

Abstract

Three experiments are conducted to examine the visual-perceptual and linguistic aspects of Chinese comprehension processes. Character reading times were collected using a mouse-controlled moving-window technique in all experiments. The first experiment looked into the question of whether and how parafoveal information is used in Chinese reading. Manipulation of the availability of partial character information to both the left and right parafovea yielded no particular parafoveal benefits. However, the reading time data seemed to relate to the component processes more meaningfully when parafoveal information was provided. The second experiment continued exploring this issue while the visual similarity of parafoveal information was manipulated. The results show that presenting random pattern to the right parafovea slowed down reading significantly, implying that visual characteristics from the parafoveal region are obtained on a fixation. This experiment also looked into the perceptual span of Chinese reading, which was observed to be asymmetric and limited in size. In the last experiment, lexical, syntactic, and semantic information were separately violated at certain points in short passages. The reading comprehension processes varied to meet the cognitive demands imposed by how the available information was represented. The flexibility of readers' processing strategy was implicated. The results of these experiments are finally discussed in light of the contemporary issues in reading research and the models of language comprehension processing.