The development of phonology in trilingual first language acquisition

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The phonological development in bilingual language acquisition has been extensively studied and discussed in terms of language separation and cross-linguistic influence (CLI) (e.g., Kehoe 2015 for an overview). However, the phonological development in trilingual first language acquisition has received less attention (e.g., Mayr & Montanari 2015). In a longitudinal approach, my dissertation studies the phonological development of a trilingual child (ages 1;3 to 2;8), who has acquired Standard German, Italian and Swiss German simultaneously from birth. The goal of this study is to discuss trilingual first language acquisition in the context of earlier debates on separate (phonological) systems and CLI by looking at the segmental level.

In this talk, I will present naturalistic longitudinal data (1;10-2;8) on the development of stops /p, t, k, b, d, g/ in all three languages. Swiss German, Italian and Standard German have binary stop systems, but base the contrast on different factors. Swiss German differentiates stops based on closure duration (CD) (Ladd & Schmid 2019); Standard-German and Italian have a voicing contrast, but German stops have short-lag (voiced) or long-lag (voiceless) voice onset time (VOT), while Italian contrasts between prevoiced (voiced) and short-lag (voiceless) stops (Lisker & Abramson 1964).

For children acquiring a language with short-lag vs. long-lag VOT, target-like stops are in place around 2;0 (e.g., Snow 1996), whereas monolingual children acquiring a true-voicing language produce non-target-like prevoiced stops up until 5;5 (e.g., Khattab 2000). To date there is no production study on stop acquisition in Swiss German. VOT has received much attention in bilingual first language acquisition (e.g., Kehoe et al. 2004). Although bilingual children show varying acquisition patterns, including non-target like stop productions due to CLI, they differentiate their two L1s from early on. VOT acquisition in 3L1 children is still understudied.

In the recordings (N = 10 for Standard German, N = 9 for Italian and Swiss German; 30 minutes per session), mono- and disyllabic words with initial stress were identified. VOT and CD were measured with *Praat* (Boersma & Weenink 2019) and analyzed (N = 1089 instances (VOT); N = 592 instances (CD)). Results show differentiated stop systems based on VOT for all three languages starting at age 2;4. German and Italian show a monolingual-like development. These results speak for separated language systems. CD patterns are more complex, suggesting that the child starts contrasting the Swiss German stops only at 2;8. The findings will be discussed in terms of salience and quantity of input.

References

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