# Grammatical suffixes in pentl'ach

#### Shankhalika Srikanth

University of Victoria ssrikanth@uvic.ca

The aim of this project was to conduct an analysis to support reconstruction of pentl'ach grammatical suffixes in collaboration with Qualicum First Nation, using 1) Boas documentation and 2) the comparative method by identifying cognates in neighbouring Salish languages. As of now, I have identified three potential verbal inflectional suffixes: the middle voice, control-transitive, and 3<sup>rd</sup> person ergative. I followed four steps in my work. First was partial transcription of the stories in the Boas documentation. The second was identifying and tracking all verb forms in the stories. Next, I tried to identify verb roots and grammatical suffixes. Finally, I consulted grammars of neighbouring related languages to identify cognates with the forms I had identified. More work on the last step is required to strengthen the analysis. Keywords: pentl'ach; Salishan languages; morphology, community-based language revitalization

# 1 Introduction<sup>1</sup>

The aim of this project was to conduct an analysis to support reconstruction of pentl'ach grammatical suffixes in collaboration with Qualicum First Nation, using 1) Boas documentation and 2) the comparative method by identifying cognates in neighbouring Salish languages. In this paper I will discuss three potential grammatical verbal suffixes: the middle voice, control transitive, and 3<sup>rd</sup> person ergative forms.

In the following sections I will go over the language background of pentl'ach, followed by my methodology, methods, and the relevant ethical implications of this project. I will then provide a summary of my analysis of the aforementioned grammatical suffixes, followed by the limitations of this work. Finally, I will briefly discuss next steps.

<sup>&</sup>lt;sup>1</sup> Thank you to the Reawakening pentl'ach team for the opportunity to do this collaborative work. Please see Andreatta et al. (this volume) for an overview of and invitation to support the Reawakening pentl'ach project. Thank you to Suzanne Urbanczyk for all your guidance and support, as well as to my peers in LING531/431 for their work and feedback. A final thanks to the anonymous reviewers of this journal for their comments and suggestions.

# 2 Language background

pentl'ach is a Central Salish language spoken on the land that is sometimes called Vancouver Island. pentl'ach is the ancestral language of the pentl'ach people. It is the ancestral language of Qualicum First Nation and some members of K'ómoks First Nation. It is closely related to neighbouring languages ?ay?ajuθəm (Comox), Shishálh (Sechelt), Skwxwu7mesh (Squamish), and Halkomelem. Its status is currently defined as reawakening, and one of the goals of the reawakening project is to have this status recognized by Canadian institutions as well.

# 3 Methodology

In this section I will elaborate on the framework and methodology underpinning my work. In the next section, I will go into more detail about the specifics of the materials and methods I employed to do the work.

I endeavoured to situate the work in an Indigenist research paradigm, which is a way of describing and doing research in a relational context (Wilson 2007). I also chose to ground the work in the "4 R's", which are a set of shared values: respect, relevance, reciprocity, and responsibility (Kirkness & Barnhardt, 1991, as cited in Gardner, 2012). Gardner (2012) describes how the "4 R's framework" can be a useful way of describing how grassroots language revitalization work is conducted. I detail below how I tried to incorporate the 4 R's into my work.

Respect: I wished to show respect for the language, culture, and histories of the pentl'ach peoples by including all verb forms within their context rather than pulled out of context, as recommend in Lukaniec (2022). When compiling a spreadsheet of all the verb forms I was able to identify in the stories, I made sure to include a column with the entire sentence in which a given verb form was found, along with the translation of the entire line. When doing the analysis, I looked at how the forms were used in the context of the story rather than in isolation. This was made especially easier by cross-comparing Boas's texts with Kinkade's rewriting of the stories in a more naturally flowing English (Kinkade, 2008).<sup>2</sup>

Relevance: I picked the focus of my research from topics suggested by the Reawakening pentl'ach team, so as to ensure my final analysis would have relevance to their larger community language plan. This is a key element of the Indigenist research paradigm as well, i.e., "The reason for doing the research must be one that brings benefits to the Indigenous community" (Wilson, 2007, p.195).

Reciprocity: I am contributing to a community-led project, led by Qualicum First Nation, rather than working solely as an outsider linguist. The goals are defined by the community, rather than by abstract, decontextualized goals I may have about researching linguistic theory. In this way, I am also grounding this work in the framework of community-based language revitalization (CBLR), as defined by Czaykowska-Higgins (2009), as well as other scholars.

