

# Seeing speech: Teaching and learning Hul'q'umi'num' pronunciation with Praat

Rae Anne Claxton, Sonya Luschiimtunaat Charlie, Harvey S-hwutstus George, George  
Sq'utxulenuhw Seymour

*Simon Fraser University and Hul'q'umi'num' Language and Culture Collective*

Sonya Bird

*University of Victoria*

Maida Percival

*University of Toronto*

# Who we are

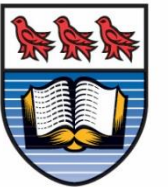
- Rae Anne Claxton, Sonya Luschiimtunaat Charlie, Harvey hwutstus George, George Sq'utxulenuhw Seymour
  - MA students in SFU Masters in Linguistics of a First Nations Language (Hul'q'umi'num')
  - Members of the Hul'q'umi'num' Language and Culture Collective
- Sonya Bird: Linguistics professor, University of Victoria
- Maida Percival: PhD student, University of Toronto



S-



SIMON FRASER  
UNIVERSITY



University  
of Victoria



# Huy tseep q'u

- Our Hawaiian hosts
- Elders: Ruby Peter, Delores Louie, Merle Seymour
- SFU Masters in Linguistics of a First Nations Language (Hul'q'umi'num')
- Donna Gerdts, SFU
- SSHRC, including Partnership Development Grant #890-2017-0026



University  
of Victoria



Social Sciences and Humanities  
Research Council of Canada

Conseil de recherches en  
sciences humaines du Canada

Canada



SIMON FRASER  
UNIVERSITY

# Introduction: Hul'q'umi'num'

- Hul'q'umi'num' territory
  - Along the Salish Sea from Nanoose to Malahat on Vancouver Island and neighboring islands.

- North of Seattle, WA



Island Halkomelem = Hul'q'umi'num'



# Introduction: Hul'q'umi'num' context

- Hul'q'umi'num'
  - Approximately 40 L1 speakers (elders) + 200 fluent second-language (L2) speakers + over 1,000 semi-fluent speakers and language learners + several hundred “fluent understanders”
  - Active language revitalization: many (new) programs designed to create new speakers of all ages



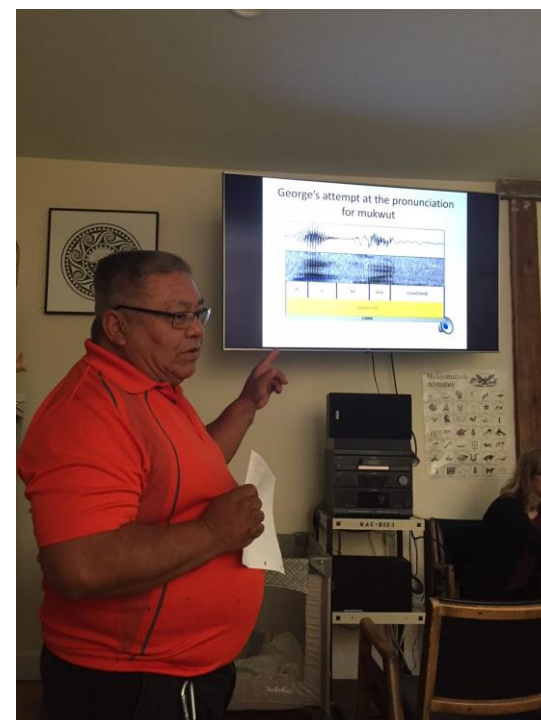
# Hul'q'umi'num' sounds

	Labial	Dental	Alveolar	Lateral	Palatal	Velar	Lab. Velar	Uvular	Lab. Uvular	Glottal
stop	p		t			k	kw	q	qw	'
Glott. stops	p'		t'				kw'	q'	qw'	
affricates		tth	ts		ch					
Glott. affricates		tth'	ts'	tl'	ch'					
Fricatives		th	s	lh	sh		hw	x	xw	h
Resonants	m		n	l	y		w			
Glott. resonants	m'		n'	l'	y'		w'			

- 37 consonants, 21 not in English
- Other important sound features: long strings of consonants
  - E.g. **hwtl'**uqtnuts 'cougar'

