## Abstract

The semantic and syntactic analyses in reading Chinese two-character words were examined using lexical decision (Experiment 1) and word-categorical (Experiment 2) decision tasks. Two types of ambiguity (semantic ambiguity and syntactic-category ambiguity) were manipulated in four conditions: combined semantic and syntactic-category ambiguous (SE+SY+); semantic ambiguous but syntactic-category unambiguous (SE+SY-); syntactic-category ambiguous but semantic unambiguous (SE-SY+); semantic and syntactic-category unambiguous. The results showed that some significant main effects of semantic ambiguity were found in Experiment 1 and Experiment 2. The main effects for syntactic-category ambiguity were found significant in Experiment 2. These results supported the automaticity of semantic analysis, and syntactic analysis under forcible condition. The present study suggested that the semantic and syntactic analyses were sensitive to language specific properties.