The past and present of lexical suffixes in the Sḵwx̱wú7mesh language

by

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B.A., Simon Fraser University, 2016

Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Arts

in the
Department of Linguistics
Faculty of Arts and Social Sciences

SIMON FRASER UNIVERSITY
Summer 2021

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Abstract

Lexical suffixes are a class of morpheme in Salish languages which are obligatorily bound, but have the semantic properties of free-standing nouns. Sḵwx̱wú7mesh, a member of the Central Salish branch, has a rich system of over 120 suffixes. Lexical suffixes serve diverse functions in the morphology of the language, from serving as verb arguments, to deriving new adjectives and nouns.

This thesis describes how Sḵwx̱wú7mesh lexical suffixes interact with the phonology, syntax, and other aspects of the morphology. It traces the development of this system from Proto-Salish, through Proto-Central Salish, and to innovations unique to Sḵwx̱wú7mesh. As a new generation of second language speakers continue reclaiming their language, they will need to develop new vocabulary to talk about things that did not exist in the Sḵwx̱wú7mesh language and using lexical suffixes will be a crucial way of doing this. Hopefully this thesis will provide further support for that important work.

Keywords: lexical suffixes; Squamish; Salish; morphology; historical linguistics

Acknowledgements

I would like to thank my supervisors, Marianne Ignace and Peter Jacobs for their support and helpful feedback.

I have to thank Marianne for hiring me to help out with the first year of the Sḵwx̱wú7mesh immersion program, even though nobody was sure what to do with me at first. Without that opportunity I would never have been introduced to the language, which has been a life changing experience. I would also like to thank her for the incredibly interesting courses in our graduate certificate program, as well as for creating such a unique and entertaining classroom experience. Your work in documenting and revitalizing Secwepemctsín and X̱aad Kil is so important and inspiring.

Next I would like to thank Peter. Thank you for always entertaining my questions about the language and being so generous to everyone with your knowledge. Thank you for the many conversations about the function this or that morpheme, or the connections between Sḵwx̱wú7mesh and other languages. I regret that my speaking ability has declined over the past couple years, but I greatly appreciate all our conversations in the language and have to thank you for gently correcting my grammar or quickly providing the word I can't come up with. Chen kw'enmántumi.

Thank you to all my classmates in the Linguistics program. Working on homework together made the assignments much more bearable. Thank you also to my classmates in the First Nations certificate program for your great senses of humour and for allowing me to learn a little bit about your languages.

A very important thank you must go out to everyone involved with the Sḵwx̱wú7mesh immersion program. Thank you to Khelsilem for being a great and enthusiastic teacher of the language, and for helping to create a new generation of speakers and teachers (and thank you for helping me get into grad school). Thank you to all the students in that first year who were so welcoming to the strange xwelítn. I can't wait to see what you all do with the language, and I know it is in good hands. I'm sure that was the best job I'll ever have. Chen kw'enmántumiyap.

Finally, thank you to my friends and family, without whose support I would not have gotten through this.

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List of Acronyms

Language abbreviations

Cx	Comox
Sl	Sliammon
Se	Sechelt
Sq	Sḵwx̱wú7mesh
Cw	Cowichan (Island Halkomelem)
Ms	Musqueam (Downriver Halkomelem)
Ck	Chilliwack (Upriver Halkomelem)
Sn	Saanich (Northern Straits)
Sg	Songish (Northern Straits)
Kl	Klallam
Ld	Lushootseed
Tw	Twana
Ti	Tillamook
Li	Lillooet
Sh	Shuswap
Th	Thompson
Cb	Columbian
Ka	Kalispel
PS	Proto-Salish
PCS	Proto-Central Salish

Glossing abbreviations

CONJ	conjunction
MID	middle
DEM	demonstrative
PL	plural
SUB	subject

CON	connective
AUX	auxiliary
LCTR	limited-control transitivizer
DET	determiner
F	female
POS	possessive
CAUS	causative
TR	transitivizer
SG	singular
LOC	locative
OBL	oblique
APPL	applicative
REFL	reflexive

Others

UR	unanalyzable root

Chapter 1. Introduction

Lexical suffixes are a class of bound morphemes in Salish languages that have semantic content like nouns, but are typically phonologically distinct from them. These unique properties and their ubiquity within the lexicon of all Salish languages have made them one of the most well-known features of the family. This thesis describes the inventory of lexical suffixes in Sḵwx̱wú7mesh, their functions and grammatical behaviour, and their origins and development from the earliest stages of the Salish family to the present.

Sḵwx̱wú7mesh is a language of the Central Salish branch, spoken from the Squamish and Cheakamus River valleys down Howe Sound to north shore of Burrard Inlet. No known dialect divisions exist. It is closely related to Sechelt to the west and Halkomelem to south, and distantly related to the Lillooet language to the east. The Salish language family likely originated on the coast somewhere between the Fraser River and the Skagit River, based on the distribution of flora and fauna terms that can be reconstructed back to Proto-Salish (Kinkade 1990: 10). This is not far to the south of present day Sḵwx̱wú7mesh territory, which likely indicates that the area was occupied by Salish speaking people since the earliest expansion of that language family. Sḵwx̱wú7mesh oral histories (*syets*) also explain the historical connections between Central Salish speaking peoples. In the story of the Flood told by Louis Miranda to Kuipers (1969: 19-20), a group of Sḵwx̱wú7mesh people boarded their canoes and rode out the flood by heading for the mountains. Eventually, they hitched their canoes to the only mountain not submerged, Mount Garibaldi (*Nch'ḵaẏ́*). One canoe broke away and drifted down to Mount Baker, which is why the Nooksack language is similar to Sḵwx̱wú7mesh. Another history tells of how some people from Gibson's Landing (*Ch'ḵw'elhp*) followed a sea lion across the Georgia Straight, with some settling at Penelakut Island (*P'ná7lx̱ets'*) and Nanoose (*Snéwnews*), explaining why the Sḵwx̱wú7mesh were friendly with those people (Kuipers 1969: 21-23).

The Sḵwx̱wú7mesh language is highly endangered with few remaining first language speakers, although a strong movement to revitalize it exists among the younger generations of community members. It is hoped that the material in this thesis can contribute in a small way to achieving this goal by describing in greater detail how

lexical suffixes are used within the lexicon of the Sḵwx̱wú7mesh language, and how new words are formed with lexical suffixes. This second goal is especially important, as the next generation of speakers will need to coin new words to talk about things that currently do not have words in the language.

The main questions of this thesis are:

1. How do lexical suffixes function within the grammar of the Sḵwx̱wú7mesh language?
    a. How do they interact with the phonology?
    b. What morphological, syntactic, and semantic functions do they have?
2. How did the lexical suffix system in Sḵwx̱wú7mesh arise from earlier systems in Proto-Central Salish and Proto-Salish?
    a. How can this comparative evidence be used to interpret the meaning and function of lexical suffixes that are unclear or not well-attested in Sḵwx̱wú7mesh?

1.1. Background

Salish lexical suffixes have long been of interest to linguists and anthropologists. An early description comes from Sapir (1911), who refers to them as “substantivals” (253), noting that they are verbal affixes with nominal meaning, and contrasting them with noun incorporation due to the fact that they are etymologically unrelated to free-standing nouns (252). Another important early piece of research is Haeberlin (1974), which was written between 1917 and 1920 but not published until much later. This is a survey of all “substantival” suffixes known from the Salish languages at the time and represents an important step in comparative Salish research.

Another family-wide survey is Newman (1968), which presents a list of 76 cognate sets. He focuses on how the suffixes are distributed across the branches of the family, recognizing that some lexical suffixes must be reconstructed back to Proto-Salish. This paper also notes the large range of meanings and semantic extensions that many lexical suffixes have, which would become an important area of research for future

researchers. Newman also proposed that “lexical suffixes are not derived from noun roots” (Newman 1968: 27), which was later disproven by Kinkade (1998); see Chapter 3 for a discussion of Kinkade’s argument.

Hinkson (1999) is an important study of the semantics of lexical suffixes in Salish, describing the semantic extensions that certain lexical suffixes have undergone across the family. This research involves reconstructing the proto-meanings of these suffixes and arguing that the polysemy they exhibit in modern Salish languages result from both cognitive and cultural practices. The developments she traces follow specific pathways, which include shape, locational, relational, and metonymic extensions.

Kuipers’ *Salish Etymological Dictionary* (Kuipers 2002) reconstructs hundreds of lexemes to earlier forms of Salish, including Proto-Salish. Crucially for this thesis, he reconstructs around three dozen lexical suffixes back to Proto-Salish, including alternate and/or connective forms for many of these. This dictionary serves as one of the main sources for the Proto-Salish reconstructions in Chapter 3.

Probably the earliest description of lexical suffixes in Sḵwx̱wú7mesh specifically comes from Hill-Tout (1900). His analysis is linguistically unsophisticated, and he did not recognize lexical suffixes as a morphological class, nor did he recognize their obligatorily bound status, referring to noun plus lexical suffix forms as “noun compounds” and verb plus lexical suffix forms as “noun objects”. Despite these shortcomings, it is an important resource, as it demonstrates that the grammar of speakers of the late 19th century was not significantly different from later generations of speakers.

Kuipers (1967) description of the Sḵwx̱wú7mesh language is one of the first modern grammars of a Salish language, and was an important influence on grammars to come. Kuipers described lexical suffixes, although the name had not been coined yet, dividing them into “somatic suffixes”, “non-somatic suffixes”, and “formatives”. His description primarily consists of a catalogue of the lexical suffixes he had been able to elicit, along with the words derived from them. He also noted the semantic extensions of the body-part suffixes, correctly recognizing that the body-part meaning is primary. However, his grammar contains little on how lexical suffixes actually function as a class of morpheme, i.e., how they relate to the roots they attach to, how the meaning of the whole word is derived, and so on.

Finally, the Squamish-English dictionary (Squamish Nation Dictionary Project 2011) also contains a brief section on lexical suffixes, which are broken down into body part suffixes and others. This section includes the lexical suffix, its main referent, additional meanings, as well as the corresponding full word.

1.2. Methodology

The analysis of the grammar in this thesis is descriptive and meant to update and expand on the very short section on lexical suffixes contained in Kuipers' 1967 grammar of the language. As such, it is largely theory-independent, but I have assumed that morphology exists as an area of grammar separate from phonology and syntax, but which interfaces with both. The interaction between morphology and syntax is especially relevant to lexical suffixes, as discussed in Chapter 2. The material for this chapter comes from Kuipers (1967, 1969) and the Squamish-English Dictionary (2011), unless otherwise cited.

The chapters on the history of Sḵwx̱wú7mesh lexical suffixes follow basic procedures of the comparative method. This begins with recognizing regular sound correspondences between lexical items in related languages, which for Central Salish have been largely worked out by Galloway (1988). Once cognates are identified, knowledge of sound correspondences makes it possible to reconstruct proto-phonemes of the ancestral language, and then morphemes in that proto-language that survive in two or more daughter languages (Rankin 2003, Nichols 1996).

This method requires a large amount of cognate material from as many related languages as possible. Fortunately, lexical suffixes are well described in most grammars and dictionaries of Salish languages. Some data for this thesis come from broad surveys of the family such as Kuipers (2002) and Haeberlin (1974), but the majority come from language-specific sources. By language, these are: Comox-Sliammon: Blake (2000), Watanabe (2003); Sechelt: Beaumont (2011); Musqueam (Halkomelem): Suttles (2004); Chilliwack (Halkomelem): Galloway (2009); Nooksack: Richardson & Galloway (2011); Saanich (Northern Straits): Montler (2018); Songish (Northern Straits): Raffo (1972); Klallam: Montler (2012); Lushootseed: Bates et al. (1994).

Data from these various sources were compiled into a spreadsheet, where each language has its own column, and each row corresponds to a cognate set with a single ancestral form[1]. From there, Proto-Central Salish forms were reconstructed according to the sound correspondences described by Galloway (1988). Where possible, these were checked against reconstructions in sources such as Galloway (1988), Kinkade (1998), and Kuipers (2002). Only lexical suffixes which are found in five or more geographically contiguous languages or two or more non-contiguous languages were reconstructed back to Proto-Central Salish. Five was selected since this represents attestation in half of the languages of the branch[2]. This cut-off is arbitrary, but in a continuum-like language group such as Central Salish, it is impossible to use typical criteria such as attestation in multiple branches of the family to determine which lexemes go back to the proto-language.

[1] Ideally, although the problems of phonological/morphological variants of a single suffix in one language corresponding to two or more suffixes in another language occasionally made this difficult.

[2] For different criteria, see Kuipers (2002), who reconstructs Proto-Central Salish roots “attested for minimally Squamish in the north down to and including Twana in the south” (Kuipers 2002: 215). He does not give a justification for this.

Chapter 2. The grammar of lexical suffixes in Sḵwx̱wú7mesh

2.1. Introduction

This chapter describes the synchronic morphology of lexical suffixes in the Sḵwx̱wú7mesh language as spoken by the latest generation of fluent elders. This chapter is broken into two sections: one of morphophonology, or how lexical suffixes interact with the phonology of the language, and one on morphology and morphosyntax, or how lexical suffixes relate to other morphemes within the word, or other words within a phrase.

2.2. Morphophonology

As the name implies, morphophonology deals with the phonological shifts that sometimes occur within words as morphemes are combined. Although words in Sḵwx̱wú7mesh are often morphologically complex, sounds generally change little when new morphemes are added. This contrasts with most other Salish languages, which frequently have very complex morphophonological processes, such as umlaut, segment deletion, coalescence between adjacent segments, etc. Two areas where lexical suffixation does affect the phonology of the word in Sḵwx̱wú7mesh are in stress and glottalization, both of which are discussed here.

2.2.1. Stress

Lexical suffixation and stress can interact in complex ways in Sḵwx̱wú7mesh, as in other Salish languages (Revithiadou 1999). A full discussion of these interactions is outside the scope of this thesis[3], but I will describe the major patterns in this section. Stress in lexically suffixed words may be determined phonologically, in which case the

[3] See Dyck (2004) for an in-depth analysis of Sḵwx̱wú7mesh stress, including interactions with lexical suffixation.

suffix is unmarked with regard to stress, or morphologically, in cases where the lexical suffix is inherently stressed[4].

In lexically suffixed words where the suffix is unmarked for stress, the rules for stress assignment are determined phonologically by the type of vowel in the root and suffix. If both the root and suffix contain a full vowel, the stress will default to the root (1.a). If the root has schwa and the lexical suffix has a full vowel, the stress will be typically on the suffix (2.b). These rules account for stress with the majority of lexical suffixes in the language.

1. Lexical suffix unmarked for stress
    a. Root and suffix both contain full vowel

s-x̲áẏ=ach	“left hand” (√*x̲aẏ* “left”, *=ach* “hand”)
(n-)sháẇ=us	“cheekbone; skinny” (√*shaẇ* “bone”, *=us* “face”)
shiyúkw’=uẏs	“one whole large piece” (√*shiyúkw’* “whole piece”, *=uẏs* “large object”)
ts’áx̲’=apsem	“get hit on the back of the neck” (√*ts’ax̲’* “get hit”, *=apsem* “back of the neck”)

    b. Root contains schwa, suffix contains full vowel

x̲ewtl’=ách	“break one’s hand” (√*x̲ewtl’* “break”)
ts’ah=ús	“get hit in the face” (√*ts’eh*[5] “get hit”)
x̲ch=uẏs	“be full grown (about larger fruit)” (√*x̲ech* “be full grown”)
s-tsex̲=ápsem	“back of the neck” (√*tsex̲* UR, *s-* “nominalizer”)

[4] Dyck (2004) claims that there are lexical suffixes which are inherently unstressed. However, the examples of inherently unstressed suffixes she provides are sometimes stressed, according to the dictionary. She gives *=mut* “piece”, but c.f. *x̲a7utsen=mút* “four pieces”, *kw’in=mút* “how many pieces?”. The only example I could find of a suffix that never seems to bear stress is *=wilh* “canoe”.

[5] This root has underlying schwa, which shifts to *a* before *h* according to the phonological rules of the language (Kuipers 1967:30).

Roots that have a schwa followed by a resonant do not seem to follow a predictable pattern. Stress may fall on the root (2.a), the suffix (2.b), or it may be variable (2.c). What accounts for these unpredictable patterns is currently unknown.

2. Unpredictable stress in *CeR* roots

   a. Stress on the root

      t'ém̓=us "hurt one's face" (√*t'em* "hurt, chop", *=us* "face")

      xwéy=us-em "be showing [about face]" (√*xwey* "appear")

      yél=a7en "wing" (√*yel* UR[6], *=a7n* "cheek, member of pair")

      k̲w'él=a7en "ear" (√*k̲w'el* UR)

   b. Stress on the suffix

      t'em̓=ách "chop one's hand accidentally" (√*t'em* "hurt, chop", *=ach* "hand")

      hen̓=ús "be looking in direction of speaker" (√*hen* UR)

      s-xweyxwey̓=úy̓s "rock that sticks out" (√*xwey* "appear", *=uy̓s* "large object")

   c. Variable stress

      n-chém̓=us ~ n-chem̓=ús "meet, come together" (√*chem* "come together"[7])

Lexical stress accent exists in Sk̲wx̲wú7mesh, but plays a smaller role than in other Salish languages. Lexical suffixes with inherent stress are very rare; in fact, Dyck (2004) claims that fewer than five percent of all morphemes in the language are marked for stress (216). I have noted eleven such lexical suffixes, which are given in Table 2.1 below. These suffixes always bear stress, regardless of the vowel type or stress pattern of the root to which they are attached.

[6] UR = unanalyzable root

[7] Also in *chem̓=ts-ám* "close one's mouth".