# Introduction: Hul'q'umi'num' pronunciation

- Challenge: learners have very high standards with respect to pronunciation, but little by way of resources to support them
  - ***In general***: until very recently, very little opportunity to develop our own capacity for language work
  - No thorough phonetic description
  - Few opportunities to hear natural speech, *not* in a pedagogical context
  - Popular teaching approaches de-emphasize pronunciation (e.g. WAYK, TPR)

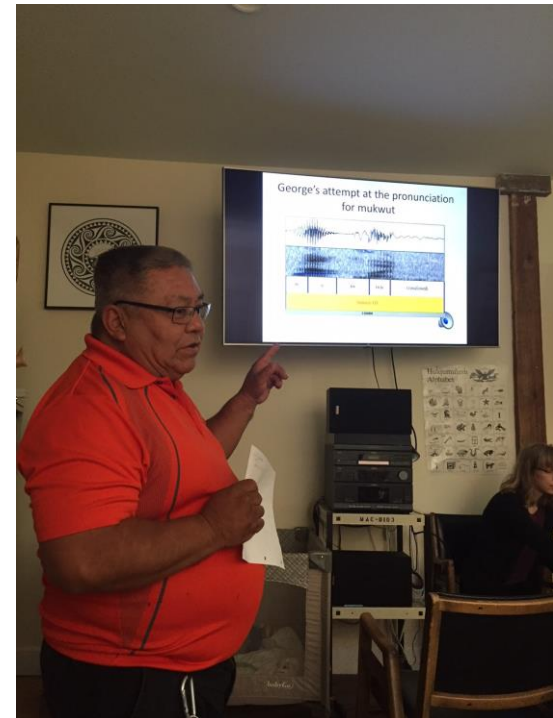


