1. THE QUESTION

> Linguists frequently study linguistic change, but an equally interesting phenomenon is linguistic stability or resistance to change.
>
> —Macauley (1977, 2)

> You know, I mean some people can just change their own dialect. [...] Like, you know, we could be in Durham [and] you know people from New York. Some people try to change all that. I ain't into that. Now, see, I can't change from Durham to New York. I just can't and won't. The way I communicate changes, but how I speak don't.
>
> —Speaker 1070, Durham, North Carolina, post-high-school interview

Transitions between life stages, particularly from childhood to adolescence and adulthood, have a profound impact on an individual's identity formation and social networks as well as involvement with and orientation toward social institutions. Many linguists have noted that it would be surprising if such cultural transitions did not impact language use (Hockett 1950; Labov 1964, 1972, 2001; Cheshire 1987; Chambers 1995, 2003; Eckert 1997; Kerswill and Williams 2000; Foulkes and Docherty 2006; Woolard 2011; Wagner 2012b). Popular depictions of adolescent language create an image of teenagers as vocally rebellious, even describing teen speech as a separate language.[1] But does reality match these descriptions? And, if adolescents do use language to set themselves apart, how does the individual linguistically transition into this life stage and back out again on the other side?

Cross-sectional generational and ethnographic studies of adolescent speech have led to important hypotheses about how life stages influence speech, as well as how these influences might spur sound change within communities. Based on these studies, sociolinguists hypothesize that life-stage changes create predictable cycles of linguistic behavior, particularly that individuals advance sound change and increase the use of vernacular variables during adolescence (Eckert 1997; Labov 2001). However, the paucity of middle childhood and adolescent longitudinal research leaves a gap in empirical evidence for testing assumptions of postacquisition stability and change. Longitudinal studies are necessary to trace typical linguistic paths across the life span, creating a sense of what is likely to change and what stays stable as speakers age. While language acquisition studies incorporate longitudinal methods to document individual linguistic progression, similar studies beyond early acquisition are rare so that post-early-acquisition trajectories of language variation remain underdocumented (G. Sankoff 2005). Additionally, longitudinal studies serve as an important complement to more common cross-sectional studies, as an understanding of how individual life-span variation corresponds to community patterns improves interpretation of apparent-time/cross-sectional data.

Although longitudinal studies of adolescent and adult linguistic variation and change are uncommon, recent longitudinal research on African American English (AAE) morphosyntactic and consonantal variation from the Frank Porter Graham Project (FPG) suggests that many iconic AAE variables undergo age-grading, in which adolescents decrease their use of vernacular variants as they enter adulthood (Van Hofwegen and Wolfram 2010; Wolfram and Van Hofwegen 2012). This work provides evidence that the linguistic individual is not stable across the life span. However, it remains to be seen whether such patterns are pervasive, affecting variables across linguistic subsystems, or if they are restricted to stereotyped and/or morphosyntactic variables. Without empirical longitudinal evidence, a number of questions remain:

> Do individuals change their linguistic behavior in predictable ways across adolescence? And, are adolescent trajectories of change isomorphic across linguistic subsystems?
>
> How do individual trajectories relate to synchronic community patterns in terms of vowel variation over late adolescence and early adulthood?
>
> How do trajectories of variation for AAE across adolescence correlate with and reflect societal structures?
>
> What does variation and stability during late adolescence and early adulthood reveal about the nature of language change over the life span?

The FPG database provides the first opportunity to empirically explore these questions as it represents the largest and most comprehensive longitudinal study of AAE ever undertaken. The FPG study began with 88 African American children in 1990 and followed participants from infancy through adulthood, with 67 participants remaining in the study as of 2011. The study now spans over 20 years and includes a battery of academic, social, and demographic data across dispersed time points. The linguistic development of each child has been preserved alongside their demographic, social, and educational history, providing a narrative of linguistic development rather than a simple snapshot (Burchinal et al. 2000).

Using the FPG database, I identify the stability and change of acoustic variants in the vowel space during adolescence and compare these trajectories with other linguistic subsystems, in particular, the morphosyntactic and consonantal changes observed by Van Hofwegen and Wolfram (2010; Wolfram and Van Hofwegen 2012). I also investigate the relationship between institutional structures and lifetime change by exploring the relationship between school demographics and participation in regional sound changes at each time point.

I focus on a subsample of 20 speakers, from approximately age 10 to approximately age 20, comparing time points at age 10 (mean age = 10.1, *sd* = .45, for the primary data collection point for fourth-grade protocol), age 14 (mean age = 14.4, *sd* = .46, for the primary data collection point for eighth-grade protocol), age 16 (mean age = 16.5, *sd* = .55, for the primary data collection point for tenth-grade protocol), and age 20 (mean age = 20.1, *sd* = .66). The inclusion of multiple time points from preadolescence through early adulthood is necessary to determine whether adolescence significantly differs from childhood and early adulthood time points. With these four time points, I establish trajectories of change for each participant, discriminating between nonmonotonic fluctuations, stability, peaking patterns, or sloping patterns in the data, a necessity for discerning how individual patterns correspond to community patterns of stability or change.

