The influence of spelling reforms on bilingual word processing: Research proposal

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The leading goal of language reforms is to streamline the use of language by, for instance, simplifying its orthographic rules. However, few language reforms have entered everyday use, making their effectiveness rarely subject to empirical analysis. Although simplification is usually associated with facilitation, psycholinguistic studies of pseudohomophones (i.e., non-existent words that are phonetically similar to real words but using non-standard orthography) (e.g., *nuż*, *sience*) indicate that they are more difficult to process, compared to real words as well as pseudowords (i.e., non-existent yet pronounceable words) (e.g., *opej*, *acklon*). This phenomenon is known as the pseudohomophone effect and has been observed in psycholinguistic studies employing, for instance, the reaction time methodology (Martin 1982; Vanhoy and Van Orden 2001). The purpose of this study is to investigate the pseudohomophone effect in the context of bilingualism, and thus to determine whether the linguistic changes proposed by language reforms produce comparable effects when processed in the first (L1; i.e., Polish) and second language (L2; i.e., English). The pseudohomophones that will be used in the study come from *Jednodńuwka futurystuw* (Jasieński et al. 1921) and the *Handbook of Simplified Spelling* (Paine 1920).

The study will employ the reaction time (RT) methodology with a lexical decision task, where Polish-English proficient bilingual speakers will be asked to read Polish and English sentences and decide whether the last word of the sentence is a real word occurring in Polish or English. For the purposes of this study, a database of sentences ending in pseudo-homophones (e.g., "Students of history are not interested in sience."), real words (e.g., "The cat played with the ball."), pseudowords (e.g., "She picked up the acklon."), and nonwords (i.e., unpronounceable and meaningless words) (e.g., "It was only her bnigo.") has been created.

The study aims to test two hypotheses. First, regardless of word type, RTs for L1 stimuli are hypothesized to be faster compared to L2 stimuli. Second, the pseudohomophone effect is speculated to emerge only in L1, due to the variability of English phonology and spelling, as well as a higher exposure to L1 compared to L2, even in the case of high-proficiency bilingual speakers.

Theoretical references:
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