

論文報告 Paper Presentation

筆劃數對繁簡體漢字閱讀者在識別漢字時的不同效應

The number of strokes matters in perceiving Chinese characters by the traditional and simplified Chinese character readers

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The lexical decision (LD) task requires participants to respond with speeded and accurate actions, which makes the process of identifying a word automatic without labor and therefore probably reflects the similar word identification process in natural reading. With manipulating the presentation duration of target words, the LD task allows the early visual orthographic processing to be involved.

In the current study, we recruited the lexical decision (LD) task to probe the possible pattern difference in perceiving Chinese characters by the young adult skilled Hong Kong traditional Chinese character (HKC) readers and the Mainland China simplified Chinese character (MLC) readers. The first part of stimuli consisted of 20 real simplified Chinese characters and 20 real traditional Chinese characters, which differed significantly in their stroke numbers and covered both the left-right (LF) and top-bottom (TB) structure. The second part of stimuli were pseudo characters, constructed based on the 40 real Chinese characters by rearranging the left and right parts or the top and bottom parts of them. These stimuli were presented on the computer screen with manipulating its presentation duration and adding a mask behind each target stimulus. Results revealed an intriguing trend in the correct RTs (reaction times) for both real characters and pseudo characters that the MLC simplified character readers' RTs tended to be longer with the increase of stroke numbers in characters, while the HKC traditional character readers showed an opposite pattern, that is, their RTs tending to be shorter with the increase of stroke numbers in characters. These results firstly suggested that the number of strokes probably plays opposite roles in the MLC and HKC participants' perception of characters. The results further implied that the MLC and HKC participants probably use stroke numbers, even component numbers (constructed by strokes) or some other information which reflects the structure and visual spatial features of characters in different ways in their perception or recognition of characters.

Keywords: Chinese character perception; lexical decision task; traditional character readers; simplified character readers