Lexical competition between linguistic varieties

Marie-Anne Morand & Constanze Vorwerg (University of Bern)
Marie-Anne.Morand@isw.unibe.ch

Intra- and inter-speaker variation is omnipresent in communication between interlocutors. However, how systematic variation, such as between different language varieties, is processed and how it is mentally represented is largely under-researched. Only few studies have focused on non-standard varieties of a language [1-3], and influential language production models do not explicitly take language variation into account. For lexical selection, the question is whether there is competition between lexical items from different language varieties of a speaker, such as (Swiss) Standard German (SG) and Bernese German (BG). BG is a dialect spoken in the area of Bern, while SG is used in educational settings and some specific contexts, and for most written language – a situation often described as diglossia.

Using an experimental design developed by Costa et al. [4] for studying Catalan-Spanish bilinguals, we conducted a picture-word interference experiment in BG, with written distractors in both varieties. In Costa et al.'s study, a *facilitatory* effect of simultaneously presented picture names in the non-target language was found, as already known for monolingual identity distractors. This was interpreted as evidence against competition between languages in bilingual speakers. The question addressed by the present study is, whether SG and BG behave similarly, or whether there is competition between lexical items from the two varieties. In addition, we investigated semantic interference within and between varieties, which has already been studied for both mono- and bilingual production.

Twenty BG-speaking students named the pictures in Bernese German. Distractors were either identical with the picture name, semantically related to it, or unrelated, in one of the two varieties. We measured response latencies by means of a voice key and checked its accuracy in all critical trials subsequently with the help of Praat. Distractor VARIETY and TYPE were both within-subject variables.

A 2x3 ANOVA with repeated measures revealed significant main effects for both distractor VARIETY ($F1(1,19)=13.44, p<.01, \eta^2=.01; F2(1,11)=5.72, p<.05, \eta^2=.02$) and distractor TYPE ($F1(2,18)=16.47, p<.001, \eta^2=.20; F2(2,10)=6.32, p<.05, \eta^2=.22$) in both analyses. The interaction was significant only by participants ($F1(2,18)=5.50, p<.05, \eta^2=.09; F2(2,10)=1.33, p=.307, \eta^2=.05$). Faster responses were observed with BG than with SG distractors. Pairwise comparisons revealed strong identity facilitation (-45ms; by participants $p=.001, \eta^2_p=.52$; by items $p=.003, \eta^2_p=.56$) within BG, but no cross-variety identity facilitation (+1ms, by participants $p=.667, \eta^2_p=.01$; by items $p=.984, \eta^2_p=.00$). There were tendencies for semantic interference within BG (+20ms; by participants $p=.122, \eta^2_p=.12$; by items $p=.168, \eta^2_p=.17$) and between SG and BG (+27ms; by participants $p=.052, \eta^2_p=.18$; by items $p=.095, \eta^2_p=.23$).

Results suggest that Bernese German and Standard German compete for selection, but Standard German lexical entries are actively inhibited when Bernese-German lexical items are accessed – possibly due to the (distant) sociolinguistic status of this variety [5]. The finding that there is no cross-variety identity effect, but maybe even slightly stronger between- than within-variety semantic interference is incompatible with the hypothesis of variety-specific selection processes. If selection were variety-specific, we should have observed facilitation with identical SG distractors, via semantic representations. Results are rather consistent with the idea that naming alternatives from the standard variety are suppressed during lexical access, via inhibitory links between naming alternatives, while semantic interference is even stronger across varieties.

References

[1] Vorwerg, Lüthi, Straessle, & Pickering (2014). Poster presented at CUNY. [2] Cai, Pickering, Yan, & Branigan (2011). *JML 65*, 431–445. [3] Kambanaros, Grohmann, Michaelides, & Theodorou (2013). *BLC 17*, 169–188. [4] Costa, Miozzo, & Caramazza (1999): *JML 3*, 365–397. [5] Lüthi & Vorwerg (2014). Paper presented at AMLaP.