Table 2.1 Inherently stressed lexical suffixes

Suffix	Gloss of suffix	Example word	Gloss of example
=álkwlh	"dance, dancer"	*mix̲alh=álkwlh*	"perform bear dance" (√*míx̲alh* "bear")
=álh	"times"	*kw'in=álh*	"how many times?" (√*kw'in* "how many?")
=álhk̲wu	"water"	*tsiyachis=álhk̲wu*	"five rivers" (√*tsíyachis* "five")
=álhx̲a	"throat"	*itut=álhx̲a*	"have no appetite" (√*ítut* "sleep")
=áyak̲ap	"taste, smell"	*halh=áy̓ak̲ap*	"good-smelling/tasting" (√*ha7lh* "good")
=ay=áx̲a7n ~ =iy=áx̲a7n	"arm"	*xwakw'=iy=áx̲a7n*	"have pins and needles in arm" (√*xwakw'* "be drunk")
=áy=a7n[8]	"ear"	*tsak̲w=áy=a7n*	"have a bleeding ear" (√*tsak̲w* "bleed")
=k̲wáy̓new̓as	"stomach"	*yulh=k̲wáy̓new̓as*	"have heartburn" (√*yulh* "burn")
=mámin	"inside"	*mikw'=mámin*	"wash the dishes" (√*mikw'* "wash")
=úllh	"young individual"	*mix̲alh=úllh*	"bear cub" (√*míx̲alh* "bear")
=únexw	"wave"	*hiy=únexw*	"big waves" (√*hiyí* "big")

Some lexical suffixes do not seem to behave according to predictable stress patterns. For example, the suffix *=aẇtxw* "house, building" nearly always surfaces with stress, but it is unstressed in words like *k̲w'úy̓=aẇtxw* "hospital" (√*k̲w'uy* "dead") and *tl'ák̲t=aẇtxw* "longhouse" (√*tl'ak̲t* "long"). Another example is *=ayum̓* "small object", which is typically stressed, but unstressed in *shiy̓úkw'=ayum̓* "one whole small piece" (√*shiy̓úkw'* "whole piece") and *x̲a7útsen=ayum̓* "four berries" (√*x̲a7útsen* "four").

Whether this irregularity is due to individual or dialectal variation, or more general prosodic features of the language is currently unknown. The issue of secondary stress may also be at play here; in polysyllabic words, secondary stress tends to occur on alternating syllables (Dyck 2004:74). However, secondary stress is not consistently marked in Kuipers (1967) or in the Sḵwx̲wú7mesh dictionary, so it may be that certain cases of secondary stress have been marked as primary, or vice versa, giving rise to the appearance of irregularity in certain lexically suffixed words.

[8] c.f. *=a7n* "cheek, member of pair" in example (2.a) above

2.2.2. Glottalization

Kuipers (1967) describes a semi-predictable process in which glottalization is inserted between a morpheme (both roots and suffixes) ending in a vowel or resonant and a suffix (Kuipers 1967: 52). He also subdivides these into two types, depending on whether the triggering suffix is vowel initial (3.a) or consonant initial (3.b), with (3.c) showing that glottalization is not inserted in the case of an obstruent final stem.

3. Junctural glottalization

   a. Vowel initial suffix

      skati=7ús “crazy faced” (√*skáti* “crazy”, =*us* “face”)

      x̲éyts’-em̓=us “have an itchy face” (√*x̲éyts’* “ichy”, *-em* “middle”)

      s-ch’ï7i=7áy̓ “strawberry plant” (√*ch’í7i* “strawberry”, =*ay̓* “plant, tree”)

      k̲’emel̓=áy̓ “maple tree” (√*k̲’émel* “paddle”)

   b. Consonant initial suffix

      s-k̲wiṅ=ch “back hair” (√*k̲win* “hair on”, =*ch* “back”)

      sham-sháṁ=ch-aṁ “be finning (about porpoise/whale)” (√*sham* “stick out of water”, =*am* “middle”)

      hiyí7=ts “have a big mouth” (√*hiyí* “big”, =*ts* “mouth”)

      etsíṁ=ts “have a small mouth” (√*7etsím* “small”)

   c. No glottalization after obstruent

      nekw=ús-em “shake one’s head” (√*nekw* “shake”)

      k̲ál̓k̲=ay “wild rosebush” (√*k̲al̓k̲* “wild rosebud”)

      k̲’et=ch-án “go behind something” (√*k̲’et* “go around”, *-an* “transitive”)

      tsik̲=ts-án “stab someone in mouth” (√*tsik̲* “be stabbed”)

Kuipers describes the vocalic type (3.a) as “potentially preglottalized” (1967:52), implying that these suffixes contain an underlying glottal stop (e.g. *=7us*, *=7ts*), which then coalesces with a preceding resonant, or is deleted after an obstruent. A problem with this analysis is that these suffixes frequently do not trigger resonant glottalization:

4. Instances where vocalic suffixes fail to trigger resonant glottalization

tl’íkw’en=ay̓	“kinnikinnick plant” (√*tl’íkw’en* “kinnikinnick”, *=ay̓* “plant, tree”)
ne-k̲’íl=us	“clever, smart” (√*k̲’il* UR, *ne-* “locative”, *=us* “face”)
x̲wáy=ach	“have a paralyzed arm” (√*x̲way* “be paralyzed”, *=ach* “hand, arm”)
múy=uy̓s-en	“boil something by means of hot stones” (√*muy* “submerge”, *=uy̓s* “large object”, *-en* “transitive”)

This contradictory behaviour is not fully explained by Kuipers. The environments he gives where glottalization appears most consistently are with the pronominal stems *tam* “what”, *in* “the one, the other”, after the connective *=ay=*, and “in a number of cases which make the impression of being recent formations” (Kuipers 1967:52). Additionally, he provides an example of a consultant producing the “artificial combination” *etsím̓=ikwup* “small fire” (√*7etsím* “small”, *=ikwup* “fire, firewood”) in response to a question about *hiy=íkwup* “big fire” (√*hiyí* “big”). Furthermore, there are frequent exceptions to glottalization of the connective *=ay=*, as in *chemx̲=áy=us* “put pitch in someone’s eyes” (√*chemx̲* “pitch”, *=ay=us* “eye”) and *k̲’elx̲=áy=us* “pupil of the eye” (√*k̲’elx̲* UR).

A more thorough analysis comes from Dyck (2004), who examines the relationship between stress and glottalization in Sḵwx̲wú7mesh within the framework of Optimality Theory[9]. According to her analysis, the glottalization of lexically suffixed forms in (3.a) above results from the process of syllabification in Sḵwx̲wú7mesh which is governed by several constraints, most importantly that all syllables must have an onset, that syllabification can take place across a Root=Lexical Suffix boundary, and that a

[9] Dyck’s thesis follows Kuipers (1967) in analyzing glottalized resonants as resonant plus glottal stop sequences /mʔ nʔ lʔ yʔ wʔ/, which is necessary for her explanation of the stress system in Sḵwx̲wú7mesh. In this thesis, I have followed the standard orthography and written them as unitary phonemes.

root-final resonant is parsed as the coda of the final syllable in the root (135-136). Thus, a glottal stop is inserted to provide an onset for a vowel-initial suffix that follows a root-final vowel or resonant, as in (3.a), while no glottal stop insertion is required for root-final obstruent words, as in (3.c).

However, Dyck's analysis does not account for cases such as (3.b) where a consonantal suffix triggers glottal stop insertion before a root-final vowel or resonant. Here, the constraints do not predict that glottalization should occur, since there is no syllable onset position for the glottal stop to take. To account for these cases, I invoke a diachronic explanation which reconstructs the lexical suffixes system of an earlier stage in the evolution of the Sḵwx̱wú7mesh language.

Most lexical suffixes with the form *=C* have alternants [=əC] ~ [=VC] within the language, or cognates in other Salish languages that have fuller forms, showing that the Sḵwx̱wú7mesh single-consonant suffixes are a later innovation in that language which result from a more general process of vowel reduction and final syllable schwa deletion (see Chapter 5 for a full discussion). Table 2.2 shows some Sḵwx̱wú7mesh single-consonant lexical suffixes and their Proto-Central Salish ancestral forms with initial vowel that show the environment for the process of glottal insertion to occur.

Table 2.2 Sḵwx̱wú7mesh single-consonant lexical suffixes

Gloss	Sḵwx̱wú7mesh	Proto-Central Salish[10]
"mouth"	*=ts*	**=ucin*
"back"	*=ch*	**=ičən*
"head"	*=ḵw*	**=iqʷ, *=aqʷ*
"bottom (Sq), penis (PCS)"	*=ḵ*	**=aq, =aq'*

However, there are still cases where a consonant that usually triggers glottalization fails to do so. These cannot be accounted for phonologically, since the usual environment for glottal insertion applies. These exceptions demonstrate the instability of resonant glottalization in Sḵwx̱wú7mesh and across the Salish family. Many dictionary entries include free variation between glottalized and non-glottalized

[10] The forms **=aq, =aq'* are from Kuipers (2002) and Kinkade (1998), while the rest are my own reconstructions.

resonants, as in *ch'eyxw* ~ *ch'eẏxw* "dry" and *hiw* ~ *hiẇ* "upstream region", and Kuipers states that glottalized resonants are "almost always in free – or at least stylistic – variation" with unglottalized ones (1967:51). The most plausible explanation is that these exceptions were glottalized at one point, but that this glottalization was irregularly lost.

2.3. Morphology and morphosyntax

I have combined morphology and morphosyntax into one section, since with lexical suffixation it is difficult to discuss one without the other. Lexical suffixes straddle the boundary between derivation, a morphological process, and noun incorporation, usually a syntactic process. This section describes how lexical suffixes relate to the root they attach to, other suffixes (including other lexical suffixes), and some prefixes.

2.3.1. Relationship between the root and lexical suffix

The most important question regarding the morphology of lexical suffixes is: how does the lexical suffix relate to the root it attaches to? As this varies depending on the lexical category of the root, I have broken this section down based on whether the root is a verb, adjective, or noun (following the structure in Suttles 2004 for Musqueam)[11]. All category labels of roots and derived forms come from the Squamish-English dictionary (2011).

Verb roots

Root as head, lexical suffix as modifier

This is a very large category of words with lexical suffixes in Sḵwx̱wú7mesh, which parallels observations made by Suttles of Musqueam (2004:289). Most frequently, the lexical suffix plays the semantic role of the theme/patient, which is again paralleled by Suttles' and Gerdts' findings in Musqueam and Island Halkomelem respectively (Suttles 2004:290; Gerdts 2003:347). Some examples of this are given in (5) below.

5. Lexical suffix as theme/patient

   lhích'=ach "cut one's hand" (√*lhich'* "cut", *=ach* "hand")

[11] I have assumed that Sḵwx̱wú7mesh has the lexical categories noun, verb, and adjective.

tsékw=[w]ilh[12] “pull a canoe ashore” (√*tsekw* “pull”, =*wilh* “canoe”)

k̲exw-ní=[i]7kwup “gather firewood” (√*k̲exw* “gather”, *-ni* “transitivizer”, =*i7kwup* “fire, firewood”)

ip’=áẏlh “hold baby in arms” (√*7ip’* “hold”, =*aẏlh* “child”)

Occasionally the lexical suffix has the role of source, instrument, or location, but these uses are much rarer.

6. Lexical suffix as source, instrument, and location

(ne)xw-mú7=ts[13] “drop something from mouth” (√*mu7* “drop”, =*ts* “mouth”, *nexw-* “locative”)

tsa7ts=k̲s “feel around for fish with butt end of harpoon” (√*tsa7ts* UR, =*k̲s* “nose, point”)

na-k̲w’ú7=wilh-an “accompany someone in canoe” (√*k̲w’u7* “be together?”, =*wilh* “canoe”, *na-* “locative”, *-an* “transitive”)

Words of this class are syntactically intransitive but semantically transitive, resulting in a construction reminiscent of noun incorporation. The similarity between lexical suffixation and noun incorporation has been noted since at least Sapir (1911). Some (Newman 1968, Hagège 1978, Mithun 1984) have argued that the phonological differences between lexical suffixes and their corresponding full nouns means that lexical suffix constructions cannot be considered equivalent to noun incorporation. However, Gerdts (2003) argues, based on combinations of lexical suffixes with other suffixes in Halkomelem, that lexical suffixes occupy argument position, and therefore are functionally equivalent to incorporated nouns. Some of the tests she applies to Halkomelem can no longer be used in Sḵwx̲wú7mesh, but at least one seems to show that Sḵwx̲wú7mesh behaves similarly to Halkomelem.

Gerdts states that lexical suffix constructions allow the semantic possessor of a lexical suffix to appear as an external argument of the verb, with the lexical suffix as the

[12] I have used square brackets to indicate a sound that is present underlyingly but deleted.

[13] I have used curved brackets to indicate an element that is optional.

head of the theme, which is equivalent to noun incorporation constructions (Gerdts 2003:353). Where the resulting verb is intransitive, the underlying possessor surfaces as the subject of the verb, which is shown by the English translations of the Sḵwx̱wú7mesh examples below.

7. Externally possessed lexical suffixes

    a. *ses men nekw=ach-í7m kwétsi xwelítn*
    CONJ then move=hand-MID DEM white.person
    “then the white man moved his hands” (Kuipers 1967:237)

    b. *ses men sát=ḵwuy̓=ach-í7m kwétsi menílh*
    CONJ then give=digit=hand-MID DEM himself
    “then he extended his finger” (Kuipers 1967:238)

    c. *an chap tl’iyiḵw=ay=ús-m*
    very 2PL.SUB squeeze=CON=face-MID
    “squeeze your (pl.) eyes very tightly shut” (Kuipers 1967:221)

Furthermore, these data show that lexically suffixed verbs are reflexivized with the middle suffix, rather than the usual *-sut* (see “Combining lexical suffix with verbal suffixes” below for more examples). Gerdts (1988) argues that in Halkomelem *-θət* (cognate with *-sut*) is used when the reflexive is the underlying object, while *-əm* (cognate with *-m*) occurs when the object is derived, i.e. moved from its place in the underlying structure. This includes not only lexical suffix constructions, but datives and benefactives as well; c.f. the grammaticality of (8.a) versus the ungrammaticality of (8.b) in Halkomelem. This implies that the possessor modifies the lexical suffix, which occupies the theme position, in underlying structure (Gerdts 2003:355). This construction parallels what is found in languages with traditional noun incorporation, suggesting that lexical suffixation is equivalent to noun incorporation.

8. Halkomelem reflexives (reproduced from Gerdts 2003:353, 355)

    a. *niʔ kʷələš-θət kʷθə swəy̓qeʔ*
    AUX shoot-TR.REFL DET man
    "The man shot himself”

    b. **niʔ ʔa:m-əs-θət kʷθə swəy̓qeʔ ʔə kʷθə pukʷ*

AUX gave-APPL-TR.REFL DET man OBL DET book
"The man gave himself a book"

Lexical suffixes may also express the object of a transitive verb, as shown by the data from Bar-el and Watt (2000) shown in (9) below. I was unable to find examples of lexically suffixed transitive verbs in any of the texts in Kuipers (1967, 1969) or in the other stories that I have access to, suggesting that this construction may have been somewhat rare in narrative speech.

9. Lexically suffixed transitive verbs (data from Bar-el and Watt 2000:15)

   a. *na xéwtl'=shen-nexw-as*
      AUX break=foot-LCTR-3SUB
      "he accidentally broke his foot"

   b. *na xewtl'=ách-nexw-as*
      AUX break=hand-LCTR-3SUB
      "he accidentally broke his hand"

   c. *na xewtl=ách-nexw-as lha Lisa ta naxch-s*
      AUX break=hand-LCTR-3SUB DET.F Lisa DET hand-3POS
      "Lisa broke her arm"

   d. *na xéwtl'=shen-nexw-as ta nix=kwúy̓=shen-s*
      AUX break=foot-LCTR-3SUB DET digit=digit=foot-3POS
      "he broke the toe"

Interestingly, these last two examples show that the lexical suffix may "double" a free-standing object of the same or similar meaning. Gerdts reports a similar type of object doubling in Island Halkomelem (Gerdts 2010).

Root as modifier, lexical suffix as head

In this class of words, the lexical suffix behaves like a derivational affix, changing both the meaning and part of speech of the root. Words of this type are quite common in Sḵwx̱wú7mesh and represent a very common way of forming new nouns, which can be seen by the fact that words for items and concepts introduced since contact are often formed this way.

10. Nouns derived from verb roots

ts'ax̲=áẃtxw	"second-hand store" (√*ts'ax̲* "sell cheaply")
táy=wilh	"race canoe" (√*tay* "canoe race (v.)", *=wilh* "canoe")
mekw=shn	"socks" (√*mekw* "wrap", *=shn* "foot, leg")
(n-)k̲w'ík̲w'l=was	"stick for holding salmon above fire" (√*k̲w'el* "be cooked", *=was* "stick, wooden object")

The majority of nouns derived from verbs via lexical suffix nominalization are participant nominalizations (Comrie and Thompson 1985), meaning that the resulting noun relates to the verb root as a thematic relation (agent, theme, location, etc.) of that verb. The particular semantic relation seems to be primarily determined by the inherent properties of the lexical suffix; i.e., *=aẃtxw* "house, building" usually relates to the verb root as a location, *=wilh* "canoe" as the manner, etc. However, since lexical suffix derivations are independent lexical items, they may undergo unpredictable semantic change, which can render the original thematic relation between verb root and lexical suffix obscure (Comrie and Thompson 1985:13-16).

One particularly common class of nouns derived from verbal roots are names for tools, which typically are formed from the root describing the activity they perform, plus the lexical suffix *=tn* "instrument", or rarely *=mn* "instrument."[14] The thematic relation of the derived noun to the verb root is of course instrumental. Because the suffix *=tn* always results in a noun, in some formations the "instrument" meaning has been lost, resulting in a process whose only function seems to be nominalization. This suffix is even found in some place names, where no trace of the instrumental function remains (e.g., *Temtemíxw=tn* "village at Belcarra" (√*temixw* "land"). This once again demonstrates the principle of semantic unpredictability encountered with derived nouns.

[14] John Lyon (p.c.) asks why *=tn* is considered a lexical suffix here. This is partially due to tradition, since it is grouped with the lexical suffixes by Kuipers (1967), as are cognates in Lillooet (Van Eijk 1997:80) and Musqueam (Suttles 2004:297). It behaves like a lexical suffix in that it can occur both before and after other lexical suffixes (e.g. *kw'ekw'ch=us=tn=áẃtxw* "window of house" (√*kw'ach* "look at", *=us* "face, *=tn* "instrument", *=aẃtxw* "house")), as well as before the middle suffix (e.g. *ch'aw=tén-m* "ask for assistance" (√*ch'aw* "help", *=tn* "instrument", *-m* "middle")). Additionally, it can occur with verbal, adjectival, and nominal roots, which is typical of lexical suffixes.

