THE IMPORTANCE OF APPALACHIAN IDENTITY: A CASE STUDY IN ROOTEDNESS

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ABSTRACT: Regional identity does not always neatly correspond to geography. In the cognitive conception of many people, Appalachia is located firmly in the American South although the official boundaries range from Alabama to New York. There are undoubtedly differing levels of regional affiliation even by people who orient toward the region. The core area of Appalachian identity, with the strongest regional affiliation, is located in the Southern Appalachian subregion and includes eastern Tennessee, western North Carolina, southwestern Virginia, eastern Kentucky, and southern West Virginia. The present case study investigates the idea of rootedness, or connection to the conceptual Appalachia, taking /ɑɪ/ monophthongization, a classic Southern feature, as a marker of rootedness. Tokens from a single speaker born and raised in East Tennessee, are examined at two different times. As a high school student, the speaker produces almost categorical monophthongal /ɑɪ/; however, as a professional in her mid-30s, the speaker is almost categorically diphthongal. This stark change in linguistic behavior undoubtedly has many sources, yet the speaker discusses how her orientation to the region changed dramatically. The current study furthers our understanding of how speakers negotiate a nuanced Southern and Southern Appalachian regional identity identity and employ linguistic resources to reflect shifting orientations.

KEYWORDS: monophthongization, place attachment, identity.

> You know you're from here when you start talkin' like us.
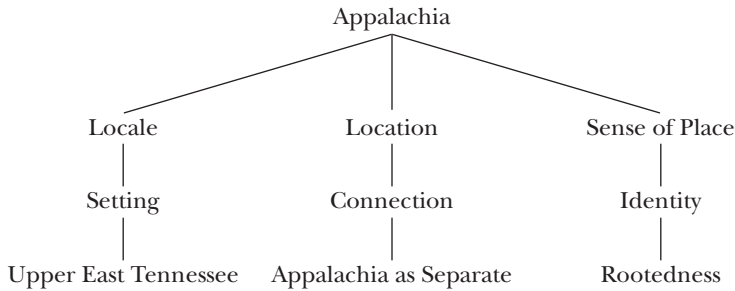> —Juanita, teacher, age 50, Hancock County, Tennessee

A PARTICIPANT IN AN EARLIER STUDY (P. Reed 2016, 141) responded with the above when asked about how language featured in local orientation and identity. At a surface level, the statement makes the connection between language and place that many people, including linguists, take for granted. However, on further consideration, this statement belies a deep notion that how one speaks provides a window into the speaker's conception of self. When a speaker aligns with a location, features associated with that place will presumably appear in speech; conversely, when a speaker does not align with a location, features associated with that particular place may

be absent from speech. The presence of features associated with northeast Tennessee, where the data from P. Reed (2016) and for the present study were collected, indicates to hearers that the speaker is from the area. This type of regional affiliation is not limited to the hearer, as the speaker is also aware of the connection to place. Such a notion undergirds the investigation of the relationship of speaker to place. But, why might such a connection between linguistic behavior and place arise? I term this connection to place ROOTEDNESS, defined as one's attachment to place. This connection can be somewhat broad, as a connection to mountains or to the South as a whole. Conversely, and more importantly, rootedness can be quite granular, as the connection to a local community or even to a particular parcel of land (Cox 2006). Rootedness, however, is not static. It can evolve over time, as one's connection to place changes across one's life span. The goal of the present article is to show how rootedness interacts with linguistic features in the speech on one individual at two time points, highlighting how rootedness and shifts in rootedness impact language.

The connection between place and language has been noted for centuries (e.g., shibboleth in the book of Judges in the Bible, Wenker [1877] in Germany, Guilléron and Edmont [1902–10] in France, Kurath [1949] in the United States). Labov (1963) built upon these ideas in that a connection was made between how speakers felt about place and their language. Labov noted that speakers' feelings about Martha's Vineyard were crucial in understanding vowel centralization. Since then, many studies have incorporated place (e.g., Bailey et al. 1993; Johnstone, Andrus, and Danielson 2006; Dodsworth 2008; Johnstone and Kiesling 2008; Hall-Lew 2009). However, why does place play a role in linguistic behavior?

