Proofreading Errors and Reading Units in Chinese Texts

Chien-Hui Kao, Chih-Wei Hue, Yu-Hsiang Tseng, and Ming Lo

Department of Psychology, National Taiwan University

Hue (1989) reported a word inferiority effect in detecting character-position transposed words embedded in text. To explain the phenomenon, he cited Healy's (1976) unitization model, and argued that "word" is a reading unit of Chinese. Furthermore, he argued that in word recognition, a word's orthographic configuration is important cue, and that the word inferiority effect he found was caused because a character-position transposed word still possesses its orthographic configuration. The present study was a follow up of Hue's experiment, and in particular, was designed to test his theory concerning how the word inferiority effect is produced. In Experiment 1, the participants' eye movements were recorded while they were detecting misprints in the reading materials which were presented on a computer screen in two different writing directions (vertical vs. horizontal). There were four types of misprinted two-character words: 1. High frequency words with characters transposed in position, 2. low frequency words with characters transposed in position, 3. words with their second character replaced by an orthographically similar one, and 4. words with their second character replaced by a phonologically similar character (controls). The experimental results show that writing direction neither affected the detection rate nor the skip rate of the four types of misprints. Compared with the detection rate of the controls, the detection rates of the other three types of misprints are lower (i.e., word inferiority effect). In Experiment 2, the vertical printing condition of Experiment 1 was replicated, only that in Experiment 2, the reading materials were printed on papers. These results suggest that two-character words can be reading units of Chinese and, in word recognition, a word's orthographic configuration is important cue. However, the results of the present study also indicate that Hue's idea concerning how the word inferiority effect is caused is not correct.

Keywords: Chinese reading, eye movement, word inferiority effect, word recognition

