Attitude as a dimension of sound change

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Introduction

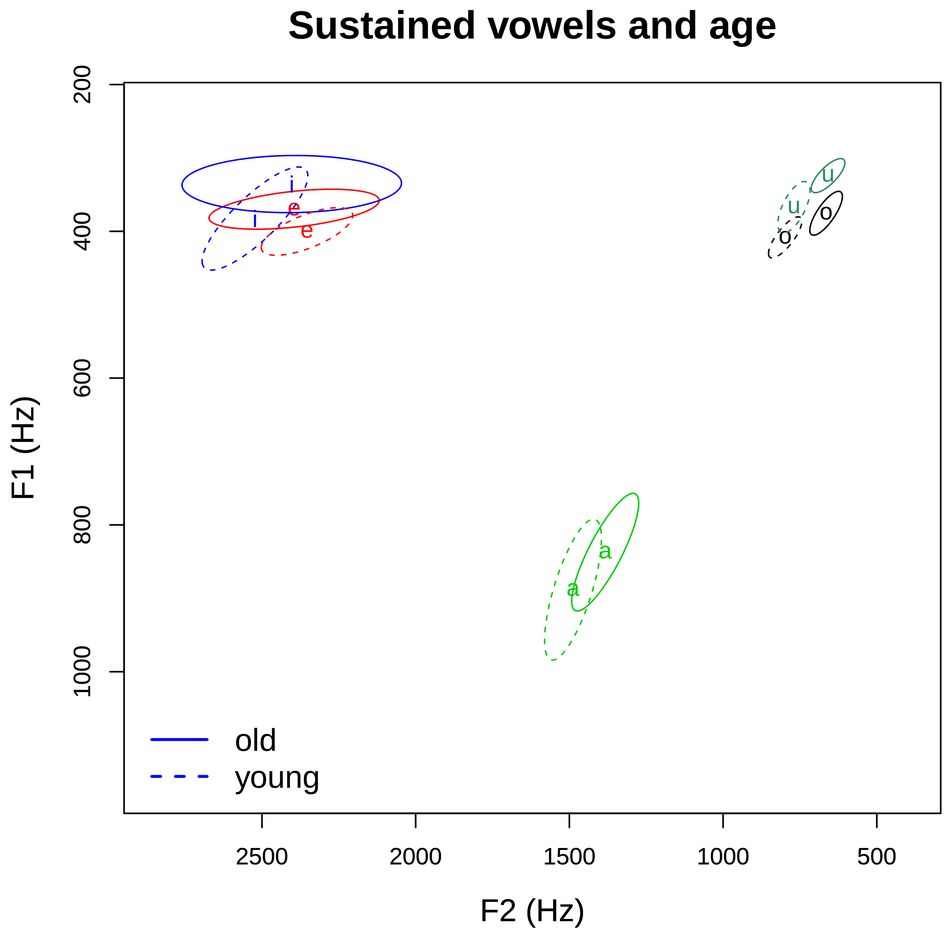
- Hungarian mid and close long vowels are being shortened in a sound change in progress (Mády 2012).
- Quantity perception of unstressed /o:/ and /u:/ is different by old and young listeners (Mády 2010).
- This difference can be linked to a relative age difference, without assuming a sound change in progress (Harrington, Palethorpe & Watson 2007).
- Perception differs also according to implicit attitude measurements (Mády 2012).

