More than the sum of the parts: bimodal bilingual language acquisition – syntactic aspects

Diane Lillo-Martin^{1*}, Ronice Müller de Quadros², Deborah Chen Pichler³

¹University of Connecticut, ²Universidade Federal de Santa Catarina, ³Gallaudet University

Abstract

In our research we are interested in addressing questions about how children develop as bilinguals, and in particular, how the languages of a bilingual interact. We approach these questions by examining the course of bilingual development for children who are *bimodal bilinguals* – children who use both a spoken language and a natural sign language. In the present study, our participants are *codas*, or hearing children growing up in households with Deaf users of a sign language. Such a language combination gives us a fresh view of bilingualism, and allows us to think about language architecture in new ways.

In this presentation, we provide an overview of our investigations of the development of bimodal bilingualism, focusing on our studies of morphology and syntax (Chen Pichler et al. 2010, in press; Koulidobrova et al. 2011; Lillo-Martin et al. 2010, 2011, 2012; Quadros et al. 2012, in press). We are examining structures in both the speech and the sign used by children (age 1-1/2 and up) simultaneously acquiring American Sign Language (ASL) and English, or Brazilian Sign Language (Libras) and Brazilian Portuguese (BP).

We start with an overview of the ways that the participants' languages interact with each other. While they clearly differentiate their languages from early on and use the languages differently in different contexts, they do allow the languages to influence each other, and produce code-mixing and code-blending. Our study of the development of verbal morphology in the children's spoken languages shows that in English – but not in Brazilian Portuguese – cross-language influence leads to the production of commission errors as well as the more common uninflected root forms. The children's Noun Phrases show effects of influence in that the kodas omit determiners in their spoken languages

more often and for a longer period of time than monolingual children typically do. Finally, WH-questions show influence in both directions: earlier acquisition of *in situ* structures in the spoken languages, but greater use of sentence-initial WH-phrases in the sign languages.

Our developing model of bilingual language architecture accounts for the cases we observe of apparent cross-linguistic influence as examples of *language synthesis*. Our findings support the conclusions of many others that the languages of a bilingual are continuously active and interact in multiple ways.

References

- 1. Chen Pichler, D, Lee, J, & Lillo-Martin, D. in press. Language development in ASL-English bimodal bilinguals. D. Quinto-Pozos (Ed.), *Multilingual Aspects of Signed Language Communication and Disorder*.
- Koulidobrova, H, Quadros, R M de, Chen Pichler, D, & Lillo-Martin, D. 2011. Cross-Language influence, code-switching, and code-blending. *International Symposium on Bilingualism 8*. Oslo.
- Lillo-Martin, D, Quadros, R M de, Koulidobrova, H & Chen Pichler, D. 2010. Bimodal bilingual cross-language influence in unexpected domains. In J. Costa et al. (Eds.), *Proceedings of GALA 2009.*
- Lillo-Martin, D, Koulidobrova, H, Quadros, R M de & Chen Pichler, D. 2012. Bilingual language synthesis: Evidence from WH-questions in bimodal bilinguals. In A. K. Biller et al. (Eds.), *Proceedings of BUCLD 36*.
- Quadros, R M de, Lillo-Martin, D, Koulidobrova, H, & Chen Pichler. 2012. Noun Phrases in bimodal bilingual acquisition. *Generative Approaches* to Language Acquisition–North America 5. Lawrence, Kansas.
- 6. Quadros, R M de, Lillo-Martin, D & Chen Pichler, D. in press. Early effects of bilingualism on WH-question structures: Insight from sign-speech bilingualism. *Proceedings of GALA 2011*.

^{*} diane.lillo-martin@uconn.edu