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Taking typography to experimental testing: On the influence of serifs, fonts and justification on eye movements in text reading

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Typography is assumed to extensively influence reading ease. Yet, some typographic variables such as serifs do not influence eye movements in reading (Perea 2013). One possible confound in previous studies may be the use of single sentences or short paragraphs, since many typographic variables only bring their influence to bear in longer texts. We tested this assumption using 12 short stories distributed on two pages, each with 24 lines, and varied font (Compatil vs. Lucida), serifs (serif vs. sans-serif), and justification (justified vs. flush left). Participants (N=32) read the stories for comprehension. Mixed-models analysis replicated that serifs do not impact on fixation durations or saccades. Font did not influence reading. Justification, however, increased the number of fixations on a page, especially where spaces were extraordinarily wide. Moreover, readers tended to fixate on spaces more often with increasing space width, while fixation duration decreased in such cases. This suggests that readers used these fixations to plan saccades to upcoming words that, otherwise, fell outside of parafoveal preview. Overall, our findings suggest that typographic variables influence eye movements when they have a direct influence on word identification (justification). Whenever they do not impede word identification, they do not influence reading ease (serifs).