11. Nouns derived from verbs with *=tn*

a. Instrumental

lhích'=tn	"saw" (√*lhich'* "cut")
p'ats'=tn	"needle" (√*p'ats'* "sew")
si7=k̲s=tn	"tissue" (√*si7* "wipe", *=k̲s* "nose")
x̲eĺ=tn	"pencil" (√*x̲eĺ* "write")

b. Nominalizing[15]

ch'aw=tn	"helper" (√*ch'aw* "help")
pxways=tn	"blow-hole [of whale/dolphin]" (√*pxwaẏs* "snort")
achcháw=ten	"spawning place" (√*7achcháw* "spawn"[16])
k̲'elch'=tn	"new dancer's tent" (√*k̲'elch'* "put in seclusion")

A handful of other suffixes in the language seem to always result in a derived noun. These are suffixes whose function is to name members of a particular class of noun; for example *=aẇtxw* "building, house", *=aẏ* "plant", and *=aẏ* "container, place for"[17]. This indicates that these lexical suffixes must have an inherent nominalizing feature which specifies that the category of the resulting word is a noun.

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[15] Marianne Ignace (p.c.) points out, based on parallels in Secwepmectsín, that in all cases except *ch'awtn* "helper", the *=tn* has a locative function, meaning something like "place where X occurs", which would also explain its occurrence in place names. However, there are sporadic occurrences in words like *sxw7úmten* "Indian doctor" (√*7um* UR, *sxw-* "nominalizer"), *syá7ten* "widow, widower" (√*ya7* UR, *s-* "nominalizer"), and *tl'ek̲'tn* "liver, gall" (√*tl'ek̲'* "black") where neither an instrumental nor locative meaning is clear.

[16] This root is unusual due to the sequence of two identical consonants, and may actually be √*chaw*, with initial reduplication and the addition of a prefix *7a- ~ 7e-* of unclear meaning. However, this is speculative as there are no words in the language without the initial syllable. See *s-7e-x̲á7-x̲em* "wild pigeon" (√*x̲aam* "cry", *s-* "nominalizer") or *es-7á-te-tem* (√*tam* "what?", *es-* "stative") for examples of this potential prefix.

[17] The only exception are words formed with from the root √*tam* "what", e.g., *tam=áẇtxw* "what kind of house is it?", *tam=aẏ* "what kind of tree is it?", or √*nach'* "one; different", e.g., *nach'=áẇtxw* "one house; be in a separate house/room".

Adjectival roots

Root as head, lexical suffix as modifier

Words of this class retain their adjectival function, with the lexical suffix limiting the meaning of the root.

12. Adjective as head, lexical suffix as modifier

t'ik̲w=mámin	"cold inside a house" (√*t'ik̲w* "cold air/weather", *=mámin* "inside")
tl'ek̲ttl'ák̲t=i7=k̲in	"long-haired (about an animal)" (√*tl'ak̲t* "long", *=i7=k̲in* "wool, animal hair")
k̲ey=ús	"ugly" (√*k̲ey* "bad", *=us* "face")
nexw-[h]iyí=k̲s	"big-nosed" (√*hiyí* "big", *nexw-* "locative", *=k̲s* "nose")

Adjectives derived using lexical suffixes function like other adjectives in the language, meaning they can be used both predicatively and attributively (i.e., modifying a noun). In the latter usage, the adjective typically occurs before the noun it modifies.

13. Adjectival lexical suffix words used predicatively

    a. *welh nakw hiy=íkwup kwétsi yí7yulh*
       CONJ AUX big=fire DEM fire
       "now the fire had become big" (Kuipers 1967:221)

    b. *nilh melh walhs wa tl'ek̲tl'ák̲=shn ta smek̲w'á7*
       that.is then CONJ AUX long=leg DET heron
       "that's why the heron is long-legged" (Kuipers 1967:229)

14. Adjectival lexical suffix words used attributively

    a. *kwétsi shiy̓úkw'=ayum̓ tála*
       DEM whole.piece=small.object money
       "the dollar pieces" (Kuipers 1967:238)

There are no examples in the texts in Kuipers (1967, 1969) of an adjective with lexical suffix occurring with a noun of the same meaning, which seem to be

ungrammatical in Musqueam (Suttles 2004: 292). Further examination of the existing Sḵwx̱wú7mesh materials would help clarify this question.

Root as modifier, lexical suffix as head

Words of this class are nouns, with the root describing a characteristic and the lexical suffix representing the kind. The meaning of these derived words is predictable from the meaning of its parts.

15. Adjective as modifier, lexical suffix as head

tl'aḵt=áẇtxw	"longhouse" (√*tl'aḵt* "long", *=aẇtxw* "house, building")
teẇíṅ=xw	"unripe berry" (√*teẇíṅ* "raw, unripe", *=xw* "part of plant")
x̱eta=7áx̱an	"far side" (√*x̱éta* "far", *=ax̱an* "side")
chílh=iṅup	"high ground" (√*chilh* "high", *=inup* "ground")

This type of derivation is less common than having the adjective root as the head, although there are a few words in the dictionary such as *ts'emíl̓=ay=ts'a* "thin cloth" (√*ts'emẇíl* "thin", *=ay=ts'a* "clothes") that have seemingly nominal semantics but are glossed as adjectives.

Exocentric compounds with adjective roots

In some cases of adjective plus lexical suffix, the result is an exocentric compound, where neither component can be analyzed as the semantic head, and the meaning of the whole word cannot be determined by the meaning of its component morphemes (Fabb 1998:67). Typically, this is a form of synecdoche, where a word for a part comes to refer to a larger whole. The result seems to be consistently a noun.

16. Exocentric compounds with adjective root

xwíkw'=us	"red-throated loon" (√*xwikw'* "grey", *=us* "face")[18]

[18] Marianne Ignace (p.c.) suggests that botanical and zoological terms often use saliency as a principle in naming. Since the red-throated loon only displays its red throat when during breeding season when they are in the Arctic, the more salient feature to Sḵwx̱wú7mesh people would have been their grey faces.

s-chílh=us	“hill” (√*chilh* “high”)
hiyí=k̲w	“head cover used by *sxw7úmten* ‘Indian doctor’” (√*hiyí* “big”, =*k̲w* “head”)
x̲was=tn	“suet, hardened grease/fat” (√*x̲wes* “fat (adj.)”, =*tn* “instrument”)

Many names for animals follow this pattern, such as *xwíkw’us* “red-throated loon” above, as well as *pa7pa7=í7=k̲in* “breed of dog with fluffy hair” (√*pa7pa* “fluffy”, =*i7=k̲in* “wool, animal hair”), *tl’ák̲t=iyups* “ring-necked pheasant” (√*tl’ak̲t* “long”, =*iyups* “tail”), *(n)-tl’ex̲w=ch* “turtle” (√*tl’ex̲w* “hard”, =*ch* “back”). These are identical to bahuvrihi or possessive compounds (Bauer 2008), so that *xwíkw’us* “red-throated loon” for instance can be interpreted as “grey-faced” underlyingly. In some cases, the identity of the root has been obscured or lost over time, but comparative evidence can show the original meaning of the full word; for instance, *k̲way=k̲s* “seagull when mature with yellowish-orange beak” (√*k̲way* UR, =*k̲s* “nose”, c.f. PS **qway* “blue, green”, but in some Salish languages “greenish-yellow, yellow” (Kuipers 2002:94)).

Nominal roots

Root as head, lexical suffix as modifier

In words with a noun root acting as the head, it appears that only body part lexical suffixes may occur as the modifier. The resulting noun is an endocentric compound, where the root denotes the kind of noun, and the lexical suffix restricts its meaning to a particular body part.

17. Noun as head, lexical suffix as modifier

shaẃ=k̲w	“skull” (√*shaẃ* “bone”, =*k̲w* “head”)
s-k̲win=ách	“arm hair” (√*k̲win* “hair on body”, =*ach* “arm, hand”)
s-meyts=áns	“gums” (√*meyts* “meat”, =*ans* “teeth”)
kw’el̓áẃ=shen	“skin on foot” (√*kw’el̓áẃ* “skin”, =*shen* “foot, leg”)

Generally in words of this type, the lexical suffix has a locative or possessor connotation; for instance, *shaẃk̲w* “skull” could be translated as either “bone in the head” or “bone of the head.”

Root as modifier, lexical suffix as head

This is a more common type of construction with lexically suffixed nominal roots. In these formations, the lexical suffix denotes the class of noun, while the root specifies the function, material, product, or possessor of the noun. In some cases, like *saẃtk̲wúy̓ach* “little finger” below, the root modifies the lexical suffix in a more abstract sense.

18. Noun as modifier, lexical suffix as head

sil̓=áẃtxw	“tent” (√*sil*[19] “cloth”, *=aẃtxw* “house, building”)
x̲we7ít=ay̓	“Western yew tree” (√*x̲we7ít* “iron wedge”, *=ay̓* “plant”)
nexw-lám=ay	“bottle” (√*lam* “alcohol”, *nexw-* “locative”, *=ay* “container”)
saẃt=k̲wúy̓=ach	“little finger” (√*saẃt* “junior-line sibling”, *=k̲wuy̓=ach* “finger”)

Naturally, lexical suffixes such as *=aẃtw* “house, building” and *=ay̓* “plant”, which have the function of naming a particular class of noun commonly occur in this type of derivation. The suffix *=ay* “container” seems to have been particularly productive recently in the language’s history, as it is frequently used to create new words from nouns for containers that hold introduced objects. Often, the stems to which it attaches to are themselves morphologically complex.

19. Nouns with *=ay* “container”

shukwa=7áy	“sugar container” (√*shukwa* “sugar”)
lhx̲áy̓tstn=ay	“dish cupboard” (√*lhx̲ay̓tstn*[20] “white person’s dishes”)

[19] From English *sail.*

[20] The word *lhx̲ay̓tstn* is certainly morphologically complex, probably consisting of the connective *=ay̓=*, *=ts* “mouth”, and *=tn* “instrument”. The root is less clear, but it phonologically resembles the

(n-)tala=7áy “purse, money bag” (√*tála* “money”, *n-* “locative”)

nexw-yiẏulh=áy “stove” (√*yíẏulh* “fire”, *nexw-* “locative”)

Overall, this is a very productive way of forming new nouns in the language, and can be compared to noun-noun compounding in other languages, a morphological process which is almost unknown in Sḵwx̱wú7mesh.

Exocentric compounds with noun roots

Combinations of noun root plus lexical suffix may also be exocentric, although nouns of this type seem to be less common than those derived from adjectival roots.

20. Exocentric compounds with noun root

témlh=epsem “pileated woodpecker” (√*temlh* “red ochre”, *=apsem* “back of the neck”)

s-kwúṁ=echn “humpback, humpback salmon” (√*kwum* “lump”, *=echn* “back”[21])

ḵwlhi7=shn “shoe” (√*ḵwlhaẏ*[22] “driftwood, log”, *=shn* “foot”)

méchen=ten “fine-toothed comb” (√*méchen* “louse”, *=tn* “instrument”)

Most of these are synecdoches, referring to some part of that stands in for the larger whole. Others, such as *ḵwlhi7shn* “shoe” allude metaphorically to the appearance of the object (“logs on the feet”), while *méchenten* “fine-toothed comb” describes its function (“louse [removal] instrument”).

Numeral roots

In cases of lexical suffixes occurring with a numeral root, the root is always the head. These are classifier constructions, where the lexical suffix identifies the type of noun being counted. Some of these occur only with numerals or counting verbs, while

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one found in *lhx̱=énp=tn* “floor” (*=np* “ground”, *=tn* “instrument”) and *lhx̱ilsh* “stand up”, although a semantic connection is problematic.

[21] Less productive variant of the *=ch* “back” suffix.
[22] Morphologically complex, from √*ḵwelh* “drift ashore” plus *=aẏ* “plant”.

others function as regular lexical suffixes, but may have a slightly different meaning when occurring with numeral roots, quantifiers, and the numeral interrogative *kw'in* "how many?". Only a handful of lexical suffixes occur as numeral classifiers in Sḵwx̱wú7mesh according to Kuipers (1967), certainly fewer than the roughly 30 reported for Island Halkomelem (Gerdts & Hinkson 2004).

Table 2.3 Lexical suffixes as numeral classifiers

Classifier	Noun class	Notes
=*mut*	piece, individual specimen	classifier only
=*ḵs*	small oblong object	"nose, point" when not functioning as classifier
=*axwilh*	container	classifier only
=*amats'*	strands of wool, rope, etc	also "torso" when not functioning as classifier
=*ayuṁ*	small object	
=*uẏs*	large object, piece, chunk	typically means "rock" when not functioning as classifier
=*awanexw*	year	dubious classifier status
=*aẇtxw*	house	dubious classifier status
=*awaṅ*	roll of 50-60 blankets	dubious classifier status
=*yes*	days	dubious classifier status

Of these suffixes, =*aẇtxw* "house", =*axwilh* "container", and =*yes* "days" occur with the suppletive forms √*nach'*- "one", √*tsam*- "two", and √*chan*- ~ √*chanxw* "three". The remaining suffixes occur with the usual forms of the numeral roots.

Unfortunately, there are few examples of these classifier forms used in sentences. Thus it is difficult to distinguish between those lexical suffixes that function as true classifiers, and those that occur only in quantifying expressions or measure words (Aikhenvald 2000:115-120). The criteria that numeral classifiers must cooccur with a noun likely disqualifies at least =*awanexw* "year", =*aẇtxw* "house", =*awaṅ* "roll of 50-60 blankets", and =*yes* "days", since these simply refer directly to the objects being counted, rather denoting a particular class of noun they cooccur with (Kuipers 1967:152 confirms this for =*aẇtxw* and =*awanexw* at least), and may occur without an accompanying noun. Some example sentences with suffixes which do seem to have a clear classifying function are given below.

21. Classifier lexical suffixes (examples from Kuipers 1967:152)

a. *xa7útsen=uy̓s smant*
   four=large.object rock
   “four rocks”

b. *xa7útsen=ks stsek*
   four=oblong.object wood
   “four pieces of wood”

c. *xa7útsen=axwilh te-n ch’aẇáy̓*
   four=container DET-1SG.POS spoon
   “I have four spoons”

d. *kw’ín=mut kwi i tl’ík-s-t-axw*?
   how.many=pieces DET AUX bring-CAUS-TR-2SG.SUB
   “how many (individual items) did you bring?”

Regardless of whether certain lexical suffixes function as true classifiers, their behaviour when combining with numeral roots is important to note. Further examination of recorded Skwxwú7mesh material may be able to definitively answer this question.

Combinations of lexical suffix with other affixes

Combining lexical suffix with lexical suffix

A common feature across the Salish family is deriving new lexical suffixes by compounding suffixes, which is especially productive with the body part suffixes. These compounds are often specific to individual languages, meaning that this process continued long after the languages diverged from each other. The specific forms of the compound suffixes below seem to be unique to Skwxwú7mesh.

In these cases, the lexical suffixes must together form an intermediate constituent which is then combined with the root to form a new word. This can be seen from the fact that the meaning of the compound is derived from the meaning of the two suffixes and is consistent across all uses of that compound, essentially behaving as a single lexical suffix.

This differs from words where a lexical suffix is added to a stem which already contains a lexical suffix, in which case the root plus lexical suffix forms an intermediate

constituent, which is then built upon by adding suffixes left to right. Examples of this include words such as *kw'ekw'ch=us=tn=áẇtxw "*window of house" (√*kw'ach* "look at", *=us* "face, *=tn* "instrument", *=aẇtxw* "house") in Figure 2.1 below.

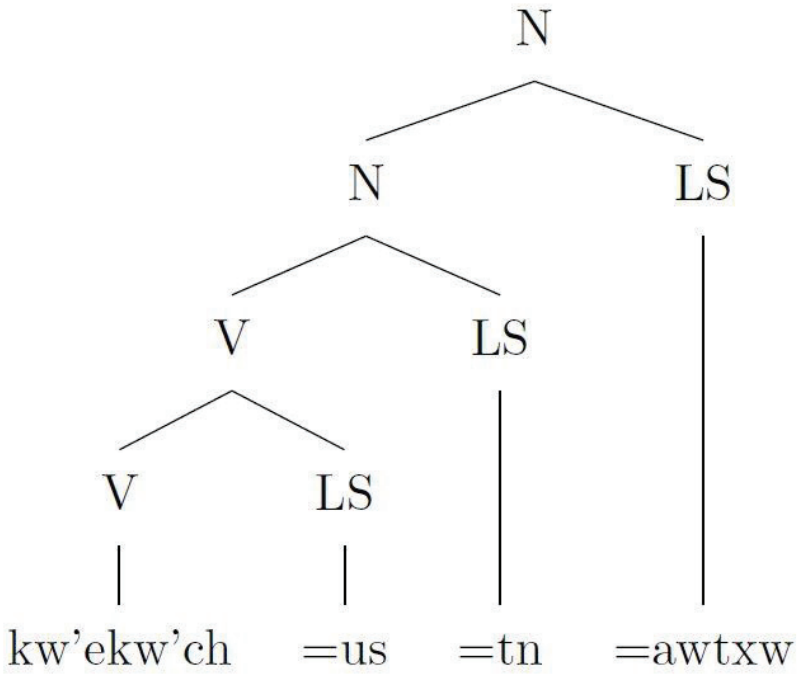

Figure 2.1 Morphological tree of *kw'ekw'chustnáẇtxw* "window of house"

This word is a particularly illustrative example, since each intermediate constituent is also attested as a word in the language: *kw'ákw'ch=us-t* "stare at someone" (*-t* "transitive"), *n-kw'ekw'ch=ús=tn*[24] "window; mirror" (*n-* "locative"). This structure contrasts with that found in compound lexical suffixes, as illustrated in Figure 2.2 below.

The six compound lexical suffixes that exist in Sḵwx̱wú7mesh are presented below, along with several derived forms which contain them, and a brief description of how their meaning is derived.