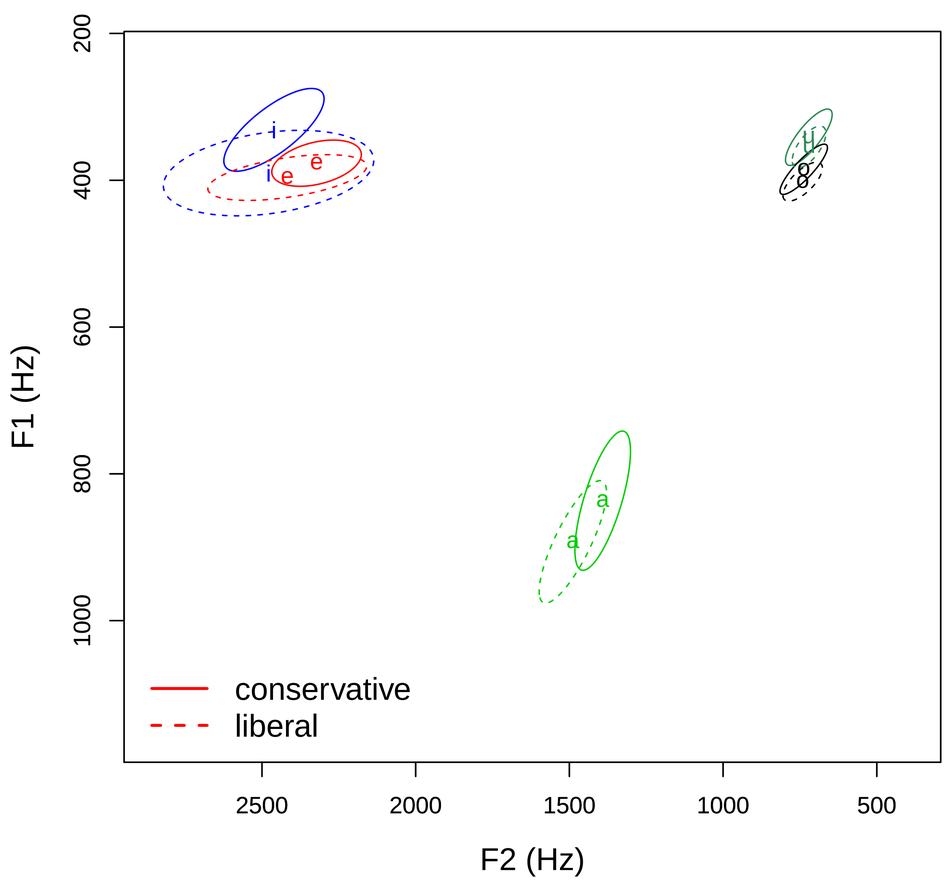
Methods

Set 1: sustained vowels /a e i o u/.
Set 2: stressed and unstressed /o:/ and /u:/ in carrier words, embedded in sentences. Flanking consonants were alveolars.
Speakers: 13 young speakers (18–20 y.), 12 old speakers (> 50 y.). Even distribution of gender. 5 repetitions.
Implicit attitude: utterances with substandard linguistic forms + spotting of "incorrect" utterances → conservative and liberal participants.

Results

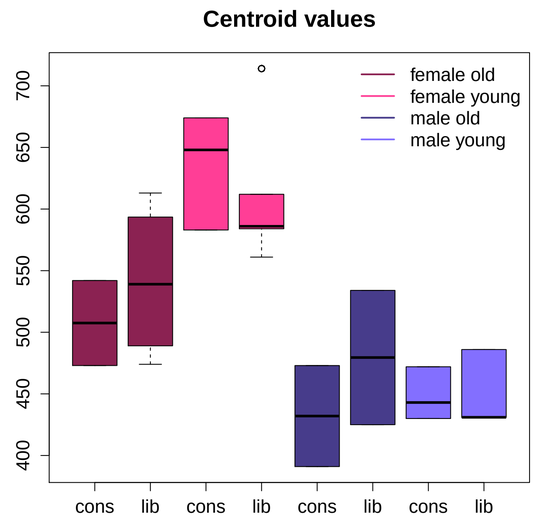
Sustained vowels





BUT: attitude between genders not evenly distributed: more conservative males and liberal females.

Centroid values: midpoint of vowel space based on sustained /i a u/ for each speaker.



Embedded vowels

Euclidean distance from sustained target vowel /o/ or /u/ (ED).

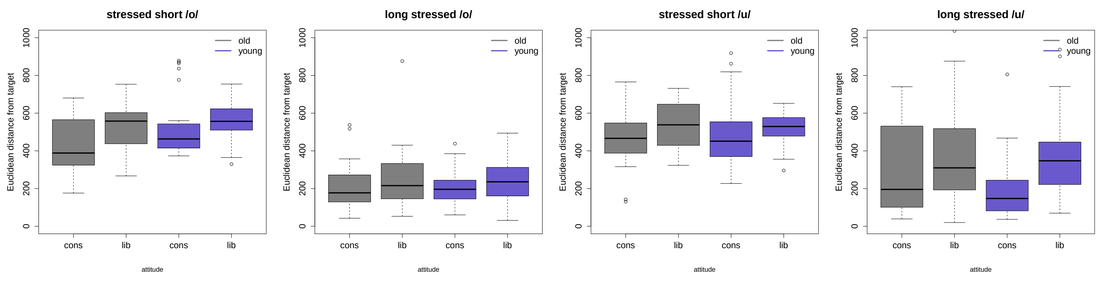
Advantage: male and female speakers are comparable.

ANOVA for each vowel type with age and attitude as fixed factors.

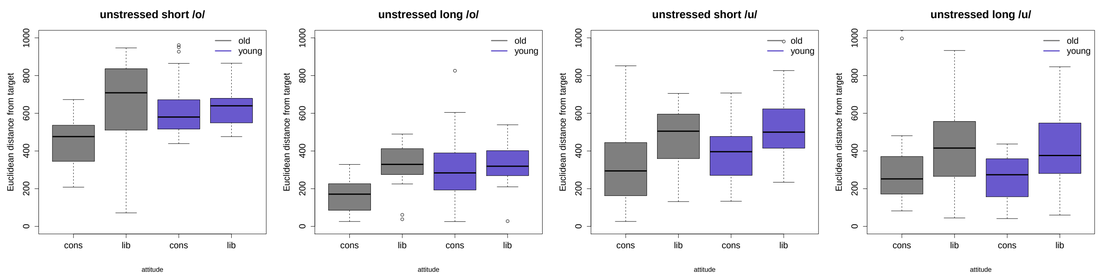
Effect of age and attitude:

- No effect on stressed vowels, exception: age on short /u/.
- Effect of attitude on unstressed /u/ and /u:/.
- Effect of age and attitude on unstressed /o/ and /o:/.

Stressed vowels:



Unstressed vowels:



Discussion & conclusions

- Vowels were more close and more back for old speakers ∼ Harrington et al. 2007.
- Tendency less true for liberal old speakers than for conservative ones.
- Same tendency for young speakers.
- Boundaries of sound categories are affected by age as well as attitude in both perception and production – this assumption can be modelled by exemplar theory (Pierrehumbert 2001, Walker & Hay 2011).
- Attitude is a separate dimension of sound change on its own.

References

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