

Word cognate status and concreteness effects in translation verification: ERPs in L1 and L2 processing

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To address the issue of bilingual language representation and processing we crossed a semantic variable (concreteness) and the cognate status of words in a translation verification task. Cognates are words that have a similar form and meaning in both languages (L1 & L2) while non-cognates in a translation task have similarity in meaning but not in word form. The general finding is that cognates are recognized and produced faster than non-cognates (e.g., Kroll & Stewart, 1994) which is usually attributed to a common set of form-based representations across the two languages. Models of bilingual language processing disagree on the issue whether cognate processing is affected by overlapping representations at the lexical level only or the semantics beyond (Kroll & De Groot, 1997). We test the models' predictions and examine the extent to which semantics (more specifically, concreteness, i.e., concrete vs. abstract words) is involved in cognate vs. non-cognate processing.

Overall, 30 young Bulgarian-English bilinguals participated in two experiments. They performed a single word translation verification task from L2 (English) into L1 (Bulgarian) and from L1 into L2. The words were presented for 300 ms with a 500-ms interstimulus interval and with an intertrial interval that varied between 1700 and 2200 ms. We used a go/no go task (to press a button if a non-equivalent translation is detected and do not press a button if the second word is a translation equivalent). ERP data are in progress.

References

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