# Introduction: Hul'q'umi'num' pronunciation

- Solution: new programming in Hul'q'umi'num' linguistics (SFU)

*In terms of pronunciation*

- Seeing speech using acoustic analysis software: Praat ([www.praat.org](http://www.praat.org))
- Emerging as an effective way of learning pronunciation in the broader field of second language acquisition (Olson, 2014).
- Something we can learn, take control of, and make use of ourselves





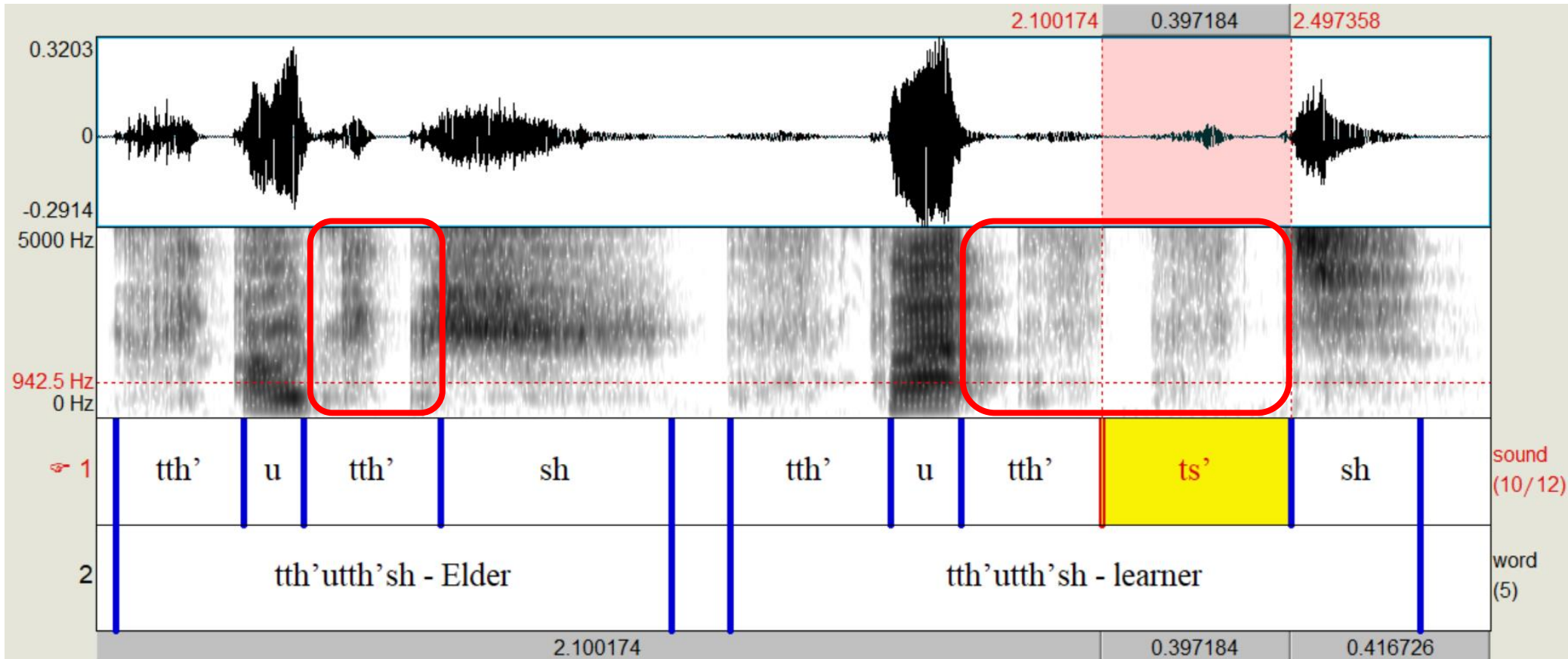
# Hul'q'umi'num' phonetics and phonology class