Agnew (2002, 16) states that PLACE has three necessary components. First, place needs a LOCALE, the "setting in which everyday life is most concentrated for a group of people." Basically, this means place requires an actual physical setting. Second, place requires LOCATION, which is the "node that links the place to both wider networks and the territorial ambit it is embedded in." Thus, place requires not only a connection to larger units of both people and geography, but also a separateness from these larger units. Finally, place requires, and I posit that this is the most crucial of Agnew's components, a SENSE OF PLACE, defined as "symbolic identification with a place as distinctive and constitutive of a personal identity and a set of personal interests." A region such as Appalachia possesses all three components, as seen in figure 1: it is a geographic region (although the exact boundaries are elusive); it is both connected to and separate from broader networks; and there is a definite sense of place. However, the sense of place and its meaning depends upon the individual.

FIGURE 1
Agnew's (2002, 16) Elements of Space Applied to Appalachia

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                        Appalachia
              ┌──────────────┼──────────────┐
           Locale         Location      Sense of Place
             │               │               │
          Setting        Connection       Identity
             │               │               │
   Upper East Tennessee  Appalachia as Separate  Rootedness
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When discussing regions and regionality, John Shelton Reed (1983, 11) noted that regional identity was "the cognitive entity that people used to orient themselves." As a noted sociologist of the American South, Reed knew that what constituted the South did not correspond neatly to geographical boundaries or to political boundaries, even though it would be considered a PLACE according to Agnew's definition above. Areas considered Southern may not actually be located in the South (e.g., Ypsilanti, Michigan, referred to as "Ypsitucky" [Anderson 2003]). Further, areas within the geographical South have varying levels of "Southern-ness." Thus, "South" and "Southern" have both a denotative and connotative notion. As denotation, they are terms that refer to the southern portion of the United States. However, in a connotative sense, "South" and "Southern" have a rich sense of meaning that people can use to self-conceptualize and orient themselves. Region, with its many meanings arising from its multilayered nature, was and is a means for people to create and maintain a sense of identity. Appalachia presents an interesting case, as much of it lies geographically within the American South. Thus, it is decidedly a Southern region, as studies (Greene 2010; P. Reed 2016) have found that area residents think of themselves as Southern. However, due to internal differentiation or stigma toward rural areas, there is also a feeling of distinctiveness. Some residents identify as "Appalachian" or "Mountain" primarily, and secondarily as "Southern."

The disputed nature of regions is especially true of Appalachia, as the official designation of Appalachian from the Appalachian Regional Commission (ARC; http://www.arc.gov) is quite different from where most people think Appalachia is. Figure 2 shows the 410 counties over 13 states that comprise ARC's Appalachia. However, most people, including natives to the region, have a much more restricted notion of where Appalachia is located. The area captured by the ellipse in figure 2 is where over 40% of

FIGURE 2

Appalachian Region as Defined by the Appalachian Regional Commission
and the Core Region from Ulack and Raitz (1981, 45)

Ulack and Raitz's (1981, 45) 2,397 respondents, both native to the region
and outside it, think Appalachia is. Thus, a person residing in an officially
designated Appalachian county in western New York or northeast Mississippi
may have the same cognitive entity and its ensuing personal orientation (as
per J. S. Reed's statement above) as a person who resides in East Tennessee
or eastern Kentucky. However, residing in a more core area perhaps creates
a distinct cognitive entity.

Evidence exists that the areas that are considered more core to Appa-
lachia have a different orientation toward the region than those areas that
lie more at the periphery. For example, Billings (2006, 263) states that
for both Central and Southern Appalachia,[1] the idea of the region "is as
important a symbol as family, community, county, or even state or nation."
While potentially overstated (e.g., Puckett 2003), such a claim nonetheless
demonstrates that certain areas of Appalachia have a stronger orientation
to the region. Other lines of inquiry add that the orientation to the region
may be quite granular, from the subregion (i.e., which part of Appalachia)

to the speaker's home community and even to a particular parcel of land within the community. Thus, the idea of the Appalachian homeland (Montgomery 2015) or homeplace (see Cox 2006) is vitally important, particularly for those residents in the core area.

