

Effects of simultaneous bilingual acquisition on filled pauses in French speech

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When faced with similar phones in two languages, simultaneous bilinguals have been found to have different phonetic realisations from monolinguals due to cross language influences, despite their ability to maintain language-specific differences (Fowler et al, 2008). It remains unclear, however, to what extent such cross language phonetic influences occur in the production of filled pauses (FPs), sounds like *uh* and *um* in English. This is because while FPs exhibit language-specific patterns in their distribution and phonetic form (Candea et al, 2005; Wieling et al, 2016) and thus present conflicting input for simultaneous bilinguals, their linguistic status remains unresolved, and they are well known for their strong within-speaker consistencies (Künzel, 1997). To this end, the present study examines the differences between monolinguals and simultaneous bilinguals in their use and realisation of FPs.

From the recordings of spontaneous French speech by 15 female German-French simultaneous bilinguals (HABLA-Corpus: Kupisch, 2011; Kupisch et al., 2012) and 20 female French monolinguals (NCCFr: Torreira et al., 2010), instances of FPs (*euh* and *hum*) were identified. Midpoint frequencies of the first three formants were extracted for the vocalic component of each token alongside its duration. Data were analogously collected for FPs in the German speech of the simultaneous bilinguals (*äh* and *ähm*) for comparison. The acoustic properties and distribution of FPs were then compared between speaker groups. Results show that the simultaneous bilinguals used more *hum* than the monolinguals in French, while the acoustic results indicate higher variability both between and within the speaker groups. The role of discrepancies in early language input in shaping these sounds, as well as the nature of FPs themselves, will be discussed in light of these findings.

Keywords: filled pauses, simultaneous bilinguals, hesitation phenomena, cross language phonetic influence

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