- Participants
  - Students: SFU-based Master's in Linguistics of a First Nations Language program
  - Instructors: Sonya Bird and Maida Percival
- Process
  - Teaching and learning phonetic analysis with Praat
    - Training in Praat
    - Recording, listening to + visualizing, and documenting L1 and L2 speech



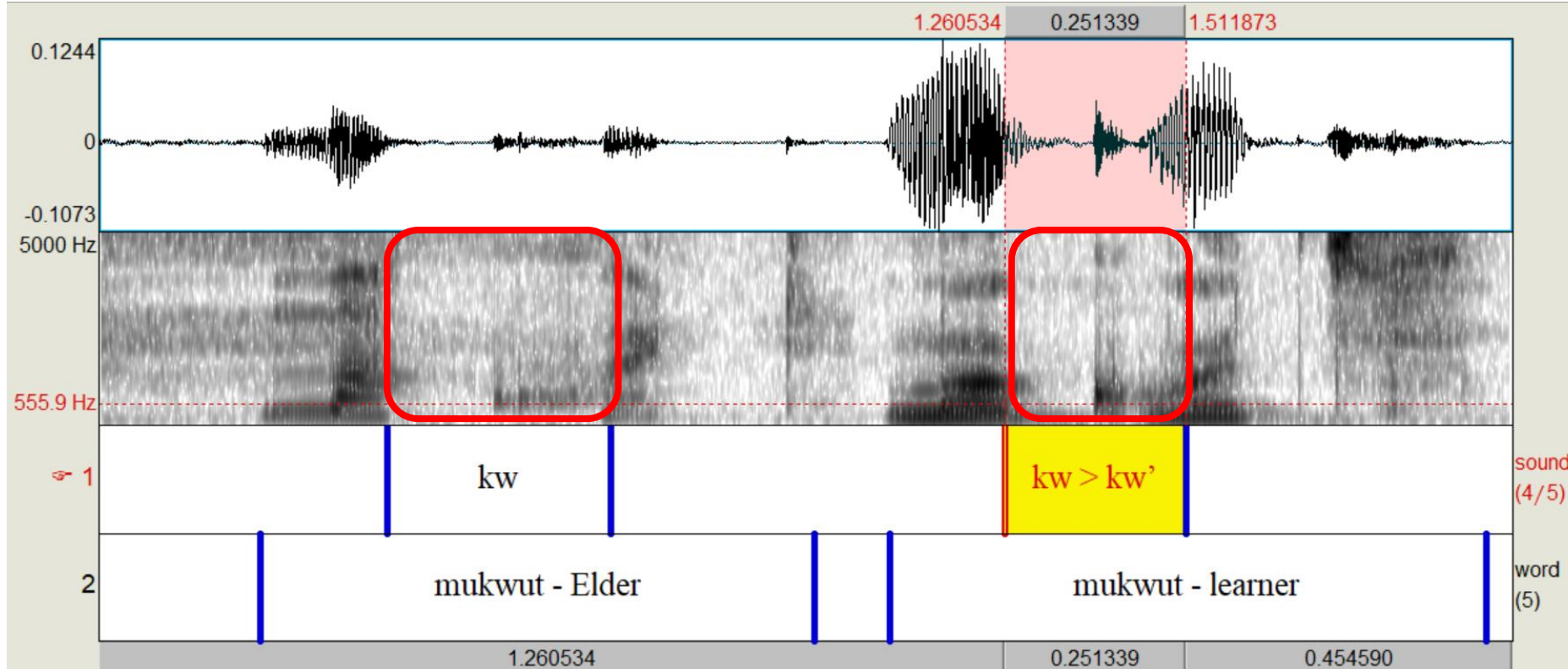
# Example 1: adding sounds to words

- Learners sometimes insert sounds that shouldn't be there
- Praat helps learners see these sounds, and avoid them



# Example 2: Hul'q'umi'num' plain vs. ejective stops

- Learners tend to “over-ejectivize” stops
- Praat helps learners understand the release features of these sounds and try to match their Elders' speech



Long version

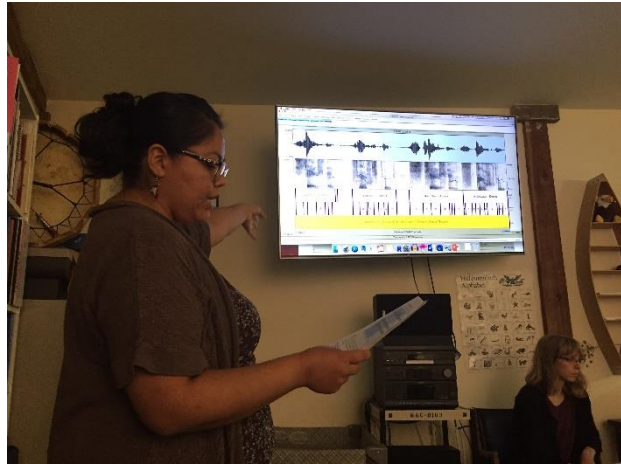


Short version

# Discussion: Phonetic analysis as a pronunciation tool

- Pedagogy

- Raises **awareness** of detailed pronunciation features
- Helps develop both **perception** and **production** skills, both of which contribute to production ability
- Takes guess out pronunciation (it's right there, you can hear and see what you're doing)
- Fun for elders too!