The claim that regional identity is stronger in parts of Central and Southern Appalachia is not merely anecdotal. Cooper, Knotts, and Elders (2011) identfiied the area from the official ARC designation that had the strongest regional affiliation by focusing on the naming practice of businesses. While this may seem odd at first, it should be noted that "[n]aming is a noteworthy cultural practice not only because of its ability to create a sense of continuity over time but also through its capacity for changing and challenging lines of identity" (Alderman 2008, 195). Thus, naming practices can serve as a proxy for what citizens of that particular area deem important, or how they identify. Cooper and colleagues focused on businesses with *Appalachian* in their name. They computed an A-score, where they divided the number of businesses with *Appalachian* in their name by the number of businesses with *American* in their name.[2] They found that parts of eastern Kentucky, northeast Tennessee, parts of western North Carolina, and parts of southwestern Virginia have high A-scores. Note that these high A-score areas make up a large part of the core mental region of Appalachia. In figure 3, based on the A-score map from Cooper, Knotts, and Elders (2011, 464), shows that across the region, there are quite large differences in naming practices. While not a perfect measure, the A-score does show that, in some areas, *Appalachia* does feature more prominently. One may ask why such differences between regional affiliation, at least with respect to naming, exist?

To answer this question, we must delve deeper into what Appalachia means. In 1921, Campbell wrote, "Let us come now to the Highlands—a land of promise, a land of romance, and a land about which, perhaps, more things are known that are not true than of any part of the country" (xxi). Campbell was discussing the fact that many mistruths about the region were rampant and widely accepted by the broader population. Many of these myths still exist today and continue to be quite popular, such as a predilection for violence, traditional (and sometimes retrograde) belief systems, and maintenance of cultural tradition. Thus, Appalachia has several types of meanings.

Some argue that these varying types of beliefs about Appalachia can be collapsed into to two main overarching beliefs, one positive and one negative; Williams (2002, 17) states that there are "two defining stereotypes lodged in the American mind: the Appalachian mountaineer, noble and stalwart, rugged and independent, master or mistress of the highlands environment; and the profligate hillbilly, amusing but often also threatening, defined by a deviance and aberration, a victim of cultural and economic deprivation

FIGURE 3
A-Score Map from Cooper, Knotts, and Elders (2011, 464)
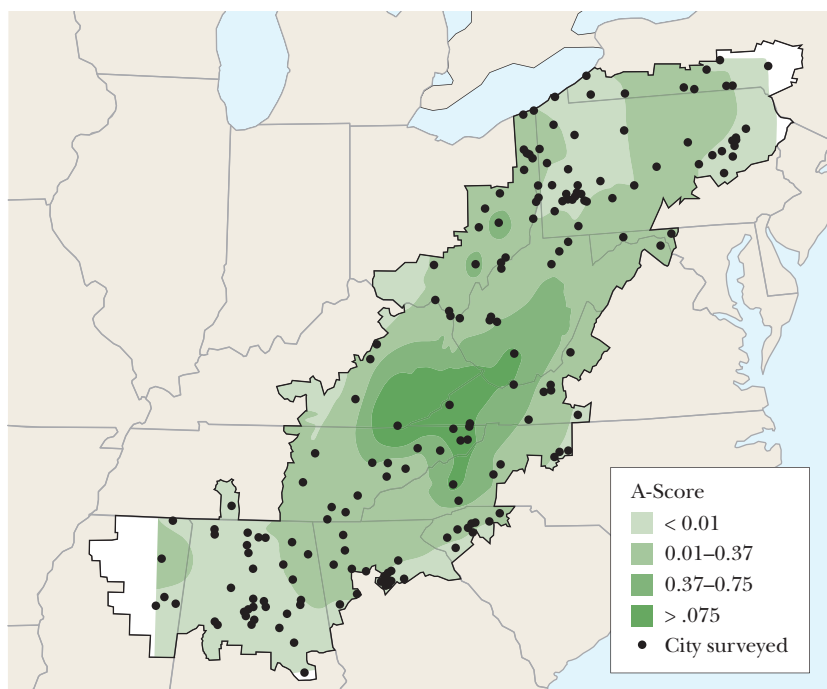
attributable to mountain geography." The first stereotype is quite positive, and one can see that natives to the region might want to possess or to exhibit such attributes. However, the second stereotype is very negative—so negative in fact that natives might want to avoid affiliation with such attributes. Thus, the meaning of Appalachia can be seen as contradictory (see also Hazen 2018 [this issue]).