The linguistic ecology in this study provides an ideal testing ground for theories regarding the importance of adolescence in life-stage variation, as well as the interaction between societal structures and participation in ethnolectal vowel variation. The African American Vowel System (AAVS) represents a stable vowel system that has been present in the region for at least 75 years, even as rapid changes are evident in the Predominant Regional Variety (PRV) (Dodsworth and Kohn 2012). While the AAVS spans over three generations, evidence reviewed in chapter 3 indicates that who participates in this system and to what extent are highly variable with the PRV. As a collection of socially correlated stable variables, components of the AAVS have the potential to serve as resources in adolescent identity work, a core component of life-stage change (Eckert 1997). Because the AAVS is a stable system, life-stage variation can be assessed without the complicating factors of a change in progress.

As the first longitudinal acoustic analysis of vocalic variation across the adolescent and early adult life span, this study provides insight into the ways in which the cultural context of growing up predicts engagement in variable linguistic systems. This study illustrates that, while the AAVS highly correlates with school and community demographics, group adolescent trajectories for these variables are not distinct from earlier or later time points. These results contrast with patterns observed in contemporary analyses of consonantal and morphosyntactic vernacular AAE variables in which FPG participants as a group use more vernacular variants during adolescence than during childhood or adulthood (Van Hofwegen and Wolfram 2010; Wolfram and Van Hofwegen 2012). While sociolinguists hypothesize that age-grading is a common component of life-span change across adolescence (Eckert 1997; Chambers 2003), these findings suggest that community-level patterns of age-grading may be restricted to a select suite of highly salient variables.

As more longitudinal studies of adolescent and adult speech emerge, evidence about postacquisition stability and change complements apparent-time/cross-sectional studies by establishing models of individual linguistic life cycles. The results from this study indicate that age-grading is not a majority pattern for nonstereotyped vowel variation. This result suggests that adolescent peaks for vocalic variants undergoing community change are not a default pattern related to age-grading, bolstering the position that adolescents and children advance language change through incrementation (Labov 2001).

1.1. THE ADOLESCENT PEAK HYPOTHESIS: LINGUISTIC LIFE CYCLES AND LANGUAGE CHANGE

The field's interest in adolescent linguistic behavior at least partially emerges from the repeated observance of adolescent peaks in synchronic studies. The adolescent peak is a pattern in which adolescents stand out from older and younger generations through the use of more innovative or vernacular forms. Eckert hypothesizes that adolescents use more vernacular and more innovative variants as they establish independent identities from their families, which, in turn, advances sound change:

> Adolescence is the focus of the development of the social use of the vernacular, and in general is seen as the time when linguistic change from below is advanced. Adolescents lead the entire age spectrum in sound change and in the general use of vernacular variables, and this lead is attributed to adolescents' engagement in constructing identities in opposition to—or at least independently of—their elders. [1997, 163]

Under this model, the cultural process of growing up is predicted to influence postacquisition trajectories of linguistic behavior. Following an acquisition stage, apparent-time evidence and short term real-time evidence suggest that children begin to diverge from parental models as they gain exposure to peer models in elementary school (Kerswill and Williams 2000, 2005). Many scholars suggest that the process of divergence continues incrementally across childhood, leading to an adolescent peak in vernacularity and innovative forms (Labov 1964, 1972, 2001; Cheshire 1987, 2005; Eckert 1997, 2000, 2011).[2] As teens transition to adulthood, they are described as attenuating their use of vernacular variables (Labov 2001) and, to a lesser extent, changes in progress (Cedergren 1987), moving toward adult norms. Finally, some young adults shift away from local or stigmatized variants during the transition between adolescence and early adulthood as they gain adult marketplace responsibilities or come into contact with other linguistic varieties in social institutions such as university systems or the military (Wagner 2008, 2012a; Prichard and Tamminga 2012; Bigham 2010, 2012). Often, young adults' orientations toward marketplace pressures are cited as instigating this shift, and sometimes a similar shift back to more vernacular behavior has been predicted for retirees who no longer experience the pressure of conforming to linguistic marketplace pressures (Chambers 1995, 2003; Eckert 1997).

This model predicts that linguistic behavior during the adolescent life stage is set apart by two processes: innovation and an increased use of vernacular variables. Although both processes potentially set adolescent speech apart in synchronic time, it is assumed that individual paths will differ for each, with vernacular forms shed during early adulthood and changes in progress maintained to some extent for the duration of the life span. Yet, as discussed below, apparent-time studies do not provide data to differentiate between these two patterns.

