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Word co-activation and competition and the perception of morphological structure

The cognitive literature on similarity-based principles of word association has greatly contributed to understanding effects of family size and frequency of neighbouring words on a variety of word processing tasks: non-word repetition (Vitevitch et al. 1997; Vitevitch & Luce 1998), recall from verbal short-term memory (Gathercole et al. 1997), phoneme identification (Pitt & McQueen 1998) and word recognition (Luce 1986; Luce & Pisoni 1998). Beyond specific differences depending on the nature of the input stimuli (e.g. acoustic vs. visual) and the processing requirements of the task (e.g. word recognition vs. word production), an interesting general pattern of reversal emerges: neighbours have facilitative effects on spoken word production and inhibitory effects in spoken word recognition. Furthermore, the frequency distribution of neighbours plays an important role in determining whether competition/co-activation effects are facilitative or inhibitory: high-frequency neighbours tend to exert an inhibitory effect on some processing tasks, while low-frequency neighbours facilitating execution of the same tasks. In the talk, we consider what competition-co-activation effects in lexical processing can tell us about the emergence of structure in morphologically complex words, based on evidence from highly inflected languages (Marzi et al. 2016) and English word compounding (Gagné & Spalding (in press); Ferro et al. 2016).

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