Speech Style as a Predictor of /s/ Variation Across Multiple Contexts
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Research Questions
- How does English /s/ production vary stylistically?
- Can laboratory elicitation tasks be used in fieldwork?
- How does speech in laboratory tasks vary compared to read speech and interview speech?
- How does speech from those elicitation task types vary compared to speech in self-recordings?

Background
English /s/ production:
- Higher Centre-of-Gravity indexes non-heterosexual identity & non-gender-typical masculinity (e.g., Mack & Munson 2012; Zimman 2013; Podesva & van Hofwegen 2014; Saigusa 2016)

Speech elicitation Task Types:
- INTERVIEWS & READING PASSAGES (e.g., Labov 1966)
- LABORATORY TASKS (e.g., Map Task; Diapix; Pear Story)
- SELF-RECORDINGS (e.g., Podesva 2007; Sharma 2011)

Key Previous Research:
- Maniwa et al. (2009) - Higher frequency /s/ in read speech than conversational speech.
- Boyd et al. (2015), same speaker as the present study
  - Some vowels more shifted in SELF-RECORDINGS than INTERVIEWS.
  - Some vowels more shifted in LAB TASKS than INTERVIEWS.
  - No differences between READING PASSAGES and INTERVIEWS.

Methods

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<thead>
<tr>
<th>Time &amp; Style Contrasts Analysed</th>
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<tbody>
<tr>
<td>Year</td>
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- Transcribed and FAVE-aligned (Rosenfeldt et al. 2014)
- Praat script: CoG, Spectral Peak (other measures not reported)

Summary of Results
CoG, between the 2012 and 2013 interviews:
- sig.: 2012 (lower) vs. 2013 (higher)

CoG & S.Peak, within 2013 data, across task type:
- sig.: READING PASSAGE: (higher) vs. INTERVIEW: (lower)
- sig.: LAB TASK: (higher) vs. INTERVIEW: (lower)
- sig.: INTERVIEW: (higher) vs. SELF-RECORD: (lower)
- n.s.: LAB TASK = READING PASSAGE

CoG & S.Peak, within 2013 data, within task type:
- Self-recordings: sig.: with sister (lower) vs. with friends (higher)
- Lab tasks: Some significant differences, but no obvious patterns (e.g., no effect of monologic vs. dialogic tasks).
- Reading passages: No significant differences, but The North Wind and the Sun consistently patterns differently (see below).

LMER Bootstrapping Results

Discussion & Conclusion
- Participant self-recordings result in significant differences in phonetic production as compared to most other speech elicitation tasks (see also Boyd, et al., 2015).
  - Differences between different self-recording contexts are also predictive, even across relatively similar styles.
- Speech elicited in laboratory tasks like the Map Task (Brown, et al., 1984) or Diapix (Baker & Hazan 2011) differs significantly from interview speech, but not in the same way as we found for the vowel data. For /s/, speech from lab tasks resembles read speech.
  - When controlled elicitation is needed, sociophoneticians may as well use lab tasks instead of reading passages.

References Available Upon Request
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