Politics and dialect variation:
A sociophonetic analysis of the Southern Vowel Shift in Middle TN

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1. Introduction:

This study examines the correlation between the Southern Vowel Shift in the Middle Tennessee area and different social characteristics, such as education level, age, and political views. To this end, field recordings were conducted, and the results were analyzed in terms of age, gender, occupation, education, political views, and other factors. The hypothesis is that people who associate themselves with traditionally Southern social characteristics and opinions will exhibit more effects of the Southern Vowel Shift in their speech. In particular, this study looks for correlations between certain political views and degree of Southern Vowel Shift. This is examined using voting results from the 2008 presidential election. The hypothesis is people who voted for McCain in the 2008 presidential election would be more likely to show effects of SVS than people who voted for Obama.

The Southern Vowel Shift is one of the largest vowel shifts taking place in the U.S., along with the Northern Cities Shift. In the *Atlas of North American English*, Labov et al. describe the different stages of the Southern Shift, which can be seen in Figure 1.

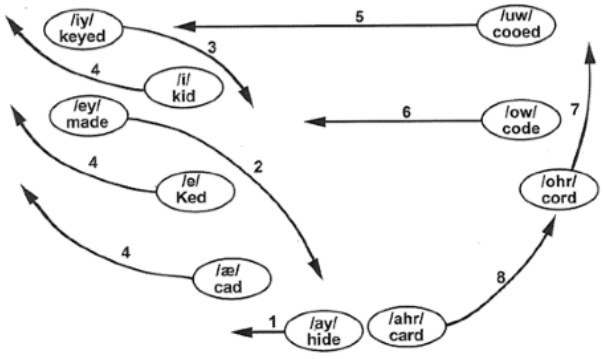

Figure 1: Stages of the Southern Vowel Shift (Labov, Ash, and Boberg 1997)

A major feature of the Southern Vowel Shift is the change in front tense and lax vowels. The tense vowels move back and down in the vowel space, while the lax vowels move forward and up in the vowel space. These changes have the overall result that when the Shift is very advanced, the tense vowels, *ey* and *iy*, have switched positions with the corresponding lax vowels, *e* and *i*. The raising and fronting of *ae*, the fronting of back vowels, and the monophthongization of *ay* are also stages of the Southern Vowel Shift.

Previous work on the correlation between dialects and political views includes Labov (2010), which compared dialects to voting patterns at the county level. The results showed the possibility of an association between political ideology, specifically Democratic views, and the Inland North dialect. However, this study does not attempt to draw correlations between voting and particular speakers' vowel formant values, and the association between ideology and the Southern dialect has not been adequately explored.

2. Methods:

The participants were 70 Caucasian females and males between the ages of 28 and 57 who were born in the Middle Tennessee area and had lived there for the majority of their lives. Interviews were conducted at the 2011 Tennessee State Fair and through personal contacts. The interviews included a recorded reading passage and word list, and a questionnaire for demographic information. The F1 and F2 vowel formants of the target vowel tokens were extracted using Praat software. Linear regressions, t-tests, and multivariate Linear Mixed Effects modeling (R 2.14) were used to test correlations between vowels and social characteristics. Interactions between social factors were also tested.

3. Results:

The results showed that there were many significant correlations between social factors, such as age and education, and the vowels associated with the Southern shift. Overall, the tense/lax shifts of *ey* and *e* and *iy* and *i* as well as the fronting and raising of *ae* were the strongest indicators of the Southern shift. The social factors that showed the strongest correlations with degree of Southern Vowel Shift were education, occupation, age, gender, and the 2008 vote. The following vowel plots show the data divided by different social factors. Each plot displays the mean formant values of each vowel for each social group represented.

