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Semantic Access for Reading Comprehension Through Word Restoration

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Member abstract

Access to semantic representations is a central component of reading comprehension. While dual-route models of reading posit the coexistence of phonological and lexical processes, transparent orthographies such as Spanish suggests that reliance on sublexical decoding may sometimes limit deeper semantic processing. This study investigates whether cognitive restoration (i.e., reading words with internal letter transpositions) facilitates semantic access and reading comprehension in expert readers. Sixty university students participated in the study. Experiment 1 examined semantic memory for isolated words using an image recognition task following standard and transposed reading conditions. Experiment 2 assessed text comprehension using narrative texts presented in the same modalities. Results showed significantly better semantic memory performance and improved text comprehension under transposed reading. These findings suggest that word restoration promotes lexical-route engagement and deeper semantic processing, even in skilled readers. Results extend dual-route accounts of reading and highlight cognitive restoration as a mechanism supporting semantic access in higher-level reading comprehension.