Bilingual Lexical Organization: Is there a sensitive period?
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A long-standing question in psycholinguistic investigations of bilingual language processing is whether bilinguals have a separate lexicon for each language, or whether they store lexical items from both languages in a single integrated memory system. While there is an emerging consensus for the latter, at least for bilinguals with an early age of L2 acquisition (AoA), there is also some evidence that bilinguals with a late AoA do not have an integrated lexicon (ex. Silverberg & Samuel, 2004). Such results are suggestive that there is a critical or sensitive period for lexical organization. Before such a conclusion can be drawn, however, it is necessary to ensure that other correlated factors, such as L2 proficiency and manner of L2 acquisition (MoA; i.e. naturalistic vs. instructional), are not instead responsible for this difference. In previous studies, these variables are often confounded, as it is difficult to tease them apart. In fact, no study to our knowledge has yet attempted to isolate the effect of MoA.

The goal of the current study is to investigate the question of whether or not AoA can account for differences in lexical organization for groups of bilinguals differing with respect to L2 proficiency and, in particular, MoA. We hypothesize that an early AoA is sufficient but not necessary for an integrated lexicon; a naturalistic MoA may also lead to an integrated bilingual lexicon, as it would enable L2 lexical items to form direct links to the semantic network. In order to investigate this, we are using a lexical decision task with masked priming (Forster & Davis, 1984). In this task, target words are preceded by subliminally presented prime words; in critical trials, these primes are the translation equivalent of the target. Translation priming effects (TPEs) are taken as evidence that words from both languages access an integrated lexicon (Altarriba & Basnight-Brown, 2007). Crucially, when participants are tested with L2 primes and first language (L1) targets, this TPE is sensitive to factors such as AoA and L2 proficiency (Duñabeitia et al., 2010; Dimitropoulou et al., 2010; Sabourin et al., in press).

A study conducted in our lab testing English-French bilinguals in this L2-to-L1 priming direction found that both simultaneous bilinguals (AoA = birth) and early L2 learners (AoA 3-6 years old) showed significant TPEs, while late L2 learners (AoA > 7 years old) showed none. Importantly, the early and late L2 learners were matched for L2 proficiency, suggesting that only early acquirers have an integrated lexicon, irrespective of their proficiency. The effect of MoA was not investigated here, as the majority of L2 French learners French in this region learn their L2 in instructional settings. In this same region, however, L2 English learners (with French L1) tend to learn their L2 in a more naturalistic way. This fundamental difference between these two groups of bilinguals creates an ideal situation in which to examine the role of MoA.

We will test our hypothesis by comparing the TPEs of 20 late French-English L2 learners to those of the group of late English-French L2 learners already tested. Crucially, these two groups will be matched in terms of AoA and L2 proficiency. We will use the same task with the same critical stimuli, though the languages of the primes and targets will be reversed in order to maintain the L2-to-L1 priming direction. If an early AoA is necessary and sufficient in order to have an integrated lexicon, then we expect these late French-English bilinguals to mirror the null TPEs of the late English-French bilinguals. If, however, we find priming effects for the late French-English bilinguals, then this would suggest that an early AoA is sufficient but not necessary for an integrated lexicon; that is, if the L2 is acquired with a naturalistic MoA, even late learners can have an integrated lexicon. These results will make an important contribution to the critical/sensitive period debate and will have implications for models of the bilingual lexicon.
REFERENCES


