

I Bag Your Pardon: The Albertan æ/ɛ shift and Community Grammars

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1. Introduction

A shift in the vowel space for speakers of Canadian English in Alberta is in process. The vowels [æ] and [ɛ] have begun to merge before the voiced velar stop [g]. Zeller [1] first documented this change in parts of the American Midwest in 1990, but it has not yet been studied extensively in Albertan speakers. This study was designed to identify the extent and direction of this shift in Alberta. However, since group identification can affect language choices, this study also collected personality and demographic data to determine the role that community and group membership plays in language change. Finally, this study used stimuli in different modalities to find possible patterns in progenitors and resisters of language change.

2. Methodology

Participants were given a two-part questionnaire and a three-part recording task. The questionnaire consisted of demographic questions, such as the number of places lived and participant age, as well as asking participants to align themselves along personality binaries, such as leader/follower, and religious/nonreligious.

The recording task consisted initially of a calibration step. In this step, participants were asked to read a list of [hVd] words encompassing known vowel phonemes of English. Next, the participants were asked to complete three blocks of recording, based on the modality of stimuli presented: Orthographic, auditory, and pictorial. Participants were presented with a stimulus and asked to read, repeat, or identify the object (or nonword) presented. Nonwords in the pictorial block were presented as simple equations of <picture> + <picture>, with the participant being asked to combine the two pictures into a new word. For example, <dog> + <bat> prompts the participant to say “dat.” Some words in the auditory portion were produced with [æ], a vowel not found in English, to measure the extent to which a recent production influences the vowels produced.

3. Results

Participant recordings were divided into individual .wav files and each vowel’s first three formants were extracted in Praat [2]. Participants’ vowel space was mapped and their results normalized. One participant’s results were removed due to errors in recording. Half of the participants (n = 9) showed no significant difference in vowel F2 between their productions of [æg] and [ɛg] (p < 0.05). These participants were labeled “Mergers.” (See Figure 1).

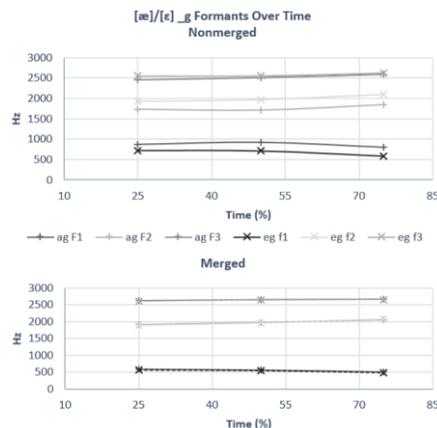


Figure 1. Formant comparison.

Preliminary analysis of the data collected suggests:

- Participants who have spent time outside the province are more likely to merge the vowels before [g].
- Merged vowels before [g] do not align to participants’ [æ] or [ɛ] in other contexts, but represent a middle ground.
- In nonword contexts, participants are less likely to merge [æ] and [ɛ] before [g], but are more likely to be influenced by the modality of the stimulus.
- Participants who merge the vowels are influenced more by the auditory prompts in all contexts.

4. Discussion

The current dialect of university-aged students in Southern Alberta shows that [æ]/[ɛ] is a merge-in-progress. Those that leave Alberta and return seem either more willing or better equipped (via experience with variation) to adapt and adopt what they perceive as “local” dialect cues.

Preliminary results support the hypothesis that there are “innovative listeners”, as described by Beddor [4], who participate more readily in sound change because they weigh new input more heavily than old input. These speakers’ reproductions of auditory stimuli are often closer to the productions of the auditory prompt than to their own vowel.

5. References

- [1] Zeller, C. 1997. “The investigation of a sound change in progress: /æ/-/ɛ/ in midwestern American English.” JEL 25.2:142-155.
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