-

<sup>&</sup>lt;sup>2</sup> Thanks to Erin Hashimoto for suggesting this resource.

Responsibility: I acknowledge my privilege as a settler and as someone with linguistics training, and recognize that I have a responsibility to put that training to use in this project to support larger community goals of reconstruction. I take responsibility for the goals I said I would achieve- though I wasn't able to attain them to the extent I was hoping, I hope that my results will still be of some help in the overall project.

#### 4 Methods

In this section I detail the materials I worked with as well as the methods I used for my analysis.

This project was a collaborative effort with peers in the (Researching) Community-Based Language Revitalization course, and so all materials were shared via Microsoft Teams. All files referenced below that I created as part of my analysis were shared on Teams.

I worked primarily with the Boas documentation from the American Philosophical Society (APS) that is part of the ACLS collection, specifically the stories included in pg. 58-70 of "Item S2j1 Comox and pentl'ach texts". I also briefly referenced the English wordlists in the yellow pages of "Item S2j3 pentl'ach materials" and the German wordlists in the white pages (as revised by Anna Moffat).

At the start of my project, I transcribed some pages of the stories. Erin Hashimoto had already transcribed 75% of the stories and developed some conventions for this that I followed in transcribing the remaining 25%.

The second step was for me to read through the stories to highlight and track any forms that appeared to be functioning as verbs. I first identified forms as verbs based on their English glosses. Then, as I became more familiar with the texts, I was able to identify some forms as being similar to earlier forms and included these even if their English gloss didn't necessarily seem to operate as a verb. I worked collaboratively with Erin Hashimoto in this last step, as we compared forms that seemed to interact with motion auxiliaries; see Hashimoto (this volume) for a detailed discussion of the latter. She was able to point out some verb forms to me that I had missed in my initial pass of the texts.

As I highlighted these verb forms, I created a spreadsheet to keep track of them. The tracking process was as follows: First, I included information on where the forms came from in the first few columns. I then included the entire sentence in which the verb form was found, and the English gloss of the sentence in the next two columns. I then attempted to isolate the verb phrase. This sometimes included other grammatical content in addition to just the verb, such as pronouns or locatives, as I was not confident enough in my understanding of the morphology and syntax to isolate just the verb. Finally, I included a column marking the semantic "sense" of the verb stripped of extra grammatical information, to compare to other forms with similar meaning later. For example, verb phrases translated as "he eats", "eats it" and "ate" would all be tracked with the unmarked sense "eat". In the very last column, I included additional notes. These were generally notes

about the analysis of the verb, questions about how to analyse the form, making note of any uncertainties I had in the analysis of the example, or notes about any potential cognates of the form in other languages.

In my third step, I tried to identify verb roots and identify grammatical suffixes. This was a cyclical process, as identifying verb roots made it easier to isolate suffixes, and vice versa. Ultimately my goal was to identify grammatical suffixes. So, where possible, I tried to focus on this rather than isolating verb roots. To do this step, I used the spreadsheet to filter for individual senses. I then compared the different forms that appeared with a given sense and tried to see if there were any obvious surface-level patterns that I could work with. I will elaborate more on this step and its limitations in the section on the analysis.

My final step was to consult dictionaries and grammars of neighbouring related languages to learn more about potentially shared morphological/syntactic features that could be at play, as well as to identify cognates with the forms I identified. The Mainland Comox grammar (Watanabe, 2003) was very useful in detailing different suffixes.

#### 5 Ethical considerations

In doing this work, I followed the ethical guidelines laid out by OCAP®<sup>3</sup> (Ownership, Control, Access, Possession), which are a set of principles that assert First Nations data sovereignty and control over data collection. I will detail here how I have taken each principle into consideration in my research.

Ownership: The documentation used is in the public domain and held by the APS and thus not owned by me. The Reawakening pentl'ach team invited students in our course to work with these materials to support the reawakening process, and has given permission for this paper to be published in this journal. I recognize and acknowledge that all cultural property rights belong to Qualicum First Nation for doing this work, and that I do not retain property rights or copyright for the results of this work and all materials that were created.