1.1.1. LIMITS OF THE APPARENT-TIME CONSTRUCT AND THE LINGUISTIC INDIVIDUAL. Like the majority of sociolinguistic analyses (Labov 1963; Bailey et al. 1991; Tillery and Bailey 2003), depictions of life-stage changes are mostly established on the basis of cross-sectional studies that compare adolescents to adults using the apparent-time construct (e.g. Ash 1982; Cedergren 1973, 1987; Labov 2001). The apparent-time construct tracks sound change by comparing community speech norms across generations of speakers in a cross-sectional design. Under this model, differences between the speech of older and younger generations are interpreted as a reflection of language change within the community. However, linguistic instability at the individual level can confound the interpretation of apparent-time data.

Panel studies increasingly suggest that individuals can continue to modify their language throughout the life span, both in the direction of community change (Harrington, Palethorpe, and Watson 2000; G. Sankoff and Blondeau 2007), such that apparent-time comparisons may underestimate linguistic change, as well as in opposition to the direction of community change (Wagner and G. Sankoff 2011), such that apparent-time comparisons may overestimate linguistic change. Building on Labov (1994), G. Sankoff identifies five potential relationships between synchronic patterns of community variation observed in apparent time and individual trajectories of change (table 1.1, see also figures 1.1–1.4).

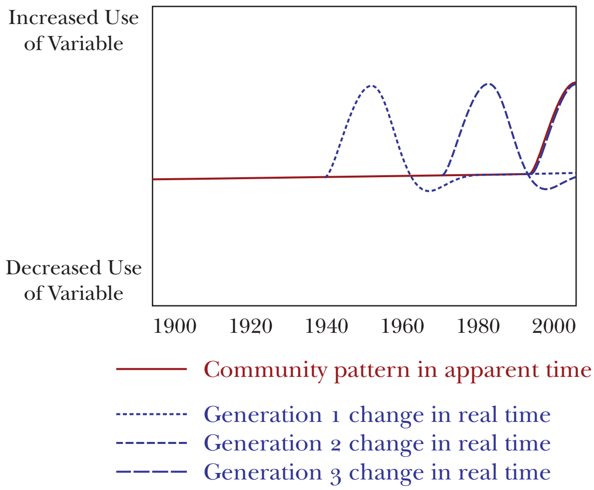
Interest in the relationship between individual trajectories of change and community variation emerges from the observation that aggregate, synchronic patterns can mask multiple patterns of longitudinal behavior. Authors such as Labov (1994) and G. Sankoff (2005) observe that monotonic slopes for age in synchronic data can correspond to age-grading in which linguistic variation remains stable at the community level even as individuals undergo life-stage change (figure 1.1), generational change in which individuals are stable while new generations bring in more advanced forms of a linguistic change (figure 1.2), or life-span change in which individuals undergo change in the same direction as community change (figure 1.3).

Age-grading is a cyclical process in which each successive generation uses heightened levels of a variant at a predictable stage in life. In an apparent-time study that relies on comparisons between age groups to identify language change, age-graded patterns superficially appear identical to language change patterns. One generation will stand out from other generations for the linguistic variable in question (figure 1.1).[3] However, because the aberrant generation is expected to shed the variable with age, this pattern does not capture a community change. Instead, it reflects a pattern of linguistic variation associated with a particular life stage, such as adolescent peaks in stable vernacular variants.

TABLE 1.1
Possible Relationships between Individual and Community Variation as Illustrated in Labov (1994), Expanded in G. Sankoff (2004, 2005), and Discussed in Wagner (2012a)

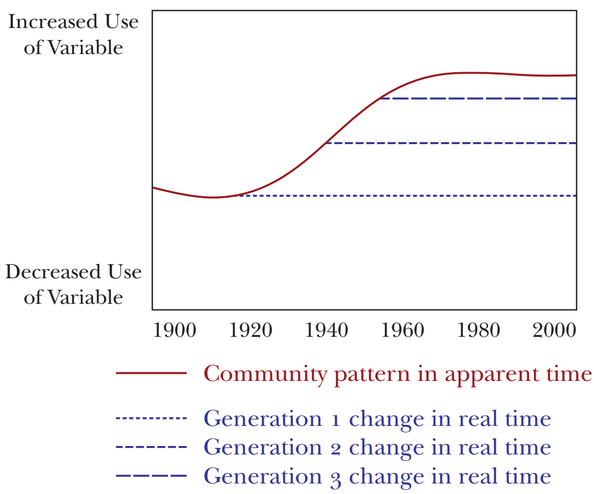
	Individual	*Community*	*Synchronic Pattern*
Stability	stable	stable	flat (no apparent change)
Age-grading (fig 1.1)	unstable	stable	monotonic slope with age
Generational change (fig 1.2)	stable	unstable	monotonic slope with age
Community change	unstable	unstable	flat (no apparent change)
Life-span change (fig 1.3)	unstable	unstable	monotonic slope with age

FIGURE 1.1
Age-Grading



Generational change has traditionally been conceptualized as a pattern in which each successive generation advances a sound change but remains stable across the life span. This corresponds to a monotonic distribution in apparent time with stability at the individual level (figure 1.2).

