The California Vowel Shift and Gay Identity

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Introduction

- Dialectologists have long recognized the connection between regional accent features and place identity.

- Sociolinguistic variationists have turned their attention to the use of regional accent features in the construction non-place identities.

- Features of the California Vowel Shift (CVS) have been associated with gender (Eckert 2006), ethnicity (Fought 1999, Hall-Lew 2009), gang affiliation (Mendoza-Denton 2008), and even emotional expression (Eckert 2008).

- This paper examines whether the CVS can be used in the construction of gay identity.
The California Vowel Shift

(adapted from Eckert 2008)
Vowel Quality and Gay Identity

- Most previous work on acoustic correlates of sounding gay examines suprasegmental (fundamental frequency and voice quality) and consonantal features (e.g. spectral and durational properties of sibilants) rather than vowel quality.

- Given the use of CVS to display emotion (Eckert 2008), and that phonetic performances of emotion can index gayness (Podesva 2007), it follows that CVS could partly constitute gay identity.
Vowel Quality and Gay Identity

- Laboratory Phonology work on Gay Vocalic Variation
  - Pierrehumbert et al. (2004) report that gay men exhibit more expanded vowel spaces than their heterosexual counterparts. (May be indicative of a tendency toward hyperarticulation in some gay-sounding speech styles.)
  - Munson et al. (2006) find that gay men exhibit lower BAT and BET vowels and slightly fronter BOOT vowels than their heterosexual counterparts.
Vowel Quality Predictions

KEY
California Vowel Shift
Pierrehumbert et al. (2004)
Munson et al. (2006)
Approach

- Intraspeaker variation
  - Previous work on CVS and sounding gay examines interspeaker patterns
  - Facilitates exploring how vowel quality might be employed as a resource for identity construction

- Conversational speech
  - Previous work on sounding gay investigates read sentences or isolated words
  - Avoids separating speakers from social situations that might allow for expression of gay identity
Regan

- Background
  - Early 30s, gay, Vietnamese American
  - Grew up in Orange County; currently lives in San Francisco
  - Buyer for household products corporation

- Situations
  - Boys’ Night Out
  - Dinner with Friend
  - Meeting with Supervisor
Acoustic Analysis

- Self-recordings of 3 situations, 30 minutes each.
- Digitized at 44.1 kHz
- All monophthongal stressed vowels (N = 2,591) labeled using Praat.
- Measurements taken by script, using LPC formant tracking (10 coefficients in 5 kHz range) at vowel midpoint.
- F1, F2, F3, max f0, min f0, mean f0, and vowel duration
- Formant tracking errors corrected by hand.
Basic Patterns
Fronting of BOAT

+ p ≤ 0.1
* p ≤ 0.05
*** p ≤ 0.001

- boys' night out
- dinner with friend
- meeting with supervisor
Raising of BAN Boys’ Night Out
Raising of BAN Dinner with Friend
Raising of BAN  Meeting with Supervisor
Raising of BAN Situations Compared

- Regan’s degree of raising in the boys’ night out situation is significantly greater than that in the meeting with supervisor situation ($p \leq 0.01$).

- His degree of raising in the dinner with a friend situation is suggestively greater than that in the meeting with a supervisor situation ($p \leq 0.1$).

- No difference between boys’ night out and dinner with friend situations.

- Regan raises BAN most in the boys’ night out situation and least in the meeting with supervisor situation.
Backing of BAT Boys’ Night Out
Backing of BAT Dinner with Friend
Backing of BAT Meeting with Supervisor
Three-way contrast in degree of backing between the three situations ($p \leq 0.001$ between each combination).

Regan’s degree of backing is most extensive in the boys’ night out situation, less extensive in the dinner with friend, and least extensive in the meeting with supervisor.
In Regan’s speech, all components of the CVS vary according to the speaking situation.

All features are most advanced in the Boys’ Night Out situation and least advanced in Regan’s meeting with his supervisor.

Results are most consistent with predictions of CVS.
What do the patterns mean?

