Crosslinguistic influence in bilingual spelling development: evidence from two closely related language Dutch and German

Eva Knopp¹, Fleur de Mulder¹, Mirjam Broersma² & Roeland van Hout²

¹Radboud University, Modern Languages and Cultures ²Radboud University, Department Language and Communication

Contact author: eva.knopp@ru.nl

When bilingual children learn how to read and write in their two languages, the two developing systems may influence each other, also on their level of literacy (Genesee et al., 2006). There has been extensive research investigating crosslinguistic influence (CLI) in bilingual literacy development and factors that play a role in it (see ibid., Geva, 2014 for reviews). Many studies indicate that bilinguals share their literacy skills across their languages, particularly so when those skills apply to both writing systems (Bialystok et al., 2005; Koda, 2008). While CLI in literacy skills can be advantageous, it can also lead to negative transfer effects, particularly so, when the two writing systems differ, for instance in terms of the orthographic principles that underlie grapheme-phoneme correspondences.

Most studies investigating CLI in bilingual literacy development have focused on receptive skills, such as grapheme-decoding or word-reading (Genessee et al, 2006; Feinauer et al., 2013). They indicate that CLI in literacy skills is moderated by similarities and differences between the two linguistic and the two writing systems involved (Bialystok et al., 2005). Also child-internal factors, such oral language proficiency and dominance in oral language skills, play a role (Feinauer et al., 2013). In addition to this, it has been speculated that a bilingual advantage in metalinguistic abilities can compensate for reduced oral proficiency when bilinguals develop literacy in their weaker language (Bialystok, 2007)/ Few studies, however, have looked at CLI in bilingual spelling development and most of those focus on bilinguals with English as one of their languages (e.g. Howard et al., 2012; Savage et al., 2017). Howard et al. (2012), who investigated the spelling development of Spanish-English bilinguals in 2nd and 4th grade of primary school, found only little evidence of negative effects of crosslinguistic evidence, predominantly but not exclusively going from dominant to non-dominant language. They also found that negative transfer between the two systems considerably decreased from 2nd to 4th grade.

In the current study, we investigate CLI in bilingual spelling by examining the development of Dutch-German bilingual primary school children, who learn how to read and write in both of their languages. We present results from a pilot study in which we tested the word-spelling of 2nd and 4th graders (N=36) focusing on features in which the two orthographic systems differ (Landerl & Reitsma, 2005). Findings indicate that 2nd and 4th graders show extensive evidence of CLI leading to spelling mistakes. This happens to a greater extent in the non-dominant school-language, Dutch. However, this differs significantly between more balanced early bilinguals and more German-dominant late bilinguals. We also find that not all CLI-prone features are difficult to the same degree for the bilinguals in our study. Spelling skills improve in both languages for all bilinguals in our study. In contrast to Howard et al. (2012), however, we see that CLI-prone features still cause difficulties for 4th graders. We speculate that this might be related to the high degree of linguistic similarity between the two languages and writing systems, which may be a problem in the beginning. Interestingly, we see that in 2nd grade the more balanced bilinguals score higher than the German-dominant bilinguals, also in German. This could be an effect of enhanced metalinguistic awareness in this group of bilinguals.

References

Bialystok, E., Luk, G., & Kwan, E. (2005). Bilingualism, biliteracy, and learning to read: Interactions among languages and writing systems. Scientific Studies of Reading, 9(1), 43–61. http://doi.org/10.1207/s1532799xssr0901_4

- Bialystok, E. (2007). Acquisition of Literacy in Bilinguals. A framework for research. *Language Learning*, 57(suppl. 1), 45-77. http://doi.org/10.1111/j.1467-9922.2007.00412.x
- Feinauer, E., Hall-Kenyon, K. M., & Davison, K. C. (2013). Cross-language transfer of early literacy skills: An examination of young learners in a two-way bilingual immersion elementary school. *Reading Psychology*, 34(5), 436–460. https://doi.org/10.1080/02702711.2012.658142.
- Genesee, F., Geva, E., Dressler, C., & Kamil, M. L. (2006). Synthesis: Crosslinguistic relationships. In D. August & T. Shanahan (Eds.), *Developing literacy in second- language learners. Report of the national panel on language-minority children and youth.* (pp. 153–174). Mahwah, NJ: Lawrence Erlbaum Associates.
- Geva, E. (2014). Introduction the cross-language transfer journey a guide to the perplexed. Written *Language & Literacy*, 17(1), 1–15. http://doi.org/10.1075/wll.17.1.01gev
- Howard, E., Green, J., Arteagoitia, I. 2012. Can yu rid guat ay rot? A developmental investigatio nof cross-linguistic spelling errors among Spanish-English bilingual students. *Bilingual Research Journal*, 35(2), 164-178. https://doi.org/10.1080/15235882.2012.703637
- Koda, K. (2008). Impacts of prior literacy experience on second language learning to read. In K. Koda & A. M. Zehler (Eds.), *Learning to read across languages: Crosslinguistic relationships in first- and second-language literacy development* (pp. 68–96). New York: Routledge.
- Landerl, K., & Reitsma, P. (2005). Phonological and morphological consistency in the acquisition of vowel duration spelling in dutch and german. *Journal of Experimental Child Psychology*, 92(4), 322–344. https://doi.org/10.1016/j.jecp.2005.04.005
- Savage, R., Kozakewich, M., Genesee, F., Erdos, C., & Haigh, C. 2017. Predicting writing development in dual language instructional contexts: exploring cross-linguistic relationships. *Developmental Science*, 20. https://doi.org/10.1111/desc.12406.