## PLM2023 Thematic session: Eye-tracking in reading research and translation reception studies

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Reading is such a complex process that there is no single theory of reading but there are models and frameworks which have evolved coming mainly from eye movement research (Holmqvist et al., 2011). Some of these models and frameworks focus more on the visual processes, i.e. eye movement control (the E-Z Reader model by Reichle, Rayner and Pollatsek (2003), the SWIFT model by Engbert, Nuthmann, Richter, and Kliegl (2005), while others aspire to explain how the mind generates meaning from text by tapping into the mental processes (construction-integration model by Kintsch (1988); the Reading Systems Framework by Stafura and Perfetti (2017). Most eye-tracking studies which underly these models investigated how we read single words and sentences.

In this thematic session we want to open up a discussion on how the view of the reading process offered by the prevalent models and frameworks can be extrapolated to 'real-world reading' (Jarodzka and Brand-Gruwel 2017) which involves reading a variety of texts for different purposes in analogue and digital formats. We are interested in how the purpose of reading, the text- and reader-related factors affect the reading experience and text reception (Hyönä, Lorch & Kaakinen 2002; Kruger 2013; Walker 2021). Is reading in our first language different from reading in our second language? Can eye-movements capture the fact that a text has been written in the writer's native language or translated from another language? Do language errors in human and machine translated texts impact the fluency of reading and call for higher order meaning integration processes (re-reading)? Does reading a badly translated novel spoil our narrative engagement? These are some of the questions we would like to address. Another matter to also discuss is methodological challenges in experimental studies involving various text types, languages and readers (Kuperman et al. 2022).

## References

Engbert, R., Nuthmann, A., Richter, E. M., & Kliegl, R. (2005). SWIFT: A dynamical model of saccade generation during reading. *Psychological Review*, 112, 777–813.

Holmqvist, K., Nyström, M., Andersson, R., Dewhurst, R., Jarodzka, H., & Van de Weijer, J. (2011). *Eye tracking: A comprehensive guide to methods and measures*. Oxford: Oxford University Press.

Hyönä, J., Lorch, R. F., Jr., & Kaakinen, J. K. (2002). Individual differences in reading to summarize expository text: Evidence from eye fixation patterns. *Journal of Educational Psychology*, 94, 44–55.

Jarodzka, H., & Brand-Gruwel, S. (2017). Tracking the reading eye: towards a model of real-world reading. *Journal of Computer Assisted Learning*, 33, 193–201.

Kintsch, W. (1988). The role of knowledge in discourse comprehension: A construction-integration model. *Psychological Review*, 95, 163–182.

Kruger, H. (2013). Child and adult readers' processing of foreignised elements in translated South African picturebooks: An eye-tracking study. Target, 25, 2, 180-227.

Kuperman V., Siegelman, N., Schroeder, S., Acartürk, C., Alexeeva, S., Amenta, S., Bertram, R., Bonandrini, R., Brysbaert, M., Chernova, D., Da Fonseca, S.M., Dirix, N. Duyck, W., Fella, A., Frost, M., Gattei, C.A., Kalaitzi, A., Lõo, K., Marelli, M. Nisbet, K., Papadopoulos, T.C., Protopapas, A., Savo, S., Shalom, D.E., Slioussar, N., Stein, R., Sui, L., Taboh, A., Tønnesen, V., & Usal, K.A. (2022). Text reading

in English as a second language: Evidence from the Multilingual Eye-Movements Corpus, *Studies in Second Language Acquisition* 44, 3, 1-35.

Reichle, E. D., Rayner, K., & Pollatsek, A. (2003). The E-Zreader model of eye-movement control in reading: Comparisons to other models. *Behavioral and Brain Sciences*, 26, 445–526.

Stafura, J. Z., & Perfetti, C. A. (2017). Integrating word processing with text comprehension: Theoretical frameworks and empirical examples. In K. Cain, D. L. Compton, & R. K. Parrila (Eds.), *Theories of Reading Development* (pp. 9–32). John Benjamins.

Walker, C. (2021). An eye-tracking study of equivalent effect in translation: The reader experience of literary style. Palgrave Macmillan.