneous speaking and oral reading. Journal of Speech and Hearing Research 25.25–8.

Jun, Sun-Ah, and Christina Foreman. 1996. Boundary tones and focus realization in African-American intonation. Paper presented at the 3rd joint meeting of the Acoustical Society of America and the Acoustical Society of Japan, Honolulu, HI, December 6.

Kurath, Hans, and Raven I. McDavid, Jr. 1961. The pronunciation of English in the Atlantic states. Ann Arbor, MI: University of Michigan Press.

Labov, William. 1972. Language in the inner city: studies in the Black English vernacular. Philadelphia, PA: University of Pennsylvania Press.

——. 1991. The three dialects of English. New ways of analyzing sound change, ed. by Penelope Eckert, 1–44. New York, NY: Academic Press.

——. 1994. Principles of linguistic change. Volume 1: Internal factors. Oxford, UK/Malden, MA: Blackwell.

Labov, William, and Wendell A. Harris. 1986. De facto segregation of Black and White vernaculars. Diversity and diachrony, ed. by David Sankoff, 1–24. Amsterdam, The Netherlands: John Benjamins.

Labov, William, Paul Cohen, Clarence Robins, and John Lewis. 1968. A study of the non-standard English of Negro and Puerto Rican speakers in New York City. Report on cooperative research project 3288. New York, NY: Columbia University.

Labov, William, Sharon Ash, and Charles Boberg. 2006. The Atlas of North American English: phonetics, phonology and sound change. A multimedia reference tool. Berlin, Germany/New York, NY: Mouton de Gruyter.

Loman, Bengt. 1975. Prosodic patterns in a Negro American dialect. Style and text: studies presented to Nils Erik Enkvist, ed. by Håkan Ringbom, Alfhild Ingberg, Ralf Norrman, Kurt Nyholm, Rolf Westman, and Kay Wikberg, 219–42. Stockholm, Sweden: Språkförlaget Skriptor AB.

McCormick, S. D. 1900. The Virginia dialect. Bookman 11.446–50.

McNair, Elizabeth DuPree. 2005. Mill villagers and farmers: dialect and economics in a small Southern town. Publication of the American Dialect Society 90. Durham, NC: Duke University Press.

Miller, Michael I. 1986. The greatest blemish: plurals in -sp, -st, -sk. Language variety in the South: Perspectives in black and white, ed. by Michael B. Montgomery and Guy Bailey, 235–53. Tuscaloosa, AL: University of Alabama Press.

Myhill, John. 1988. Postvocalic /r/ as an index of integration into the BEV speech community. American Speech 63.203–13.

Pederson, Lee A., Susan Leas McDaniel, Guy Bailey, Marvin H. Basset, Carol M. Adams, Caisheng Liao, and Michael B. Montgomery. (eds.) 1986–1992. The Linguistic Atlas of the Gulf States, 7 vols. Athens, GA: University of Georgia Press.

Pollock, Karen E. 2001. Phonological features of African American Vernacular English (AAVE). <http://www.rehabmed.ualberta.ca/spa/phonology/features.htm>. Accessed June 11, 2007.

Poplack, Shana. (ed.) 2000. The English history of African American English (Language in Society, vol. 28). Oxford, UK/Malden, MA: Blackwell.

Purnell, Thomas, William Idsardi, and John Baugh. 1999. Perceptual and phonetic experiments in American English dialect identification. Journal of Language and Social Psychology 18.10–30.

Rickford, John R. 1999. African American Vernacular English: Features, evolution, educational implications (Language in Society, vol. 26). Oxford, UK/Malden, MA: Blackwell.

Sledd, James H. 1966. Breaking, umlaut, and the Southern drawl. Language 42.18–41.

Stuart-Smith, Jane. 1999. Glasgow: accent and voice quality. Urban voices: accent studies in the British Isles, ed. by Paul Foulkes and Gerard Docherty, 203–22. London: Arnold.