Given our knowledge of the importance of language and identity, particularly regional identity, an investigation of the linguistic behavior of speakers from a stigmatized region with disputed meaning can illuminate the interplay of regional identity and speech. In particular, to study a feature of speech that is known to be closely tied to a regional identity might illustrate how speakers navigate the multilayered and often contradictory nature of regions. Thus, the present study will focus on the monophthongization of /ɑɪ/, a feature that is closely aligned with the South and with Southern Appalachia (see below). Practically every study on any variety of Southern speech mentions this feature (e.g., Pederson et al. 1986–93; McMillan and Montgomery 1989; Bernstein 2006; Labov, Ash, and Boberg 2006; among many others). Also, it appears in popular depictions of Southern speech,

such as Venable's (2013) dialect dictionary. Additionally, this feature is one that Southerners themselves mention, as exemplied by a Tennessee speaker who stated that her friends noticed how she said "nice, white rice," and she herself noticed the difference as well (P. Reed 2016, 17).

The focus of the remainder of the current paper will be the speech of a single speaker, Suzanne. Suzanne was born and raised in northeast Tennessee on the border between Central and Southern Appalachia. She lived in her hometown until going away to college. She attended college at a large state university located in Southern Appalachia. She then went to graduate school at a large university in a coastal Southern state. She is married; however, her spouse is not from Appalachia or the South.

In P. Reed (2014, 2016), I found that the realization of /aɪ/, whether more monophthongal or diphthongal, is conditioned by a speaker's relationship to place, with speakers that have stronger place-based attachment having more monophthongal productions. In P. Reed (2014), I showed that two of three sisters (Morgan and Hannah) patterned alike in using primarily monophthongal productions, while one (Suzanne) was quite distinct, using almost categorical diphthongal production. Suzanne's connection to place, her rootedness, was not as strong as that of her sisters. In fact, Morgan stated, "I am straight up Southern, straight up Appalachian," emphasizing the strong connection to place. Hannah discussed her "love of the hills" and that East Tennessee was "home." Suzanne, in contrast, described herself as a "citizen of the world," and that she "has a broader outlook now." I concluded that this difference in connection to place could be one of the factors, perhaps even a primary factor, that explained her divergent realization of /aɪ/ as compared to her sisters.

This prompts me to ask: Was Suzanne always different? Were her productions of /aɪ/ always more diphthongal? Or did her productions shift over time? The present study compares her /aɪ/ realizations from the data from P. Reed (2014) and a speech sample from Suzanne as a high school senior. The results show a dramatic shift from being almost categorically monophthongal as a high schooler to practically categorically diphthongal roughly 20 years later.

MONOPHTHONGIZATION OF /aɪ/

It is widely known that monophthongization of the diphthong /aɪ/ is a feature of Southern U.S. English (e.g., Bernstein 2006; Labov, Ash, and Boberg 2006; Greene 2010). It could be considered "the most notable unchanging element in Southern states' pronunciation" (Feagin 2000, 342). Continuing on this thread, Wolfram and Schilling (2015, 72) note that speakers from

the South, which includes large portions of Appalachia, "are well known for their pronunciation of the PRICE vowel more like the LOT vowel." In his overview of North American vowels, Thomas (2001) finds /aɪ/ monophthongization (in varying degrees) from Texas to North Carolina and shows several speakers from Appalachia that have quite monophthongal systems. Further, this feature not only is noticed by linguists, but also exists in popular knowledge. Listeners were able to use differing degrees of glide weakening to place speakers on a North-South continuum from Michigan to Alabama, leading Plichta and Preston (2005, 107) to call monophthongization "one of the principal caricatures of southern US speech."

As with other variables, monophthongization of /aɪ/ is subject to both geographic and social differentiation, as well as linguistic conditioning. Thomas (2003) outlines two broad monophthongal systems that exist in the South: (1) monophthongization occurring in prevoiced and syllable-final positions (PRIZE/PRY),[3] and (2) monophthongization in all contexts (PRIZE/PRICE/PRY). The latter is more restricted socially and geographically (Bernstein 2006) and is a feature of rural accents and also of Appalachia (Hall 1942; Wolfram and Christian 1976; P. Reed 2016; see below also). Hazen (2004) notes that there appears to be a rough sonority hierarchy of environments favoring monophthongal productions across the South, from most likely to be monophthongized to least likely, shown in (1):[4]

1. prepausal > liquid > nasal > prevoiced > prevoiceles [Hazen 2004, 66]

Linguistic atlas data show that the prevalence of monophthongization of /aɪ/ in prevoiced and open syllables is found across the South (Pederson 1986–93; Labov, Ash, and Boberg 2006). However, extensive prevoiceless monophthongization is much more restricted. In the Appalachian region, monophthongization is of the PRIZE/PRICE/PRY system (Pederson 1983; Pederson 1986–93). Table 1 shows the higher frequency of monophthongal /aɪ/ in East and Middle Tennessee (both in Appalachia) than in West Tennessee, as an example of the greater rates of /aɪ/ monophthongization in Appalachia.

