

Opposing contributions of letters and bigrams in word recognition?

Mary L. Still

Alison L. Morris

Results of orthographic priming experiments suggest that relative letter order between prime and target must be preserved to produce priming; i.e., *swap* and *swat* are similar but *paws* and *swap* are not. This claim was investigated in two lexical decision experiments using 35 and 100 ms prime durations. Prime-target pairs consisted of orthographic neighbors (*ible-ABLE*) and two types of anagram primes - those sharing no bigrams with the target (mirror anagram; *elba-ABLE*) and those sharing some bigrams with the target (bigram anagram; *bael-ABLE*). Significant interference effects were found for mirror anagram targets while facilitation was found for neighbor targets; no priming was found for bigram anagrams. These results have two primary implications. First, they suggest that anagrams are orthographically similar, indicating that some aspect of word recognition is insensitive to letter position. Second, the difference in anagram conditions suggests that bigrams, or another relative position coding system, modulates orthographic priming.