The morphosyntactic representation of language varieties: bivarietal syntactic priming

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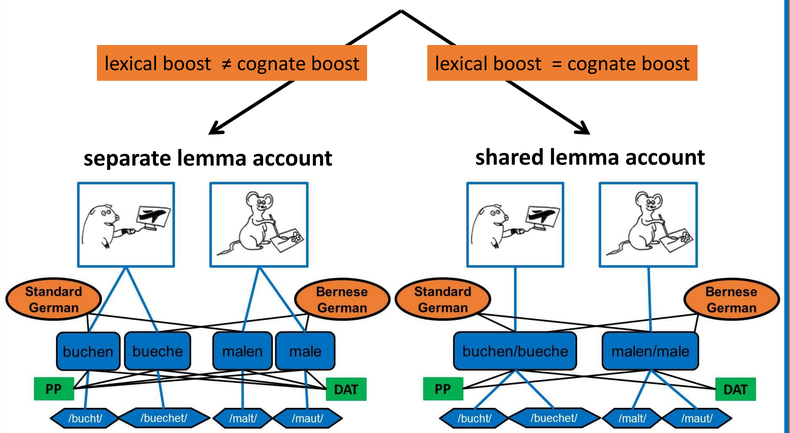
INTRODUCTION

The words of a bivarietal speaker are very often cognates, that is words which are very similar in form, sound and meaning. How are these cognates stored in the mental lexicon?

Bilingual studies have shown that lemmas (abstract word forms) are represented separately – even for cognates and even in speakers of very closely related languages (Schoonbaert et al., 2007; Cai et al., 2011). To investigate whether we can find more integrated representations in varieties of a language, we tested syntactic priming of verb phrases in speakers of Bernese German (dialect variety) and Standard German (standard variety). These two varieties are very similar, as they share a large part of grammar and vocabulary, but they are still clearly distinguishable and each variety serves specific functions (education, media, official publications vs. everyday spoken language, informal text).

- **Do bivarietal speakers of Bernese and Standard German have separate lemma representations – as with two different languages – or shared lemma representations?**

This was tested by comparing the magnitudes of priming effects when verbs are repeated within a variety (lexical boost) and when cognates are repeated between the varieties (cognate boost).



METHOD

Participants:
72 speakers of Bernese and Standard German

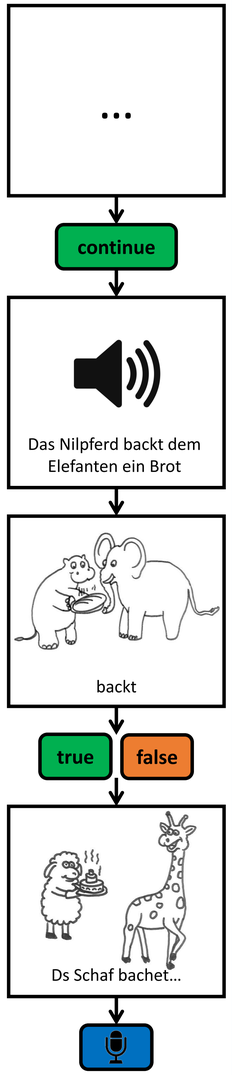
Task:
- Computer-based syntactic priming experiment: Participants heard a sentence (prime sentence) and subsequently described an event in their own words (target sentence)
- Distraction: Picture matching task
- Response variety: Bernese German

Manipulated factors:
- PRIME VARIETY: Half of the prime sentences were presented in Bernese German, the other half in Standard German
- VERB RELATION: Half of the sentence pairs contained completely different verbs, e.g. *bachet – maut/malt;* the other half contained the same verb (or the Standard German cognate verb), e.g. *bachet – bachet/backt*
- PRIME STRUCTURE: Prime sentences contained a prepositional phrase (PP) or a dative (DAT):
  PP: *Das Nilpferd backt ein Brot für den Elefanten*
  (the hippo bakes a cake$_{ACC}$ for the elefant$_{PP}$)
  DAT: *Das Nilpferd backt dem Elefanten ein Brot*
  (the hippo bakes the elefant$_{DAT}$ a cake$_{ACC}$)

Stimuli:
- 32 critical items consisting of a prime picture, a prime sentence and a target picture
- 96 filler items with transitives and intransitives

Data analysis (logit mixed effect model LME):
Dependent variable:
- Primed (i.e. same structure as prime) vs. unprimed (i.e. alternative structure)

Random effects:
- By-participants
- By-items
- Random slopes for verb relation



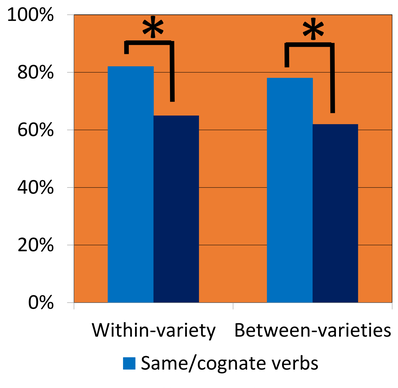
RESULTS

Responses:
- PP: 1261 (55%)
- DAT: 881 (38%)
- Other: 162 (7%)

Priming effects:
The number of all primed responses divided by the sum of all primed and unprimed responses

Results:
- Main effect of verb relation (in both variety conditions)
  → boost effects
- No interaction
  → lexical boost = cognate boost

Priming effects in each condition:



LME results:

	Estimate	*SE*	*z*	*p*
Intercept	-1.153	0.107	-10.758	<.001
Verb relation	-1.082	0.206	-5.253	<.001
Prime variety	0.194	0.105	1.857	0.063
Prime variety*Verb relation	0.154	0.209	0.738	0.461

DISCUSSION

We found evidence for integrated lemma representations of cognates in speakers of Bernese and Standard German. This finding contrasts with the results of bilingual studies, which imply separate representations for cognates. We propose a shared lemma account for cognates in bivarietal speakers, when the cognates are close enough.

REFERENCES

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