EFFECTS OF TEXT SEGMENTATION ON SILENT READING OF CHINESE REGULATED POEMS: EVIDENCE FROM EYE MOVEMENTS

Chen Qingrong   Gu Wentao∗   **Christoph Scheepers**
Nanjing Normal University   *University of Glasgow*

ABSTRACT

Interword spaces have been reported to play an important role in silent reading of alphabetic languages. However, it has not yet been clear whether text spacing/segmentation facilitates the cognitive process in silent reading of Chinese, a logographic language, especially in reading Chinese regulated poems which have predefined rhythmic structures. An eye-tracking experiment was conducted to monitor eye movements of native participants in reading Chinese regulated poems in four segmenting conditions: normal text, character segmentation, rhythmic

_____

Chen Qingrong 陈庆荣 is post-doctoral researcher of the School of Chinese Language and Culture and associate professor of the School of Psychology; Nanjing Normal University, Nanjing, Jiangsu 210097, China; [qrchen@njnu.edu.cn]. His current research focuses on the cognitive mechanisms and neural dynamics of poem reading, lexical processing, and prosodic expectation.

*Gu Wentao 顾文涛 (corresponding author) is professor of the School of Chinese Language and Culture, and director of Institute of Language Science and Technology (Yuyan Keji Yanjiusuo); Nanjing Normal University, Nanjing, Jiangsu 210097, China; [wtgu@njnu.edu.cn]. His research interests include speech prosody, experimental phonetics, spoken language technologies, and cognitive sciences.

Christoph Scheepers is senior lecturer at the Institute of Neuroscience and Psychology, University of Glasgow, United Kingdom; [Christoph.Scheepers@glasgow.ac.uk]. He is primarily interested in the cognitive and neural architectures, mechanisms, and representations involved in human language comprehension and production. He is an expert in eye-tracking and advanced statistical modelling.

segmentation, and syntactic segmentation. By comparing a set of measures of eye movements, both global and local analyses showed that syntactic segmentation boosted reading efficiency, while rhythmic segmentation did not. The findings demonstrate that not rhythmic but syntactic structure plays major roles in the cognitive process in reading Chinese regulated poems, suggesting an intrinsic difference in the information structure between spoken and written languages.

文本切分对汉语格律诗阅读的影响

陈庆荣　顾文涛*　Christoph Scheepers

南京师范大学　　　英国格拉斯哥大学

提要

以往的研究表明，词间空格在字母文字的阅读过程中有重要作用。然而，这种间隔或切分对于语素文字如汉语的阅读、特别是对具有固定节律的汉语格律诗的阅读，是否有促进作用，仍属未知。为此，我们采用眼球追踪技术，考察了文本切分对汉语格律诗阅读的影响。实验设计了四种文本切分模式：正常文本、逐字切分、节律切分、句法切分。通过全局分析和局部分析，我们发现，与句法结构相吻合的切分能有效加快汉语格律诗的阅读，而与节律结构相吻合的切分对汉语格律诗的认知加工并无促进作用。研究结果表明，是句法结构而不是节律结构，在汉语格律诗的阅读中发挥主要作用，这也体现了书面语言与口头言语在信息结构上的区别。

关键词

文本切分　**阅**读　**汉**语格律诗　**节**律结构　**句**法结构　**眼**球运动