Speakers, listeners, languages: Coarticulatory variability and contrast in spoken language dynamics

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In this talk, I will report on some of our work studying cross-linguistic differences in anticipatory nasal coarticulation in French, American English, and German in both production and perception. Our production data highlight that anticipatory nasal coarticulation in American English is far more extensive compared to both French and German, which are fairly similar. Using eye-tracking, we exposed the same participants to the most extreme anticipatory tokens of our production data, asking whether the cue to coda nasality is used as early as possible within each language's production characteristics. Unexpectedly, it is the German participants who seem to be most sensitive to nuanced differences in anticipatory coarticulation, while French participants seem to use the coarticulatory cue only limitedly, contra recent work by Zellou et al. (2023). For the Americans, our results suggest in both production and perception that nasality in VN sequences is a property of the rhyme, as first suggested by Solé (1992, 1995). Therefore, a *lack* of anticipatory nasality is disambiguating between VN and VC for Americans only.

References:

Solé, M.-J. (1992). Phonetic and Phonological Processes: The Case of Nasalization. *Language and Speech, 35*(1-2), 29-43.

Solé, M.-J. (1995). Spatio-temporal patterns of velopharyngeal action in phonetic and phonological nasalization. *Language and Speech, 38*, 1-23.

Zellou, G., Pycha, A., & Chitoran, I. (2023). Use of gradient anticipatory nasal coarticulatory cues for lexical perception in French. *Journal of Phonetics*, 14(1).