Reading development is about multimodal coordination and linguistic awareness: An integrative, not-so-simple view of reading

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Reading aloud involves the complex interplay of visual, motor and lexical processes. However, while eye movements have been extensively investigated in the literature, much less is known about the coordination of voice, eye and finger movements in oral and finger-point reading. The talk is about how multimodal synchronized time-series of digitized reading signals can be collected and modelled computationally. Data analysis shows that coordination of eye fixations, voice articulation and finger movements is a function of the increasing sensitivity of developing readers to the linguistic structure of a written text. The way multimodal coordination changes with reading expertise is thus a fundamental marker of reading development.