

Developmental theories of word reading and spelling as well as theoretical accounts of dyslexia mostly assume that the development of reading and spelling skills is based on the same underlying cognitive mechanisms across languages (Coltheart, 1985; Ehri, 1992, 2014; Facoetti, Corradi, Ruffino, Gori, & Zorzi, 2010; Frith, 1986). The present project challenges this hypothesis by testing whether the cognitive mechanisms at play in learning to read and spell vary based on environmental factors such as the complexity and depth of the orthography to learn. Two well-known cognitive underpinnings of reading and spelling: verbal learning (Litt, Wang, Sailah, Badcock, & Castles, 2019; Poulsen & Elbro, 2018) and sound blending (Gellert & Elbro, 2017b; Orsolini, Fanari, Tosi, De Nigris, & Carrieri, 2006) will be examined. An experimental (dynamic assessment) procedure, adapted from Gellert & Elbro (2017), will be used to investigate their role in learning to read and spell in Italian (a shallow orthography) and Danish (a deep orthography). It is hypothesised that the role played by verbal learning (and its associated cognitive mechanisms) is relatively more important in deep orthographies (such as the English and the Danish) than in shallow orthographies (e.g., the Italian). Conversely, it is expected that sound blending is particularly important for learning to read and spell in shallow orthographies. This hypothesis will be tested in two parallel longitudinal studies conducted in Italian and in Danish. The outcomes of this project are expected to increase our understanding of the learning mechanisms of reading and spelling across languages, and thus to support the early identification and remediation of children at risk of reading and spelling problems.