Comprehension Is Supported by Regressions During Reading

Elizabeth R. Schotter, Randy Tran, Keith Rayner

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Abstract

Recent Web apps have spurred excitement around the prospect of achieving speed reading by eliminating eye movements (i.e., with rapid serial visual presentation, or RSVP, in which words are presented briefly one at a time and sequentially). Our experiment using a novel *trailing-mask paradigm* contradicts these claims. Subjects read normally or while the display of text was manipulated such that each word was masked once the reader's eyes moved past it. This manipulation created a scenario similar to RSVP: The reader could read each word only once; *regressions* (i.e., rereadings of words), which are a natural part of the reading process, were functionally eliminated. Crucially, the inability to regress affected comprehension negatively. Furthermore, this effect was not confined to ambiguous sentences. These data suggest that regressions contribute to the ability to understand what one has read and call into question the viability of speed-reading apps that eliminate eye movements (e.g., those that use RSVP).

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