FIGURE 1.2
Generational Change



Life-span change is a process in which individuals change in the direction of community change in real time. When life-span change occurs, apparent-time analyses can underestimate linguistic change as older age groups will have advanced their use of the linguistic variable in question alongside the community under analysis (figure 1.3).

Stability observed in apparent time could reflect real-time stability or communal change, in which all community members change in concert, such as when a community adopts a new lexical item. A third possible relationship between individual trajectories and community variation not mentioned in Sankoff's assessment is that community stability may correspond to nonmonotonic change at the individual level, in which individuals display noncyclical patterns of change across the life span (figure 1.4). In this scenario, apparent-time analyses would correctly assess community stability, but individual dynamicity would not be apparent. This pattern in which independent nonmonotonic paths for stable vocalic variation across the life span correspond to community stability will be discussed in greater depth in chapters 5–7.

These observations highlight an inherent limitation of apparent-time studies: individual trajectories of change across the life span can complicate interpretation of cross-sectional data. For example, life-stage changes associated with adolescent peaks may take the form of age-grading (figure 1.1) or life-span change (figure 1.3). In apparent time these two patterns appear

FIGURE 1.3
Life-Span Change

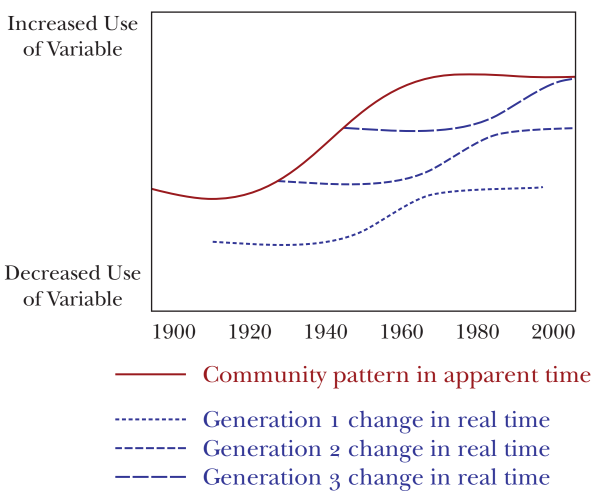
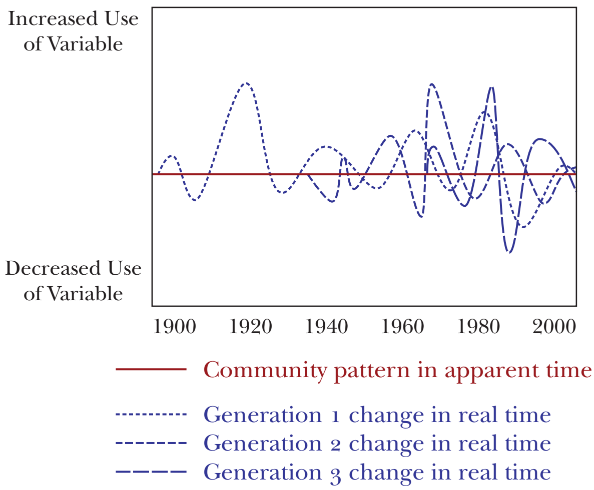


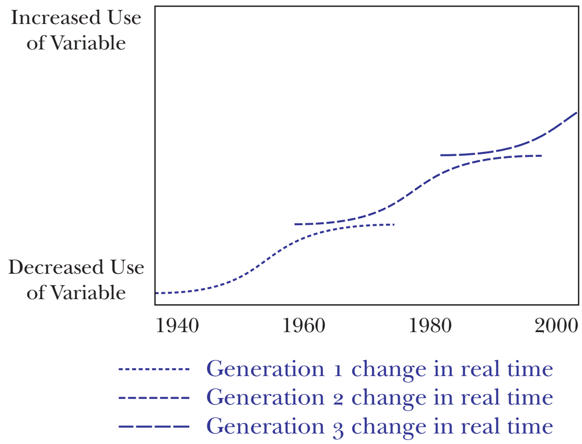
FIGURE 1.4
Community Stability May Correspond
to Noncyclical Individual Trajectories of Variation



identical, giving rise to the adolescent peak. The patterns may also reflect a combination of age-grading and change so that they are not mutually exclusive, as is probably the case for stereotyped changes in progress like invariant *be* in AAE or quotative *be like*. As illustrated in sections 1.1.2–1.1.4, longitudinal data are crucial to identify the extent to which group patterns of age-grading are an expected component of the linguistic life cycle as this pattern can confound the interpretation of apparent-time data.

