

Abstract

Second language acquisition (SLA) and third language acquisition (TLA) research are well-established and dynamically developing disciplines. However, there is a dearth of studies on the L3 phonetics and phonology acquisition. This dissertation reports the results of the experiment investigating the effect of language learning and learners' age on the perception and production of native (Polish) and non-native (L2 English and L3 Mandarin Chinese) voicing contrasts. Three experimental groups are compared: (1) trilingual adults, (2) *quasi*-monolingual adults, and (3) monolingual children. Subjects performed two tasks: identification and imitation. The results show that the perception and realization of voicing contrasts differ with learners' language experience and age, and the study provides support for the SLM, as well as evidence for bidirectional cross-linguistic influence (from L1 to L2/L3, from L3 to L2 and from L3/L2 to L1). Major observations are: (i) trilingual speakers are able to distinguish between their language systems quite successfully - in perception; (ii) in production, trilingual speakers have a separate phonetic category for aspirated stops, but the formation of a new category for L2/L3 unvoiced lenis stops is not completely successful; (iii) as compared to English monolinguals, trilingual speakers' L2 English long lag stops are more aspirated; (iv) trilingual speakers' productions in the L1 differ from monolingual speakers'; (v) CLI from L1 is more prevalent in the voiced (English and Chinese short lag) series of stops, particularly—but not exclusively—at early stages of language acquisition; (vi) less linguistically experienced children assimilate English and Chinese short-lag stops to the native voiceless category, whereas more experienced monolingual adults—to native voiced category.