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Vowel raising in Bengali inflectional morphology: Interactions of orthography and phonology

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Abstract

We investigate the processing of inflected verbs in Bengali. The word forms involve an interaction of orthography and phonology: the 1st Person singular is formed from the 3rd Person by adding the suffix /-i/. For stem vowels [e, o] this causes the stem vowel to be raised. For [e, o] this is reflected orthographically, but not for [i]. We examine this in a cross-modal priming study and an eye tracking task where an auditory first-syllable fragment is matched to either the 1st or 3rd Person visual form. We show that orthography plays an important role, with mismatching forms being less effective as primes, and fragment completion being easier for patterns with different orthography. For words with no orthographic difference, manual responses to fragment completion were at chance, but eye tracking revealed distinct match vs. mismatch processing. We discuss implications for roles of orthography and phonology in lexical access.