Interactive Influences During Oral Reading in Wernicke's Aphasia

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(Abstract)

The etiology of neologisms in the speech of patients with Wernicke's aphasia is unclear. Current thinking attributes these errors to a two-stage deficit; an erroneously retrieved lexical item being subjected to further phonemic alteration. If this were true, then the production of neologisms should be influenced by factors affecting lexical access. One such factor is the nature or predictiveness of the surrounding context. The purpose of this study was to examine whether the oral reading accuracy of subjects with Wernicke's aphasia is influenced by the degree to which the target words are predicted by linguistic context. It was hypothesized that oral reading accuracy would improve when the linguistic context was strongly predictive of the target word to be read.

Two subjects with Wernicke's aphasia who demonstrated neologisms and paraphasias were asked to read words aloud in isolation and in sentences. The sentences differed in the amount of semantic information contained in them that could be used to predict the target word (e.g., I have a ______. versus I bounce a _____.). Both subjects showed a marked increase in the number of neologisms produced in the low-predictive context compared to isolation condition. In addition, both subjects showed a marked decrease in neologistic responses in the highly-predictive context condition compared to the low-predictive context condition. These results demonstrated that the nature of the linguistic context influences lexical access in patients with Wernicke's aphasia and supports the notion of a word retrieval component in the generation of neologisms.