Adam Mickiewicz University in Poznań

Doctoral School of Languages and Literatures

The Growing Potential of Eye-Tracking in Language Studies

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Type of classes	seminar
Language of instruction	English
The number of hours + form of passing classes	20 hours / credit of a grade
Purposes of classes	• Introduction to eye-tracking as a research method • Contribution of eye-tracking to reading research • Contribution of eye-tracking to translation and interpreting studies • Contribution of eye-tracking to reception studies • Contribution of eye-tracking to bilingualism research • Introduction to designing experiments using eye-tracking • Introduction to conducting experiments using eye-tracking
Learning contents	• Research methods – eye-tracking and multi method approaches • Reading research – leading scholars, major advances, competing models • Cognitive Translation and Interpreting Studies – studying eye movements as proxies for cognitive effort • Multi-method approaches in Reception Studies and bilingualism research – why eye-tracking is not enough • Participating in eye-tracking experiments • Hands-on session in an eye-tracking lab • Hands-on workshop in research design
Entry requirements	Good command of English (at least B2 level). Keen interest in empirical research.

Learning outcomes	
	Verification methods:
In terms of knowledge: A person who has completed classes knows and understands: the achievements of world science in the discipline in which the education takes place, as well as the paradigms and directions of development of this discipline, in a way that enables their creative and innovative development and their verification within the framework of research projects undertaken [E_W01]; at an advanced level research methodology appropriate for the discipline of science in which education takes place, which allows for proper selection of research theories and tools and their effective application and modification within the framework of own research [E_W02]	Oral publication report based on a selected empirical study using eye-tracking
In terms of skills: A person who has completed classes is able to: use knowledge from various disciplines of science to creatively identify, formulate and innovatively solve complex research problems or perform advanced research tasks. In particular, he/she is able to: — define the objectives and the subject of scientific research, — formulate research hypotheses, — develop research methods, techniques and tools and apply them creatively and effectively, draw conclusions on the basis of scientific evidence [E_U01]; effectively retrieve information related to scientific activity from various sources, including from sources in foreign languages, and to properly select, critically analyse and interpret this information; furthermore, he/she is able to assess its relevance for scientific development [E_U02]; establish and implement scientific cooperation in research teams, including international ones [E_U07]; transfer the results of scientific activity to the socio-economic sphere in cooperation with institutions from the social and economic environment [E_U08]	Individual presentation based on a published study design with a suggestion of a potential follow-up study
In terms of social competences: A person who has completed classes is prepared to: critical evaluation of the work in the field of the scientific discipline within which the education is provided and its own contribution to the development of this discipline [E_K01]; fulfilling social obligations as a researcher; initiating actions in	Active participation in the class discussions and activities

favour of the public interest, *inter alia*, through appropriate dissemination of scientific achievements in society. Furthermore, he/she is ready to take actions leading to the development of civil society based on knowledge [E_K03]; thinking and acting in an entrepreneurial way, creating new ideas and searching - in cooperation with people from other disciplines - for innovative solutions, as well as taking up challenges and intellectual risk in the scientific and public spheres and taking responsibility for the consequences of their decisions [E_K04]; continuous improvement of professional competence and personal development, in particular by tracking and analyzing the latest developments in the represented scientific discipline [E_K05]	
Literature	Cop, U., Drieghe, D., & Duyck, W. (2015). Eye movement patterns in natural reading: A comparison of monolingual and bilingual reading of a novel. *PloS one*, *10*(8), e0134008. https://doi.org/10.1371/journal.pone.0134008 Inhoff, Albrecht W., Andrew Kim, & Ralph Radach. 2019. "Regressions during reading." *Vision (Basel)* 3 (3): 35; doi:10.3390/vision3030035 Jarodzka, Halszka, & Saskia Brand-Gruwel. 2017. "Tracking the reading eye: towards a model of real-world reading." *Journal of Computer Assisted Learning* 33: 193–201. https://doi.org/10.1111/jcal.12189 Kuperman V, Siegelman N, Schroeder S, et al. Text reading in English as a second language: Evidence from the Multilingual Eye-Movements Corpus. *Studies in Second Language Acquisition*. 2023;45(1):3-37. doi:10.1017/S0272263121000954 Rayner, K., Schotter, E. R., Masson, M. E. J., Potter, M. C., & Treiman, R. (2016). So Much to Read, So Little Time: How Do We Read, and Can Speed Reading Help? Psychological Science in the Public Interest, 17(1), 4–34. https://doi.org/10.1177/1529100615623267 Tiselius, E., & Sneed, K. (2020). Gaze and eye movement in dialogue interpreting: An eye-tracking study. *Bilingualism: Language and Cognition*, 1–8. Titone, D., Libben, M., Mercier, J., Whitford, V., & Pivneva, I. (2011). Bilingual lexical access during L1 sentence reading: The effects of L2 knowledge, semantic constraint, and L1–L2 intermixing. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 37*(6), 1412–1431. https://doi.org/10.1037/a0024492

	Walker, C., 2019. A cognitive perspective on equivalent effect: using eye tracking to measure equivalence in source text and target text cognitive effects on readers. Perspectives, 27 (1), 124–143. https://doi.org/10.1080/0907676X.2018.1449870 Whyatt, B., Tomczak-Łukaszewska, E., Witczak, O., & Lehka-Paul, O. (2024). Readers have to work harder to understand a badly translated text: an eye-tracking study into the effects of translation errors. *Perspectives*, 1–21. https://doi.org/10.1080/0907676X.2024.2418016