

Longitudinal Changes in English Accents at UCU

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Research questions

speech accommodation:
partners in conversation
converge (accommodate) to
each other [1]

to reduce social distance [2]

- with L2/L1 speakers?
- what resulting accent? [3]
- longitudinal recordings
- descriptive models of phonetic measurements
- plus listening experiments assessing intelligibility

Corpus



- n=282 UCU students from cohorts 2010 to 2013
- about 60% native Dutch, 5% native English, 35% other
- 5 interviews of ~20' with same speaker, **longitudinal**, over 3 years
- **English**: read sentences, read texts, read UN Decl Human Rights, informal and formal monologues, dialogue.
- **LI**: read UN Decl Human Rights, informal monologue
- metadata: questionnaires, audiometry, administrative



Challenges

- data collection - 6 years!
- on-campus office; evenings only!
 - logistics (150 interviews in 6 weeks)
 - ~900 hours, ~12 interviewers, how to safeguard consistency?
- validation - did speaker indeed say X?
- conformity with speakers' consent
- is **privacy** and anonymity assured?
 - with (**future**!) speaker recognition?
 - what if anonymity would be violated?
- sexual abuse story "I was so mad at my flatmate Lisa for sleeping with Thomas..."
- transcription - what did speaker say?
use speech technology
- metadata link speech data with metadata (both static and dynamic) across 5 recordings
- integrity adhering to backup schedule is difficult (~20 GB/interview, ~2.5 TB total)

Dissemination

- with metadata
- using ISOcat labels: "mother tongue" yes/no, vs "native language" + codes
- linking recordings by speaker
- CLARIN compatible storage
- MPI: The Language Archive
- Meertens Institute
- access only after compliance with consented terms of usage
- ... for linguistic research and development ...
- ... ensuring anonymity ...

Future plans

- **integration** of production and perception
- use same individuals as speakers and as listeners, correlate findings
- network analysis
- how is convergence related to (prestige in) social network? who converges to whom?

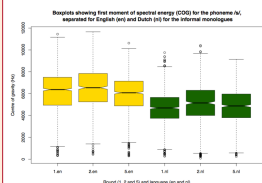
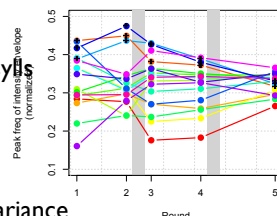
Some findings

rhythmicity: degree of reduction of unstressed syllables

Dutch L2ers: **no change**

English L1ers: convergence towards **Dutch** values!

decreasing betw-speaker variance



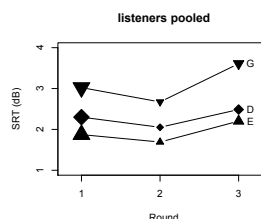
is /s/ **sharper** in English than in Dutch?

R1: contrast present
R2: Dutch and Eng sharper
R5: Dutch and Eng less sharp, contrast reduced, convergence towards **Dutch** values!

is converged speech more **intelligible** (lower SRT) than unconverged speech?

R1: unconverged, baseline
R2: lower SRT; less variance in SRT between talkers and between listeners, **more intelligible**

R3: **as R1**
no interlanguage benefit!



References

- [1] H. Giles, N. Coupland, J. Coupland, in *Contexts of Accommodation: Developments in applied sociolinguistics* (CUP, Cambridge, 1991), pp. 1-68.
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- [3] J. E. Flege, in *Speech Perception and Linguistic Experience: Issues in Cross-language research* (York Press, Timonium, MD, 1995), pp. 229-273.

Information

lucea.wp.hum.uu.nl



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