

IS1404 E-READ: Evolution of Reading in the Age of Digitization

Position paper

Name: Mr Julian Jarosch, jjarosch@students.uni-mainz.de

PhD student in General Linguistics at Johannes Gutenberg-University Mainz

WG(s): WG1, WG3

1. **Potential research contribution** in light of, or linked to

A. WG interest and Scientific programme:

My PhD project is closely related to the interests of WG1, since it targets reading behaviour of adults, as modulated by typographic variables. The selection of variables for study is guided by their relevance to the paradigm shift of reflowable typesetting on the internet and reading devices.

Combining psycho- and neurolinguistic methods (eye tracking and EEG) with a background and affiliation in book studies places my research at an interdisciplinary nexus.

Completed experiments so far have shown that adult, experienced readers' eye movements are slightly, but adversely affected by distended interword spaces in justified typesetting as implemented in digital typography, differing from the (at least potentially) more even typesetting in print.

Further eye tracking research currently investigates monospaced fonts, a vestige of technical constraints which no longer apply. Nevertheless, this class of fonts persists, probably due to distribution on personal computers. They are conspicuously absent from professional print typography, thus making them a distinctly digital phenomenon.

Future research is planned to extend into readers' attitudes towards the above typographic variables, which touches on WG3's interests. The relation between the connotative associations which a typographic style may evoke, and the denotative contents of the text, is of particular interest in face of digital typography, where the reader may alter the appearance of text at will.

B. Action objectives (pages 7-10 in the MoU):

Part of my aim is to improve upon definitions of legibility, such as “[l]egibility is [...] the speed and accuracy with which text [...] can be read” (Lonsdale 2014: 30), and to sharpen the distinction between the phenomenon legibility and its (potential) measures, thereby contributing to an aggregate measure of reading.

Through my focus on what influences legibility, evidence-based recommendations applicable to typesetting can be readily derived, e.g. either avoiding or improving justification in digital typography. Personal practical experience in e-book-publishing will be beneficial in translating scientific findings to desiderata for digital typography standards.

My affiliation with both the linguistics and the book studies departments at my home university should facilitate publishing results in a manner accessible to both disciplines.

2. Interest in

A. organizing and/or participating in a **short-term scientific mission (STSM)**.

Optional: pursuing what research questions/projects; where to/with whom; linked to what objective(s) of the Action:

I am interested in (though there are, at this point, no concrete plans) a STSM collaboration with Anne Mangen – since digital reading is determined both by screen technology as well as changing typesetting software, I would propose to conduct an experiment dissociating the influences of medium-specific typography (caused by constraints of different typesetting softwares) and of the medium's surface (backlit screen, paper).

B. organizing and/or participating in a **Training School** (please indicate what kind of training [theoretical; methodological; technical]).

Optional: linked to what objective(s) of the Action:

I would be interested in participating in a Training School on statistical methods to expand my methodological range.