

# Abstract

A Modified Task Dependent Hypothesis is introduced in the present study to provide a different perspective to understand the role of phonological processing in Chinese character recognition. The hypothesis suggests that variations in the stimulus environment and in the response requirement of an experiment will influence the degree of phonological involvement and the magnitude of the phonological effects. In Experiments 1a and 1b, we manipulated the stimulus environment by changing the number of stimuli presented to subjects in a categorization task and the results showed that the phonological effects varied accordingly. In Experiments 2a, 2b, 2c and 2d, we manipulated the response requirement of an experiment by instructing subjects to give different responses to the same set of target characters. When subjects were asked to read aloud the characters, there was very early phonological priming. However, when subjects were asked to make semantic judgments about the characters, delay and marginal phonological priming was observed. These results are in line with the modified task dependent hypothesis, which suggests that phonological processing in Chinese character recognition is a matter of degree of involvement, but not an all-or-none question.