

Voice Onset Time of French in Contact with English in Southwestern Ontario

Voice Onset Time (VOT) is the acoustical measurement that distinguishes between the voiced (/b, d, g/) and voiceless (/p, t, k/) stop consonants in French and in English. In French, the voiced consonants /b/, /d/, /g/ are pre-voiced and the voiceless /p/, /t/, /k/ are produced with short-lag voicing. In English, /p/, /t/, /k/ are produced with long-lag voicing whereas /b/, /d/, /g/ are identical to the French /p/, /t/, /k/, which causes confusion amongst bilingual speakers and second-language learners.

Recent studies show that French-English bilinguals who live in an English dominant environment are manifesting bidirectional VOT patterns (Turner et al. 2014). On the other hand, a study focusing on immersion students (Netelenbos et al. 2016) showed that young anglophones learning French distinguish voiceless stops in both perception and production but not their voiced counterparts.

The following study examines the production of voiced and voiceless stops in native speakers of French in southwestern Ontario. The main purpose is to find out whether or not the contact with English is affecting the production of the French stops in four individuals: two men and two women of varying ages. We evaluate the impact of the English language on French spoken in a minority setting by examining the presence of aspiration in /p/, /t/, /k/ and by determining if /b/, /d/, /g/ are realized in the “grey” (intermediate) zone. The VOT values are examined in Praat (Boersma and Weenink 2019) and assessed with both parametric and non-parametric statistical tests. Our results show that three out of the four speakers produce French VOT values, with the exception of the youngest speaker, who produces English VOT values for the voiced stops.

The contact between the two languages, as well as the study of bilingualism, remains under studied in this region. Therefore, by assessing the phonetic and sociolinguistic factors, we will gain a better understanding of the impacts of language contact and its effects on pronunciation.

References

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