Control: I do not retain control over any of the analysis of the data or materials created. All relevant findings and materials have been submitted as part of the requirements of the course, and were subsequently compiled and forwarded over to the control of the Reawakening pentl'ach team of Qualicum First Nation for their use.

Access: I worked together with the rest of the project team in the class to make sure our respective projects were coherent, and there was no duplication of work. We endeavoured to make our work as complementary as possible to make the analysis accessible when passed on to the Reawakening pentl'ach team. I used commonly-used file formats such as Word docs and Excel spreadsheets to minimize the chance of any members of the team not being able to access my work on their devices. In the copy of the analysis that I have given to the team, I have

\_

<sup>&</sup>lt;sup>3</sup> https://fnigc.ca/ocap-training.

included a guide to using the verb forms spreadsheet I created that was mentioned in section 4, in order to make consulting that material easier.

Possession: I have not retained and will not retain exclusive possession of any of the analysis. The results of my analysis, including the verb forms spreadsheet, have been given to the Reawakening pentl'ach team, along with my contribution to the transcription of the stories.

# 6 Analysis

The primary suffixes I've identified as of now are the middle voice, the control transitive, and the 3<sup>rd</sup> person ergative suffixes. All examples included in this section are taken from the pentl'ach stories in the manuscripts as documented in Boas (1910).

#### 6.1 Middle Voice: /- Vm/

This middle voice suffix is described in detail in the morphological description of ?ay?ajuθəm, a neighbouring language related to pentl'ach. Phonologically, it is described as consisting of a phonemic vowel followed by /m/. It is described as having two functions. The first is to "express events and states in which no energy or immediate effect is exerted on another entity", and the second is to express events where the immediate effect is exerted on the subject itself, rather than an external entity (Watanabe, 2003, p.192).

Both of these related functions can be seen in examples taken from the pentl'ach stories, in verb forms that appear to carry a suffix of the same form. See (1) of a verb form describing an event that has no effect exerted on another entity:

$(1)^4$	Mē lā'tcam ta stō'lao				
	Mē	lā'tc	-am	ta	stō'lao
	come	rise	-MV	the	river
	'It rises the river'				
					(Boas, 1910, p. 23, line 9)

The river is rising, but in the context of this sentence appears to affect no external entity. Conversely, see (2), where the ocean rises and floods the land:

#### Mēletc ti kuō'łkō lxstō mēmēxti smē'i. (2) Μē -letc ti kuō'łkō lxstō mēmēx тi smē'i -rises the ocean and flood the land 'It rises the ocean and floods the land.' (Boas, 1910, p. 25, line 8)

 $^4$  The following abbreviations are used in this paper: MV = middle voice, CTR = control transitive, 3ERG = 3<sup>rd</sup> person ergative.

\_

Here, the action of water rising *does* have an effect on something else: as a result of the ocean rising, the land is flooded. I am hypothesizing that this is why the verb does not carry the middle voice suffix in this example.

See now (3), one where the action connoted by the verb does have an effect, but it is reflexive on the subject carrying out the action himself rather than an external entity:

(3) Kuē'xenarcim ta jō'i.

Kuē'x -enarc -im ta jō'i

shakes -? -MV the boy

'He shakes himself the boy.'

(Boas, 1910, p. 31, line 3)

Here, the subject of the sentence (the boy) is doing an action that has an effect on himself and nothing external, and so I hypothesize that this is fulfilling the second function of the middle voice as described in the  $\alpha$  and  $\alpha$  grammar, which is to express a reflexive.

#### 6.2 Transitives: control /-t/

Four different types of transitive suffixes are discussed in the ?ay?ajuθəm grammar referenced above. I will only discuss the control transitive, which is used when the subject has control over the action they are doing (Watanabe, 2003, pp. 202-203). In ?ay?ajuθəm, this suffix is described as having the form /-t/. I found some forms in the stories that appear to carry this suffix and match the function described in the ?ay?ajuθəm grammar. See (4). The gloss for this example was taken from Kinkade (2008, p. 91).

(4) Kuī'xtas qaxuā'was mēslē'xēm.

Kuī'x -t -as qaxuā'was mē -s $\frac{1}{2}$  - $\frac{1}{2}$  - $\frac{1}{2}$  me shake -  $\frac{1}{2}$  - $\frac{1}{2}$  me shakes it and it does not fall down.'

