Longitudinal Changes in English Accents at UCU

Hugo Quené & Rosemary Orr
UiL OTS & UCU, Utrecht University

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

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?
  - is privacy and anonymity assured?
  - with (future!) speaker recognition?
  - what if anonymity would be violated?
- 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)

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.
- L1: read UN Decl Human Rights, informal monologue
- metadata: questionnaires, audiometry, administrative

Some findings

- Rhythmicity: degree of reduction of unstressed syllables in English
- Dutch L2ers: no change
- English L1ers: convergence towards Dutch values!
- decreasing betw-speaker variance

Bioacoustics: 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!

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?

References


Information

lucea.wp.hum.uu.nl

Thanks to Lisa Teunissen and all facilitators!

Hugo Quené  h.quene@uu.nl
www.hugoquene.nl

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 ...

OTU & UCU, Utrecht University

Tip: http://lobepurinton.com/tips/poster-design