



Department of Psychology
The University of Hong Kong

香港大學心理學系

Departmental Seminar

Understanding Eye Movements during Reading Using Hidden Markov Models

11:00a.m. – 12:00n.n. | October 30, 2024 (Wednesday)

Rm 813, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong



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Abstract

To better understand readers' eye movement behavior during reading, we used the Eye Movement analysis with hidden Markov models (EMHMM) approach, which takes both spatial and temporal dimensions of eye movement behavior into account to quantify participants' eye movement patterns and consistency. We examined whether manipulating features in reading materials including font size and word boundary information would facilitate children's reading. The results showed that children have an initial established visual routine for reading, and only individuals with more flexible visual routine would benefit from the instruction. We also examined how LLMs and adults resolved the ambiguities due to lack of word boundary information. The results suggested that it is essential to understand these differences through XAI methods to facilitate LLM adoption.

Zoom Meeting

(For participants who couldn't attend the Seminar in person)

<https://hku.zoom.us/j/6985555998?pwd=V05yTGJWNTIzazd2OFZ0Q3FReHVkdz09>

Meeting ID: 698 555 5998 | Password: Psyc

~All are Welcome~

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