

Reply to Yang and Yang: Culturally primed first-language intrusion into second-language processing is associative spillover, not strategy

Yang and Yang (1) raise important questions about our studies (2) showing that priming with heritage-culture visual cues can disrupt second-language performance. Because the studies combine methods from different fields of psychology in a unique way, this is a valuable opportunity to explain our methodological choices more fully.

Studies 1 and 2 examined overall fluency of recent Chinese immigrants after exposure to Chinese cultural cues. Yang and Yang (1) raise the concern that fluency can be assessed with not only word speed but also more specific measures of breakdowns and repairs. Although breakdowns (e.g., pause length) are important characteristics of dysfluency, they are limited in evaluating second-language (L2) fluency because speakers “transfer their use of pauses from their first to their second language” (3). We chose the standard overall measure, pruned speech rate, to tap word speed as well as breakdowns and repairs by counting words that remain after pruning filled pauses, repairs, and speech errors within a certain time period. To check the comprehensiveness of this objective measure, we also employed a more subjective measure of listeners’ holistic fluency impressions (4). The two measures correlated significantly and exhibited the same pattern of results.

Study 3 showed speeded recognition reaction times to Chinese literal-translation phrases after exposure to Chinese images.

We interpret this as evidence of elevated accessibility of Chinese lexical structures. Yang and Yang (1) note that faster recognition can indicate familiarity, confidence, and ease. It is not clear why Chinese images would increase familiarity, because participants reported no difference in familiarity with the Chinese and American images. If Chinese images induced confidence, that would have speeded reaction times in the other blocks of trials (English names, Chinese names) as well, but priming did not affect those. Priming did not affect recognition accuracy either, ruling out the ease-of-recognition account.

Yang and Yang (1) insightfully note that our literal-translation task involves recognizing English (L2) phrases connected to Chinese (first language, L1), so that drawing on one’s Chinese knowledge could be an adaptive response strategy. However, this would be true in all conditions, and yet speeded reaction times only occurred in conditions with Chinese images, not neutral or American images. The well-established mechanism of cultural priming on accessibility (5) explains these results. Although priming is adaptive in helping participants complete the task, it is not a strategy so much as a byproduct of prior exposure to visual cues.

Finally, Yang and Yang (1) suggest immigration recency and second-language proficiency as potential moderators of L1 intrusion into L2. We propose that the

intrusion would occur “for recent immigrants” (2) and sampled recently arrived Chinese students, noting that the generality of the effect is a question for continuing research. We also discuss that it may be limited to coordinate bilinguals, whose L1 is strongly associated with their heritage culture, as opposed to compound biculturals, who learn two languages in the same context. Yang and Yang (1) take this discussion further, providing useful guides to future research.

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