

European block settlement into the Canadian West meant that different ethnicities were settled in specific lands reserved for them, and the ethnic split of these groups is still evident today. This project investigates sociophonetic differences in stop voicing between some of the rural communities in Manitoba, Canada, representing differing ethnicities and religions.

The Languages in the Prairies Project (LIPP) is a corpus of word list, reading passage, and interview data collected from nine different communities across Alberta and Manitoba between 2009-2019. The present project investigates factors of stop voicing in three of these Manitoba communities: speakers of Ukrainian or Icelandic descent from the Interlake region, and those largely of Low German-speaking Mennonite descent from the Southern and Steinbach regions. The goals of this study are a) to establish a baseline phonetic description of stops, and b) to investigate potential community differences.

This study analyzes word lists from 25 Interlake speakers, 21 Southern speakers and 35 Steinbach speakers. Word-initial stops are analyzed for their VOT, while word-final stops are analyzed for voicing into the closure, closure duration, and burst duration.

Results from the Southern and Interlake communities show that both communities display high levels of prevoicing and voicing bleed in comparison with other reported varieties of English. Further, within these highly voiced varieties, there were significant differences in stop voicing between the regions: word-initially, Interlake speakers prevoiced more tokens (51%) in comparison to Southern speakers (31%), and word-finally, Interlake speakers had high amounts of voicing bleed, or glottal pulsing into a stop closure. While some bleed is expected, the amount in underlyingly voiced stops was particularly high for speakers in the Interlake region. At the same time, Interlake speakers had significantly longer closure and burst durations in underlyingly voiceless stops, which are cues to voicelessness.

Word-finally, there does not appear to be an effect of final stop devoicing from German, unlike nearby German-substrate varieties in Wisconsin and Minnesota (Purnell et al 2005, Pfiffner 2021). However, the Interlake speakers had significantly more voicing in the underlyingly voiceless stops (38% of the closure is voiced) in comparison to Southern region speakers (18%), which together with the closure and burst durations suggest that Interlake speakers have conflicting cues to voicing. This could result in a neutralization process.

These preliminary results suggest a degree of prevoicing not normally found in North American English, typically described as contrasting short-lag and long-lag VOT (Lisker & Abramson, 1964). Li (2021) also reports prevoicing in her Winnipeg speakers, in the -20ms average range, suggesting that prevoicing may be characteristic of the Canadian Prairies regardless of L1. Word-finally, our results also contrast with nearby American dialects spoken in Wisconsin and Minnesota, which have high rates of devoicing (Purnell, Salmons, & Tepeli, 2005; Pfiffner, 2021), which has previously been attributed to German substrate effects (Allen, 1973; Purnell et al., 2005). Our results suggest that these German substrate effects do not continue across the border into Canada and indeed, that Canadian Prairies speakers overall may show a different stop voicing pattern than currently described North American varieties.

References

- Allen, H. (1973). *The linguistic atlas of the Upper Midwest, Volume 1*. University of Minnesota Press, Minneapolis, MN.
- Li, L. (2021). A sociophonetic study of Filipino English in Winnipeg, Canada. Doctoral dissertation. University of Manitoba.
- Lisker, L., & Abramson, A. S. (1964). A cross-language study of voicing in initial stops: Acoustical measurements. *Word*, 20(3), 384–422.
- Pfiffner, A. (2021) Cue-Based Features: Modeling Change and Variation in the Voicing Contrasts of Minnesotan English, Afrikaans, and Dutch. Doctoral dissertation. Georgetown University.
- Purnell, T., Salmons, J., & Tepeli, D. (2005). German substrate effects in Wisconsin English: Evidence for final fortition. *American Speech*, 80(2), 135-164.
- Purnell, T., Salmons, J., Tepeli, D., & Merced, J. (2005). Structured heterogeneity and change in laryngeal phonetics. *Journal of English Linguistics*, 33(4): 307-338.