(Boas, 1910, p. 27, line 4)

In this example we see the verb root followed by [-t] and then followed by [-as]. Since the context specifies that the subject "he" is shaking "it", an external object, I am proposing that the [-t] is a control transitive marker as in ?ay?aỹuθəm. Following this suffix, we see word-final [-as], which I am proposing is a 3<sup>rd</sup> person ergative marker, marking the 3<sup>rd</sup> person subject of this transitive sentence. I will discuss this suffix more in the next section.

### 6.3 Pronominal subject markers: 3ERG

Central Salish languages have a split-ergative system. In ergative morphology, the subject of a transitive verb is grammatically differentiated from the subject of an intransitive verb. Instead of matching the subject of a transitive verb, (as it does in English), the subject of an intransitive verb grammatically parallels the object of a transitive verb. In ?ay?ajuθəm, the ergative is used for marking the subject of most transitive sentences, and is marked with the suffix /-as/ (Watanabe, 2003, p. 52). This same suffix seems to appear several times in the pentl'ach stories as well, as seen in (5):

(5) Tā'tim qē mā'lxuas.

Tā'tim qē mā'lxu -as

she.gives ?? take -3ERG

'She gives he takes it.'

(Boas, 1910, p. 28, line 1)

In this example, the transitive verb "to take" is marked with the 3<sup>rd</sup> person ergative to show that it is a transitive verb with a 3<sup>rd</sup> person subject "he". Review also (3) and (4) from before (repeated below). The same verb ("to shake") appears in both, but in (3) the verb is functioning as an intransitive (since the verb is acting reflexively on its subject) and we see no word-final [-as]. Compare this to (4), where the verb is functioning as a transitive and does have word-final [-as] at the end. This contrastive distinction seems to be evidence that pentl'ach is following an ergative system and that /-as/ is likely a third person ergative marker.

- (3) Kuē'xenarcim ta jō'i.

  Kuē'x -enarc -im ta jō'i

  shakes -? -MV the boy

  'He shakes himself the boy.'
- **(4)** Kuī'xtas gaxuā'was mēsłē'xēm. Kuī'x -t -as qaxuā'was mē -słē'x -ēm shakes - CTR -3ERG -falls not come -MV'He shakes it and it does not fall down.'

#### 7 Limitations

My analysis is severely limited by what I was able to do in a fixed amount of time. I will detail here the assumptions and remaining questions I have, so that the team will be able to replicate and verify my results going forward.

### 7.1 Background knowledge

I came into this project with no formal knowledge of the structure or sounds of Salish languages, and very limited knowledge of pentl'ach culture, and so I lacked a lot of the background knowledge that might have made analysis easier. Language and culture are inextricably intertwined, and so having a broader understanding of the linguistic and cultural context of pentl'ach would no doubt have enabled me to produce a fuller, more confident analysis. With more time and collaboration, I would be able to familiarize myself more with both the language and the culture within which the language lives. I believe this knowledge was the component that was most lacking for me when working on this project.

# 7.2 Transcription

Transcribing the texts brought up a lot of areas of uncertainty. In addition to the possibility of misinterpreting Boas's handwriting, there was also some confusion in deciding how much of the variation that was in the characters to represent. As Erin Hashimoto did the bulk of the work developing the conventions we used, I won't touch on the details; see Hashimoto (this volume). The key questions we had were when we saw words that seemed like they should be identical based on their form and gloss, but would have slight differences in transcription (for example, a "T" in one instance and a "t" in another.) It was unclear whether this difference was a marker of: variations that Boas was hearing; inconsistency in his own transcribing conventions; Boas mishearing the sounds of the languages; or, a significant phonemic distinction. Since we weren't sure, we kept in all the variations that we could see.

# 7.3 Sound correspondences

Most of my comparative work was with Mainland Comox Salish. I relied on the sound correspondences detailed in Galloway (1988, p.299) to compare forms. The limitation here is that I cannot depend on the orthographical conventions of Galloway matching those of Boas. This would heavily depend on each person's individual conventions with respect to their choice of characters and diacritics, and also on how broad or narrow each person's phonetic transcription was, i.e., how much phonetic detail each individual included. The hope is that the conventions are similar enough to justify comparison.

