

## **Age of L2 acquisition has a greater influence on L1 metalinguistic awareness than proficiency.**

Brien, C. and Sabourin, L.  
University of Ottawa

The age at which a speaker acquires a second language (L2) has been found to influence homonym processing in the first language (L1). In a combined ERP and cross-modal lexical decision task, monolinguals were found to reveal a context-by-frequency-interaction which slowed their processing of target words that were appropriately-related to the subordinate reading of the priming homonym, supporting the Reordered Access Model<sup>1</sup>. The results of the bilingual groups did not, even though the task was carried out in English, the L1 of all participants. The diverging performances of the bilinguals from the monolinguals were apparent in behavioural responses as well as in the amplitude, scalp distribution, and latency of ERPs. Bilingual effects were found that varied by age of L2 acquisition (AoA) suggesting that AoA influences processing in the L1<sup>2</sup>. Specifically, the later bilingual groups exhibited a marked divergence from the monolingual group which was correlated with AoA. The later bilinguals revealed greater priming effects ( $p < .001$ ) and ERP modulations compared to the simultaneous bilinguals and the monolinguals, suggesting a heightened metalinguistic awareness due to the L2 influencing homonym processing in the L1<sup>3,2</sup>.

The current study intends to discount proficiency as a factor influencing these particular results. Participants were grouped according to proficiency levels using French cloze tasks<sup>4</sup> and were compared to the above-reported AoA-grouped results. As anticipated, participants with the highest proficiency scores correlate with the earliest AoA. However, the remaining participants revealed a continuum of proficiency scores which did not correlate with the heightened metalinguistic awareness that was found by AoA. These results are anticipated to support these previous findings and suggest that AoA, rather than proficiency, has the greatest influence on a second language influencing the first in regards to a speaker's metalinguistic awareness of lexical relationships in homonym processing.

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