Crosslinguistic priming in Norwegian-English bilingual children

The present paper considers the acquisition of word order by Norwegian-English bilingual children. Specifically, it focuses on the acquisition of possessive constructions, a structure which is relatively complex in Norwegian. In Norwegian, possessive pronouns can be prenominal or postnominal, depending on pragmatic factors: possessive pronouns are used prenominally to express contrast (1a), whereas postnominal possessives are neutral, and the possessive relation is given information (1b). In English, possessive pronouns are always prenominal (1c).

I investigate the word order choices of 4 to 7-year-old Norwegian-English bilingual children, by comparing the within-language and between-language priming effect of the prenominal word order in two different pragmatic contexts, a neutral one and one expressing contrast. Syntactic priming is a powerful tool to determine whether the abstract syntactic categories of two languages are stored separately or together, and if the activation of an abstract structure in one language determines the activation of the equivalent structure in the other. Studies that have focused on word order in different pairs of languages (e.g. Loebell and Bock, 2003; Hartsuicker, Pickering and Veltkamp, 2004) show that structural overlap is essential to priming, suggesting that only structures that are grammatical in both languages can be crosslinguistically primed. The case of possessive pronouns is particularly interesting in this respect, because both word orders are grammatical in Norwegian, but not equivalent, as they occur in different pragmatic environments. My hypothesis is that, given the pragmatic, and not syntactic, nature of the difference between the two word orders, it should be possible to prime the prenominal possessive from English to Norwegian even in contexts where the postnominal one would be appropriate. However, the priming effect should be stronger for those contexts where the two languages converge. Moreover, I predict that the priming effect should be stronger within-language (Norwegian to Norwegian) than between-language (English to Norwegian).

My data show that there is a statistically significant difference between the within-language and the between-language priming effect. Specifically, the strongest effect is found within-language, and the weakest is found between-language, in the context where the two languages diverge. I tested 25 bilingual speakers and found that, for the contrastive context within language, 89% (299/336) of the children produced the prenominal word order after hearing the prime (2a), and no children produced the postnominal one (2b). The remaining 11% (37/336) of the children produced an utterance that could be classified as “other” (2c). For the contrastive context in the between-language condition, I found that 68% (225/332) of the children chose the prenominal word order, 32% (107/332) chose the postnominal one, or “other”. Consistent with the predictions, it was also possible to obtain a priming effect for the neutral context; that is, children were primed to use the prenominal word order in contexts where the postnominal one would have been more appropriate. However, the effect was found to be significantly weaker, as only 21% (29/136) of the children produced the prenominal word order, while 79% (107/136) (produced the postnominal word order or “other”).
Examples

(1) a. min bil  b. bil-en min  c. my car
    my car car-def my
    ‘MY car’ ‘my car’

(2) a. hans bukser er grønne
    his trousers are green
    ‘HIS trousers are green’

 b. buksene hans er grønne
    trousers-def his are green
    ‘his trousers are green’

c. han har grønne buker på
    he has green trousers on
    ‘he is wearing green trousers’

References