

Attention, Competition, and Lexicality in the Same-Different Matching Task.

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Reversed-anagram masked primes (e.g., rulb-BLUR) produce interference for words in the lexical-decision task, but facilitation for both words and nonwords in the same-different task (Morris & Still, 2011). What accounts for these different outcomes? The tasks differ in the type of decision required, the presence of the reference stimulus in the same-different task, and the premask duration (typically longer in the same-different task). Each of these variables can potentially alter the competitive interactions affecting target processing. In two experiments using the same-different task, we manipulated inter-item competition by varying premask duration. We presented participants with a reference (1000 ms), followed immediately by the premask (500 or 1000 ms) and then the prime (48 ms) and target. Word and nonword targets were presented in separate blocks. Priming effects for words and nonwords interacted with block order and premask duration: For the 1000-ms premask duration, priming was found in both blocks, but for the 500-ms duration, priming was found only in the second block. These results are consistent with a theoretical framework involving attention, competition, and top-down activation from lexical representations.