Lexical Selection in Bivarietal Speakers

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Stroop-like interference in picture naming has aroused researchers' interest since the 1970s. In this paradigm, participants name a picture while being presented with a distractor word that is to be ignored. Semantically related distractors have been found to slow down the naming response, suggesting that both words are activated in parallel during lexical access. Picture-word interference (PWI) experiments have mostly focused on lexical processing of either mono- or bilingual speakers. There have hardly been any studies that looked into lexical selection for speakers of two discrete, but closely related language varieties (e.g. Kambanaros et al. 2013).

Using an experimental design developed by Costa et al. (1999) for studying Catalan-Spanish bilinguals, we have conducted a picture-word interference experiment with written distractors in either (Swiss) Standard German (SSG) or Bernese German (BG). The latter is a dialect of High Alemannic German (mostly) spoken in the region around the capital city of Switzerland (Bern). The aim was to study bivarietal lexical processing with respect to the question of whether words of both varieties of German compete for selection in language production.

Participants were asked to name the pictures as fast as possible in Bernese German. The distractors were either identical (iden) with the picture name, semantically related to it (sem) or unrelated (unrel). In contrast to semantic interference, an identical distractor usually leads to facilitation. Cross-language identity was investigated in Costa et al.'s study, which found an identity effect for same- and different-language pairs. This facilitatory effect was interpreted as evidence *against* competition for selection between languages in bilingual speakers and in favor of a language-specific selection mechanism. The question addressed by this study was, whether there might be competition between the two varieties of German investigated, or whether they would behave like different languages.

The twenty participants of our experiment are Bernese German speaking students (mean age: 23.6). Distractor variety (BG, SSG) and type of distractor (iden, sem, unrel) were within-subject variables. We carried out an ANOVA by participants (F1) and by items (F2). Main effects in both analyses were significant, as well as the interaction in F1 (p = .014). Faster responses were observed with BG distractors than with SSG ones (mean: BG = 692 ms, SSG = 712 ms). This difference was significant (p < .05). Pairwise comparisons reveal strong identity facilitation and slight semantic interference within Bernese German, but no cross-variety identity facilitation, with a clear semantic interference between SSG and BG. These results suggest that there is no cross-varietal competition in lexical selection between Bernese German and Standard German, but an inhibition of Standard German when accessing Bernese-German lexical items.

References

Costa, A., Miozzo, M., Caramazza, A. (1999): Lexical selection in bilinguals: Do words in the bilingual's two lexicons compete for selection? *Journal of Memory and Language 3*: 365–397.

Kambanaros, M., Grohmann, K., Michaelides, M., Theodorou, E. (2013): On the nature of verb-noun dissociation in bilectal SLI: A psycholinguistic perspective from Greek. *Bilingualism: Language and Cognition 17*: 169–188.