

LEXICAL SELECTION IN BIVARIETAL SPEAKERS: V2 SPEECH PRODUCTION

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The selection mechanism that underlies word production has been studied for several decades [e.g., 1]. However, experiments with mono- and bilingual speakers have almost exclusively been conducted using standard languages. The sociolinguistic situation in the Swiss German speaking part of Switzerland lends itself to investigating lexical processing between language varieties, because Standard German (SG) and various dialects of Swiss German co-exist in a situation often described as diglossia [2]. In general, Swiss bivarietal speakers use spoken Standard German rather in education contexts and for outgroup communication, and Swiss German is preferred in all casual situations.

With regard to bilingual word production, Mahon et al. argue for a language-specific selection mechanism in bilingual word production [3]. Similarly, Costa and Caramazza present evidence against competition of the two lexicons of bilinguals during lexical access, for L1 as well as for L2 production [4]. Picture naming was facilitated when the name of the picture and the distractor word were the “same”, regardless of the distractor language. Morand and Vorwerg [5] examined the selection mechanism of bivarietal speakers in Switzerland and claimed that it is variety non-specific in Bernese German (BG) speakers with SG as a second variety (V2) for production in their first variety (V1). SG, however, is inhibited due to its sociolinguistic status. We wanted to test whether this inhibition of the non-response variety affects both directions. Using an experimental design developed by Costa et al. [6], we conducted a picture-word interference experiment to investigate bivarietal speech production in the V2 (SG). There should be cross-varietal competition from V1 picture name distractors, if lexical selection is variety non-specific and speakers do not inhibit their V1 in the same way. There should be facilitation, if lexical selection is variety-specific.

Thirty BG-speaking students took part in this experiment. They had to name 12 pictures in SG. Written distractors were presented simultaneously with the picture in one of both varieties, and were either identical with the picture name, semantically related to it, or unrelated. All word pairs were non-cognates. Response latencies were measured by means of a voice key, and its accuracy was afterwards checked with PRAAT.

Error analysis led us to exclude two items from further analyses as they received 8.3% and 7.8% erroneous responses (3.3% overall). A 2x3 ANOVA with repeated measures revealed significant main effects for both distractor VARIETY ($F(1,29)=37.69, p<.001, \eta^2=.04$; $F(1,9)=24.00, p<.01, \eta^2=.10$) and distractor TYPE ($F(2,28)=4.68, p<.05, \eta^2=.05$; $F(2,8)=4.60, p<.05, \eta^2=.06$). The interaction also proved significant in both analyses ($F(1,2,28)=28.33, p<.001, \eta^2=.22$; $F(2,8)=12.06, p<.01, \eta^2=.33$). Faster responses were observed with SG than with BG distractors. Pairwise comparisons revealed strong identity facilitation within SG (-62ms; by participants $p=.000, \eta^2=.38$; by items $p=.003, \eta^2=.56$), but no semantic interference (+3ms; by participants $p=.588, \eta^2=.003$; by items $p=.857, \eta^2=.002$). There was also no semantic interference between SG and BG (+2ms; by participants $p=.946, \eta^2=.000$; by items $p=.811, \eta^2=.003$). We did however find a significant cross-varietal identity interference by items (+25ms; by participants $p=.055, \eta^2=.05$; by items $p=.02, \eta^2=.22$).

Our results suggest competition between the two varieties, as we saw interference of identical-meaning distractors in BG. In addition to the response-time effects, these distractors also caused most errors. The inhibition of one variety, therefore, is directional. Similar to Hermans et al. [7] at SOA 0 ms, we found no semantic effect in V2 production between SG and BG. The reason for the absence of this effect within SG might also be due to the sociolinguistic distance associated with the standard variety.

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