

# The weight of dominance: Development of complex syntax at the early stages of Catalan-Spanish bilingualism

Adriana Soto-Corominas  
Johanne Paradis

University of Alberta

Compared to morphology or vocabulary, the development of syntax in bilingual children has received limited attention. Furthermore, extant research on bilingual syntactic development has mostly explored the development of the L2 in cases of foreign language acquisition, or majority L2 acquisition, and stable bilingual contexts, where children have sustained exposure to both languages in the environment, have not been investigated. Accordingly, this study examines the development of complex syntax in the two languages of Catalan-Spanish bilingual children born and raised in Catalunya, a bilingual autonomous province in Spain where education is in Catalan. Importantly, Catalan and Spanish do not differ in their complex syntactic structures. This study addresses two questions: (1) Is the use and growth of clausal density (i.e., syntactic complexity) influenced by language dominance? and (2) Are there differences in the range of complex syntactic structures used according to participants' dominance?

80 Catalan-Spanish bilinguals (ages 5-8) narrated two stories, one in each language. A parent questionnaire yielded information on participants' age, input quantity, and input quality. Children were classified into Catalan-Dominant (CDm) or Spanish-Dominant (SDm) considering their current and cumulative language exposure. CDms heard only/mostly Catalan in the home, and SDms heard only/mostly Spanish.

Sentences in the narratives were classified as *simple* (monoclausal) or *complex*. Complex sentences were further coded for their syntactic structure (sentential complement, adverbial, relative, ambiguous) and for their number of clauses. A measure of clausal density was calculated for each participant by dividing the number of clauses by the number of sentences.

To answer question (1), linear regression models were fit for each language, with the outcome variable being participants' clausal density. In the initial model, the predictors were parental years of education, Catalan/Spanish input quality, and an interaction between language dominance (either CDm/SDm) and age at testing. Backwards selection was used to obtain the optimal model. To address question (2), two chi-square tests, one for each language, compared the distribution of complex syntactic structures across dominance groups.

The model for Catalan found that participants had more clausal density as a function of age and SDm children had, overall, lower clausal density than CDms. In Spanish, age, language dominance and the interaction between them were significant: participants produced more complex syntax with increasing age; SDms had higher clausal density than CDms; however, CDms' growth of complex syntax in Spanish was faster than SDms'. The non-significant chi-square tests revealed no evidence of a difference by language dominance in terms of the distribution of complex sentences in either language.

Since Catalan and Spanish share syntactic structures in complex sentences, this could mean interdependence in development could mitigate effects of language dominance. However, dominance predicted the use and growth of complex syntax in these participants: the dominant

group showed higher clausal density than the non-dominant one in both languages. In addition, CDms' steeper slope for Spanish suggests that their increased exposure to Catalan at school may confer them an advantage in their L2 development. Finally, regardless of dominance, participants showed a similar distribution of complex syntax structures in both languages, indicating that the difference in complex syntax is *quantitative* rather than *qualitative*.