Exploring Lexical Variation in a Growing Corpus of DGS

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Data
- Filmed conversations and staged communicative events (Nistico et al. 2010)
- Multi-modal corpus, formalised and accessible through Lex (Hanke & Storz 2008)
- About 560 h footage of natural signing
- Laminated: 576,400 tokens (2019-23)

Starting Point
- The size of our corpus supports analyses of regional variation. Distributional characteristics of roughly synonymous sign clusters can easily be visualised on maps (cf. Hanke et al. 2017).
- Sometimes several competing signs of a sign cluster are used within the same region and even by a single individual.

Question
- Looking beyond regional and sociolinguistic background: What other factors influence the lexical choice of signers?

Lexical Choice - within Semantic Clusters

Synonymy cluster for ‘speak, talk, say, language’
- 5 different signs located at mouth (similar iconic motivation)
- Includes 2575 tokens from 263 persons in the corpus
- Overlapping meanings
- No clear regional distribution: several signs used in each region
- Assumption: slight meaning differences

Investigation: closer look at use by one person “signer X” reveals use of different forms for different meaning aspects for this one person

Apparent time map (cf. Hanke et al. 2017) of one of 22 lexical variants compared to ‘bread’

Political Correctness / Age Variation

In the case of ‘Africa’ the preferred use of a lexical variant AFRICA1 (used by 21 informants) in comparison to AFRICA2 (used by 4 informants) is attested.

This is a case of age variation. AFRICA2 apparently is becoming obsolete. This may be due to the fact that it is perceived as politically incorrect.

Use of signs for ‘Africa’ by age groups: 35 tokens (with 62 tokens)

Lexical Choice - Homonymy Avoidance

Regional distribution of lexical variants found e.g. for signs for ‘girl’ seems to corroborate the hypothesis of homonymy avoidance (see Gillyéron & Roques 1912, and for signed languages Boyles Baer 1981, Cuauz 2000).

But: Corpus data also show lemma pairs or clusters of homonymous signs in the same region.

Apparent time (cf. Hanke et al. 2017) of one of 10 lexical variants compared to ‘woman’ also may suggest that homonymy avoidance plays a role in regional language change. In Bavaria and Hesse the homonymous sign for ‘bread’.

Use of signs for ‘woman’ by age groups: 36 tokens (with 77 tokens)

Conclusion:
- Use of signs for ‘Africa’ by age groups: 35 tokens (with 62 tokens)
- Apparent time only allows a rather coarse diachronic view on the data, computing processes like establishment of new meanings and levelling would need a finer granularity on the timeline to be separated. Exact synonyms (lexical variants) are rare, if not regionally distributed.
- Homonymy avoidance cannot be claimed as a general rule, but we find data fitting the pattern.