Thus, although /aɪ/ monophthongization is characteristic of the South, it is relatively more common and occurs at a higher percentage in more linguistic contexts in Appalachia, particularly Southern Appalachia. With respect to Suzanne, her native northeast Tennessee community is quite monophthongal. In figure 4, I provide an F1/F2 plot of the overall vowel system from the speakers from P. Reed (2016). One can see that, overall, the community utilizes a monophthongal production of /aɪ/. Thus, the linguistic input based on the language milieu of Suzanne's childhood would have been monophthongal with respect to /aɪ/.

Percent of Monophthongal/Short Glide in Various Lexical Items
from the *Linguistic Atlas of the Gulf States* (Pederson 1986–93)

Lexical Items	East Tennessee	Middle Tennessee	West Tennessee
right	65%	28%	12%
five	70%	54%	66%
iodine (first syllable)	75%	73%	38%

FIGURE 4
Normalized/Scaled Mean Vowel Formant Values of Speakers from Reed (2016)
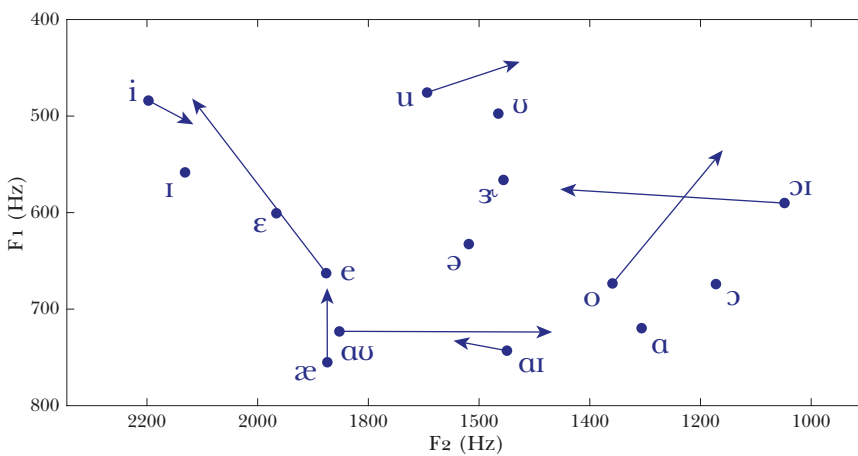
METHODS

DATA. There were two data sources for Suzanne. The first source was a speech given while she was a high school senior. The family provided me with a video cassette of the speech, which I digitized and subsequently extracted the audio. I orthographically transcribed and then force-aligned the transcriptions using the FAVE suite (Rosenfelder et al. 2014). From this data, there were 50 /ɑɪ/ tokens, 25 previoiceless and 25 previoiced or open.

The second data source was a sociolinguistic interview conducted with Suzanne roughly 20 years later, when she was a 38-year-old attorney. The interview portion was followed by a reading passage and word list. The interview was recorded using a lavalier microphone directly onto the hard drive of a laptop via Praat software (Boersma and Weenink 2018). There were 123 total tokens, 55 previoiceless and 68 previoiced or open. From the interview portion, there were 50 tokens, 25 previoiceless and 25 previoiced or

open; from the reading list, there were 34 total tokens, 11 prevoiceless and 23 prevoiced or open; and from the word list there were 39 total tokens, 19 prevoiceless and 20 prevoiced or open.

ACOUSTIC AND STATISTICAL METHODS. I measured the F1 and F2 frequency at 20% and 80% of the vowel's duration for each /ɑɪ/ token using custom Praat scripts. From these measurements, I calculated the Euclidean Distance for each token, a measure of how "far" in F1/F2 space the two time points are from each other. Lower values (i.e., closer) mean that the vowel qualities of onset and glide are closer together in the vowel space and are thus more monophthongal. Higher values (i.e., farther) show the opposite, that the two time points are farther apart and are thus more diphthongal.

Both the audio from the high school speech and the later sociolinguistic interview was also impressionistically coded. Each token was labeled as monophthongal, diphthongal, or ambiguous. For the impressionistic coding, I compared the two sets of count data using Fisher's Exact test. To compare the Euclidean Distance, I used a two sample t-test. Both tests were conducted in R (R Core Team 2018).

