Using nonwords to study visual word recognition in English L2 learners

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This study aimed to shed light on the relationship between L2 proficiency and learner sensitivity to English orthographic patterns. Nonwords, by definition, lack semantic content but correspond to varying degrees of orthographic ‘wordlikeness’. Therefore, an analysis of student sensitivity to these items may reveal more about their English orthotactic awareness – the recognition of sequencing patterns of graphemes in words – and how L2 proficiency could modulate this awareness. A list of nonwords was compiled according to various statistical properties, including orthographic neighborhood, orthographic frequency and bigram frequency. These items were then combined and randomized with an equal number of high frequency English words that matched them in length (4-8 letters) and number of morphemes (1-2). The stimulus list was then tested in two experiments with EFL students at a Japanese university, measuring speed, accuracy and confidence of response. Experiment 1 was a lexical decision task (LDT) administered by computer (n=48), recording error rates and response times for all items. Experiment 2 (n=324) was a paper based, non-timed, lexical confidence test (LCT) that required participants to use a 7-point scale to rate how confident they were that each item was an English word or nonword (+3= very confident it is an English word, -3= very confident it is not an English word, 0=not sure). Error rates and confidence levels were recorded for all items. A statistical analysis of the results from both tests was performed, with a particular focus on how responses to nonwords were influenced by factors such as proficiency and vocabulary knowledge. Findings and implications will be discussed in detail. A copy of the LCT will also be made available.

Keywords: L2 proficiency, nonwords, words, orthographic, psycholinguistics.