Eye movement control in word recognition

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Eye movements in reading have been well-investigated for the last 40 years (Rayner, 1998). However, psycholinguistic study of eye movements in isolated word reading has not taken place until recently. This might have been due to the common misconception that the eye does not move noticeably when reading an isolated word or, even if it does, that eye movements in word recognition are not psycholinguistically informative. However, it turned out that there are often two or more fixations in isolated word recognition. Furthermore, eye movements recorded during word recognition are systematically co-determined by lexical predictors and offer important insights into the time-course of lexical processing.

I report what we now know about eye movement control in isolated word recognition, given recent and on-going lexical decision with eye-tracking studies (Kuperman, Schreuder, Bertram, & Baayen, 2009; Miwa & Dijkstra, 2017; Miwa, Dijkstra, Bolger, & Baayen, 2014; Miwa, Libben, Dijkstra, & Baayen, 2014; Miwa, Libben, Dijkstra, & Baayen, 2014; Miwa, Libben, & Ikemoto, 2017). The aim of this presentation is twofold: (1) to demonstrate how the eye scans words in general (i.e., what lexical effects have been constantly observed across different studies) and (2) to demonstrate how morphographic words in particular are scanned (i.e., what lexical effects have been uniquely observed in Japanese word recognition). I scrutinize the accumulated data with a special focus on frequency effects, visual complexity effect, and their interactions with fixation locations. The results are discussed mainly with respect to models of complex word recognition and those of morphographic word recognition.

References