- Does the use of advanced features of the CVS correlate with the use of other linguistic variables?
- Style

‘a socially meaningful clustering of features within and across linguistic levels and modalities’

(Campbell-Kibler et al. 2006)
## Correlations with Other Linguistic Features

### Frequency of Falsetto Use

<table>
<thead>
<tr>
<th></th>
<th>Boys’ Night Out</th>
<th>Dinner with Friend</th>
<th>Meeting with Supervisor</th>
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</thead>
<tbody>
<tr>
<td>Falsetto Utterances (N)</td>
<td>38</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>Total Utterances (N)</td>
<td>383</td>
<td>449</td>
<td>365</td>
</tr>
<tr>
<td>% Falsetto</td>
<td><strong>9.92%</strong></td>
<td><strong>5.35%</strong></td>
<td><strong>0.27%</strong></td>
</tr>
</tbody>
</table>

(χ² = 34.98, df = 2, p ≤ 0.001)
Correlations with Other Linguistic Features
Phonetic Properties of Falsetto

Previous analysis of discourse links falsetto to expressiveness. * (p ≤ 0.05)
Correlations with Other Linguistic Features
Falling Declarative Intonation

<table>
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</thead>
<tbody>
<tr>
<td>f0 Max (Hz)*</td>
<td>224</td>
<td>191</td>
</tr>
<tr>
<td>f0 Range (Hz)**</td>
<td>163</td>
<td>136</td>
</tr>
<tr>
<td>f0 Slope (Hz/ms)***</td>
<td>0.431</td>
<td>0.413</td>
</tr>
</tbody>
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* three-way significant difference (p ≤ 0.01)
** three-way significant difference (p < 0.05)
*** two-way significant difference (p ≤ 0.01)

Previous analysis of discourse and work in psychology (Scherer 1974, Pell 2001) link high pitch levels to animatedness.
Regan’s Stylistic Package

Boys’ Night Out

- Advanced features of the California Vowel Shift
- Frequent use of falsetto, produced for longer stretches of time and reaching higher pitch levels
- Falling declaratives with high maximum f0 levels, wide f0 ranges, and steep slopes
Nonheteronormativity, the Partier Persona, and Gay Identity

- The co-occurrence of the CVS and non-heteronormative pitch patterns hints at a connection between CVS and gay identity.

- Partier Persona – drinking heavily, frequenting clubs, oppositional positioning to non-partiers

- While the partier persona is not wholly gay, it is a particularly gay brand of partying that Regan endorses.
Questions for Discussion

- What social meanings are associated with a California accent?
- Which of these meanings can be recruited in the construction of gay styles?
- Can non-Californian regional dialect features be used as a component of a gay accent?
  - Eckert’s (2000) work linking newer components of the Northern Cities Vowel Shift to working class toughness suggests not.
Future Directions

- Investigate how advanced tokens of the CVS are employed in interaction.

- Conduct matched guise perception study using resynthesized vowel tokens (showing varying degrees of fronting, raising, and backing), administered to three different groups: people who know Regan well, Californians, and people from elsewhere.

- Track the enregisterment of the CVS through orthographic representation (Agha 2003, Johnstone et al. 2006, Zhang 2008).
Conclusion

- Work on phonetic correlates of sounding gay should take regional accents into account (as argued by Munson and Babel 2007), since what constitutes an “extreme variant” may depend on the particular linguistic system that structures the variation under consideration.

- Examining intraspeaker variation is a fruitful means of tapping into the social meanings of components of the CVS.
## References

- Campbell-Kibler, Kathryn et al. 2006. The elements of style. Poster presented at New Ways of Analyzing Variation 35. Columbus, OH.
- Eckert, Penelope. 2008. Getting emotional about social meaning in variation. Paper presented at New Ways of Analyzing Variation 37, Houston, TX.
Regan exhibits consistent cross-situational patterns for each of the four components of the CVS examined. That is, BOOT fronting, BOAT fronting, BAN raising, and BAT backing were all most advanced in the boys’ night out situation and least advanced in the meeting with supervisor situation. Yet the components of the shift are at different stages in the historical change. Is the social meaning of the CVS uniform across its components, or do its components have differing meaning potentials?

Example: BOOT fronting is an older change than BOAT fronting. BOAT fronting has been claimed to be more perceptually salient. Is this due to the fact that the BOAT vowel is more frequent than BOOT and thus a better carrier of meaning?