Sutcliffe, David. 2003. African American English supersegmentals: a study of pitch patterns in the Black English of the United States. Phonology and morphology of creole languages, Linguistische Arbeiten, vol. 478, ed. by Ingo Plag, 147–62. Tübingen, Germany: Max Niemeyer Verlag.

Tarone, Elaine E. 1973. Aspects of intonation in Black English. American Speech 48.29–36.

Taylor, William C. 1997. Rule ordering in the phonology of Alabama-Georgia consonants. Language variety in the South revisited, ed. by Cynthia Bernstein, Thomas Nunnally and Robin Sabino, 210–8. Tuscaloosa, AL: University of Alabama Press.

Thomas, Erik R. 1989. The implications of /o/ fronting in Wilmington, North Carolina. American Speech 64.327–33.

——. 1989/1993. Vowel changes in Columbus, Ohio. Journal of English Linguistics 22.205–15.

——. 2001. An acoustic analysis of vowel variation in New World English (Publication of the American Dialect Society 85). Durham, NC: Duke University Press.

——. forthcoming. Phonetic properties of linguistic profiling in American English. Linguistic profiling and linguistic human rights, ed. by John Baugh.

Thomas, Erik R., and Elizabeth L. Coggshall. forthcoming. Comparing phonetic characteristics of African American and European American English. Linguistica Atlantica (Journal of the Atlantic Provinces Linguistic Association).

Thomas, Erik R., and Guy Bailey. 1998. Parallels between vowel subsystems of African American Vernacular English and Caribbean creoles. Journal of Pidgin and Creole Languages 13.267–96.

Thomas, Erik R., and Jeffrey Reaser. 2004. Delimiting perceptual cues used for the ethnic labeling of African American and European American voices. Journal of Sociolinguistics 8.54–86.

——. forthcoming. An Experiment on Cues Used for Identification of Voices as African American or European American. Language variety in the South III, ed. by Michael D. Picone and Catherine Evans Davies. Tuscaloosa, AL: University of Alabama Press.

Thomas, Erik R., and Phillip M. Carter. 2006. Rhythm and African American English. English World-Wide 27.331–55.

Thomas, Erik R., Norman J. Lass, and Jeannine Carpenter. forthcoming. Identification of African American speech. Reader in sociophonetics, ed. by Dennis R. Preston and Nancy Niedzielski. Cambridge, UK: Cambridge University Press.

Torbert, Benjamin Charles. 2005. Southern vowels and the social construction of salience. Durham, NC: Duke University diss.

Vaughn-Cooke, Fay Boyd. 1986. Lexical diffusion: evidence from a decreolizing variety of Black English. Language variety in the South: Perspectives in Black and White, ed. by Michael B. Montgomery and Guy Bailey, 111–30. Tuscaloosa, AL: University of Alabama Press.

Walton, Julie H., and Robert F. Orlikoff. 1994. Speaker race identification from acoustic cues in the vocal signal. Journal of Speech and Hearing Research 37.738–45.

Wells, J. C. 1982. Accents of English. 3 vols. Cambridge, UK: Cambridge University Press.

Williamson, Juanita V. 1968. A phonological and morphological study of the speech of the Negro in Memphis, Tennessee (Publication of the American Dialect Society 50). Tuscaloosa, AL: University of Alabama Press.

Wolfram, Walt(er A.). 1974. The relationship of Southern White speech to Vernacular Black English. Language 50.498–527.

Wolfram, Walt, and Erik R. Thomas. 2002. The development of African American English (Language in society, vol. 31). Oxford, UK/Malden, MA: Blackwell.

Wolfram, Walt, and Ralph Fasold. 1974. The study of social dialects in the United States. Englewood Cliffs, NJ: Prentice Hall.

Wolfram, Walter A. 1969. A sociolinguistic description of Detroit Negro speech (Urban language series 5). Washington, DC: Center for Applied Linguistics.

Wroblewski, Michael, Thea Strand, and Sylvie Dubois. 2007. African American and non-African American vowels in Cajun country. Paper presented at the annual meeting of the Linguistic Society of America, Anaheim, CA, January 7.