Bilingual-Bicultural Language Acquisition of Prelingual Deaf Children

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In this dissertation, findings from empirical spontaneous language data collected over an eighteen month period from seven native signing Deaf children (2;10-12;9) in a bilingual-bicultural (bi-bi) Pre-K-7 education program in Flanders, Belgium are presented. The principal goal of this dissertation is to examine early/early-late bilingual Deaf children's mastery in terms of complexity and accuracy of Flemish Sign Language (Vlaamse Gebarentaal - VGT) and spoken Dutch, specifically their knowledge and use of the verb systems. The complexity and prolonged timetable of acquisition of these systems make them well-suited for an acquisition study. In Dutch, the entire verb system meets the criteria of complexity and prolonged acquisition. In Flemish Sign Language, only polycomponential signs (PS) are complex and acquired over a lengthy period of time, making them the focal point of the VGT acquisition study. Additionally, the linguistic or gestural nature of PS components is still being contested and this study allows the examination of this issue from an acquisition standpoint. Finally, for both languages, results of morphosyntactic and lexical language development, measured through MLU, MLU5, and VocD, are presented as well as the comparisons between acquisitions of these and verbal components.

Data were gathered through monthly video-recordings. The children were filmed in an oral setting where they engaged in spontaneous conversations in Dutch with a familiar adult native speaker and in a VGT setting where they conversed in Flemish Sign Language with a familiar adult native signer. All data of this study were transcribed and analyzed using Codes for the Human Analysis of Transcripts (CHAT) and Computerized Language ANalysis (CLAN) respectively, both part of the Child Language Data Exchange System (CHILDES).

Statistical analyses of the VGT results showed significant differences between the acquisitions of the three kinds of PSs, i.e. verbs of modeling, handling, and visual-geometric description. Additionally, main periods of development can be observed for each of the parameters. Furthermore, the results of the parameter analyses revealed that most development occurred between the ages of 5 and 8 and that the acquisition of polycomponential signs appears complete by age 9. The children from the bilingual-bicultural education program seem to acquire polycomponential signs similarly to native signing children.

From the findings of this study, it seems that polycomponential signs are a heterogeneous system of gestural and morphemic components, rather than a homogeneous morphological one. Moreover, the findings support Schembri's (2001) proposed categorization of PS components in that handshapes can be morphemic or gestural, whereas location is always gestural. To reveal the nature of the movement component, more research is needed.

The findings from the statistical analyses of the Dutch corpus showed that the hearing-impairment has a significant impact on the children's acquisition of the verb system, both in terms of complexity and accuracy. The acquisition of morphological verb markers poses major difficulties, especially for those morphemes with low salience. However, salience alone cannot provide a satisfactory explanation for all observed phenomena, and further research is needed.

Finally, a comparison of the children's acquisition of polycomponential signs in Flemish Sign Language/the Dutch verb system and general measures of morphosyntactic and lexical growth confirmed that correlations between those aspects can be found.

References:

Schembri, A. (2001) Issues in the analysis of polycomponential verbs in Australian Sign Language (AUSLAN). Unpublished Doctoral Dissertation. Sydney: University of Sydney.