1.1.2. ADOLESCENT PEAK AS EVIDENCE FOR LANGUAGE CHANGE. Labov (2001) suggests that adolescent peaks observed in apparent time provide an important clue to how language change occurs within a community. Under his hypothesis, children first acquire the linguistic system of their primary caregiver. However, at some point "children must learn to talk differently from their mothers," a process Labov labels VERNACULAR REORGANIZATION (2001, 415). To Labov, the existence of the adolescent peak for changes in progress demonstrates that children advance sound change by altering their speech until they reach a period of grammatical stabilization (see figure 1.5). Specifically, he hypothesizes that girls will use their mother's system until about age 4.[4] From age 4 until age 17, these girls push the sound change forward year by year.[5] As such, younger girls are expected to have less advanced sound changes than their older siblings because they have not had the same amount of time to push the sound change forward.

FIGURE 1.5
Vernacular Reorganization in Real Time



Because sound changes appear to advance as logistic functions, incrementation will occur as a logistic function, leading to the S-curve observed for language change (Labov 1994). This model predicts an adolescent peak for girls during the middle stages of the sound change, when the sound change advances more rapidly, but not in the later stages or earliest stages, when the change advances in slower increments.

Evidence to support Labov's hypothesis is found in cross-sectional studies of rapid change. These studies indicate that "preadolescents are consistently found to use incoming forms less frequently, not more frequently, than their immediate elders, while postadolescents also use the same form less frequently," resulting in an adolescent peak (Tagliamonte and D'Arcy 2009, 59). In his study "Linguistic Variation and Change in Philadelphia," Labov (2001, 458) found a peak in apparent time among adolescent females for nine incoming sound changes in Philadelphia.[6] The 13–16-year-old female group had the most advanced variants for eight of the nine variables considered: (aw), (eyC), (owC), (owF), (uwF), (æhN), (æhS), and (æhD). Peaks were largest for mid-range changes, including back vowel fronting, while peaks were smallest for nearly completed changes, including fronting of (æhN) and (æhS). Because the logistic incrementation model predicts that differences in the magnitude of the peak will correspond to the stage of the sound change, the Philadelphia study provides evidence that individuals advance their participation in incoming sound changes between childhood and adolescence.

Several earlier studies of sound change display similar patterns, providing further support for Labov's hypothesis. Trudgill's (1974) study of Norwich English found incoming variants were more common among the youngest participants in his study. Nevertheless, because Trudgill (1974) grouped speakers by decade, it is impossible to determine distinctions between preadolescent and adolescent speech. Ash (1982) identified similar peaks for /l/ vocalization, a change in progress in Philadelphia. Cedergren's (1973) study of *ch* lenition in Panama also contained a peak, which she interpreted as indicating a change in progress.[7] To confirm this hypothesis, Cedergren resampled the population over a decade later between 1982 and 1984 (Cedergren 1987). The peak remained, even as the sound change had advanced by 10–15% per age group. Consistent with figure 1.3, she interpreted this finding as indicative of both community change and individual change across the life span. Labov interpreted the adolescent peak in each of these studies as evidence of logistic incrementation across childhood and adolescence corresponding to community sound change.

Tagliamonte and D'Arcy (2009) offered strong evidence that adolescent peaks also occur for morphosyntactic changes. The age range of the 152 Canadian English speakers in their sample population allowed for the comparison of teenagers to both children (age 9–12) and adults (age 29–32). Teens had higher rates for the incoming form than preadolescents or adults for five of the six variables explored (quotative *be like*, discourse marker *like*, stative possessive *have*, modal *have to*, future temporal *going to*, and intensifier *so*). The strongest evidence to support a model of logistic incrementation is apparent in the magnitude of the peaks in this study. Once again, peaks were largest for rapid changes, as seen in the case of *be like*, whereas incipient changes, such as intensifier *so*, and changes that were approaching completion and completed changes, such as future temporal *going to* or modal *have to*, showed little to no peak. This pattern is consistent with the pattern of logistic incrementation observed in Labov (2001), suggesting that such patterns occur for morphosyntactic variables as well as phonetic variables.

