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Skilled readers activate the meanings of phonetic cues in Chinese

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Abstract

Many Chinese characters consist of probabilistic cues to meaning or pronunciation. We investigated whether readers automatically activate the semantics associated with a familiar phonetic even when it is putatively irrelevant. In a lexical decision task, primes were semantically related to the overall character, the sub-lexical component, or not related to either. Latencies were significantly faster when primes were related to the meaning of the phonetic and related to the meaning of the entire target as compared to unrelated prime-target pairs. The magnitudes of the priming effects were larger for lower frequency targets. Results indicate that readers activate the semantics of a phonetic even when it is unrelated to the meaning of the character. This suggests that the irrelevant semantics may influence the meaning of a character, and also challenges standard analyses in which such characters are considered morphemes because phonetics can also contribute to meaning.