22. *=ts=ḵ* "chin" (*=ts* "mouth", *=ḵ* "bottom")

    s-les=ts=ḵ "chin" (√*les* "bottom")

[24] The root vowel /a/ is reduced in this form and *kw'ekw'chustnáẇtxw* "window of a house" due to stress falling on a suffix.

tsik̲=ts=k̲ “get stabbed in the chin” (√*tsik̲* “be stabbed”)

ts’ak̲’=ts=k̲ “get hit on the chin” (√*ts’ak̲’* “get hit”)

This suffix can be interpreted as literally meaning “bottom of the mouth”, with the second suffix here restricting the meaning of the first. This is similar to how the meaning is derived for combinations of lexical suffixes in Secwepemctsín (Marianne Ignace, p.c.). The structure of *tsik̲tsk̲* “get stabbed in the chin” is illustrated in Figure 2.2 below.

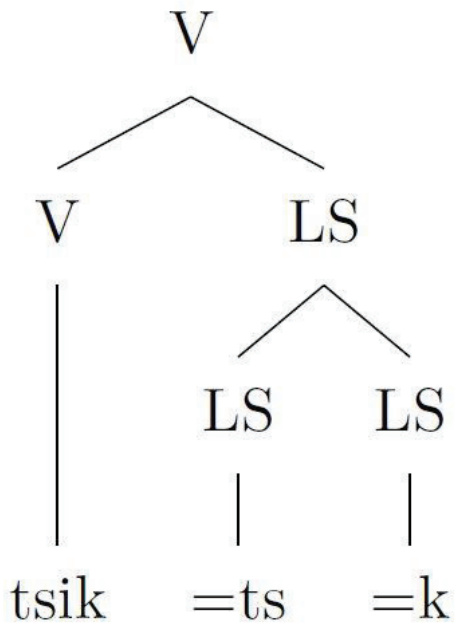

Figure 2.2 Morphological tree of *tsik̲tsk̲* “get stabbed in the chin”[25]

Unlike the left to right concatenation of morphemes illustrated in Figure 2.1, the two lexical suffixes here form a unit which is then attached to the root at a higher level.

23. *=ch=k̲* “hip” (*=ch* “back”, *=k̲* “bottom”)

s-k̲’aẇ=ch=k̲ “hip, side of body” (√*k̲’aw* UR)

x̲ewtl’=ch=k̲ “break one’s hip” (√*x̲ewtl’* “break”)

[25] The program used to create these trees is unable to handle non-Unicode characters; both <k> should be the uvular <k̲>.

s-miyíw=ch=k̲ “hip” (√*miyíw* “side, edge”)

This suffix is formed in a similar way to (22) *=ts=k̲* “chin” above, with the second suffix modifying the first. Likely the underlying meaning is “bottom of the back”, which gives the meaning “hip”.

24. *=ch=us* “forehead” (*=ch* “back”, *=us* “face”)

s-t’úkw’=ch=us ~ s-t’uk̲w=ch=us “forehead” (√*t’ukw’* or √*t’uk̲w* UR)

ts’ák̲=ch=us “have a bald forehead” (√*ts’ak̲* “become bald”)

ts’ák̲’=ch=us “get hit on forehead” (√*ts’ak̲’* “get hit”)

In the case of this compound, it is unclear how the meaning “forehead” is compositionally derived from the meanings of *=ch* “back” and *=us* “face”. It is likely that the suffix *=ch* here has the broader connotation “surface/area”, a meaning that is more typically associated with the connective form *=aẏ=ch*. The shift from “(flat) surface of the face” to “forehead” is straightforward, and may relate to the cultural practice of binding the foreheads of high-status infants to give them a flattened shape (Matthews 1955: 185).

Unlike the previous two examples, the meaning of the compound in (24) is derived by the meaning of the first suffix modifying the second, with the underlying meaning something like “surface of the face”. As the next few examples show, this appears to be the more common process.

25. *=ach=xw* “branch of tree” (*=ach* “hand”, *=xw* “part of plant”)

k̲wáẏtsay=ach=xw “hemlock bough” (√*k̲wáẏtsay* “hemlock”)

slheḿxw=ách=xw “moisture dropping from trees” (√*slheḿxw* “rain”)

tl’úts’=ach=xw “be close-limbed (about tree)” (√*tl’uts’* “be close together”)

In the compound in (25), it is not entirely clear which suffix is modifying which. Certainly *=xw* is contributing some meaning relating to plants or trees, but this suffix typically refers to parts of the plant, and not to the entire organism. Regardless, the use

of the suffix *=ach* to refer to branches of trees is not surprising when examples like English *limb* are considered.

26. *=k̲s=ay* “elbow” (*=k̲s* “nose, point”, *=ay̓* “container?”)

    s-7áy=k̲s=ay “elbow” (√*7ay* UR)

This is the only word which contains the compound suffix in (26). The first component is clearly the “nose, point” suffix, referring to the pointed shape of the elbow joint, but the second element is unclear. It is very unlikely to be the *=ay̓* “plant” suffix, which leaves only the “container” suffix as a plausible candidate. However, the semantic contribution of this suffix to the meaning of the whole compound is still difficult to understand.

27. *=ay̓=k̲w=shen, =ay̓=ek̲w=shen* “knee” (*=ay=* “connective”[26], *=k̲w* “head”, *=shen* “leg, foot”)

    tsek̲tsk̲=áy̓=ek̲w=shn “lie on back with knees drawn up” (√*tsek̲* “erected”)

    k̲im̓k̲im̓xw=áy=ek̲w=shen “kneecap” (√*k̲im̓xw* UR)

    k̲p’=áy̓=ek̲w=shen “kneecap” (√*k̲ep’* “close, cover”)

This suffix is also clearly built by the first suffix modifying the second, i.e., “head of the leg”. The function of the connective *=ay̓=* is unclear.

Combining lexical suffix with “locative” prefix

One morpheme that frequently combines with lexical suffixes is the “locative” prefix, which has the allomorphs *nexw- ~ xw- ~ n-*. This prefix is glossed in the dictionary as “location” (2011:120) and by Kuipers as “on, in, at, over (a surface), by way of” (1967:113). The meaning of this morpheme is quite vague, but it is extremely productive, being found in well over one hundred words in the language, including nouns, verbs, and

[26] Connectives are a class of morpheme which serve to link roots and lexical suffixes. See Chapter 4, section 4.3.1 for a full discussion of these morphemes.

adjectives[27]. A full discussion of this prefix and its many functions is outside the scope of this thesis, but the tendency of this prefix to combine with lexical suffixes is important to note. I have glossed it here as “locative” for simplicity, but note that this does not capture the full range of uses of this prefix.

Kuipers describes three types of productive uses of the locative prefix, and three types of “lexicalized” combinations (1967:114). Of these uses, three involve the co-occurrence of lexical suffixes. How he distinguishes between productive and lexicalized combinations is not clear. He does state that lexicalized forms with this prefix obey different allomorphic rules than the productive ones: in lexicalized combinations, the prefix occurs as *n-* before obstruents and *nexw- ~ xw-* before resonants, while in productive combinations, *nexw- ~ xw-* occur in all positions. However, this does not seem to always be the case; c.f. *ne-k̲’íts’=iy̓=ik̲w* “crown of head; comb of bird” (√*k̲’its’* UR, *=iy̓=ik̲w* “top of head”), a body part term which is one of Kuipers’ “productive combinations”, and therefore should be expected to have the ***nexw-* form instead. At present, the strongest statement that can be made is that the *n-* form only ever occurs before obstruents, while the *nexw- ~ xw-* forms may occur before any phoneme.

The first category of words with the locative prefix plus a lexical suffix are some body part terms, which naturally use the body part lexical suffixes. Kuipers states that these terms refer to those parts of the body which are surface areas of others (Kuipers 1967:114).

28. Body part terms with the locative prefix

(ne)xw-miyíw=a7n	“cheek” (√*miyíw* “side”, *=a7n* “cheek”)
nexw-7áts=ach	“palm of hand” (√*7ats* “surface”, *=ach* “hand”)
xwi-yá=shn[28]	“right leg” (√*yah* “right”, *=shn* “foot, leg”)

[27] This prefix is likely also a component of the prefixes *nexw-s-* “agent”, *s-xw-* “step-relative; acting for/in the place of”, and *t-xw-* “out of control”, but these forms are not relevant to the discussion of lexical suffixes.

[28] The vowel *i* is epenthetic between the *xw-* form of the locative prefix and a root beginning in *y*, c.f. *xwi-yah=áy=a7n* “right ear” (√*yah* “right”, *=áy=a7n* “ear”), *xwi-yém̓=tn* “belt” (√*yem̓* UR, *=tn* “instrument”. Note that it is not found in the alternant with the *nexw-* form: *nexw-yém̓=tn* “belt”.

xw-k̲aẏ=áẏ=an “left ear” (√*k̲aẏ* “left”, *=áẏ=an* “ear”)

While some of these forms are certainly surface areas of other body parts, it is not clear that this is the case for all forms, such as *xwiyáshn* “right leg”.

Another use of this prefix with lexical suffixes is in expressions referring to one member of paired body parts, which occur in a set phrase

ti-n s-nexw-7ína=LS
DET-1SG.POS NOM-LOC-other=LS
“my other ...”

where *=LS* refers to the body part in question. Kuipers states that the *nexw-* prefix is only required for those body parts “part of or imbedded in a larger whole” (1967:114). Compare the difference between (29.a-b) and (29.c-d).

29. Locative forms with lexical suffixes and √*7ína*

a. *ti-n s-nexw-7iṅ=áy=us*
DET-1SG.POS NOM-LOC-other=CON=face
“my other eye”

b. *ti-n s-nexw-7iṅ=áx̲a7n*
DET-1SG.POS NOM-LOC-other=side
“my other side”

c. *ti-n s-7íṅ=ach*
DET-1SG.POS NOM-other=hand
“my other hand”

d. *ti-n s-7íṅ=áẏ=a7n*
DET-1SG.POS NOM-other=CON=ear
“my other ear”

Given the data provided by Kuipers, it seems that *nexw-* is required for body parts that are flat surfaces or embedded in a larger surface, but not required for those body parts that are extremities.

A very common use of the combination of locative prefix and lexical suffix occurs in possessor compounds with adjectival roots. These occur with the body part suffixes and refer to a physical or emotional characteristic of the possessor.

30. Possessor compounds with the locative prefix

(n-)ts'úys=us "crazy-faced" (√*ts'uys* "crazy", =*us* "face")

(nexw-)wéchwech=k̲s "broad-nosed" (√*wech* "wide", =*k̲s* "nose, point")

(ne)xw-[h]iy=áy=us "big-eyed" (√*hiyí* "big", =*ay=us* "eye")

n-ts'ak̲=iy=ek̲w "bald-headed" (√*ts'ak̲* "bald", =*iy=ek̲w* "top of the head")

Note that adjectives of this type do not consistently occur with the locative prefix: it is optional in *(nexw)wéchwechk̲s* "broad-nosed" and *(n)ts'úysus* "crazy-faced" above, and always absent in words such as *tl'ek̲ttl'ák̲t=i7=k̲in* "long-haired (about an animal)" (√*tl'ak̲t* "long", =*i7=k̲in* "wool, animal hair") and *pelh=ts* "thick-lipped" (√*pelh* "thick", =*ts* "mouth").

Finally, there is a large class of miscellaneous words which do not fit into any of the previous categories. Included in this category are a number of place names, where the locative function of the prefix is obvious. Frequently, the locative prefix combines with body part suffixes as well as =*aẏ́* "container", where there is a clear locative connotation to the word. However, the instrumental suffix =*tn* also readily combines with the locative prefix, which is semantically unexpected.

31. Miscellaneous words with lexical suffixes and locative prefix

a. Locative meaning

xw-[h]ám̓=us "have one's face covered" (√*ham* "be covered", =*us* "face")

(ne)xw-mu7=ts "drop something from one's mouth" (√*mu7* "drop", =*ts* "mouth")

xw-[h]iẃ=k̲s-án “put something in someone’s nose” (√*hiẃ* “move up”[29], *=k̲s* “nose”, *-an* “transitive”)

xwe-ṅíw=ch “camp in recess” (√*niw* “insert”, *=ch* “back”)

b. Function of locative prefix unclear

(ne)xw-yéṁ=tn “belt” (√*yeṁ* UR, *=tn* “instrument”)

xw-iẃás=tn “fishing rod” (√*yeẃás* “fish with hook and line”)

xw-mikw’=mámin “wash dishes” (√*mikw’* “wash”, *=mámin* “inside”)

ne-k̲w’úy=ach=xw “have withering leaves (in fall)” (√*k̲w’uy* “dead”, *=ach=xw* “branch”)

c. Both with and without locative prefix

(n-)chéṁ=us “meet, come together” (√*chem* “come together”, *=us* “face”)

(n-)ch’k̲=aẏ “Mount Garibaldi” (√*ch’ek̲* “dirty”, *=aẏ* “container”)

(nexw-)néẃ=ts=tn “telephone” (√*niw* “insert”, *=ts* “mouth”, *=tn* “instrument”)

(n-)ch’i7=tn “ritualist’s rattle” (√*ch’i7* UR)

Given the wide range of functions and meanings of the locative prefix, it is difficult to come up with a unified description of its distribution. While it frequently combines with lexical suffixes, especially body part suffixes, it is never obligatory in these contexts. This contrasts with Lillooet, where van Eijk claims that certain combinations of the locative prefix (which is always *n-* in that language) and lexical suffixes form a circumfix which attaches to both sides of the root (Van Eijk 1997: 75). In Sḵwx̲wú7mesh, it is safest to assume that the root and lexical suffix first form a stem to which the prefix is added, since it is so frequently optional. Further investigation into the

[29] Probably same root as *hiẃ* “be upstream”, *híẃ-i7* “get closer to front or fire”, *hiẃ=k̲-m* “have sexual intercourse”.

many functions of the locative prefix, both with and without lexical suffixes, is required to satisfactorily explain its role in the morphology of the language.

Combining lexical suffix with verbal suffixes

Verbs which contain lexical suffixes may occur with typical verbal suffixes. Generally, there is little difference in verbal morphology between simple verbs and verbs with a lexical suffix. One important class of exceptions are verbs which end in the body part suffixes given in Table 2.4, which take the forms *-i7m* and *-i7n* of the middle and transitive suffixes, respectively.

Table 2.4 Lexical suffixes that take -i7m, -i7n

Lexical suffix	Suffix gloss	Example	Example gloss
=ach	"hand"	*míkw'=ach-i7m*	"wash one's hands" (√*mikw'* "clean")
=k̲wuy̓=ach	"finger"	*sát=k̲wuy̓=ach-í7m*	"offer one's finger" (√*sat* "offer")
=ay̓=á7an	"ear"	*k̲wah=áy=a7n-i7n*	"pierce someone's ear" (√*k̲weh* "be perforated")
=a7an	"cheek, side"	*tsik̲=a7án-i7n*	"stab someone in the ear" (√*tsik̲* "stab")
=áx̲a7n[30]	"side, arm"	*p'i7=áx̲a7n-í7n*	"grab someone by the arm" (√*p'i7* "hold")

The reasons for this are unclear; the middle *-i7m* seems to be unique to these lexically suffixed words, but the *-i7n* form is often found with bare verb roots. Interestingly, many of these words are glossed as intransitive in the dictionary, e.g. *kwém-i7n* "make thumping sound" (√*kwémi7* "sound") and *pékw'-i7n* "splash (v.)" (√*pekw'* "scatter").

Another unique property of lexically suffixed verbs is the fact they can never combine with the reflexive suffix *-sut*[31]. Where a reflexive meaning occurs, the middle

[30] Kuipers lists *=ay̓=áx̲a7n* "arm" as one of the suffixes taking the *-i7m, -i7n* forms, but I was not able to find examples in the dictionary. He provides *mikw'=ay̓=áx̲a7n-i7n* "wash someone's arms" and *p'a7=ay̓=áx̲a7n-i7n* "grab someone by the arms".

[31] The reflexive always occurs following the transitivizers *-Vt* and *-Vn-t-*, where *V* is a copy of the root vowel.

suffix *-Vm* is found instead, which is true throughout the Salish family (see Gerdts 2003, Suttles 2004, Van Eijk 1997).

32. Examples of reflexive meaning with middle suffix

míkw'=shn-aṁ	"clean one's feet" (√*mikw'* "clean", =*shn* "feet")
p'ayak̲=á7lh-m	"make one's bed" (√*p'ayak̲* "be fixed", =*a7lh* "bed")
x̲wíl̓=k̲s-em	"blow one's nose" (√*x̲wil̓* "come out", =*k̲s* "nose")
sáx̲w=k̲w-aṁ	"rub oil in one's hair" (√*sax̲w* "be greased", =*k̲w* "head")

Verbal suffixes usually occur after any lexical suffixes. This behaviour is expected, since lexical suffixes often behave like derivational affixes, which typically occur closer to the root than inflectional affixes cross-linguistically (Bybee 1985: 24). However, there are a handful of seemingly exceptional cases where lexical suffixes occur after verbal inflectional suffixes.

33. Lexical suffixes occurring after inflection

k̲'eytl'-án=ay'	"medicinal plant" (√*k̲'eytl'* "heal", *-an* "transitive", =*aẏ́* "plant")
k̲'áṅ-at-sut=íwes	"oars for rowboat" (√*k̲'an* "return", *-at* "transitive", *-sut* "reflexive", =*iwes* "paddle")
lhét'-em=ten	"herring rake" (√*lhet'* "catch herring", *-em* "middle", =*ten* "instrument")
shúkw'-um=áẇtxw	"bath house/room" (√*shukw'* "bathe", *-um* "middle", =*aẇtxw* "house, building")

Kuipers states that words like this are unusual and "make the impression of being recent formations" (1967:52). These cases can be explained as a type of morphological re-analysis. In Sḵwx̲wú7mesh, verbs always occur with some form of inflectional suffix, typically the middle suffix, since intransitive verbs are most common in speech. Thus, speakers seem to have reanalyzed root plus middle stems such as *shúkw'-um* as a single morpheme √*shúkw'um*, which can be thought of as the loss of a morpheme

boundary (Koch 1996). A similar process is likely responsible for *k̲'ánatsutíwes* “oars for rowboat”, where the root √*k̲'an* almost always co-occurs with the transitive plus reflexive *-at-sut* and may have become regarded by speakers as a simple root √*k̲'ánatsut*. This kind of reanalysis may relate to the decline in fluent use of lexical suffixes as Sḵwx̲wú7mesh (and other Salish languages) became moribund (Thompson, in Haeberlin 1974).

