

## The Reversed Goldilocks Effect: Premask Duration Modulates Priming in the Masked-Priming Same-Different Task

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In the standard masked-priming same-different task, a related prime (e.g., fiath-FAITH) produces facilitation when the reference – presented above a premask – and target are the same. At first blush, the mechanisms underlying the task appear to be straightforward, as simulated by the Bayesian Reader model. In two experiments, we employed a modified version of the task: Participants were presented with a reference (1000 ms), followed by a premask (1000 ms or 500 ms or 250 ms) and then the prime (48 ms) and the target. The premask variation and use of reversed-anagram primes (e.g., hsif-FISH) allowed us to manipulate inter-item competition. Premask duration modulated priming effects: For the long and short premask durations, priming was found in both word and nonword blocks, but for the medium premask duration, priming effects were unreliable. We propose a new model, which simulated the observed results as a function of competition, attention, and lexicality.