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The idiosyncrasy of filled pauses in L2 English in the context of phonetic convergence

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University College Utrecht (UCU) brings together students from different language backgrounds, who use English as a lingua franca. Only a small minority of the students speaks English as a native language (L1); the majority is Dutch (Orr & Quené, 2017). Prior studies have shown that the speakers in this multilingual community converge towards a shared accent of English: after three years on campus, students' /s/ pronunciations have become more similar (Quené et al., 2017), as has their speech rhythm (Quené & Orr, 2014).

This study aims to investigate how this convergence may affect the idiosyncrasy of non-native (L2) English filled pauses 'uh' and 'um'. Filled pauses (FPs) are considered useful features in forensic speaker comparisons, since they are highly speaker-specific (e.g. Künzel, 1997). This not only means that there is variation in how FPs are used by different speakers, but also that they are a consistent feature in an individual's speech (Braun & Rosin, 2015). Moreover, it is possible that speakers are consistent in using FPs in their L1 and L2, because FPs tends to not be explicitly taught. However, because languages differ in FP use (De Leeuw, 2007), ongoing practice in speaking the L2 may affect their realization, as well as the community's converging language.

To investigate the idiosyncrasy of filled pauses in the context of convergence, 20 Dutch female UCU students were selected from the LUCEA corpus (Orr & Quené, 2017). FPs were segmented from 2-minute English monologues, recorded at the beginning and the end of their Bachelor studies. Together, they produced 680 FPs. The first and second formant of the vowels in 'uh' and 'um' showed convergence – measured as reduced variance – whereas the third formant and F0 showed more variance over time. Linear mixed-effects models showed that only part of the students changed their FP realizations with time. While changes were minimal, they resulted in a drop in speaker classification performance in cross-time comparisons.

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