RESULTS

The impressionistic results show that Suzanne was almost categorically monophthongal in her high school speech; there was only one auditory diphthongal token and one ambiguous token. For example, as she begins her speech, "Tonight, we the class of nineteen ninety-…," there are several auditorily monophthongal tokens (figure 5a). If we return to the scale proposed by Hazen (2004), the presence of a monophthongal production in the prevoiceless context of *tonight* predicts that we might see prenasal monophthongization, which indeed we do. The auditorily diphthongal token came just after Suzanne quoted Henry David Thoreau on hearing different drummers; she responds, "Each of us will hear a different drummer, because no two of us are alike." In this quotation, Suzanne is responding to a famous author, and thus might be adjusting her production of *alike* to better fit the literary quality of this portion of her speech.

In contrast, the later interview data show the opposite pattern (figure 5b). During the interview, Suzanne was almost categorically diphthongal, with two monophthongal tokens and one ambiguous token. Both of the monophthongal tokens came from the word *like*, once used quotatively and another as a verb. However, each of these were quite short, and thus the monophthongal auditory quality could be the result of compression or truncation.

FIGURE 5
Impressionistic Coding of Suzanne's /ɑɪ/ Production at Two Different Times
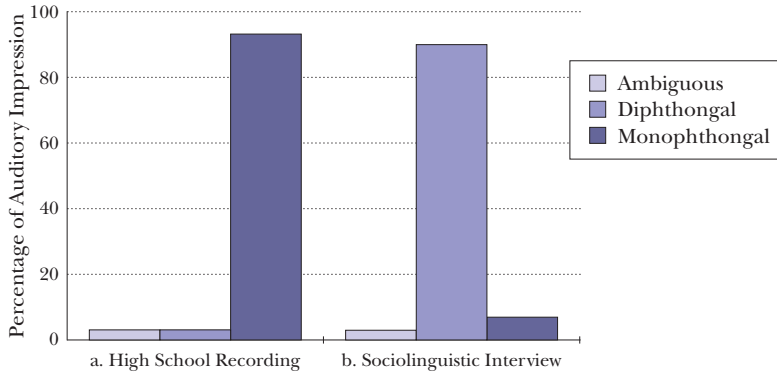
The Fisher's Exact test was significant at the $p < .0001$ level. Thus, we can see that the frequencies of the different token types were significantly different between the two data sources.

The acoustic results show similar patterning. Figure 6 shows a boxplot of the Euclidean Distance values from each data source. In the high school data, the median value (the dark line) is much lower, which indicates that the tokens are more monophthongal. Suzanne's only diphthongal token is visible as an outlier. In contrast, the interview data's median is much higher, and thus the tokens at this time are more diphthongal.

FIGURE 6
Euclidean Distance for Suzanne
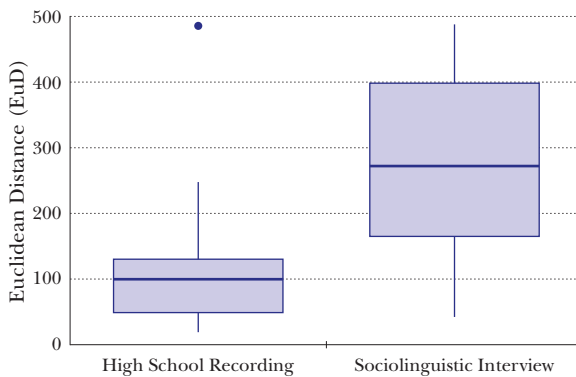
Both the impressionistic and the acoustic results show that Suzanne's linguistic production of /ɑɪ/ was strikingly different as a high school senior than as a 38-year-old professional. Her linguistic production, in fact, was almost completely changed from primarily monophthongal to primarily diphthongal.

DISCUSSION

The difference between the two data sources representing two unique time periods is readily apparent. Suzanne's productions scarcely appear to be from the same person. The difference is measurable with instrumentation, as evidenced by the Euclidean Distance figures (figure 6). However, and perhaps more importantly, it is perceivable to listeners as shown by the impressionistic results.

