

Abstract

A large proportion of Chinese characters are constructed by the semantic and phonetic radicals. The semantic radicals provide the meaning of the characters; the phonetic radicals provide the cue of the pronunciation. In this study, the frequency effects of the semantic and phonetic radicals on Chinese characters recognition were investigated. There were two tasks : semantic categorization and homophone matching tasks. The semantic and phonetic radicals had no significant frequency effect in semantic categorization task. Only the interaction effect was found. The characters with the high semantic and low phonetic radicals frequency yielded the shortest reaction time. The semantic radicals had significant frequency effect on both the reaction time and error rate in homophone matching task. It was inferred that Chinese character recognition may access the meaning first, the phonological information may be optional or task dependent.