Few generational studies compare stable variation with language change, but Cameron (2005) is a rare exception. This study contrasted a morphosyntactic change in progress (quotative strategies) with two stable phonological variables (final *-s* deletion and intervocalic spirantization of *d*) in Puerto Rican Spanish for speakers between the ages of 5 and 84. Only the variable undergoing change showed an adolescent peak. Given findings presented in previous studies of language change, this distinction appears to indicate that adolescent peaks are an important feature of changes in progress. These studies provide important clues to how language change advances through communities. They ascribe a special role to children and adolescents as the vanguard for language change at both the phonetic and morphosyntactic level.

While the evidence reviewed above is compelling, there are two empirical issues with drawing conclusions from these generational studies. First, adolescent peaks in apparent time that might be attributed to language change could also reflect a pattern of age-grading (figure 1.1). An understanding of typical individual life-stage patterns for stable communities allows for a more informed interpretation of patterns found in communities undergoing change. The more that is known about individual trajectories of language variation across childhood and adolescence in relationship to community patterns of variation, the easier it will be to identify when or if adolescent peaks are attributed to language change or are the result of age-grading. Second, generational studies rarely include child participants (Labov 2001, Cameron 2005, and Tagliamonte and D'Arcy 2009 are exceptions). Without child participants, it is unclear whether teens and children differ from each other, a vital component of the logistic incrementation hypothesis. An understanding of the relationship of the child and adolescent individual to synchronic community patterns is a critical issue for the study of language variation and change.

1.1.3. EVIDENCE FOR AGE-GRADING. Adolescents are not only described as innovative, but also as vernacular, so that adolescent peaks in synchronic data may correspond to age-graded behavior. Adolescent age-graded patterns for stable variants have been cited as evidence of the importance of life stages in linguistic development (Chambers 1995, 2003; Eckert 1997; Labov 2001). Such generational differences cannot be attributed to language change, and as such present an important insight into the influence of the cultural construct of age on language variation. Due to an overwhelming focus on the processes underlying language change, research into the linguistic behavior of stable variation is rare in sociolinguistics; accordingly, the relationship between individual trajectories of life-stage variation and stable sociolinguistic variables remains an underexplored topic (Wagner 2012b). Only a handful of stable variables in English, such as multiple negation, copula absence, velar nasal fronting, and interdental fricative stopping, receive attention within the field of sociolinguistics.[8] Yet, as illustrated by the quotations introducing this chapter, an understanding of the patterning of stable variation, or resistance to change, is equally important in providing insight into the ordered heterogeneity of the speech community. Because age-grading and vernacular reorganization associated with language change can appear identical in apparent-time studies, an understanding of age-graded behavior for stable variables is crucial to the study of language change.

Even as adolescent peaking for nonstandard stable variables is sometimes touted as a truism in the field of sociolinguistics, evidence discussed below suggests that different communities and class backgrounds exhibit different patterns of age-grading in apparent time. This pattern is consistent with the hypothesis that age-grading reflects the culture context of aging in a community. If adolescent peaks for stable variants are based on identity work, as suggested by Eckert (1997), then social indexing of the variable in question, as well as social expectations for adolescent identities, will influence the age distribution of the variant.

Two predominant patterns of age-grading have been described for stable variation in generational studies: a curvilinear pattern in which children demonstrate the highest levels of nonstandard features (Romaine 1984; Cheshire 1987, 2005) and a peaking pattern in which adolescents have the highest levels of vernacular features (Labov 1966, 2001). Labov found an adolescent peaking distribution for velar nasal fronting, /ð/-stopping, and /θ/-stopping in his New York City study (e.g., Labov 2001, 112). Based on this evidence, he claimed that the use of stable vernacular sociolinguistic variables is a function of class for adults, but that speakers may show elevated use of such variables in late adolescence (119). Yet the age of an apparent-time peak for stable variation does not always appear in adolescence and frequently interacts with class. For example, Biondi (1975) identified a peak in /θ/-stopping, among other variables, for fourth graders when compared to first and eighth graders among Italian American bilingual and monolingual Bostonians. Macauley's (1977) analysis of Glaswegian English identified that the stigmatized use of glottal variants for /t/ was highest among children, but declined across adolescence to lower levels in adulthood among professional and white-collar groups in his data. Variability in patterns of age-grading can be contrasted with more consistent patterns of adolescent peaking identified for changes in progress, suggesting that age-grading may be subject to more locally defined cultural practices related to age.

