

First Language Retention in Adult Korean Adoptees

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The long-term status of first-language (L1) phonological representations acquired in early childhood remains a central issue in psycholinguistics, particularly under conditions of abrupt and prolonged input deprivation. International adoptees (IAs) provide a unique testing ground for this question, as IAs typically experience early L1 acquisition followed by sudden cessation of exposure and immediate immersion in a second language (L2). Early neurocognitive accounts proposed that such circumstances could lead to near-complete replacement of the L1 (Pallier et al., 2003; Ventureyra et al., 2004). More recent work, however, has challenged this view, arguing that early-acquired linguistic knowledge may persist in a latent form and become accessible under conditions of reactivation or relearning, consistent with the Permanence Hypothesis (Bowers et al., 2009; de Bot & Stoessel, 2000; Choi et al., 2017).

The present study examines the robustness and processing efficiency of the Korean laryngeal contrast in adult Korean IAs. Korean is typologically well suited for this investigation, as it employs a three-way laryngeal contrast (aspirated, lenis, fortis) that is absent in English and difficult for late L2 learners to acquire (Hyltenstam et al., 2009). Fifty-six adult Korean adoptees residing in the United States completed an online phonetic discrimination task, along with additional lexical and morphosyntactic tasks. Analyses focused on both discrimination accuracy and reaction times (RTs), using mixed-effects models to account for individual variability.

To isolate theoretically meaningful effects, analyses proceeded in stages. First, discrimination accuracy was compared across same-category and cross-category trials, revealing significantly higher performance on same-category trials ($p < .001$), confirming task validity and sensitivity to phonological category structure. Subsequent analyses excluded same-category trials and focused only on true phonemic contrasts (aspirated–lenis, aspirated–fortis, lenis–fortis) to avoid ceiling effects. Within this filtered dataset, no significant differences in discrimination accuracy were observed among the three contrasts (all $ps > .44$). Reaction time analyses, conducted on correct trials only and log-transformed to address skewness, likewise revealed no main effect of contrast type (all $ps > .44$). Critically, a Group $\times$ Contrast analysis showed no interaction ($p = .90$), indicating that participant groups did not differ in the relative processing efficiency of specific VOT contrasts.

Taken together, these converging accuracy and RT results suggest that once Korean laryngeal contrasts are successfully accessed, they are processed with comparable efficiency across contrast types and participant groups. The findings argue against selective vulnerability of particular phonological contrasts and instead support accounts in which early-acquired phonological categories remain stable and uniformly robust despite decades of non-exposure. In line with the Permanence Hypothesis, the results indicate that early phonological representations may persist in an intact but latent form, becoming observable through sensitive perceptual measures rather than gross performance differences. These findings contribute to ongoing debates on language attrition, reactivation, and critical periods, highlighting the importance of contrast-level and processing-based analyses in understanding long-term L1 retention in IAs.

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