2.4. Summary

This chapter has provided an overview of the mechanics of lexical suffixation in the grammar of the Sḵwx̲wú7mesh language. In terms of morphophonology, lexical suffixation interacts with stress and glottalization in patterns which are semi-predictable. The morphology and morphosyntax of lexical suffixes are much more complex, and therefore the majority of the chapter is devoted to this topic. The various ways that lexical suffixes can relate to different types of roots and other suffixes are described. Overall, the system of lexical suffixation in Sḵwx̲wú7mesh covers a wide range of functions that, in other languages, might be achieved via derivation, compounding, and noun incorporation.

Chapter 3. Proto-Salish origins

3.1. Introduction

The origin of lexical suffixes was disputed by linguists studying the family before the debate was settled by Kinkade (1998). By examining the frequent occurrence across the family of full words with the form [consonant + lexical suffix] of the same meaning, Kinkade showed that lexical suffixes derive from full lexical items, usually with the loss of the initial consonant, or the initial consonant and following vowel. In fact, he reports that some fluent speakers of Upper Chehalis were still aware of this process (Kinkade 1998:14). Some examples in Sḵwx̱wú7mesh of full forms and related lexical suffixes are shown below.

34. Full forms and lexical suffixes with same meaning

s-ṁus “face” *=us* “face”

tsútsin “mouth” *=ts, =tsin, =utsin* “mouth”

yenís “tooth” *=ans* “tooth”

meḵsen “nose” *=ḵs, =ḵsen, =eḵsen* “nose”

temíxw “land, earth” *=mixw*, *=mexw* “people, land”

s-nexwílh “canoe” *=wilh* “canoe, container”

sáyips “pin, clothespin” *=ayips, =aẏaps* “button”

Kuipers (1967) originally considered the initial consonant in these Sḵwx̱wú7mesh forms to be a fossilized root to which the lexical suffix was attached, noting that many words referring to parts of the body begin with an initial *m*- (Kuipers 1967:116):

35. Body-part words beginning with /m, ṁ/

s-ṁus “face”

méḵsen “nose”

me<u>k</u>=álxwtselh “tongue”

s-mets’=ál=<u>k</u>en “brain”

mé<u>x</u>w=eya “bellybutton”

In the cases of the forms for “face” and “nose”, both the suffix and full forms must be reconstructed to Proto-Salish, given their reflexes across the family. The roots of the other forms are almost certainly unrelated. The root √*me<u>x</u>w* in the word for “bellybutton” is probably related to *sme<u>x</u>w=íws* “smallpox” with the lexical suffix *=iws* “body”, suggesting the root means something like “blemish” with the full form possibly meaning “little blemish”. For the form “brain”, the suffix clearly contains *=<u>k</u>en* “head”[32], with √*mets’* possibly being found in *máts’ulh* “pus” as well, in which case the root may mean “matter”. This reanalysis of the S<u>k</u>w<u>x</u>wú7mesh forms shows that Kuiper’s observation that all begin with /m/ is merely a coincidence, further reinforcing Kinkade’s theory on the origin of lexical suffixes.

Kinkade (1998) reconstructs 57 lexical suffixes, presumably to Proto-Salish, with an additional four that occur only in the Central Salish and Tsamosan branches. Kuipers’ *Salish Etymological Dictionary* contains 34 lexical suffix reconstructions at the Proto-Salish level, with four in Proto-Coast Salish (Kuipers’ grouping of Nuxalk, the Central Salish branch, the Tsamosan branch, and Tillamook), and 18 in Proto-Interior Salish (Kuipers 2002:203-214). These lists differ from each other not only in the number of suffixes reconstructed but also occasionally in their phonological forms. For these reasons, I have included both sets of data in the analysis.

3.2. S<u>k</u>w<u>x</u>wú7mesh lexical suffixes from Proto-Salish

Of the roughly 120 lexical suffixes in the S<u>k</u>w<u>x</u>wú7mesh language, around 50 can be traced back to Proto-Salish. This does not include suffixes derived via compounding or the addition of a connective morpheme, unless this derivation can be shown to have occurred at the Proto-Salish stage. The list of S<u>k</u>w<u>x</u>wú7mesh lexical suffixes derived

[32] The full suffix *=ál=<u>k</u>en* may be an /l/-form of *=a<u>y</u>’ya<u>k</u>in* “insides, guts”; compare the Sechelt cognate *=ala=qin* “inside of the head”, closely matching the form and meaning of the suffix in *smets’=ál=<u>k</u>en*. See example (48) for a full discussion of this suffix.

from Proto-Salish is given in Table 3.1 below. Glosses for the Proto-Salish forms are given only if they differ significantly from the Sḵwx̱wú7mesh. The majority of these forms are found either in Kuipers (2002) or Kinkade (1998), but I have reconstructed some based on their appearance in Sḵwx̱wú7mesh and at least one language outside of the Central Salish branch[33]. More detailed commentary on most of these forms can be found in Chapter 4 and Chapter 5, which trace the evolution of these suffixes in Proto-Central Salish and the Central Salish dialect continuum, to the present languages.

Table 3.1 Sḵwx̱wú7mesh lexical suffixes from Proto-Salish[34]

Sḵwx̱wú7mesh	Gloss	Proto-Salish	Notes
=ap₁	base?	**=ap₁* (Kuipers, Kinkade)	fossilized in Sḵwx̱wú7mesh
=ap₂	hair, rope	**=ap₂*	reconstructed on basis of Ms *=ép, =əp*, Ka *=əp*, Cb *=ap*
=apsám, =apsem, =psem	back of the neck	**=aps(m)* (Kuipers) **=apsam* (Kinkade)	
=min, =men, =émen	instrument	**=min* (Kuipers, Kinkade)	Kuipers form from Kuipers (1976), not *Salish Etymological Dictionary*
=mesh	people	**=mix* (Kuipers, Kinkade)	Kuipers groups this with **=mixʷ*
=mixw, =mexw	people	**=mixʷ* (Kuipers) **=(a)mixʷ* (Kinkade)	
=aẏ=amixw	breast	**=al=(a)mixʷ* (Kinkade)	
=am, =em	berry?	**=am*?	fossilized in Sḵwx̱wú7mesh and across family, possibly middle suffix **-m*?
=tn, =tán, =tín	instrument	**=tin, =tan* (Kuipers) **=tn, =tən* (Kinkade)	Kuipers form from Kuipers (1976), not *Salish Etymological Dictionary*

[33] This is based on the assumption that the five main branches of Salish are equally related to each other and do not form higher level subgroupings, which is the most widely accepted classification. If it turns out some higher nodes exist above these branches (e.g., Kuipers' Coast Salish), then some of these reconstructions would have to be revised.

[34] I have converted any non-Sḵwx̱wú7mesh data into the modified version of the North American Phonetic Alphabet frequently used by Salishanists. Any errors in transcription are my own.

=txw, =áẇ=txw, =el̓=txw	house	**=tx^{w}* (Kuipers) **=tx^{w}, =a<u>ɬ</u>=tx^{w}, =aẇ=tx^{w}* (Kinkade)	
=a7n, =a7án	cheek	**=ani?, =ana?* “ear, side of head” (Kuipers, Kinkade)	
=i=nup, =i7=nup, =ay=nup, =el=nup, =nep, =np	ground, floor	**=nup, =lup* (Kuipers) **=al=inup* (Kinkade)	
=inas	chest	**=in=was, =an=was, =il=was, =al=was* (Kuipers) **=al=awas* “breast, chest, middle”; **=in=was*, **=an=was* “torso, chest, insides” (Kinkade)	Sḵwx̱wú7mesh clearly reflects **=in=was*
=ans	tooth	**=anis* (Kuipers, Kinkade)	
=nach, =nech	bottom? bay?	**=anak* “belly, stomach, anus” (Kuipers, Kinkade)	in most Sḵwx̱wú7mesh forms, this suffix is fossilized and no longer has clear semantic function
=aw=anexw	year	**=ánax^{w}* “season, salmon, year, weather” (Kuipers) **=anux^{w}* “weather, season, year” (Kinkade)	
=ts, =tsn, =tsin, =utsin	mouth, edge, opening	**=cin, =ucin, =uc, =c* (Kuipers) **=ucin* (Kinkade)	only the first form is productive in Sḵwx̱wú7mesh
=its’a, =ts’a, =ay=ts’a, =ay=ts’a7	clothes	**=ic’a?* “hide, surface, blanket” (Kuipers, Kinkade)	
=us	face	**=us* (Kuipers, Kinkade)	
=álh	times	**=a<u>ɬ</u>* (Kinkade)	
=lhnay	(inside of) throat	**=<u>ɬ</u>n* (Kuipers) **=a<u>ɬ</u>nal* (Kinkade)	Kuipers form from Kuipers (1976), not *Salish Etymological Dictionary*

=alh=ch, =elh=ch, =lh=ch	water (pejorative?)	**=q^{w}a, =k^{w}a* (Kuipers) **=k^{w}a, =k^{w}u* (Kinkade)	fossilized in Sḵwx̱wú7mesh
=kwu, =kw	water	**=q^{w}a, =k^{w}a* (Kuipers) **=k^{w}a, =k^{w}u* (Kinkade)	fossilized in Sḵwx̱wú7mesh
=at=ḵwu, =ay=at=ḵwu	water	**=q^{w}a, =k^{w}a* (Kuipers) **=k^{w}a, =k^{w}u* (Kinkade)	fossilized in Sḵwx̱wú7mesh
=alh=ḵwu	water, fluid		
=uy̓s, =ay̓s	large object, piece, chunk	**=ils(t), =als(t)* “stone, round object” (Kuipers) **=als* (Kinkade)	
=ay̓lh, =aylh, =iyálh	child, person, people	**=il(t), =al(t)* (Kuipers) **=ay=alt* (Kinkade)	
=a7lḵ	wave	**=alaq* “wind, weather” (Kuipers)	fossilized in Sḵwx̱wú7mesh
=ay̓=aḵap	smell, taste	**(=al)=aqap* (Kinkade)	found in Central Salish and Tsamosan only
=ch, =ichen, =achen, =echen	back	**=ik(n)* (Kuipers) **=ikin* (Kinkade)	only the first form is productive in Sḵwx̱wú7mesh
=ikwup, =ay=ikwup, =chep, =el=chep	fire, firewood	**=k^{w}up* (Kuipers) **=ikup* (Kinkade)	forms with /kw/ are productive, /ch/ forms seem fossilized
=ach, =chis	hand	**=ak, =ak=a?, =ak=is(t)* (Kuipers) **=akis, =aka?* (Kinkade)	only the first form is productive in Sḵwx̱wú7mesh
=shen, =shin	foot	**=xan* (Kuipers, Kinkade)	
=alxwtsalh	tongue	**=x^{w}c=* (Kuipers) **=ix^{w}acaɬ* (Kinkade)	
=ḵ, =ay̓=ḵ	bottom, behind, trunk	**=aq, =aq’* “crotch, sexual organs” (Kuipers) **=aq “penis”* (Kinkade)	Kuipers reconstructs this form to Proto-Coast-Salish only
=ḵin, =ḵn	hair, throat, language	**=qin* “head” (Kinkade) **=aqin* “head” (Kuipers)	
=ḵs, =ay=ḵs, =ḵsen, =el=ḵsen	nose, point	**=qs(n)* (Kuipers) **=aqs* (Kinkade)	only the first form is productive in Sḵwx̱wú7mesh

=aḵalh, =áẏ=aḵalh	water?	**=aqaɬ*	tentative reconstruction, see discussion
=axan	side	**=aχan* (Kuipers, Kinkade)	
=ḵw, =eḵw, =ḵwa	head	**=iqʷ* (Kuipers) **=iqʷ(an)* (Kinkade)	Kuipers reconstructs this form to Proto-Coast Salish only
=aẏ	plant, tree	**=aẏ* (Kuipers, Kinkade)	Kuipers reconstructs this form to Proto-Coast Salish only
=aẏ, =i7	fish	**=aẏ?*	fossilized in Skwxwú7mesh and across family, see discussion
=aẏin, =i7an, =aẏi	net	**=ayan* (Kuipers, Kinkade)	also “trap” in other languages
=ay=uṁ	berry, small round object	**=uma?* (Kinkade)	
=yas, =yes, =alh=yes	day	**=yas* “days, nights” (Kinkade)	
=iwan	spirit, mind	**=iwan* “belly, emotions” (Kinkade)	
=iws, =iẇs	body	**=iws* (Kuipers)	Kuipers reconstructs this form to Proto-Coast Salish only
=wilh, =ulh	canoe, container, stomach	**=wil* (Kuipers, Kinkade)	
=i7ups	tail	**=ups, =up=a?* (Kuipers) **=ups* (Kinkade)	

3.3. Comments on specific suffixes

3.3.1. PS **=ap₂* “hair, rope” > Sq **=ap*

The suffix *=ap₂* “hair, rope” is a fossilized suffix, found in only four words in Skwxwú7mesh. These are:

36. Forms with *=ap*$_2$ “hair, rope”

ch’k̲w’=ap	“tie hair up with a feather in it” (√*ch’ek̲w’* UR)
k̲’ts’=ap	“tie hair up in back” (√*k̲’ats’* “on the back”)
lhk̲=áp=ten	“line connecting harpoon/gaff hook head to the pole” (√*lhek̲* “anchor”, *=ten* “instrument”)
t’ach’=ap=áx̲=tn	“net-hanging twine” (√*t’ach’* UR, meaning of *=ax̲* unknown)

It is found in two words in Musqueam (Suttles 2004:294), neither of which are cognate with the Sḵwx̲wú7mesh forms. This suffix is also found in the Southern Interior languages Kalispel (Haeberlin 1974:336) and Columbian (Czaykowski 1982:20), where it is productive. The distribution of this suffix shows that it must go back to Proto-Salish. Whether it occurs in frozen forms in other Central Salish languages remains to be seen.

3.3.2. PS **=kʷu, =kʷa, =qʷu, =qʷa* “water”

Kuipers reconstructs **=qʷa, =kʷa* as the PS forms meaning “water”, while Kinkade reconstructs **=kʷa, =kʷu*. The form **=qʷu* should be added, based on reflexes in languages like Sḵwx̲wú7mesh and Lushootseed (Kuipers 2002:209). The various forms can be represented in the following grid:

37. PS suffixes meaning “water”

	/k/	/q/
/u/	**=kʷu*	**=qʷu*
/a/	**=kʷa*	**=qʷa*

How to explain this variation is unclear. It is possible that multiple suffixes with similar form and meaning became conflated in PS. In Lillooet at least, the velar and uvular forms are in an allophonic relationship, with the velar forms occurring after a root with a uvular consonant (Van Eijk 1997:420). Whether this dissimilation rule applied at earlier stages of the language family, or whether it represents an innovation in Lillooet is unknown.

This complex of PS forms for “water” has given rise to four suffixes in Sḵwx̱wú7mesh, only one of which is productive: *=alh=ḵwu* “water, fluid”, which is used primarily in the context of cooking. The remaining suffixes are fossilized.

38. Forms with *=kwu7, =kwu, =kw* “water”

iḿsh=ál=kwu	“search for *syéwen* in the ocean” (√*ímesh* “walk”)
ína=ḵs=kwu	“other side of the river” (√*ína* “the other”, *=ḵs* “nose, point”)
chish=kw	“recede, ebb” (√*chish* “be above, up away from the beach”)
p’eḿ=ts=kwu7	“edge of water” (√*p’en* UR, *=ts* “mouth, edge”)
kw’utl’=kw	“salt water” (√*kw’utl’* UR)
kw’ach’=áy̓in=kwu	“type of shark” (√*kw’aach’* “dogfish, shark”, *=ay̓in* “net”?)

This meaning of the suffix is still analyzable in the first three words, and in all cases except the last it refers specifically to a body of water as a geographic feature. This exceptional case is interesting: I have glossed the first suffix as *=ay̓in* “net”, however, the full ending *=áy̓inkwu* is a plausible cognate of the Sechelt suffix *=alánkʷu* “tide”, which undoubtably contains this suffix for “water” as well. The form *kw’utl’kw* “salt water”, while unanalyzable in Sḵwx̱wú7mesh, has cognates in other Central Salish languages, where the root **√kʷ’uƛ’* clearly means “salt” (e.g., Se *kʷ’úƛ’um* “salty taste”).

39. Forms with *=alhch, =elhch, =lhch* “liquid (in a pejorative sense?)”

ts’ḵw=álhch	“swamp, marshy terrain, bog” (√*ts’eḵw* UR)
lhx̱w=élhch	“spit (v.)” (√*lhex̱w* “spit”)

This form is interesting from a comparative perspective: it is clearly cognate with Musqueam *=əɬcə*, Saanich *=eɬsə*, and Klallam *=aɬcu, =aɬc*. However, where these languages use this form as the productive suffix meaning “water”, in Sḵwx̱wú7mesh it is found in only two words, both of which have a negative connotation. This can be compared to Chilliwack *=əɬčɛ* where it specifically means “unclear liquid”. In fact, Chilliwack has direct cognates of both Sḵwx̱wú7mesh forms in *θ’qʷ=éɬčɛ* “dirty pond, stagnant pool” and *ɬəχʷ=éɬčɛ* “spit (v.)”. Since the other Halkomelem dialects do not

show evidence of this particular semantic evolution, it is likely that the parallel development in Sḵwx̱wú7mesh and Chilliwack is due to contact between the two languages.

