
Abstract of thesis entitled

A Developmental Study of Chinese Children's Word and Character Processing

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One of the unique features in Chinese is that two levels of unit, character and word, are both related to meaning. Both of them have their own features. Most characters are composed by radicals which may give a cue to the characters' pronunciation and meaning. Words are mostly composed by no less than two characters, and most of them are compound words which usually have 5 types of morphological structures according to the relationship between the meaning of the whole word and its component characters. Since both characters and words convey meaning, two questions arise: which of them is the basic unit of processing when people read, and what is the relationship between readers' character and word processing. Previous research has provided some evidence to answer these questions. Although characters are the basic graphic units in Chinese script, several studies have shown that adults' reading is based on words rather than on characters. Meanwhile, it has been found that the processing of words and characters also affect each other.

However, not many studies used children as participants. In this thesis, three experiments were designed to explore these two questions. Children of grade 3 and 5 in Hong

Kong primary school were used as participants to investigate the developmental change. In experiment 1, children were asked to read single characters and words that were composed by these characters. Results showed that words actually helped children to recognize characters, for most errors in single character reading got corrected in word reading. Compared to older children, younger children's character processing was more likely to rely on the context that the character might appear, for they had more errors than older children of confusing the correct character with the word related or meaning related ones. In experiment 2, the effect of word's morphological structure on the component characters was examined. Three types of structures, i.e., modifier words, coordinative words and nonwords were used to make comparison. The results were opposite to the expectations, for the closer relationship with the word didn't get any advantage for the second characters in modifier words in lexical decision task. Moreover, both P3 and P5 children's performance in modifier words on the first character was better than on the second character, and this difference was even larger than in coordinative words and nonwords. Since children of both grades showed the same pattern, the word's morphological structure still seemed to have effects on the component characters processing, although the mechanism was not clear. Experiment 3 compared the influence of pronunciation and graphemic similarity on word reading, and compared to older children, younger children were more likely to rely on pronunciation, which was consistent with previous studies. This study provided possible directions for future study, and more evidence on the relation between children's character and word processing is still needed.