

## Changing ejectives in SENĆOTEN: how explicit instruction might precipitate sound change in endangered Indigenous languages

It is not uncommon for language teachers to hyper-articulate unfamiliar sounds, to help learners perceive and produce them (Saito & van Poeteren 2012; Uther et al. 2006). These adaptations do not generally affect pronunciation in the language as a whole because second language (L2) learners only form a small fraction of the speakers of the language. The situation is different in language revitalization contexts. Currently in British Columbia, the majority of Indigenous language speakers are themselves adult L2 learners. Thus, strategies that are adopted by them and/or their teachers to emphasize unfamiliar sounds are much more likely to stick and become features of the language as a whole.

This paper explores the possibility of pronunciation change through explicit instruction, based on an auditory and acoustic investigation of the ejective stop /t'/ in SENĆOTEN (Central Salish). The study is part of a larger project to document pronunciation across four generations of speakers: *elders* (acquired SENĆOTEN fluently as children), *understanders* (heard SENĆOTEN as children and currently 're-awakening' as speakers), *teachers* (learned SENĆOTEN as young adults and have taught it for many years), and *apprentices* (learned SENĆOTEN through the master-apprentice program and are now teaching it). The data for this study consist of 130 /t'/ tokens, extracted from repetitions of 4 words (two with initial /t'/ and two with final /t'/), spoken by 12 speakers (three per generation). All tokens were transcribed (narrow transcription) based on auditory impression and analyzed acoustically (VOT, amplitude rise time, jitter perturbation, F0 perturbation). Their phonetic properties were then compared to those provided by Montler (1986), based on his work with fluent speakers in the 1970s.

Montler characterises ejectives as: "ejective but weakly so. It is often difficult, especially in the anterior consonants, to perceive the contrast [between plain and glottalized stops]" (1986, section 1.1.1). Findings from the current study show a very different picture: only three tokens corresponded to Montler's description, transcribed as creaky [t]; all were word-initial, pronounced by an understander (two tokens) or an elder (one token). Strong (tense) ejectives (Kingston 1985) were much more common: 41/65 in initial position and 47/65 in final position. These were characterized by long VOTs (initial position; average 95ms) and strong release bursts. Other realizations depended on position: 21 tokens in the [t<sup>h</sup> ~ t] range in initial position; one unreleased voiced [d'] and 17 "voiced ejective" [d'] in final position, the latter characterized by long voicing lags (making up on average 44% of the stop closure, compared to 21% of the stop closure for [t']) combined with strong release bursts (similar to [t']).

Ejective pronunciation has clearly changed since Montler conducted his fieldwork. The proposal put forth here is that explicit language instruction has precipitated this change: to ease perception and production, adult L2 learners and their teachers have adopted a strong version of what were once weak ejectives. Since these learners are now primarily responsible for transmitting SENĆOTEN, this strong ejective is becoming the norm in the language as a whole (c.f. Blevins 2004).

### References

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