40. Forms with *=atḵwu* “water”

ítl’i7=atḵwu-m	“no tide, be still (about water)” (√*ítl’i* “be still”, *-m* “middle”)
ḵ’iyáx̱=atḵwu-7em	“eddy, whirl (about water in whirlpool)” (√*ḵ’iyáx̱* “guts, intestines?”, *-7em* “middle”)
tiḵw=áy=atḵwu	“muddy (about water)” (√*tiḵw* “dirty, muddy”)

This suffix clearly contains an extension *=at=* which is otherwise unknown in the Sḵwx̱wú7mesh language. However, this form for “water” is characteristic of the Interior Salish languages: Sh *=et=kʷe?*, Li *=at=kʷa?, =at=qʷa?*, Ka-Sp *=et=kʷ*, etc. A reasonable assumption would be that Sḵwx̱wú7mesh simply borrowed the three words with this suffix from an Interior language, most likely Lillooet. However, Lillooet has no cognates for the first two Sḵwx̱wú7mesh forms, and while it has a word *n-ti?qʷ=átkʷa?* “water gets muddy” which has the same root and meaning as Sḵwx̱wú7mesh *tiḵwáyatḵwu* “muddy (about water)”, the different final vowels and the use of the *=ay=* connective in Sḵwx̱wú7mesh suggests this is not a direct borrowing. This could mean that this form should be reconstructed back to PS, although the fact that Sḵwx̱wú7mesh is the only language outside Interior Salish with this form makes this suspect. It is possible then that we are dealing with a borrowing from Interior Salish into Sḵwx̱wú7mesh.

3.3.3. PS **=aqaɬ* “water” > Sq *=aḵalh, =áy̓=aḵalh*

The suffix *=aḵalh, =áy̓=aḵalh* “water” is here tentatively reconstructed back to Proto-Salish. It is found in three words in Sḵwx̱wú7mesh, all transparently analyzable. It also occurs in the place name *Syexwáy̓aḵalh* “Brohm River”, which was glossed by a native speaker as “urine under water”, cf. √*séx̱wa7* “urine”, which does not perfectly match.

41. Forms with =aḵalh, =áy̓=aḵalh “water”

s-kw’lh=áy̓=aḵalh	“place where water runs over something” (√*kw’elh* “pour, spill”)

es-ḵwuḵwl=áy̓=aḵalh “pool” (√*ḵwul* “small amount of water”)

kw’ach’=áḵalh “type of shark”[35] (√*kw’aach’* “dogfish, shark”)

A cognate of this suffix is found in Lillooet *n-...-aláqaɬ* “surface of water”, and a cognate of *kw’ach’áḵalh* “type of shark” occurs in Sliammon *kʷ’ač’=aqaɬ* “shark” (√*kʷ’ač’* “dogfish”) (Marianne Huijsmans, p.c.). No other cognates are known. The extremely limited distribution of this suffix suggests borrowing, but only the suffix corresponds between Lillooet and Sḵwx̱wú7mesh; the full forms in both languages are unique and analyzable. Additionally, it is unlikely that the coastal Sḵwx̱wú7mesh and Sliammon languages would borrow a term for a marine animal like “shark” from the Interior language Lillooet. This suggests either the suffix descends from Proto-Salish, or that borrowing occurred at a very early stage in the evolution of the family. Evidence of this suffix from a geographically non-contiguous language would definitively answer this question.

3.3.4. PS **=ay̓* “fish” > Sq *=ay̓, =i7*

Another suffix that appears to be similarly ancient in the family is *=ay̓, =i7* “fish”. This is found in six names for fish in the Sḵwx̱wú7mesh language and one word relating to fish:

42. Words with *=ay̓, =i7* “fish”

s-tsék̓=i7	“sockeye” (√*tsek̓* “tree”; see *stsá7tsḵay* “salmonberry shoots”)
s-ts’úḵw=i7	“salmon, fish” (√*ts’uḵw* “suck”?; probably UR)
s-wach=áy̓	“perch” (√*wech* “wide, broad”)
tl’ítl’ix̱w=ay̓	“brook trout” (√*tl’ix̱w* UR)

[35] John Lyon (p.c.) suggests the gloss “surface shark” for this word. Since *kw’aach’* seems to typically refer to dogfish, which are bottom dwellers, the term *kw’ach’áḵalh* might have designated those sharks which spend their time closer to the surface, such as the salmon shark or the blue shark.

s-ts'n=aɣ̓	"bullhead" (√*ts'en* UR; unless related to *ts'náɣ̓ach* "swelling on the hand"?)
p'ew=áɣ̓	"flounder" (√*p'ew* UR; compare *P'eẃyámṁ*, a place name said to mean "blackened by smoke")
tl'ḵw'=aɣ̓	"salmon milt, salmon roe" (√*tl'eḵw'* UR; see √*tl'eḵw'* "dark" but semantics unlikely)

Suttles gives *=əɣ̓, =aɣ̓* as a possible lexical suffix meaning "fish" in Musqueam (2004:312). Names for fish species with this ending are widely distributed, but it is not described as a lexical suffix by Kuipers (1976, 2002), Kinkade (1998), or Haeberlin (1974). The evidence points to a Proto-Salish origin for this suffix, but it is appears to be especially common in Central Salish languages. A non-exhaustive list of names for fish with this suffix in other languages of the family is given below, with reconstructions where possible.

43. Some Salish words for fish with **=aɣ̓*

a. PS **sc'naɣ̓* "bullhead"[36]: Se *c'ác'əni?*, Sq *sc'naɣ̓*, Li *sc'anáż*, Th *sc'enéc'*, Sh *sc'néɣ̓e*[37]

b. PCS **scəqay* "sockeye": Cx *sə́qay?*, Se *scə́qay*, Sq *scə́qi?*, Cw *θə́qey*, Sa *θəqəɣ̓*, Sg *səqe?*, Kl *scə́qi?*, Ld *scəqi?*, Tw *scə́qay*, Li *scqaż* ("barbecued salmon", probably borrowed from Central Salish)

c. **sc'uqʷay* "spring salmon" (Sḵwx̱wú7mesh/Chilliwack "fish, salmon"[38]): Sq *sc'úqʷi?*, Cw *sθ'áqʷeɣ̓*, Ms *sθ'áqʷeɣ̓*, Ck *sθ'á:qʷi*, Sm *sθ'áqʷi?* ~ *sc'áqʷi?*,

[36] Musqueam has *θ'ə́nə* "bullhead", where the root is clearly cognate but it lacks the **=aɣ̓* "fish" suffix.

[37] This word appears to have the Secwepemctsín *=eɣ̓e* suffix, meaning "pretend" or "small". This may be an instance of folk etymology, where speakers have reanalyzed an old fossilized suffix as one that is phonologically similar but still productive (Marianne Ignace, p.c.).

[38] This semantic shift from "spring salmon" to the more generic "salmon, fish" likely had to do with which species was the primary catch for a given group (Peter Jacobs, p.c.), so this change may be an independent innovation due to the prevalence of spring salmon in Sḵwx̱wú7mesh and Chilliwack territories.

Sn *sθ'áqʷiʔ*, Nk *sc'úqʷəy̓*, Li *sc'úqʷaż* (probably borrowed from Central Salish)

d. PS **ƛ'əχʷay* "dog salmon": Cx *ƛ'əχʷay*, Kl *ƛ'χʷáy̓*, Ld *ƛ'əxʷayʔ*, Ti *ƛ'χay*[39]

Forms (43.a-c) are from Kuipers (2002), although he does not include the Sechelt or Musqueam forms under (43.a), while (d) is my own reconstruction. The Sḵwx̱wú7mesh word *tl'ítl'ix̱w=ay̓* "brook trout", although it refers to a different species of fish, phonologically resembles this last form, and could be a diminutive reduplication of it. Words such as Lillooet *smacáż* "ling" and *héləz* "humpback salmon" likely also contain this suffix (Van Eijk 2013).

3.4. Summary

A significant proportion of the lexical suffixes found in the Sḵwx̱wú7mesh language can be traced directly back to Proto-Salish. When those suffixes that are derived from Proto-Salish lexical suffixes at the Proto-Central Salish stage (Chapter 4) or at the stage when Central Salish languages had diversified (Chapter 5) are taken into account, it is likely that over half of the lexical suffixes of the language ultimately derive from Proto-Salish forms. How consistent this is with other Salish languages remains to be seen. For instance, it appears that Interior Salish languages are more innovative with their lexical suffix inventories: Kuipers (2002) reconstructs 19 suffixes to the Proto-Interior Salish stage, while only four are reconstructed to Proto-Coast Salish (2002: 212-214), none of which are exclusive to Central Salish. The following chapters will demonstrate how Central Salish and then Sḵwx̱wú7mesh innovated on the lexical suffix system inherited from Proto-Salish.

[39] Transcribed from Edel (1939), based on Thompson & Thompson (1966). Any errors in transcription are my own.

Chapter 4. Central Salish innovations

4.1. Introduction

Sḵwx̱wú7mesh is one of the ten languages of the Central Salish branch, one of the five major subgroups of the Salish family. Central Salish forms an ancient dialect continuum along the coast of the Salish Sea from Bute Inlet in the north to Puget Sound in the south, where neighbouring languages, although no longer mutually intelligible, share innovations with one another (Czaykowska-Higgins & Kinkade 1998). These languages have remained in close contact with one another and intermarriage between speakers of different languages and their dialects was and is common, so determining which shared features are common innovations versus borrowings is not simple. Kuipers sums this up by saying that the problem "is not just borrowing in the narrow sense but interpenetration of languages resulting from bi- and even trilingualism" (Kuipers 2002: 2).

Proto-Central Salish has not been reconstructed in great detail. Galloway (1988) describes the major sound correspondences between Central Salish languages and presents around 45 cognate sets out of the 300 he claims to have discovered (1988: 293). Of those cognate sets, only a few are lexical suffixes. Kuipers (2002), because of his view that the Salish family can be divided into Interior and Coastal branches, did not reconstruct lexical suffixes to any lower subgroups of the family. This thesis is a first step towards reconstructing the lexical suffix system of the Proto-Central Salish language.

In this chapter, I have used innovation to mean both lexical suffixes in Proto-Central Salish derived from Proto-Salish via a connective, compounding, or irregular phonological shift (4.2), as well as suffixes reconstructable to Proto-Central Salish with no source in the Proto-Salish lexical suffix system (4.3).

4.2. Changes from Proto-Salish to Proto-Central Salish

This section presents those suffixes in Sḵwx̱wú7mesh that can be traced back to Proto-Salish but can be shown through comparative evidence to have undergone significant phonological or morphological innovations at the Proto-Central Salish level. Included here are complex suffixes derived from Proto-Salish lexical suffixes if this innovation is specific to the Central Salish branch (e.g., PCS **=al=us* "eye", from PS

*=*us* “face”, plus the connective *=*al*=). In languages other than Sḵwx̱wú7mesh, I have kept any morphological breaks as they appear in the original source.

44. PCS *=*umix* “kind, -like” (< PS *=*mix* “people”)

    a. =*umesh* “-like”

    b. Cx-Sl =*umiš* “appearance”, Se =*úmiš* “people, persons, condition, kind, race, tribe”, Ck =*á:məx, =áməx, =əməx* “in looks, looking, appearance”, Kl =*uməš, =umš, =əmš* “type, kind, like”

In Sḵwx̱wú7mesh, this lexical suffix derives adjectives. If the root is a noun, the meaning is “X-like”, while with adjective roots the result is “somewhat X”. In both uses, it can be compared to the English suffix *-ish*, e.g. *boyish* and *reddish*. Although only found in three words in the dictionary, *tḵaya=7úmesh* “wolf-like” (√*tḵaya* “wolf”), *hiyí=7umesh* “kind of big” (√*hiyí* “big”), and *sḵwemaẏ=úmesh* “dog-like” (√*sḵwemáẏ* “dog”), this suffix is still very productive in Sḵwx̱wú7mesh (Peter Jacobs, p.c.).

The Klallam form most closely matches the Sḵwx̱wú7mesh in meaning, while the Sechelt form provides the link back to the original PS meaning of “people”. The origin of the initial **u* is unclear; it could be an irregularly reduced form of either the *=*úl*= connective, or the *=*aw*= connective.

45. PCS *=*aw=txʷ* “house” (< PS *=*txʷ* “lodging”)

    a. =*aẇ=txw* “house, building”

    b. Cx-Sl =*aẇtxʷ* “house”, Se =*awtxʷ* “house, building, shelter, room”, Ms =*əẇtxʷ, =éwtxʷ* “house”, Ck =*é:ẇtxʷ, =ɛ́ẇtxʷ, =əwtxʷ* “id.”, Sn =*eẇtxʷ, =əẇtxʷ, =heẇtxʷ* “building”, Sg =*éẇtxʷ* “house, dwelling”, Kl =*aẇtxʷ* “house, building, room”

While the form *=*txʷ* is ubiquitous throughout Salish, including several variations with different connectives, the form *=*aw=txʷ* is characteristic of Central Salish, occurring only in that branch, and in every language but Twana. The meaning or function of the connective is unclear: in every language but Lushootseed, the meaning of the compound suffix is simply “house”. It is possible that the form *=*aw=txʷ* once had a more specific meaning which was lost and over time came to largely replace the more generic

*=*tx*^{w}, but this must remain speculative. In Sḵwx̱wú7mesh, the *=txw* form occurs only in *aẏ=txw* “be at home” (√*7ay* “inside”) and *s-7il=txw* “roof of cedar shakes; long cedar planks; Indian house” (√*7il* probably a dummy root)

46. PCS **=al=ana?* “side of the head, ear” (< PS **=ani?, =ana?* “ear, side”)

    a. *=ay=an, =ay=a7n* “ear”

    b. Cx-Sl *=a?ana* “ear”, Se *=ál=ana, =áy=ana* “id.”, Ck *=ɛ́:lí:yɛ* “on/in the ear”, Ld *=al=adi?, =áldi?* “side of the head”

In Sḵwx̱wú7mesh, the form with connective always has the more specific meaning “ear”, which appears to be true of the other languages except Lushootseed. In languages without this compound form, the plain suffix often has the dual meaning “ear, side”. See Section 4.3.1 for further details on the function of this connective.

47. PCS **=al=us* “eye” (< PS **=us* “face”)

    a. *=aẏ=us, =ay=us* “eye”

    b. Cx-Sl *=awus* “id.”, Se *=álus* “id.”, Ms *=áləs, =ál̓əs, =ələs* “eye, mesh, star, appearance, tendency?”, Ck *=á:ləs* “eye”, Sn *=al̓əs, =aləs, =al̓s, =əl̓as* “id.”, Sg *=áləs*, Kl *=ayus, =ayəs, =ays, =i?s* “id.”, Ld *=alus, =əlus* “id.”

This complex suffix is reconstructed back to PCS due to its presence in all Central Salish languages. In this instance, the connective **=al=* clearly limits and adds specificity the meaning of the original suffix. Lillooet, an Interior language, has very similar suffixes *=al=us, =az=us* meaning “eye”; these were either borrowed directly from Central Salish, or innovated on the basis of the Central Salish suffixes, which Lillooet was in close contact with (Van Eijk 2014).

48. PCS **=ay=əɬ* “child, offspring” (< PS **=al(t), =il(t)* “child”)

    a. *=aẏlh, =aylh, =iyálh* “child, person, people”

b. Ms *=éyəɬ, =áyəɬ, =eẏɬ* “child, people, ceremony”, Sn *=eyɬ* “family?”, Kl *=əčɬ, =ačɬ, =čɬ* “child”[40], Ld *=iʔɬ, =ẏəɬ* “baby, child”

Since this suffix is related to (49) below, I discuss both there.

49. PCS **=úl=əɬ* “young individual” (< PS **=al(t), =il(t)* “child”)

a. *=úllh* “id.”

b. Cx-Sl *=úɬ* “young of species”, Se *=uɬ* “young (animal, bird, etc)”, Ms *=ál̓ɬ, =álɬ* “young”, Ck *=á:lɬ, =álɬ, =əɬ* “young, offspring”, Sg *=áləɬ* “id.”, Kl *=əyəɬ, =iyɬ, =əẏɬ, =aʔiɬ, =iʔiɬ, =ʔiɬ, =iɬ, =uẏɬ, =uyəɬ, =uyɬ, =uʔiɬ, =ɬ* “child”

Both **=ay=əɬ* and **=úl=əɬ* go back to PS **=al(t), =il(t)* (Kuipers 2002:205), with loss of the final **t* and devoicing of /l/ word-finally, as seen in other lexical suffixes such as **=wil* “canoe”.

Semantically, the two suffixes are mostly distinct in Sḵwx̱wú7mesh. The forms with the connective *=ay=* refer mainly to human beings, although not exclusively to “children”. Some examples with referents other than children include *ílhen=aẏlh* “feed the dead; have a feast with extra food” (√*7ílhen* “eat”), *kw’ach=mixw=aylh* “show pictures in longhouse” (√*kw’ach* “look at”, *=mixw* “person”), and *kw’enm=aylh* “pray” (√*kw’enem*?, also found in *kw’enm-án* “thank/greet/offer condolences to someone”). In each of these cases, the word is related to ceremonial activity in some way. This semantic extension makes sense when considering the many words where the suffix *=aylh* refers to “children” in the specific context of ceremony, such as *súyum=aẏlh* “ceremony involving donations of bringing out a girl” (√*súyum* “make expenditures in honour of someone”), *nah=áylh-em* “give name to a person” (√*nah* “name”), and *lixw=áẏlh-em* “give daughter in marriage” (√*lixw* “hand it down”). There may also be some relation/entanglement between the suffix *=aylh* in this context and the suffix *=yulh* “ceremony”; see example (80) for further discussion).

The only words with this suffix that do not refer to human beings are *stl’áx̱wtl’x̱w=aẏlh* “dog whelp, young of any animal” and *tl’x̱w=áẏlh=em* “to brood, sit on eggs”, both of which are derived from a root √*tl’ex̱w*. The definition of this morpheme is

[40] I have shown only the Klallam forms which must descend from PCS **=ay=əɬ* here; this suffix has become entangled with **=úl=əɬ* as I discuss below.

unclear, but it is certainly not related to the root √*tl'exw* “hard”, and I have not discovered cognates for these forms in other Central Salish languages that would provide evidence of the meaning. The reason for the differing behaviour of this root plus suffix combination must remain an open question for now.