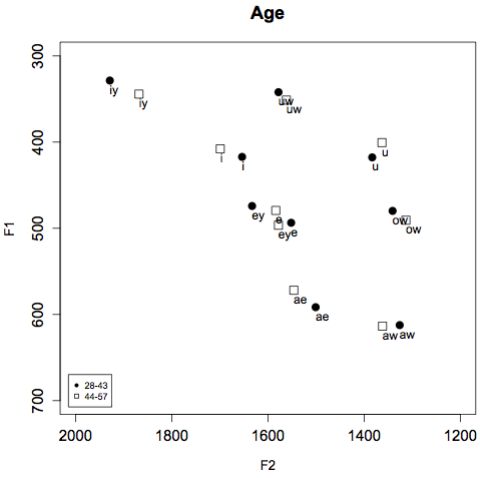

Figure 2

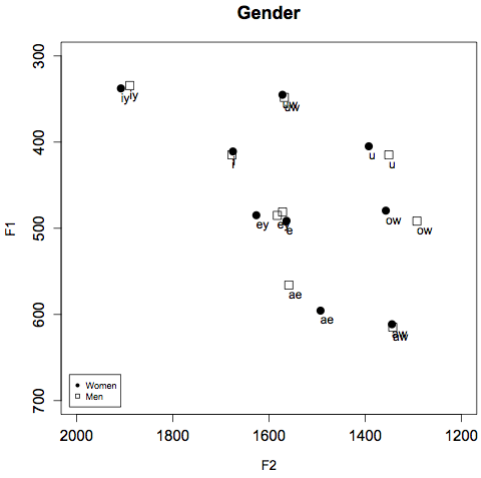

Figure 3

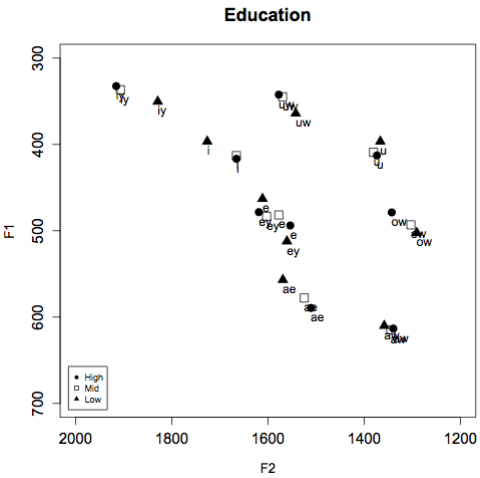

Figure 4

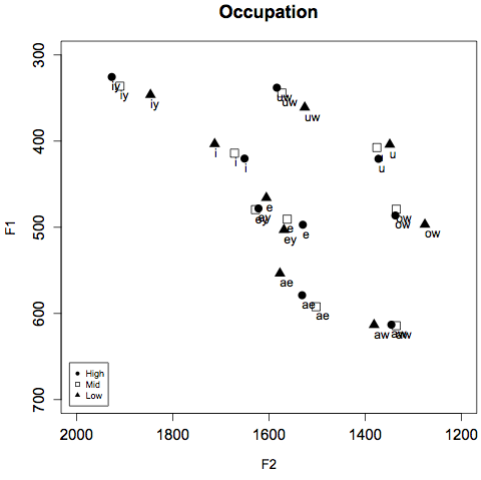

Figure 5

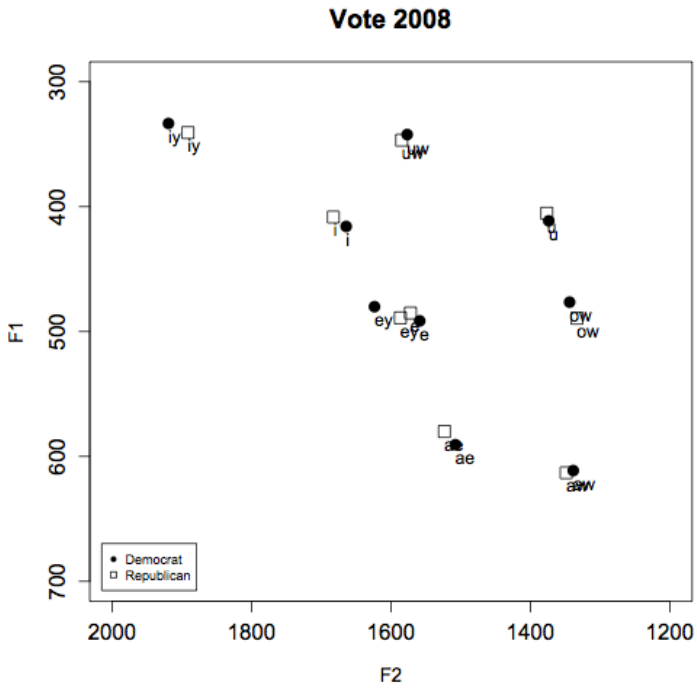

Figure 6

Since the influence of politics on speech has been less well studied than other social factors, the correlations between the Southern Shift vowels and voting in the 2008 presidential election are of particular interest. There were several significant differences in pronunciation of the SVS vowels by people who voted for the Republican candidate compared to people who voted for the Democratic candidate. The F1 and F2 of *iy* both had significant differences between the two groups of participants. The people who voted for the Republican candidate had a lower, more back *iy* than the participants who voted for the Democratic candidate. In addition, the Republican voters had a significantly higher *i* than the Democratic voters. The participants who voted for the Republican candidate had a smaller distance between these two vowels, indicating that they are closer to switching positions. The front mid vowel *e* did not show a significant difference between the two groups of participants although the plot shows that the Republican voters may have had a slightly higher and more fronted *e*. The vowel *ey*, which is consistently one of the strongest indicators of the Southern shift, did show a significant difference for both formants. People who voted for the Republican candidate had a lower and more back *ey* than Democratic voters. The Republican voters had a smaller distance between these two vowels, indicating that they were closer to switching the positions of these vowels than the people who voted for the Democratic candidate since they had a larger distance between *e* and *ey*. There was also a significant difference in the F1 of *ae*, with Republican voters having a higher *ae* than Democratic voters. For all of these vowels, the Republicans used the Southern variants more than Democrats. The lowering and backing of *iy*, the raising of *i*, the lowering and backing of *ey*, and the raising of *ae* are all changes caused by the Southern shift, and these changes were used in the speech of participants who voted for the Republican candidate. Therefore, there is strong evidence that political views and voting choices correlate with the way people speak.

4. Conclusions:

