

“Age” effects on second language acquisition

This talk reviews “age” effects on second language (L2) acquisition, especially L2 speech acquisition.

“Age” generally refers to the chronological age at which L2 acquisition first began. The research reviewed here examined individuals who began learning their L2 (mostly English) upon immigrating to an L2-speaking country. For these participants, the onset of L2 learning is considered to be the age of arrival (AOA) in the host country. For most, AOA marks the first exposure to L2 native speakers and the need to use L2 for daily communication.

A consistent finding is that individuals with an AOA of 2-10 years (“early” learners) demonstrate greater L2 proficiency than those with an AOA of 15-23 years (“late” learners). Four hypotheses regarding the cause of such “age” effects are considered. One might hypothesize that age effects arise from normal neural maturation (H1), from cognitive changes across the life span (H2), from age-related changes in how the L1 and L2 systems interact (H3), or from age-related differences in L2 input (H4). A brief review suggests that each hypothesis has some predictive power, but none accounts for the full range of data available.

Two conclusions are drawn. First, age (AOA) effects may not be due to chronological age at the time L2 learning begins, but may instead arise from variables that are co-vary with age (AOA). Second, it is likely that age-related effects on ultimate attainment in an L2 arise from multiple causative factors, in combination.

For research in this area to advance, it will be necessary to control more adequately for co-variation among multiple variables that may impact L2 learning. Rather than select research participants on the basis of AOA, it would be more productive to examine variables that co-vary with AOA, such as specific aspects of neurological development at the time L2 learning begins; specific aspects of cognitive development; the state of development of L1 categories when L2 learning begins; age-related changes in the perceived relation between sounds in the L1 and L2; amount of L2 input (measured, not estimated); and the proportion of foreign-accented (as opposed to native-speaker) input that is received.

Until potential causal variables are examined directly in L2 research, and confounded variables controlled or modeled more successfully, we can only speculate about the true basis (bases) for age-related differences in ultimate L2 proficiency.