The suffix *=úllh* can be used with both humans and animals. Unlike *=aylh*, which refers to “children” in the context of social relationships, *=ullh* classifies human or animal individuals purely on the basis of age: e.g., *swí7ka=ullh* and *slheńy=úllh* “young boy” and “young girl”, respectively (√*swí7ka* “man”, √*slhánay̓* “woman”), *wexes=úllh* “tadpole” (√*wexés* “frog”), *mixalh=úllh* “bear cub” (√*míxalh* “bear”), etc. This distinction between the two suffixes seems to be consistent throughout the Central Salish languages, with the exception of Klallam, where the two have become entangled. This makes it likely that the same distinction held at the PCS level.

50. PCS **=ala=qin* “inside of head or throat” (< PS **=qin* “head”)

    a. *=ay̓akin* “insides, guts”

    b. Se *=ála=qin* “inside of head/throat”, Ck *=ɛ́ləqəl* “(in) the head”, Ld *=aliqid* “?”

This suffix represents a compound of the suffix **=ala* “place” and **=qin* “head”. The Lushootseed suffix is unglossed, and only occurs in the word *χʷáʔχʷqʷ=aliqid-əb* “he wrapped a ceremonial headband around his head”. Tracing it back to the PCS level is somewhat problematic, since the Lushootseed form uses the phonological variant *=ali=* for “place” and has different semantics, referring to the outside of the head rather than the inside. It is therefore possible that the Lushootseed form was independently derived, with the form **=ala=qin* then representing a post-PCS innovation in Sechelt, Skwxwú7mesh, and Upriver Halkomelem.

The Skwxwú7mesh form has undergone some semantic evolution, with the meaning “head” being lost completely and the suffix now referring to the intestines or guts of an animal. In the case of the word *helh=áyakin* “good-sounding (about a drum)” (√*ha7lh* “good”), the meaning of the suffix is obscure, but it may be metaphorically referring to the insides of the drum, or to the sound a drum makes inside one’s head.

51. PCS **=al=qin* “integument” (< PS **=qin* “head”)

a. *=i7=k̲in, =ál̓=k̲en*, *=l=k̲n* “integument of animal” (the forms with *=(a)l=* typically mean “feather”, but see discussion for a counter example)

b. Se *=el=qin, =el=qi, =l=qin* “hair”, Ms *=ə́l̓qən* “pelt, fur, hide”, Ck *=ɛ́lqəl, =ə́lqəl* “wool, feather”, Sn *=el̓qən* “animal hair, fur, feather”, Sg *=lqən, =elqən, =qən* “wool, feather, skin growth”, Kl *=ayqən* “fur, wool, feather”

This suffix is derived from PS **=qin* “head” with the connective adding the meaning “on the head”, followed by the straightforward semantic shifts > “covering on the head” > “integument”. In Sḵwx̲wú7mesh, the plain form *=k̲in* has a wide range of meanings, typically “throat”, but also “language, hair, head, top”, meaning that the relationship between the forms with and without connective has been somewhat obscured.

In Sḵwx̲wú7mesh, this suffix occurs in the names for different types of dogs, such as *pa7pa7=í7=k̲in* “fluffy haired dog” (√*pa7pa* “fuzzy, wooly”), *x̲et’k̲’=í7=k̲in* “short-haired dog” (√*x̲et’k̲’* UR), *tl’ím=i7=k̲in* “short-haired dog” (√*7etl’ím* “short”), and *slhich’=l=k̲n* “dog (kind whose hair was used for making cloth)” (√*lhich’* “cut”). This last term is especially interesting, since it contains a rare /l/ form of the connective, and has cognates in Lillooet *ɬic’* “type of dog, possibly Salish wool dog” (van Eijk 2013:156) and Thompson *ɬəc̓l̓qn* “small black dog domesticated for fur, which was sheared and used in making blankets [wool-bearing dog]” (Thompson & Thompson 1996: 779).The irregular sound correspondences (Sḵwx̲wú7mesh /č’/ : Lillooet, Thompson /c’/), the analyzability of the term in Sḵwx̲wú7mesh, and the cultural use of dogs for wool on the Coast but less so in the Interior suggest that the term was borrowed from Sḵwx̲wú7mesh or another Central Salish language[41] into the Interior languages. This is further supported by the fact that blankets made from dog wool and the dogs themselves were valuable trade items (Barsh et al. 2002), which may have been exchanged by Coast peoples for goods from the Interior.

[41] The fact that this instance of the suffix contains the connective *=l=* rather than the typical *=i7=*, very closely resembling the Musqueam *=ə́l̓qən* “pelt, fur, hide”, may indicate that the Sḵwx̲wú7mesh form too was borrowed. However, Sḵwx̲wú7mesh is the only Central Salish language known to have this word.

Whether these names each referred to a separate breed is unclear. Barsh et al. (2002) describe how Coast Salish peoples maintained two breeds of dog: hunting dogs, called *sk'ínu7* in Sḵwx̱wú7mesh, and a wooly type whose hair was used for weaving, called *slhich'=l=ḵn* in Sḵwx̱wú7mesh. Whether *pa7pa7=í7=ḵin* referred to the same type, and whether the other words for dogs named specific breeds or merely described variations within the two main breeds are interesting questions which may no longer be answerable.

52. PCS **=al=ap, =ay=ap* "side of leg?" (< PS **=ap* "base")

    a. *=alap* "thigh"

    b. Se *=álap* "end, slope", Sn *=ečəč, =eẏəč, =e?ič, =eyəč* "hip", Kl *=aẏč* "hip", Ld *=álap* "leg, hip"

The Saanich forms cannot be directly related to Sḵwx̱wú7mesh *=alap*, while the Klallam form is ambiguous, since Klallam /y/ can go back to PCS */y/ or */l/. On the other hand, the resemblance of the Sḵwx̱wú7mesh and Lushootseed forms is striking and must be reconstructed back to PCS. The semantics of the Sechelt form are somewhat different, but see the compound suffix *=náč=álap* "thigh" (*=náč* "back, behind, bottom").

This suffix occurs in only two words in Sḵwx̱wú7mesh: *smekw'=álap* "thigh" (√*mekw'* UR, probably unrelated to *smekw'a7ál* "grave" or *mékw'em* "find") and *tsíḵ=alap* "get stabbed in the thigh" (√*tsiḵ* "get stabbed").

53. PCS **=al=ič* "area?" (< PS **=ik(n)* "back")

    a. *=aẏ=ch, =i7=ch* "surface, area; across"

    b. Se *=lič* "side (of land facing water, room, obstacle, etc.), wall", Ms *=él̓əc, =əl̓əc, =e?c, =líc* "route across", Kl *=ə?yi?č* "side of a point of land"

This suffix in Sḵwx̱wú7mesh is used in words describing landscape features (eg., *eshamshem=áẏ=ch* "sandbar", √*sham* "be low tide; stick out of water"), travel (eg., *t'ḵw'=aẏ=ch* "take a shortcut", √*t'eḵw'* "break"), and in place names (eg., *S7iḵ'en=aẏ=ch* "north side of Cheakamus River near confluence with Cheekeye River", √*seyḵ'* "cross over").

This sort of locational derivation from body-part lexical suffixes is extremely common. Hinkson (1999) describes the semantic evolution that lexical suffixes have undergone across Salish to arrive at their varied meanings both across and within languages. These series of meaning extensions through linked semantic changes are what she terms “semantic paths”. In her dissertation, Hinkson thoroughly analyzes the semantic extensions of the “back” suffix, where she proposes the paths BACK > SURFACE > ACROSS and BACK > OTHER SIDE (Hinkson 1999:182). She further proposes that the combination of this suffix and the connective *=*al*= results in the extension BACK > OVER (1999:137). These semantic paths are difficult to reconcile with the assumption that the suffix *=*al=ič* can be reconstructed to PCS, since it covers the range of meanings “surface”, “across”, “other side”, and “over”, which are arrived at by different paths. However, if the PCS meaning was “surface”, then the extensions SURFACE > ACROSS > OVER and SURFACE > ACROSS > OTHER SIDE are plausible alternative paths which would explain the range of meanings in the modern languages.

54. PCS *=*axʷɬ* “canoe, container” (< PS *=*wil* “canoe”)

    a. =*axwilh* “canoe” (only occurs with numeral stems as classifier)

    b. Se =*axʷɬ* “boat, canoe, container, vessel”, Ms =*xʷəɬ* “canoe”, Sn =*exʷəɬ* “conveyance, canoe”, Kl =*axʷɬ, =əxʷɬ* “id.”

This suffix is clearly related to PS *=*wil* “canoe” (Kuipers 2002: 210), but exactly how is unclear. The simplest explanation is that the resonant */w/ was devoiced to */xʷ/ a sound change that occurs sporadically in the Salish family, e.g., PS *-*nəw* (Kroeber 1999: 29) > Sq -*nexw* “limited-control transitive” (Jacobs 2011: 381-382). However, in most cases, this shift occurs word-finally (as happened to the final */l/ in *=*al(t)* “child”), or when the resonant occurs before a voiceless consonant, and not word medially as would be the case for this suffix.

A second possibility is that the suffix is derived directly from the PCS root **snəxʷíɬ* “canoe” by removing the first two consonants, in the manner described by Kuipers (1998). However, this theory does not explain the vowel */a/ in the suffix, nor does it account for the obvious similarity between PCS *=*axʷɬ* and PS *=*wil*. It is possible that the word **snəxʷíɬ* was created from a root *√*nəxʷ* or *√*nəx* plus the *=*wil* “canoe” suffix, but there is no evidence for such a root in the Central Salish languages.

55. PCS *=*al*=*wil* “bottom? side?” (< PS *=*wil* “canoe”)

a. *=iẇilh* “relative location/time”

b. Cx-Sl *=uwuɬ* “side”, Se *=ál=wiɬ* “bottom (curved, sloping)”, Ms *=ál̓wəɬ, =ól̓wəɬ, =əlwəɬ, =alwíl* “side”, Ck *=á:lwəɬ* “side, X-ward”, Sn *=əẇəɬ* “side (location in space with respect to some other reference point)”, Kl *=ə?əw, =aẇəɬ, =əwəɬ* “side”

This suffix is clearly a locational derivation from P(C)S *=*wil* “canoe”, but the semantic pathway is unclear. The most common meaning found is “side”, but a direct semantic leap from CANOE > SIDE seems unlikely. Sechelt has an intermediary with the meaning “bottom (curved, sloping)”, clearly referring to the shape of the curved underside of a canoe. This provides the probable semantic pathway CANOE > (Se) BOTTOM OF CANOE > UNDERSIDE > (Cx, Ms, Ck, Sa, Kl) SIDE > (Sq) RELATIVE POSITION, which plausibly explains the meanings of the suffix in the modern languages. It somewhat resembles the semantic extensions proposed by Hinkson for PS *=*anak* “belly” (Hinkson 1999:53-54), in this case replacing the rounded shape of the abdomen with the rounded shape of the bottom of the canoe.

56. PCS *=*al*=*aχan* “arm” (< PS *=*aχan* “arm, side”)

a. *=ay̓=ax̲a7n, =iy̓=ax̲a7n, =iy̓=ax̲an* “arm”

b. Cx-Sl *=ayaχan, =ay̓aχan* “arm”, Se *=al=láχan, =láχan, =láχa* “arm, front leg of animal, sleeve”, Ms *=əléχən* “arm”, Ck *=əlɛ́χəl* “arm, wing”, Sn *=eləχən* “hip”, Ld *=l=aχad* “arm, wing”

This suffix is another example of where it is difficult to determine what meaning the connective adds. In the case of Sḵwx̲wú7mesh, the forms with the connective clearly means “arm”, while the plain form is “side”. However, in languages like Musqueam, Saanich, and Klallam, the form without connective can also refer to “arm”, which is broadly true of languages across the family (Kuipers 2002:211). This is similar to the case of *=*al=ana?* “ear”, c.f. example (46)[42].

[42] See section 4.3.1. “Connectives” for a fuller discussion of the possible semantic functions of these connective morphemes.

4.3. Lexical suffixes unique to Proto-Central Salish

Suffixes in this section are innovations at the PCS level that cannot be shown to have antecedents in PS. Suffixes that are found in Sḵwx̱wú7mesh and one or two neighbouring languages are not listed here and are included in Chapter 5.

57. **=anum* “measurement of time”

    a. *=anam, =anem* “measure, time”

    b. Se *=ánum* “year”, Ms *=ánəm* “?”, Kl *=anŋ* “season, year”

The Sechelt and Musqueam forms clearly point to PCS **u* in the second syllable, with Musqueam showing umlaut of **a* before **u* in a following syllable (Suttles 2004: 20-21)[43]. The Sḵwx̱wú7mesh form is more problematic, since several words derived from the morpheme *t’ánam* “measure (v.)” show an unexpected /a/ in the second syllable. It is possible that Sḵwx̱wú7mesh borrowed these forms from a Halkomelem at a stage where that language had undergone the characteristic */u/ > /a/ shift. However, none of the Halkomelem dialects appear to have a cognate of this term, so this hypothesis cannot be seriously considered.

These forms are problematic for another reason, namely that they consist merely of a single consonant followed by a lexical suffix, and there are no roots consisting of a single consonant like √*t’* in the language (Dyck 2004: 49). A possible explanation is that the stem *t’ánam* is the full form from which the lexical suffix is derived, which was then extended to other words with the meaning “measure” (e.g., *syeĺ=ánem* “year”, with √*yel* being an old root meaning “turn” in Salish languages; Kuipers 2002:130). However, this does not resolve the problem of the irregular vowel correspondence in the second syllable.

58. **=aʔɬ* “bed, bedding”

    a. *=a7lh* “id.”

[43] The process may have been something like **=anum* > **=onum* > **=onom* > **=anam* > *=anəm*.

b. Cx *=aʔaɬ, =aʔɬ* “mattress”, Se *=aɬ* “bed”, Ms *=éʔɬ* “id.”, Ck *=ɛ́:yɬ, =ɛ́:ɬ, =éɬ* “id.”, Sn *=eʔɬ* “mass, substance”, Kl *=aʔɬ, =aɬ, =ɬ* “mass, substantial body of material, fluid”

This suffix is transparently analyzable in Sḵwx̱wú7mesh but is limited to three forms: *kw’lh=á7lh-en* “pour water over someone in bed” (√*kw’elh* “pour”, *-en* “transitive”), *píxw=a7lh-m* “clean one’s bed” (√*pixw* “remove (about berries from bush, dust from clothing, etc)”, *-m* “middle”), and *p’ayaḵ’=á7lh-m* “make one’s bed” (√*p’áyaḵ’* “fix). The semantics of the Straits suffixes are somewhat vague, however certain forms clearly have the meaning “bed”; eg. Sn *lé=eʔɬ-t* “make bed”, from √*leʔ* “prepare”. The connection between the Straits meanings and other languages may be that mattresses were originally made from masses of bullrushes (Peter Jacobs, p.c.).

59. **=aɬal* “throat”

a. *=lhal* “food, breath”

b. Cx *=ɬal* “throat”, Se *=ɬaɬ, =ɬal* “food, breath”, Ms *=eʔɬ, =éɬəɬ, =ɬəɬ, =áɬəɬ, =ɬél* “throat, breath, wind, food”, Ck *=áɬəɬ, =ɬəɬ, =ɬɛ́l* “windpipe, throat”, Ld *=aʔɬ* “breath”

These forms are clearly related, however, there have been some phonological and semantic shifts in daughter languages. Most languages have devoiced final /l/ to /ɬ/; in Halkomelem, these forms alternate, with the voiced version occurring before a following suffix and the devoiced version word-finally (Suttles 2004: 285 for Musqueam). This is likely the case for Sechelt as well, but I have been unable to confirm this.

The /l/ in the Sḵwx̱wú7mesh form is somewhat unexpected, since PCS */l/ often shifts to /y/ in the language, which could indicate that it was borrowed, likely from Halkomelem which has a very similar form. However, non-grammatical morphemes with /l/ are not particularly uncommon in the language. A full discussion of exceptions to the */l/ > /y/ shift in the language is outside the scope of this thesis, but I have not considered the presence of /l/ to be evidence of borrowing unless there are other phonological or semantic factors.

60. **(=aɬ)=sxaʔ* “multiple of ten”

a. *=alhshá7, =lhshá7* “tens”

b. Cx *=ša?* “id.”, Se *=ša, =šə, =š* “id.”, Ms *=ɬsxé, =ɬcyé* “id.”, Ck *=əɬsxɛ́, =əlsxɛ́* “id.”, Sn *=ɬše?, =ɬše, =ɬš* “id.”, Sg *=ɬsé* “id.”, Kl *=ɬša?* “id.”

The Comox-Sliammon and Sechelt forms attest to the fact that this suffix is complex in the other languages, possibly containing the connective **=aɬ=* or more likely, the suffix **=aɬ* “times”. The Musqueam form *=ɬcyé* is peculiar and only attested from one speaker (Suttles 2004: 303).

In Sḵwx̱wú7mesh, this suffix occurs in the numbers of the decades from “thirty” to “ninety”, with the word *wetl’ch* for “twenty” having an unknown etymology. Interestingly, the roots for the Sḵwx̱wú7mesh numbers for “thirty”, “fifty”, “sixty”, and “seventy” are cognate with Halkomelem numerals rather than the Sḵwx̱wú7mesh numbers for “3”, “5”, “6”, and “7”.

Table 4.1 Sḵwx̱wú7mesh and Musqueam numerals[44]

Numeral	Sḵwx̱wú7mesh form	Musqueam form
“three”	*chánat*	*ɬíxʷ*
“five”	*tsíyachis*	*ɬq’écəs*
“six”	*t’áḵ’ach*	*t’χə́m*
“seven”	*t’akw’usách*	*θ’á?kʷs*
“thirty”	*lhexw=lhshá7*	*ɬəxʷ=əɬsxé*
“fifty”	*lheḵ’ch=alhshá7*	*ɬəq’əcs=əɬsxé*
“sixty”	*t’éx̱m=alhsha7*	*t’χəm=əɬsxé*
“seventy”	*ts’ekwch=alhshá7*	*θ’əkʷs=əɬsxé*

This indicates either that the lower forms in Sḵwx̱wú7mesh were innovated late in the language’s history, or that Sḵwx̱wú7mesh borrowed the higher forms from Halkomelem.

