

Parafoveal-on-foveal effects in translation verification: Eye-fixation related potentials in L1 and L2 word processing

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We have addressed one of the main issues in reading and in bilingual word processing: whether two adjacent words are processed simultaneously or consecutively and whether properties of the fixated and adjacent to the fixated words play a significant role in the processing. Based on earlier studies suggesting that lexical access happens very early (in ~ 150 ms after a word onset) we have tested the assumption of parafoveal-to-foveal effect in L1 and L2. That is, when two adjacent words are translation equivalents, adjacent word (word on the right, the non-fixated one, processed parafoveally) would affect the processing of a fixated one (processed foveally). We hypothesized that L1 parafoveal word would affect the processing of L2 fixated word more than the L2 parafoveal word – the L1 foveal one. Furthermore, to explore the lexical and semantic influence on the processing of a fixated word, we have crossed a semantic variable (concreteness) with word cognate status (cognates vs. non-cognates).

16 young Bulgarian-English bilinguals participated in the experiment. They performed a translation verification task of two words. The words were presented simultaneously for 500 ms, in two blocks (L2L1 and L1L2). 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 words are translation equivalents). EEG and eye movement data were gathered. Data analyzes are in progress.