

Vowel features of college aged Vermonters  
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In 2008, Charles Boberg of McGill University conducted an acoustic-phonetic study of regional variation in Canadian English. Boberg analyzed word list data from speech of eighty-six university-educated speakers of Standard Canadian English from across the entire country. Variables of interest included the Canadian Shift, Canadian Raising, the articulation of long vowels, and the articulation of /aw/ (cow) in a relatively back position. Boberg's study provided a more detailed view of regional variation in Canadian speech, suggesting that at the phonetic level, there are six distinct regions of "Inland Canada," as opposed to the three originally outlined in the *Atlas of North American English*. Taking a similar approach, this study analyzed word list data from undergraduate students who are native Vermonters and speakers of educated Vermont English. In looking at Vermont speech, the two variables of particular interest included the Canadian Shift, a low-back merger observed pronunciation of short front vowels, and Canadian Raising, the pronunciation of the /aw/ and /ay/ diphthongs preceding voiceless obstruents. These features have been found to be present in a study of working class Vermonters (Roberts 2007) as well as in Canadian speech.

Three undergraduate students at the University of Vermont conducted this research project using the iPhone app "iSLR" (Sociolinguistics Research Lab, University of Victoria), in which they analyzed the vowels of native Vermont speakers. Ten in-state undergraduates at the University of Vermont, ages ranging from 18 to 21 years old, were recorded reading a list of 219 words. Once the recordings were taken, the WAV files of the voice recordings were used in the program PRAAT (Boersma and Weenink) to analyze the vowels. The program FAVE was used to align and extract the vowel from the words, and then the program NORM was used to measure, normalize and plot the vowels. The end product is a vowel chart for each speaker. Individual speaker means were then calculated and combined with other speakers.

Group and individual speaker means were examined and compared with findings of Boberg (2008) on Canadian raising and Canadian shift as well as those of Roberts on Vermont speech in a working class community. The results demonstrated raising of long /ai/ ('bite') before voiceless sounds, consistent with Canadian raising. This is important because in this representative sample of young, Vermont college students it looks more like Canadian raising than that demonstrated by older Vermonters' speech. However, the Canadian shift, a lowering and retraction of the short front vowels /i/, /e/, and /ae/ in response to the low-back merger, was not found in the results although it has been noted in the speech of working class Vermonters (Roberts, personal communication). Finally, as expected, these speakers have a completed low back merger, as demonstrated in "bot" and "bought," which was consistent with Boberg (2001). Unlike older and more working class Vermonters, however, there was no fronting of the BARN vowel.

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