EVALUATING SEMANTIC PRIMING AND HOMOPHONIC PRIMING IN RECOGNITION AND NAMING OF CHINESE CHARACTERS

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Two experiments were conducted in the present study to reappraise the role of phonological processing in identification of Chinese characters. Experiment 1 adopted a within-trial priming procedure and manipulated the character frequency and stimulus onset asynchrony to evaluate the effects of homophonic priming and semantic priming on recognition and naming of Chinese characters. Results indicated that in neither recognition nor naming, an effect of homophonic priming or semantic priming on processing high-frequency characters could be clearly demonstrated. When the target character was of low frequency, a stable facilitation effect of semantic priming was observed for both recognition and naming, yet a facilitation effect of homophonic priming was reliably found in the naming task only. Experiment 2 adopted a between-trial priming procedure and manipulated the character frequency to evaluate the effects of homophonic priming, semantic priming, and graphic priming on character recognition and naming. The results agreed with those of Experiment 1. Further, an inhibitory effect of graphic priming was found in both tasks. It is noted that no stable homophonic priming facilitation effect was observed in the lexical decision task, despite that the effects of both character frequency and semantic priming on processing low-frequency characters were robust. These results appear not to support an obligatory role of phonological processing in identification of Chinese characters.

Keywords: Priming effect, Frequency effect, Lexical decision, Character recognition, Character naming, Semantic priming, Homophonic priming, Graphic priming.