#### 7.4 Verb structure

As I was unfamiliar with the morphology and syntax of Salish languages, this made it difficult to analyse the structure of the forms I was seeing. I have had to make assumptions about what the verb roots could be, simply based on the forms I was able to see in the texts. Thus, it is possible that I may have isolated the verb root incorrectly at times, which would affect my analysis of what the suffixes that

follow it are. With more time, I would address this limitation by trying to find the verbs in "unmarked" form in the wordlists, or trying to find cognates for them in other related languages. This way I could isolate which parts are truly operating as suffixes and are not part of the root.

# 7.5 Cognates

The suffixes I proposed are based on the assumption that suffixes in pentl'ach are cognate to those found in Mainland Comox Salish. The suffixes I have proposed could be further supported by evidence from other texts (such as the pentl'ach wordlists), or cognates from other neighbouring related languages.

# 8 Next Steps

Next steps would be to address the limitations described above. I believe this involves three main components: 1) Learn more about Central Salish language structures, pentl'ach culture, and other Coast Salish nations' cultures. 2) Consult the Boas wordlists to find the unmarked versions of the verb forms I have identified in the stories, in order to isolate verb roots, and 3) Consult the dictionaries and grammars of other related languages to find cognates for verbs and suffixes.

This last step could be achieved by consulting Skwxwu7mesh and Sechelt dictionaries to identify cognates of the unmarked forms (Beaumont, 2011; Jacobs et al., 2010). In order to do this, it would also be important to be familiar with sound correspondences in Central Salish, as are described in Galloway (1988). This second step would be a circular process, where looking for cognates in neighbouring languages would help the analysis of pentl'ach forms, and determining pentl'ach forms would help find corresponding cognates in neighbouring languages in order to support an analysis.

In sum, I have been able to work with the pentl'ach texts in order to identify and track verb forms in a systematic manner, and through doing this work I have proposed the existence of three different types of grammatical suffixes on the verbs. More work comparing forms to cognates in related languages is required to strengthen and verify these hypotheses.

### References

Beaumont, R. C. (2011). Sechelt dictionary. Sechelt Indian Band.

Boas, F. (1910). *Item S2j.1 Comox and Pentlatch Texts*. ACLS Collection (Mss.497.3.B63c).

Czaykowska-Higgins, E. (2009). Research models, community engagement, and linguistic fieldwork: Reflections on working within Canadian Indigenous communities. *Language Documentation & Conservation*, *3*(1), 182–215.

Galloway, B. D. (1988). Some Proto-Central Salish sound correspondences. In W. Shipley (Ed.), *In honor of Mary Haas: From the Haas Festival Conference* 

- *On Native American Linguistics* (pp. 293–344). De Gruyter Mouton. https://doi.org/10.1515/9783110852387.293
- Gardner, S. E. B. (2012). The four R's of leadership in Indigenous language revitalization. In C. Kenny (Ed.), *Living Indigenous leadership: Native narratives on building strong communities* (1st ed.). UBC Press.
- Jacobs, P., Jacobs, D., & Squamish Nation Education Department. (2010). Squamish-English dictionary. University of Washington Press.
- Kinkade, M. D. (2008). The Pentlach myth corpus. In M. T. Thompson & S. M. Egesdal (Eds.), *Salish myths and legends: One people's stories (Native literatures of the Americas)* (pp. 84–103). University of Nebraska Press. <a href="https://epdf.pub/salish-myths-and-legends-one-peoples-stories-native-literatures-of-the-americas.html">https://epdf.pub/salish-myths-and-legends-one-peoples-stories-native-literatures-of-the-americas.html</a>
- Kirkness, V. J., & Barnhardt, R. (1991). First Nations and higher education: The four Rs respect, relevance, reciprocity, responsibility. *Journal of American Indian Education*, 30(3), 1–15.
- Lukaniec, M. (2022). Managing data from archival documentation for language reclamation. In A. L. Berez-Kroeker, B. McDonnell, E. Koller, & L. B. Collister (Eds.), *The open handbook of linguistic data management*. The MIT Press. https://doi.org/10.7551/mitpress/12200.003.0030
- Watanabe, H. (2003). A morphological description of Sliammon, Mainland Comox Salish: With a sketch of syntax. Endangered Languages of the Pacific Rim.
- Wilson, S. (2007). Guest editorial: What is an Indigenist research paradigm? *Canadian Journal of Native Education*, 30(2), 193-195, 322.