Brown Bag Lunchtime Seminar (Via Zoom)
(Theme: Cognition and Neuroscience)

Eye movement pattern and consistency predict passage reading performance of English as Second Language (ESL) Learners

12:30 p.m. – 1:30 p.m. | March 26, 2021 (Friday)

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Abstract
Although eye movements reflect cognitive processes involved in reading, whether eye movements predict passage reading performance in addition to language proficiency and general cognitive abilities remains unclear. Through EyeMovement with Hidden Markov Model (EMHMM), we discovered that an eye movement pattern involving more horizontal saccades predicted faster reading speed in addition to language proficiency and executive function. Also, higher English proficiency predicted faster reading speed through the mediation of this eye movement pattern. In contrast, reading comprehension accuracy could be predicted by a more consistent eye fixation at the beginning of reading engagement in addition to verbal working memory. This effect may be because higher fixation consistency indicates a better developed visual routine as a result of reading expertise. Thus, eye movement pattern and consistency predicted different aspects of reading performance. This finding has important implications for ways to assess or facilitate ESL learners’ reading through eye movement measures.

About the speaker
Ms. Zheng is a first-year PhD student from Attention, Brain and Cognition lab under the supervision of Dr Janet Hsiao. Her research interests focus on multimodal integration and eye movements.

Zoom Meeting
https://hku.zoom.us/j/3951550048?pwd=SncvL3RYakEycUtpl29vdDJEdlFwz09
Meeting ID: 395 155 0048
Password: psyc

~All are Welcome~

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