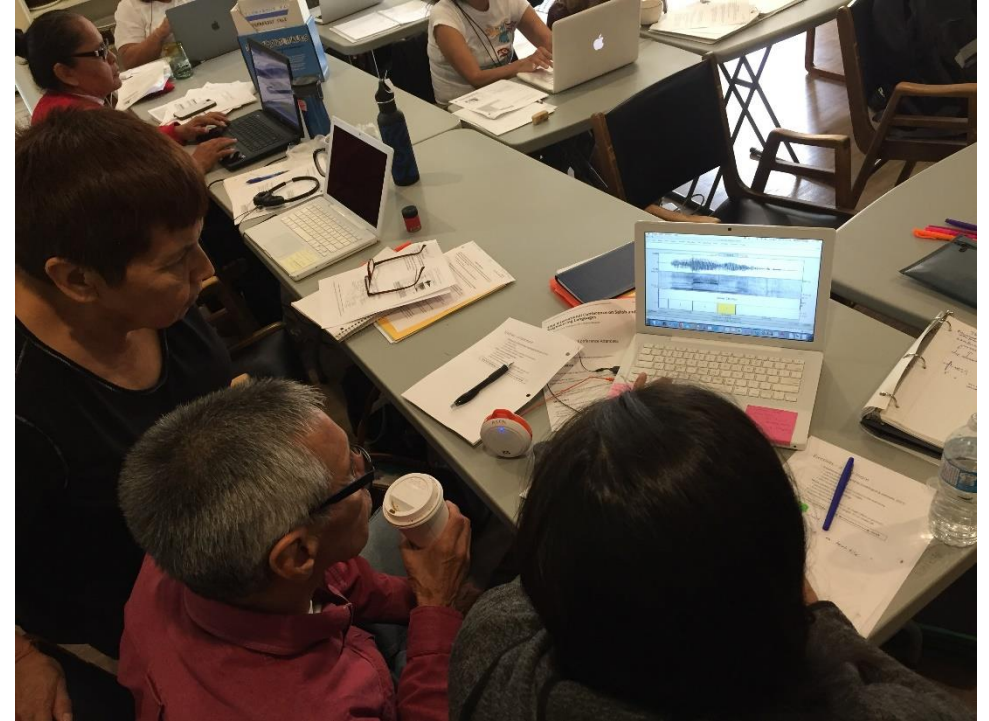


- Documentation

- Serves to **document** speech details
- Facilitates **transcription** work (of previously recorded stories)
- Builds our **capacity** to do this kind of work in our community and share it with others

# Conclusion

- So far, we have used Praat to document the speech of elders and learners, and to compare the two
- We have found that Praat is an effective tool for our own learning
- We hope to keep using Praat as teachers, to help other learners with pronunciation
- We hope that, by sharing our experiences, we might encourage others to incorporate this kind of technology in pronunciation teaching and learning, especially in contexts where resources that support pronunciation work are sparse.



# References

- J. J. Asher, *Learning Another Language through Actions: The Complete Teacher's Guidebook*. Los Gatos, CA: Sky Oaks Productions, 1977.
- S. Bird and S. Kell, "The role of pronunciation in SENĆOŦEN language revitalization," *Canadian Modern Language Review*, vol.73. no. 4, 2017, pp. 538–569.
- S. Bird, J. Leonard and D. Gerdtz (2015). The realization of obsruents across speakers of Hul'q'umi'num'. *Canadian Acoustics* 44(3), 134-135.
- G. Cantoni, "Using TPR-storytelling to develop fluency and literacy in Native American languages," in *Revitalizing Indigenous Languages*, J. Reyhner, Ed. Flagstaff, AZ: Northern Arizona University, 1999, pp. 53–58.
- C. Fitzgerald, "The sounds of Indigenous language revitalization," Plenary address, Linguistic Society of American 91<sup>st</sup> annual general meeting, January 2017, Austin Texas.
- N. Greymorning, "A language warrior's eighteen years of running a gauntlet for Indigenous languages," *Canadian Journal of Native Studies*, vol. 31. no. 1, 2011, pp. 193-203.

# References

- B. Jenni, A. Anisman, O. McIvor, and P. Jacobs, “An exploration of the effects of mentor-apprentice programs on mentors’ and apprentices’ wellbeing.” *International Journal of Indigenous Health*, vol. 12. no. 2, 2017, pp. 25–42.
- W. Y. Leonard, “Producing language reclamation by decolonising ‘language’,” in *Language Documentation and Description*, vol. 14, W. Y. Leonard and H. de Korne, Eds. London: EI Publishing, 2017, pp.15–36.
- J. McDonough and D. H. Whalen, “Editorial: The phonetics of native North American languages,” *Journal of Phonetics*, vol. 36, 2008, pp. 423–426.
- O. McIvor and P. Jacobs, “NETOLNEW ‘one mind, one people’ Language Learning Assessment Tool,” Victoria: University of Victoria, 2016. (<https://www.uvic.ca/research/partner/home/currentprojects/language-assessment-tool/index.php>.) (Accessed 2017-02-25).
- D. J. Olson, “Benefits of visual feedback on segmental production in the L2 classroom,” *Language Learning and Technology* vol. 18. no. 3, 2014, pp. 173–192.
- D. H. Whalen, M. Moss, and D. Baldwin, “Healing through language: positive physical health effects of indigenous language use,” *F1000Research*, 2016. (<https://f1000research.com/articles/5-852/v1>) (Accessed 2018-02-14)