Abstract

The number-of-meaning (NOM) and relatedness effects were examined in lexical decision, naming and semantic tasks. Whereas the typical NOM advantage (shorter latencies for characters with many meanings) was observed in naming, an NOM disadvantage was observed in semantic tasks. In addition, a relatedness disadvantage was demonstrated in naming and a relatedness advantage in semantic tasks. The experiments also showed an interaction between NOM and relatedness, with the NOM effect being limited to the characters with low-related meanings, while the relatedness effect being restricted in the Many-Meaning condition. The NOM and relatedness effects found in the present study showed support to the interactive position that semantic variables influence the lexical access processes, but not the modular notion that processing subsystems are highly independent. These results were generally consistent with the feedback activation model which posits that the NOM and relatedness effects were due to the feedback and feedforward relationships between orthographic, phonological and semantic levels in language processing.