

The Effect of Online Text Vowelization of Homographs in Context on Reading Comprehension among L1 and L2 Hebrew Speakers (Poster)

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Abstract

The rapid growth in present-day communication technologies has led to an accelerated shift in reading habits, from print to digital-online. Contemporary research findings indicate that the existence of elements such as scrolling and hypertext make online reading problematic for most readers (Shneiderman, 1998). Therefore, improving online readability and accessibility to information is of great importance, particularly (1) in deep orthography languages, which often lack correspondence between letters and sounds (Frost, Katz & Bentin, 1987); (2) in countries where multiple languages are spoken; and (3) for people with reading disabilities. The Hebrew language is an ancient deep-orthography language that uses a punctuation system (diacritical marks) which provides vowel information to improve readability and comprehension, especially for low-frequency words, borrowed words, and words that are ambiguous without vowels (the same sequence of letters produces two different pronunciations and meanings). Vowelization is most important for children at the early stages of learning Hebrew, for non-native Hebrew speakers, for individuals with reading difficulties and when people read under time constraints. The literature contains ambiguous information about the effect of vowelization on readability, and the question is still open as to under what circumstances vowelization facilitates reading. The present study examines the effect of online text vowelization of Hebrew words in context on reading among native Hebrew speakers and speakers of Hebrew as a second language. The study focuses on homographs – words that have more than one meaning in their unvoiced version. Our hypothesis was that for non-native Hebrew speakers, vowels will shorten reading latencies, especially in the case of low frequency words at the beginning of sentences (no context information). Participants were 44 students at the Open University of Israel divided into two groups: 32 native Hebrew speakers and 12 speakers of Hebrew as a second language. The participants filled out a demographic questionnaire and performed a self-paced computerized reading task – a noncumulative presentation task (Marinis, 2003) using E-Prime professional software to present the stimuli. The design included 2 (voweled/nonvoweled) X 2 (homographs/unambiguous words) X 2 (location of words: beginning of sentence/not beginning of sentence) X 2 (control/experimental sentences). The hypothesis that for non-native Hebrew speakers vowels would shorten reading latencies, especially in the case of low-frequency words at the beginning of sentences (no context information), was not supported; non-vowelized target words were read faster than

vowelized target words for both groups. Results are discussed in relation to group composition and experimental problems.

Keywords: Hebrew, Vowelization, online reading, context, self-paced reading.

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