1.1.4. AGE-GRADING AND LIFE-STAGE CHANGE IN AFRICAN AMERICAN ENGLISH. Stable variation has been explored to a greater extent in AAE as an early focus on describing the syntactic structure of AAE captured several variables that were stable across generations. As a result, some of the strongest evidence for age-graded patterns is found in work on AAE. In addition, innovative research that tracks the development of AAE across the life span provides real-time trajectories for individuals. Both apparent-time and longitudinal studies of AAE have demonstrated that vernacular AAE morphosyntactic and segmental variables undergo age-grading between childhood and adulthood (Wolfram 1969; Rickford and McNair-Knox 1994; Baugh 1996; Cukor-Avila 2002; Van Hofwegen and Wolfram 2010; Cukor-Avila and Bailey 2011), yet whether similar patterns occur for vocalic variables remains unclear (Rickford and Price 2013). While these studies provide evidence for age-grading, they raise questions about how consistent such patterns are across individuals, communities, and linguistic variables.

Similar to the generational studies outlined in section 1.1.3, generational studies of AAE suggest that children and adolescents use vernacular AAE variables to a greater extent than adults. Wolfram's (1969) study of AAE in Detroit examined several stable phonetic and morphosyntactic vernacular AAE variables, including labialization of interdental fricatives and invariant *be*.[9] In general, the youngest age group used higher rates of nonstandard variants than teens or adults, following a curvilinear model of age-grading similar to that observed in Macauley (1977). However, working-class teens patterned closer to the children's rate of usage and the middle-class teens patterned closer to adult levels of usage, indicating an interaction with class. Age-grading was also apparent in a real-time case study conducted by Baugh (1996),[10] who followed four men interviewed as teens and again as adults. Although each of the participants had taken different career paths, every individual used fewer vernacular AAE morphosyntactic variables, including copula absence and nonstandard negation, in the adult interview.

Van Hofwegen and Wolfram's (2010) FPG study expands upon this previous research by providing real-time evidence for age-grading in a large-scale study of morphosyntactic and consonantal features. Participant speech was analyzed for morphosyntactic and consonantal variation in three complementary ways: a token- and type-base measure of total vernacularity (a Dialect Density Measure [DDM]) and traditional variationist analyses for velar nasal fronting, copula absence, third-person singular *-s* absence, and invariant *be*. The majority of participants demonstrated a "roller coaster" trajectory for the composite vernacularity measure in which scores are high at 48 months, dip in first grade (approximately age 7) and fourth grade (approximately age 10), and rise in sixth grade (approximately age 12) and eighth grade (approximately age 14). Inclusion of the post-high-school time point indicated that DDM scores tended to drop for the majority of speakers between tenth grade (approximately age 15) and post–high school (approximately age 20) (Wolfram and Van Hofwegen 2012). This pattern aligns with the adolescent peak model of vernacularity in which teens use vernacular variables more frequently than younger children or adults. Isomorphic to patterns observed with the DDM, the variationist analysis of *-ing*, third-person singular *-s* absence, habitual *be*, and copula deletion also demonstrated adolescent peaking patterns as all variables rose in frequency between fourth grade and subsequent middle school and high school grades and declined in frequency between tenth grade and post–high school. These stable vernacular features have an adolescent peak corresponding to age-grading for the community in question (Wolfram and Van Hofwegen 2012).

The generational and panel studies reviewed in section 1.1.2–1.1.4 illustrate that adolescent peaks frequently occur with linguistic changes in progress (Labov 2001; Tagliamonte and D'Arcy 2009). Stable morphosyntactic and consonantal variation above the level of consciousness can show adolescent peaks (Labov 2001), particularly for AAE features (Van Hofwegen and Wolfram 2010; Wolfram and Van Hofwegen 2012), but these patterns are more variable and often subject to additional social constraints (Wolfram 1969; Biondi 1975; Macauley 1977). However, most of the variables analyzed in these studies are salient morphosyntactic and segmental variables. In contrast, less is known about how vowel variation patterns throughout the life span. Rickford and Price's (2013) landmark longitudinal case study of Foxy Boston offers a rare comparison of how aging influences these distinct linguistic structures. While morphoyntactic variation was shown to vary across adolescence for this individual, potentially interacting with factors such as style and interlocutor effects (Rickford and McNair-Knox 1994; Rickford and Price 2013), Foxy Boston's vocalic system remained relatively stable.[11] However, the earliest time point included in this study was age 13. Given evidence that suggests linguistic plasticity declines across adolescence (see chapter 2), this time point may have been too late to capture peaking patterns for vocalic variation.

In general, the study of sound changes within AAE has taken a back seat to the study of well-known morphosyntactic and consonantal variables. Although the last 15 years have witnessed the emergence of research regarding AAE vowels, the subject remains vastly understudied when compared to regional European American vowel variation and AAE morphosyntactic variation. Further, the studies addressing AAE vowel variation tend to be divorced from other AAE features. Even as researchers urge the field to consider AAE as a systematic whole, a split in the focus of analysis across linguistic subsystems may conceal how such systems work in concert to index ethnic identity. So, while longitudinal studies of AAE illustrate shifting trajectories of development on the morphosyntactic level, little is known about how the sounds of AAE develop alongside these discrete variables. Do children who demonstrate significant changes in morphosyntactic vernacularity from childhood to their teen years also demonstrate parallel changes in the vowel system? If not, what might this indicate about the relationship between vocalic variation and morphosyntactic variation in AAE and ethnolects in general?

