

## Stages of morphological processing revealed by rhyme priming

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Stem priming effects can be attributed to combinations of morphological, phonological, and semantic factors. To understand morphological processing, these factors should be dissociated. Previous research addressed this through time-course of effects (Feldman 2000) or carefully-constructed controls (Stockall & Marantz 2006).

Previously, we incorporated rhyme into a stem-priming task controlling semantic factors across critical (*dough* → *showed*) and control pairs (*dough* → *code*). We find evidence of priming for morphologically complex words preceded by words rhyming with their stems (*dough* → *showed*): *morphologically-mediated rhyme* (MMR) priming.

Here, we examine MMR by looking at (1) directional asymmetries and (2) stem allomorphy. Through allomorphy, we dissociate morphological and phonological factors. Does MMR index solely morphological factors (stem identity in *grew* / *grow*) or morphological and phonological factors combined (allomorph identity in *show* / *showed*)?

We constructed six prime conditions, controlling for frequency and semantic relatedness. All primes are paired with identical targets, reducing extraneous variance.

123 participants completed an online auditory lexical decision study for course credit (1:1 word:pseudoword, 1:4 experimental:filler). Participants responded to 8 pairs/condition. Transformed response times were analysed using linear mixed-effects models.

In contrast to rhyme priming ( $p < 0.001$ ), we find no evidence for MMR effects with regulars or irregulars. Together with our previous results, this indicates a directional asymmetry for the MMR effect.

This asymmetry may be due to the time-course of lexical competition. For *showed* → *dough*, we predict inhibition of *show* in the prime, preventing MMR effects for the target. For *dough* → *showed*, inhibition of *show* is predicted to occur after MMR facilitation has already occurred in processing the target. Additional studies will address this hypothesis by comparing stem priming with MMR effects and also revisiting previous research.

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