Analysis of the data confirmed the findings of other researchers that the changes in the mid front vowels *ey* and *e* are one of the earliest and strongest indicators of the Southern shift. It also found that the changes of the high front vowels *iy* and *i* are a weaker but still significant part of SVS in Middle Tennessee. There was also significant raising and fronting of *ae*.

The analysis of the data also showed that there are many correlations between use of Southern vowel variants and different social factors. Older people use more Southern vowels than younger people. Men are more affected by SVS than women. People who are less educated and have lower level occupations show more use of Southern vowels than people with more education and higher level occupations. The less studied factor of politics was also significant. People who voted for the Republican candidate in the 2008 presidential election exhibited more effects of the Southern Vowel Shift than people who voted for the Democratic candidate.

References:

Baayen, R. H. (2008). *Analyzing Linguistic Data: A Practical Introduction to Statistics Using R.* Cambridge: Cambridge University Press.

Dictionary of American Regional English, *Volume I, A-C*, Ed. Frederic G. Cassidy (1985); *Volume II, D-H*, Eds. Frederic G. Cassidy and Joan Houston Hall (1991); *Volume III, I-O*, Eds. Frederic G. Cassidy and Joan Houston Hall (1996); *Volume IV, P-Sk*, Ed. Joan Houston Hall (2002); *Volume V, Sl-Z*, Ed. Joan Houston Hall (2012). Cambridge, MA: Belknap Press of Harvard University Press.

Fridland, Valerie (2000). The Southern Shift in Memphis, Tennessee. *Language Variation and Change*. 11:267-285.

Hall-Lew, Lauren, Elizabeth Coppock & Rebecca L. Starr (2010). Indexing Political Persuasion: Variation in the *Iraq* Vowels. *American Speech*. 85.1:91-102.

Kendall, Tyler & Valerie Fridland (2010). Mapping Production and Perception in Regional Vowel Shifts. *University of Pennsylvania Working Papers in Linguistics.* 16.2: 103-112.

Kendall, Tyler & Valerie Fridland (2011). Variation in Perception and Production of Mid Front Vowels in the U.S. Southern Vowel Shift. *Journal of Phonetics*. 40: 289-306.

Labov, William (2001). *Principles of Linguistic Change, Volume 2: Social Factors*. Malden, MA: Wiley-Blackwell.

Labov, William (2010). *Principles of Linguistic Change, Volume 3: Cognitive and Cultural Factors*. Malden, MA: Wiley-Blackwell.

Labov, William, S. Ash & C. Boberg (2006). *The Atlas of North American English: Phonetics, phonology and sound change.* Berlin: Mouton/de Gruyter.

Zelinsky, Wilbur (1992). *The Cultural Geography of the United States*. *A Revised Edition*. Englewood Cliffs, NJ: Prentice Hill.