

Voice Onset Time in Winnipeg: a comparison of Filipino and Traditional Winnipeggers
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This study compares the production of English VOTs among Filipino and Traditional Winnipeggers in Winnipeg, Canada to investigate potential language transfer effects. English is an aspirating language, with voiceless stops having long-lag VOTs (>30ms), while voiced stops usually have short-lag VOTs (0-25ms) (Docherty, 1992; Lisker & Abramson, 1964; Morris, McCrea, & Herring, 2008). By contrast, the heritage languages and Philippine English spoken by first-generation Filipinos in general have short-lag VOTs for voiceless stops and lead VOTs for voiced stops. These seemingly contrasting systems between English and Filipino heritage languages provide a conflict site within which to diagnose and investigate traces of substrate effects (Poplack, 1980; Rosen, 2006; Stewart, 2015). In addition, the Filipino community in Winnipeg forms an ethnic enclave and has close-knit social networks, which context may constrain speakers' linguistic behavior from assimilating to local standard speech as well as promoting subsequent generations' speech to resemble more with their parents' generation demonstrating substrate transfer effects.

The data came from the Languages in the Prairies Project (LIPP). 26 Filipino Winnipeggers (FWs) and 17 Traditional Winnipeggers (TWs) were selected. Following the multigenerational approach used in Hoffman & Walker (2010:45), the FW group is separated into two generations: FW Gen.1s (9 speakers) and FW Gen.2s (17 speakers). FW Gen.1s have immigrated to Canada after 18 years old and have resided in Winnipeg for over 20 years. They are bilingual or trilingual speakers. FW Gen.2s were born and raised in Canada and are English-dominant or monolingual-English speakers. 82 words beginning with /b, d, g, p, t, k/ were selected from wordlist recordings. 3350 tokens in total were extracted and measured. VOT was measured from the first peak of spikes that marks release to the first voicing cycle. Statistic analyses were conducted in R (R Core Team, 2013) using linear regression mixed-effects (Bates et al., 2015). The best-fit model was chosen through stepwise forward elimination procedure (Schweinberger, 2020).

The results show that for voiced stops, FW Gen.2s overall use short negative VOTs that resemble the VOTs produced by TWs, while their production significantly differs from the long-lead VOTs of FW Gen.1s. This suggests that the language trait in the Filipino heritage languages is only maintained in Gen.1s and did not pass along to Gen.2s, which result was also found in Hoffman and Walker (2010). For voiceless stops, Gen.2s still pattern with TWs showing long-lag VOTs. There is significant gender-based variation in Gen.1s, where Gen.1 women show similar long-lag VOTs to Gen.2s and TWs, while Gen.1 men produce much shorter VOTs. This study supports and suggests that FW Gen.2s are well integrated into the mainstream linguistic community and do not use VOT to index ethnic identity.

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