New Directions in Sociolinguistic Methods

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Methods and Research

Questions

• How does what a listener believes about someone influence how they hear that person’s speech?

• What speech forms do different people use, and what predicts these forms? \( \rightarrow \) new technology
SOLIS

• a server at UHM that houses interview and conversation corpora

• multiple languages including Pidgin, English, Hawaiian, Khmer, Indonesian, Hungarian, Spanish, and Korean

• 100 interviews with Hawai‘i English speakers

• Uses LaBB-CAT (Fromont & Hay 2008)
**filter**

**select your filter criteria:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Transcripts</th>
<th>Layers</th>
<th>Corpus</th>
<th>Language</th>
<th>Gender</th>
<th>Birth Year</th>
<th>Hawaii Born</th>
<th>City</th>
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[Search] [Export]

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<th>Year</th>
<th>City</th>
<th>Race</th>
<th>Gender 2011</th>
<th>Notes</th>
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yeah 'cause I guess like maybe like what's happening on
"What a d- s kind of telling my cousin about it and I’m like ‘wait your birthday’s in March’"
Last Semester (SP12)

- 4 student researchers, 17 speakers
- 7,526 tokens, all of which were checked by hand
- F1 and F2 extracted at 7 points throughout the vowel using a Praat script
Older female

About Elsie

- From Kaneʻohe
- 66 years old
- Chinese & Hawaiian
- English
- Hawaiian Mission Academy (Private)

Elsie’s Vowels in Brief

**DRESS**
friendly vs. respectful

**TRAP**
family
happy
mad
About Lei
• From Kāneʻohe
• 21 years old
• Hawaiian
• English & Pidgin
• Castle High School
  (Public)

Lei’s Vowels in Brief

DRESS
definitely

TRAP
families
dad
grandfather
Other research with LaBB-CAT

- English (NZE: Docherty et al. 2006, Hay & Bresnan 2006; Scotland: Smith & Stuart-Smith)

- Māori (Maclagan et al. 2009)

- German (Jannedy 2010; work by Heidi Quinn)
Increasingly, sociolinguistics are looking at variation in speech perception in addition to production...
What social characteristics are attributed to a speaker based on how they talk?

- **ethnicity** (Purnell et al. 1999)
- **regional origin** (Clopper & Pisoni 2004)
- **vowels and perceived sexuality** (Munson et al 2006)

Can social information affect how speech is perceived?
Identification Task with Photo Manipulation

• Different photos are paired with the same token, for different groups of participants

• Example: Hay et al. (2006b) NEAR-SQUARE merger
NEAR/SQUARE Merger -distinct speaker- 🎧

![Graph showing the NEAR/SQUARE Merger with distinct speakers.](image)
NEAR/SQUARE Merger
-merged speaker-
The NEAR-SQUARE merger is led by young females from lower socioeconomic groups

Prediction:
If a listener believes a speaker is from this group (and therefore likely to merge) they may be less accurate at identifying tokens of NEAR and SQUARE
beer  bare
• Subjects rate characteristics about the people in the photographs

• The test whether these ratings predict accuracy

• Results provide evidence that social info attributed to the person in the photo affects perception of a sound undergoing merger.
Lexical Ambiguity Task

- Staum Casasanto (2010)

Is this a sensible sentence?
heard: “The mas’/mass probably lasted…”
saw: …through the storm.
…an hour on Sunday.
Predictions

People will respond faster to the *mast* interpretation when it is seen with a black face than with a white face.

People will respond faster to the *mass* interpretation when it is seen with a white face than with a black face.
Ambiguity

...an hour on Sunday.
Ambiguity

...through the storm.
Ambiguity

...through the storm.
Ambiguity

...through the storm.
Other work in this area

- **gender** (Strand & Johnson 1996; Johnson, Strand & D’Imperio 1999)
- **region** (Niedzielski 1999; Hay et al. 2006a)
- **social class** (Hay et al. 2006b)
- **ethnicity** (Staum Casasanto 2010)
- **age** (Hay et al. 2006b; Drager 2011)
- **toys** (Hay & Drager 2010)
• Experimental methods and mining of datasets are both increasingly being used to explore questions relevant to sociolinguistics

• To date, few sociolinguistic studies combine these methods... but it’s only a matter of time.
Happy Birthday, LDC!

And thank you to:

• Robert Fromont
• Kurt Brunner

• Joelle Kirtley, James Grama, Sean Simpson, and Rebecca Clifford

• Jen Hay and Paul Warren
References

• Docherty, Gerry, Jen Hay, and Abby Walker 2006. Sociophonetic patterning of phrase-final /t/ in New Zealand English. Paper presented at ASSTA.


• Hay, Jen and Joan Bresnan. 2006. Spoken syntax.

• Jannedy, Stefanie. 2010. The Usage and Distribution of "so" in Spontaneous Berlin Kiezdeutsch.

• Maclagan et al. 2009. /u/ fronting and /t/ aspiration in Māori and New Zealand English.