1.2. OUTLINE

To date, no longitudinal study tracks trajectories of change for vocalic features across childhood and adolescence outside of second-dialect acquisition studies to be discussed in chapter 2. Stable vocalic variation rarely receives attention from sociolinguists unless it is highly stigmatized. Yet, an understanding of life-stage trajectories of change for stable vocalic variation provides a necessary complement to similar studies of segmental variation and sound change by illustrating the extent to which individuals modify their speech as they age.

Despite the attention given to adolescence, without longitudinal analyses, linguists are left with only a snapshot of linguistic behavior and a set of assumptions about change over the life span. While previous research illustrates the connection between linguistic variability and age, only longitudinal studies can provide empirical evidence of the extent to which adolescent linguistic behavior shifts and changes with the inevitable changes in social structures that individuals experience as they grow and develop into adults. Specifically, longitudinal analyses that track linguistic behavior from childhood through early adulthood are necessary to identify in what ways adolescents differ from their childhood and adult selves and how individuals linguistically transition through the life stages of childhood, adolescence, and adulthood.

This study illustrates the extent and limits to which adolescent speech stands out from that of adjacent life stages through the incorporation of four time points, starting at approximately age 10 and ending at approximately age 20. Over the course of this study, I present an analysis of linguistic variation across a portion of the life span to illuminate the relationship between life stages and linguistic variation. I consider the relationship between individual trajectories of change and patterns of stability and change in the surrounding speech community. I then explore what this evidence suggests about individual negotiations between ethnolectal variation and PRV systems.

Chapter 2 presents the theoretical context for the study. First I review evidence for the influence of life stages on linguistic variation from short-term panel studies of vowel variation and ethnographic studies of childhood, adolescence, and emerging adulthood. Because life-stage change is potentially limited by a loss of plasticity over the life span, I further review relevant research from adult longitudinal studies and studies of second-dialect acquisition (SDA).

The third chapter provides the linguistic context of the study by including a review of AAE vowel research and a description of the FPG linguistic ecology. While several rapid and ongoing changes have been identified in the vowel system of the region's PRV speech variety (Dodsworth and Kohn 2012), less is known about the vowel system of the local AAE variety. I present evidence from the Southeast Raleigh Project illustrating the longevity and stability of the AAVS in the region. Chapter 4 describes the field sites and the participants in the current study and provides details of the methods used for analysis.

Within chapter 5, I provide evidence that aggregate-level trajectories for stable vocalic variation are inconsistent with patterns of adolescent peaking. As a group, the adolescent time points do not significantly differ from childhood time points for the majority of the variables analyzed. However, while aggregate-level results largely show group stability, individuals display idiosyncratic trajectories of vowel variation across adolescence. These results suggest that aggregate patterns of age-grading for stable vowel variables may be a minority pattern for life-stage variation, as adolescents do not pull from all linguistic resources in identical ways when they construct their adolescent linguistic identities.

Chapter 6 contrasts these results with patterns observed in contemporary analyses of consonantal and morphosyntactic vernacular AAE features in the corpus (Van Hofwegen and Wolfram 2010; Wolfram and Van Hofwegen 2012). Trajectories of change for stereotyped morphosyntactic and consonantal variables at the aggregate level are consistent with age-grading, unlike patterns observed for vocalic variables. Life-stage variation does not appear to affect all linguistic subsystems in predictable ways, as trajectories of change are mostly variant-specific. While age-grading has been identified as a common component of life-span change across adolescence, these findings suggest that community-level patterns of age-grading may be restricted to a select suite of highly salient variables. Evidence from this study shows that adolescent peaks at the aggregate level do not occur across all types of linguistic variables.

Chapter 7 presents implications for apparent-time studies, insights into the interaction between ethnolects and PRVs across the life span, and discussion of how individual trajectories correspond to community stability for stable variants. Only a longitudinal study that compares different linguistic subsystems can illustrate the relationship between individual trajectories of change and group patterns of synchronic variation. An understanding of how children linguistically develop in a complex sociolinguistic world is key to illuminating whether life-stage patterns predict linguistic cycles of behavior. Because of the importance of life-stage variation for AAE variation, this may be particularly true for African American youth. Observations regarding life-stage trajectories for the FPG participants not only enhance understanding of the role of life stages in predicting variation, but illuminate our understanding of the relationship between ethnolects and PRVs as individuals grow up in a linguistically diverse world.