What could make a person change in such a dramatic fashion, at least with respect to one linguistic variable? If we consider the disputed nature of the meaning of Appalachia in combination with regional identity, an explanation emerges. In P. Reed (2014), I reported that Suzanne described herself as "a citizen of the world," as someone with a "broader outlook" than her hometown. While she did not want to forget or denigrate her roots, her home region did not figure that heavily into her conception of self, that is, her identity. Suzanne is a highly educated professional who resides in the broader South but not in Appalachia. She is married to a spouse not from the South. Thus, the presence of linguistic features that are associated with Appalachia and the South might be something she would avoid, particularly given the often stigmatized connotation of Appalachia.

However, in an earlier time in her life, her productions of /ɑɪ/ were much more similar to the Southern Appalachian environment in which she was raised. She was, in essence, categorically monophthongal, mirroring the speech of her presumed input and interaction. Suzanne described herself as a gregarious teen in high school, involved in many local and regional activities. She participated in many local events, and her family was heavily integrated into the goings-on of her hometown. Thus, at that particular point in her life, her local region played a much larger role and was more central to her personal identity.

From these differences, we can see that changing affiliations and aspects of identities impact linguistic productions. As Bowie (2010, 65) states, "Individuals draw from a palette of linguistic identities at various points in time depending on their need to express whatever facets of their social identities are most important." As a teenager, Suzanne utilized features that were more regionally linked; we might surmise that her local Southern/Appalachian

affiliation was a more important facet of her identity at that point in her life. Alternatively, such a usage difference could be interpreted as highlighting the more positive connotation of Appalachia, that of home, since Suzanne was heavily involved in the local community when she still lived there. However, as a professional, the same features might be interpreted as indexing the more negative meanings of Appalachia. Thus, in her career, Suzanne utilizes a more mainstream production of /ɑɪ/. Suzanne appears to deem a more diphthongal /ɑɪ/ as more fitting for her current social identity.

The results from the present study also point to the influence of culture on speech and individuals. At different moments in her life, Suzanne has been a part of different cultures, or perhaps different parts of U.S. culture. Johnstone (1996, 7) writes,

[C]ulture provides individuals with ways of orienting themselves as individuals: ways of identifying themselves and others […], ways of valuing and evaluating themselves and their actions, ways of displaying the continuity of the memories and physical beings. Through their talk (as well as through other aspects of their behavior), individuals display the fact that they are individuals.

Thus, either the different cultures or different subcultures provided Suzanne with different ways of orienting herself, using the realization of /ɑɪ/ as a means of exhibiting her orientation. Earlier in life, the culture provided an encouragement to use a monophthongal variant, as that is part of the cultural milieu and was quite common. However, later in life, a different encouragement was present—use of the diphthongal variant. I must emphasize here that this is an individual choice. Other individuals can and do make different choices. In P. Reed (2016), some current residents of Suzanne's hometown use a more diphthongal /ɑɪ/, while others use a more monophthongal one. Many Southerners and Appalachians use monophthongal /ɑɪ/ as a symbol of pride and cultural identity. Culture provides a means to an end, but it does not determine the linguistic behavior, rather it provides a lens to interpret the potential meaning of the usage.

Suzanne's linguistic change across her adult life span has another lesson for us as sociolinguists. It is implicit in much of our apparent time methodology that adults do not change as they age. We place speakers in particular cells, and we make rather bold statements about how this generation speaks or how that generation speaks. Yet, evidence abounds for change across the life span, as Suzanne amply demonstrates. If she were to have been categorized as an 18-year-old, our claims about her would be quite different to those we would make with the data from her 38-year-old self. Speakers can and do change, even as adults, quite drastically at times. It would be good practice to remember this.

NOTES

1. According to Billings (2006), eastern Kentucky, southwest Virginia, and all of West Virginia make up Central Appalachia; eastern Tennessee, western North Carolina, upstate South Carolina, northern Georgia, northern Alabama, and northeast Mississippi make up Southern Appalachia.

2. This methodology was modeled after J. S. Reed (1976) and Reed, Kohls, and Hanchette (1990) for *Southern* and *Dixie*. In these studies, Reed and colleagues identified several different subregions of the South and found that naming practices changed as the broader American culture and the Southern U.S. culture changed. In particular, *Dixie*-named businesses greatly changed and the geographic area of *Dixie* greatly contracted.

3. The words in small capitals reflect LEXICAL SETS, where the words stand for the vowel sound contained within the word. These come from Wells (1982).

4. This scale may also be read as an implicational scale, where the presence of monophthongization in contexts presupposes monophthongization in contexts to the left.

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