The dynamics of multilingualism: exploring and modeling the acquisition of third language phonology

Magdalena Wrembel Faculty of English WA, Adam Mickiewicz University, Poznań

Multilingualism has become a norm rather than exception in the contemporary world. Multilingual acquisition has been increasing viewed as a dynamic and diversified process, offering new insights into language learning that go beyond those stemming from investigations into the first (L1) and second language (L2) alone (Flynn et al. 2004). Such an approach to the dynamics of multilingualism is in line with newest research outcomes from neuroscience, sociolinguistics or psychology (e.g. Kroll 2020, Sorace 2020).

This contribution aims to advance our understanding of the acquisition of speech from a multilingual perspective by offering a state-of-the-art overview of findings as well as some theoretical and methodological considerations in research on third language (L3) phonological acquisition. As the discipline grows dynamically, the methodologies employed develop, yet certain aspects continue to pose a challenge, including varied designs; different types of L3 learners; comprehensive measures of speech production and perception; task complexity or language modes in testing (see Cabrelli & Wrembel 2016). From a theoretical perspective, the applicability of the established L2 speech theories or L3 morphosyntactic models to multilingual phonetic/phonological data is being questioned. Consequently, alternative explanatory approaches are proposed, e.g. the Natural Growth Theory of Acquisition (Dziubalska-Kołaczyk and Wrembel 2022) in an attempt to account for the L3 phonological acquisition process under varied acquisition circumstances.

The talk will focus on new insights into the field by overviewing selected findings from recent longitudinal projects (Multi-Phon and CLIMAD) on cross-linguistic influence (CLI) in phonological acquisition. The discussion of selected results will include: developmental trajectories of foreign language phonologies from initial stages of the L3 over the first year of formal instruction; complex cross-linguistic interactions over time; the production and perception interface in L2 and L3; phonological awareness explored through accent mimicry as well as the effects of L1 background and language proficiency. Amongst major findings, we report a non-linear (partially feature dependent) development of foreign language phonology; transitory stages of L3 phonology reflected in intermediate realisations; cumulative ('hybrid')

CLI as well as differential learnability of phonetic features (e.g. Kopečková et al. 2021, Wrembel et al. 2020, 2022). Finally, avenues for further research in the area will be discussed.

References

- Cabrelli Amaro J, Wrembel M. 2016. Investigating the acquisition of phonology in a third language a state of the science and an outlook for the future. *International Journal of Multilingualism* 13(4): 395-409.
- Dziubalska-Kołaczyk, K. & Wrembel, M. 2022. Natural Growth Theory of Acquisition (NGTA): Evidence from (mor)phonotactics. In Sardegna, V. and A. Jarosz (eds): *Theoretical and Practical Perspectives on English Pronunciation Teaching and Research*. Springer.
- Flynn, S., C. Foley and I. Vinnitskaya. 2004. The Cumulative-Enhancement Model for Language Acquisition: Comparing Adults' and Children's patterns of Development in L1, L2 and L3 acquisition of Relative clauses. *International Journal of Multilingualism* 1(1): 3-16.
- Kopečková, R., Wrembel, M., Gut, U., Balas, A. 2021. Differences in phonological awareness of young L3 learners: An accent mimicry study, *International Journal of Multilingualism* www.tandfonline.com/doi/full/10.1080/14790718.2021.1897127
- Kroll, J. F. 2020. Bilingualism as a lens to the mind, the brain, and society. A plenary ppt presentation at Bilingualism Matters Research Symposium, 22 September 2020.
- Sorace, A. 2020. L1 attrition in a wider perspective. *Second Language Research* 36(2): 203–206.
- Wrembel, M., Gut, U., Kopečková, R., Balas, A. 2020. Cross-Linguistic Interactions in Third Language Acquisition: Evidence from Multi-Feature Analysis of Speech Perception. *Languages*, 5, 52; doi:10.3390/languages5040052
- Wrembel, M, Gut, U., Kopečková, R., Balas, A. 2022. The relationship between the perception and production of L2 and L3 rhotics in young multilinguals; an exploratory cross-linguistic study. *International Journal of Multilingualism*. Published online https://doi.org/10.1080/14790718.2022.2036158