Processing of cognates with varying levels of phonological overlap

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A large percentage of the words in one language are shared with other languages. These words, called cognates, share meaning but may be pronounced or spelled a little, to a lot differently. Cognates provide L2 learners with pre-existing vocabulary knowledge. However, to leverage the advantage provided by cognates during vocabulary instruction, more information regarding how cognates are processed and represented bilingually is needed. We know that cognates are processed faster than noncognates possibly due to their additional form overlap (Phonological model, Voga and Grainger, 2007). Testing this model with Japanese-English bilinguals, Nakayama, Rinus, and Lupker (2014) showed a higher degree of cognate advantage when phonological similarity (PS) was higher. However, they could not compare the processing of cognates with low PS to noncognates because cognates and noncognates are written in different scripts in Japanese. The present study addresses this issue by using Persian and English, each utilizing the same script for cognates and noncognates. Thirty highly-proficient Persian-English bilinguals will decide whether a letter string (high PS and low PS cognates, noncognates, nonwords) is a word or not (lexical-decision task) in one language after observing a masked prime (a word presented before another word) in the other language. Accuracy and time latency will be analyzed to determine the extent PS (if any) facilitates the task. Higher accuracy and faster responses are predicted for cognate with higher PS than lower and for cognates with lower PS than noncognates. These results would support the phonological model and contribute to L2 vocabulary instruction.


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