61. **=ali, *=ala* “place for”

a. *=aẏ́, =ay* “place for, container”

b. Cx *=aya, =ala* “place”, Se *=áli* “container, place where something occurs”, Ms *=élə, =ələ* “place for, container for”, Ck *=ɛ́:lɛ́, =əlɛ* “container for”, Sn *=elə*

[44] Musqueam numerals are from Suttles (2004: 462-463).

“container”, Sg *=élə, =hélə* “container”, Kl *=ayə, ay* “container”, Nk *=əy* “place”, Ld *=ali* “place where something is kept/located”

The Nooksack form of this suffix is unexpected, since this language does not undergo the */l/ > /y/ shift; it may be unrelated to this form, or less likely, borrowed from a language that did undergo the shift, such as Sḵwx̱wú7mesh. The reconstruction of the final vowel is difficult; Comox and the Chilliwack dialect of Halkomelem point to */a/, while Sechelt and Lushootseed point to */i/; the remaining languages have either deleted the final vowel or reduced it to schwa. The non-contiguous distribution of these alternating final vowels strongly suggests that both forms should be reconstructed to PCS as doublets.

In Sḵwx̱wú7mesh, this suffix occurs in several place names, such as *Nkwú7say* “Shovelnose Creek (√*kwu7s* “spring salmon”) and *Shishaẏu7aẏ* “Britannia Beach” (√*shá7yu* “screech owl”), as well as a number of terms for objects introduced since European contact, like *shukwa7=áy* “sugar container” (√*shúkwa* “sugar”) and *nexw-lám=ay* “bottle” (√*lam* “liquor”), indicating that it was productive for a long period of the language’s history, into the present day.

62. **=úl=wit* “clothing”

    a. *=élwit, =élwet, =élut, =uyt* “clothes, blanket”

    b. Cx *=ukʷt* “blanket”, Se *=ult, =úlít* “garment”, Ms *=élwət* “id.”, Ck *=élwət, =əlwət* “id.”, Sn *=alkʷət, =alẖẇət* “cloth”, Sg *=əlkʷ* “clothes”, Kl *=uykʷət, =uykʷt* “clothing”

This suffix is frequently used in women’s names in Sḵwx̱wú7mesh (Kuipers 1969: 41), as well as other Central Salish languages (Suttles 2004: 318 for Musqueam). This form is not particularly common in Sḵwx̱wú7mesh, where the more productive suffix for “clothing” is *=its’a, =ay=its’a* from PS **=ic’aʔ* “hide, blanket”. There does not appear to be a clear distinction between the uses of these two suffixes in the language.

Although the suffixes with /l/ are the only ones listed in the dictionary and Kuipers (1967, 1969), there is a related /y/-form *=uyt* which occurs in four words in the language: *mílha=uyt-s* “dancing gear“(√*mílha* “winter dance”, *-s* function unknown), *sléwaẏ=uyt* “blanket made of cedar bark” (√*sléway* “red cedar bark”), *swek̲w’elh=úyt* “mountain goat

blanket” (√*swéḵ̲w’elh* “mountain goat blanket”, function of lexical suffix unclear/redundant), *tl’eḵ̲t=úy̓t* “long coat, overcoat” (√*tl’eḵ̲t* “long”). The form *=uyt* is a direct phonological cognate with the Sechelt form *=ult*, with both having irregularly lost the medial /w/, indicating this is likely a common innovation between the two languages. The presence of /l/ in the other forms may suggest that these were borrowed from Halkomelem, since the forms in that language are nearly identical to those in Sḵ̲wx̲wú7mesh. This would suggest that *=uyt* is the older form of the suffix in Sḵ̲wx̲wú7mesh.

63. **=waʔs* “wooden object?”

    a. *=was, =wes, =us* “stick, wooden structure”

    b. Kl *=ẃyaʔs* “stick, rod”

The correspondence between these forms is problematic, since the *y* in the Klallam form has no analogue in the Sḵ̲wx̲wú7mesh. Regardless, this suffix must be the one from which the more widespread form **=al=waʔs* “paddle” is derived (see 64 below). In Sḵ̲wx̲wú7mesh, this suffix is found only in *yáy̓=wes* “bed platform” (√*yay̓* UR), *n-ḵ̲w’íḵ̲w’l=was* “stick for holding salmon above fire” (√*ḵ̲w’el* “cooked”), *shích’=us* “harpoon” (√*shich’* “go around something, turn around”?), and *p’a7úts’=us* “cradle” (√*p’a7úts’* UR).

64. **=al=waʔs* “paddle”

    a. *=iwas* “id.”

    b. Se *=əwas* “id.”, Ms *=éĺwe?s, =əĺwe?s* “id.”, Ck *=ówəs, =ó:wəs, =ɛ́:wəs, =əwəs* “id.”, Kl *=ikʷaʔs* “id.”, Ld *=alwaʔs* “id.”

This suffix contains the previous suffix *=was* “stick”, plus the connective **=al=* which has been shifted to *=i=* in Sḵ̲wx̲wú7mesh. In Sechelt and Upriver Halkomelem, it appears that the /l/ of the connective has been irregularly lost.

65. **=axʷ* “times”

    a. *=axw* “id.”

    b. Se *=axʷ* “id.”, Ms *=éxʷ* “id.”, Ck *=ɛ́xʷ* “id.”, Sn *=exʷ* “id.”, Kl *=axʷ* “id.”, Ld *=axʷ* “id.”

In Sḵwx̱wú7mesh, this suffix is only used with the numerals “one” and “three” (*nach’=áxw* and *chan=áxw*, respectively). The same is true for Sechelt, which uses *čan=axw*, a clear cognate of the Sḵwx̱wú7mesh form for “three times”, rather than the typical root for “three” which is *čałas*. In the remaining languages, it is only used for “once”. In all CS languages, the more productive suffix meaning “times” is derived from PS **=aɬ*.

This suggests that PCS used **=axʷ* at least for “once”, while the Sḵwx̱wú7mesh and Sechelt forms suggest that it was likely used for “three times” as well. Some evidence from the Tillamook language, usually considered an independent branch of the family closely related to Central Salish (Elmendorf 1962), confirms this. Tillamook is the only other Salish language that uses a cognate of Sḵwx̱wú7mesh *chánat* for “three”, where it is *čanat* (Edel 1939:49). For the meaning “three days”, Tillamook uses *čan=áxʷ=yis* (Edel 1939:27), a direct cognate of Sḵwx̱wú7mesh *chán=xw=yes*. Since Sḵwx̱wú7mesh and Tillamook are not closely related, this confirms that PCS likely used **čanaxʷ* for “three times”, which has since become lost in other languages.

66. **=iqan* “belly”

    a. *=iḵen* “front”?

    b. Ms *=íqən, =əqən, =qən, =qén* “front, slope”, Sn *=iqən, =iq* “belly”, Kl *=iqən, =iq* “belly, lower abdomen”, Ld *=iqad* “incline, slope, bank, hill”

This suffix is fossilized in Sḵwx̱wú7mesh, occurring in only three forms: *tl’ḵw’=íḵen* “dark spot on the road” (√*tl’eḵw’* “dark”), *áts=iḵen* “be front side” (√*7ats* “surface”), and *hiẇ=íḵn* “those sitting in front closest to fire” (√*hiẇ* “move up”), which are all transparently analyzable. The original PCS meaning was probably “belly”, which is still found in the Straits languages Saanich and Klallam. In fact, the semantic evolution of this suffix exactly parallels that of the more common suffix originally meaning “belly”, from PS **=anak*. The Sḵwx̱wú7mesh and Musqueam meaning extensions are the same as the BELLY > FRONT extension which Hinkson describes for this suffix (Hinkson 1999:54), while the Lushootseed meaning follows the pathway BELLY > HILLSIDE (Hinkson 1999:53).

4.3.1. Connectives

Connectives are morphemes of unclear meaning and function which serve to link the root and a following lexical suffix. Kuipers (1967) noted the existence of the "connective elements" *=ay=* and *=aw=*, stating that in some cases suffixes with a connective result in different meanings (Kuipers 1967: 119-120). Kinkade (1998) calls them "expansion suffixes", noting that while their function is unclear, at least **=al=, *=ay=,* and **=ul=* must be reconstructed back to Proto-Salish (Kinkade 1998: 18-19). Suttles notes that in Musqueam, connectives sometimes give a more restricted meaning (Suttles 2004: 285). In Lillooet, Van Eijk (1997) says that connectives are semantically empty "but in few cases they influence the meaning of the following lexical suffix" (Van Eijk 1997: 129), although he does not specify how. Other references to connectives include Gerdts & Hinkson (2004) for Halkomelem, Pidgeon (1970, cited in Hinkson 1999) for Saanich, and Kinkade (1973) for Columbian.

The cognate sets presented here suggest that PCS made productive use of at least five connective suffixes, **=al=, *=aɬ=, *=aw=*, **=ay=*, and **=úl=*. Of these, **=al=* is the most common, and seems to occasionally alter the meaning of the base suffix.

67. The **=al=* connective

	Base form		Complex form	
a.	**=us*	"face"	**=al=us*	"eye"
b.	**=qin*	"head"	**=al=qin*	"integument"
c.	**=ap*	"base"	**=al=ap*	"thigh?"
d.	**=ič(ən)*	"back"	**=al=ič*	"surface"
e.	**=waʔs*	"wooden object"	**=al=waʔs*	"paddle"
f.	**=wil*	"canoe"	**=al=wil*	"curved side?"
g.	**=aχan*	"arm, side"	**=al=aχan*	"arm, side"
h.	**=anaʔ*	"ear, side"	**=al=anaʔ*	"ear, side"

When this connective occurs with body part suffixes, the general meaning is something like “on the X”. In Sḵwx̱wú7mesh, this tendency is more pronounced: cf. *=ax̱an* “side” vs. *=ay̓=ax̱a7n* “arm”, *=a7n* “cheek” vs. *=ay̓=a7n* “ear”, while other Central Salish languages do not display this distinction for these sets of suffixes. In some cases, the connective **=al=* appears to simply restrict the meaning of the base suffix. This is the case for the form **=al=wa?s,* which has the more specific meaning of “paddle”, compared to the more general meaning “wooden object” for the base suffix. For the forms **=al=ič* “surface” and **=al=wil* “bottom? side?”, the derived form with connective seems more general than the meaning of the base suffix. It is possible that these general meanings evolved from more specific ones, e.g. **=al=ič* “on the back” > “back side” > “surface” and **=al=wil* “on the canoe” > “curved side” > “side”. For the latter pathway, the meanings “curved/sloping bottom” in Sechelt and “curved side” in Lushootseed provide evidence of this intermediary meaning.

The remaining connectives do not alter the meaning of the base suffix in any consistent way. In Sḵwx̱wú7mesh, there exist pairs such as *=yes* ~ *=alh=yes* “days” and *=txw* ~ *=aẃ=txw* “house, building”, where the meaning is the same regardless of the presence of a connective. This pattern holds across languages of the branch; compare for instance, Sḵwx̱wú7mesh *=ay̓=aḵap* “smell, taste” with Comox-Sliammon *=aqap* “smell”.

The connective **=aɬ=* is extremely rare in Central Salish, being found only in **=aɬ=kʷu, *=aɬ=qʷu* “water” and possibly **=aɬ=yes* “days”. It is probably related or identical to the PS compounding suffix **=aɬ=* (Kinkade 1998: 272), but beyond this it is difficult to speculate on its function due to its rarity. Similarly, the connective **=ay=* is found only in **=ay=əɬ* “child, offspring”, making its function unclear.

Although the function of the connective **=úl=* is unknown, it can be determined with certainty that it was inherently stressed. In Sḵwx̱wú7mesh the suffixes *=úllh* “young individual” and *=élwet* “clothes, blanket” which contain this connective always bear stress on the remnant of **=úl=*, regardless of typical stress assignment rules. This holds for other Central Salish languages, as the cognates of (49) **=úl=əɬ* “young individual” and (62) **=úl=wit* “clothing” show. For another example of the same connective, see (82) **=úl=kʷəɬ* “dance”.

The evidence from Central Salish indicates that connective morphemes do not modify the meaning of the lexical suffix in a systematic way, or at least not one that is recoverable from evidence in the modern languages. It may be that they did have a consistent semantic function at one point which has simply been obscured by centuries of semantic drift. It is possible that a family-wide comparative survey of connectives may shed light on some of these questions.

4.4. Summary

The data presented in this chapter demonstrates that Proto-Central Salish innovated greatly upon the lexical suffix system that was inherited from Proto-Salish, usually by deriving new suffixes from Proto-Salish suffixes by means of a connective morpheme, or occasionally by compounding of two suffixes. The suffixes that have no antecedents in Proto-Salish are more difficult to account for, since there is often no known full noun of similar meaning and phonology that could have provided the source of the lexical suffix. It is possible that some forms that exist only as lexical suffixes in Central Salish have corresponding full nouns in other branches of the family. I have not made a comprehensive search for original free-standing forms outside of Central Salish; this may be an interesting area for future research.

The lexical suffixes reconstructed here represent only a subset of the total inventory of Proto-Central Salish suffixes, since I have only included those suffixes that have a reflex in the Sḵwx̱wú7mesh language. Nevertheless, it is possible to gain a greater understanding of the Proto-Central Salish system just by examining those suffixes which have reflexes in a single descendant language.

Chapter 5. Sḵwx̱wú7mesh and local Central Salish innovations

5.1. Introduction

This chapter discusses the innovations that are either unique to Sḵwx̱wú7mesh, or occur only in Sḵwx̱wú7mesh and a couple other neighbouring languages and cannot definitively be traced back to Proto-Central Salish.

5.2. Local Central Salish innovations

This section contains those suffixes which are found in Sḵwx̱wú7mesh and one or more neighbouring Central Salish languages, but are not widely distributed enough to be reconstructed back to PCS with any level of surety. This distinction between local Central Salish (LCS) innovations and PCS innovations is arbitrary, but I have included a suffix here if it is found in three or fewer geographically contiguous languages.

I have used the symbol % to differentiate the LCS reconstructions from those that go back to a common proto-language. The reconstructed forms are projections based on regular sound correspondences between the languages[45].

68. LCS *%=mut*$_1$ “piece? kind?”

    a. *=mut* “piece, individual specimen”

    b. Ms *=mat* “kind, piece, part”, Ck *=má:t* “piles, kinds”

In Sḵwx̱wú7mesh, this suffix is only used as a classifier with numeral suffix roots, where it is used for counting parts or individual specimens from a homogenous group (see section in Chapter 2 on “Numeral roots” for details on this and other lexical suffixes used as classifiers). This appears to be true of Chilliwack as well, where it is attested only with numeral roots from one to five (Galloway 2009:340). In Musqueam however, it

[45] It is possible that “LCS” innovations, in lexical suffixes and elsewhere in the languages, represent dialect differentiation in the post-PCS dialect continuum.

occurs in *θí=mat* “greater part”, where the root is the adjective √*θi* “big” (Suttles 2004:396).

69. LCS *%=mut₂* “appearance”

    a. *=iṁut, =amut, =mut* “appearance, attribute?”

    b. Ms *=mət* “appearance”, (Kl *=amənət* “id.”)

This suffix is quite rare in Sḵwx̱wú7mesh, and its function is not always clear. In some words, such as *ḵeẏ=íṁut* “ugly” (√*ḵey* “bad”), it clearly refers to physical appearance. In other cases, it seems to refer to a more general attribute described by the root, as in *ḵel=ḵ=ímut* “clumsy” (√*ḵel* “bad”, *=ḵ* “bottom”?), which has a direct cognate in Musqueam *qəlq=ámət* “ugly”. In a few words, the function of the suffix is unclear: *yá7ya=mut* “be shut tightly” (√*yá7ya* “be tight”). The Klallam suffix is interesting due to its phonological and semantic resemblance to the Sḵwx̱wú7mesh and Musqueam forms, but the *-nə-* is unexplained.

70. LCS *%=amut* “blanket, clothing”

    a. *=amut, =mut* “clothes?”

    b. Ck *=ámət* “costume”, Sn *=ámət* “blanket”, (Cw *hiṁat* “costume”)

This suffix is found in Sḵwx̱wú7mesh only in *kw’as=amút* “dress up warmly” and *kw’ás=mut* “be hot (about clothes)”, both with the root √*kw’as* “hot”. Given the strong similarities between these two words, it may be that they are simply variants of one lexeme, perhaps due to being recorded from different speakers. In Chilliwack, this suffix is found only in the word *s-ləw=ámət* “dancer’s costume”, where the root is probably related to *sləw=íy* “inner cedar bark” (*=iy* “plant, tree”; Galloway 2009:353). In Saanich, this suffix occurs only as a classifier with numeral roots (Montler 2018:1091).

Some relationship between this suffix, (68) *%=mut₁* “piece, kind”, and (67) *%=mut₂* “appearance” seems likely due to the almost identical phonology. The original meaning may have been “piece”, with semantic extensions to “kind”, then to “attribute/appearance”. A similar development is proposed for the suffix *=umesh* “kind, like”. The meaning “blanket, clothing” could have plausibly evolved from either “piece” or “attribute/appearance”.

71. LCS *%=amac'* “long object?”

a. *=amats'* “rope, yarn, strands; torso”

b. Ms *=əməθ', =ém̓əθ'* “long object”, Ck *=ɛ́məc', =ɛ́məθ', =á:məθ', =əməθ'* “upright standing structure, pole”

In Sḵwx̱wú7mesh, this suffix occurs both as a classifier and a regular lexical suffix. When used as a classifier with numeral roots, it exclusively refers to strands of wool or rope. When used with other roots, it often has the same connotation, e.g., *máḵ'=amats'* “be thick, heavy (about rope)” (√*maḵ'* “thick”), but it may also have the meaning “torso”, as in *ip'a7=ámats'-em* “place hands on hip” (√*p'a7* “hold with hands”, *-em* “middle”) and *tl'áḵt=amats'* “have a long torso” (√*tl'aḵt* “long”). For the last form, compare Musqueam *ƛ'əqt=éməθ'* and Chilliwack *ƛ'əqt=á:məθ'*, both meaning “tall person”.

The original meaning of this suffix was likely close to the Chilliwack meaning of “upright standing structure”. From here, the semantic extension to Musqueam “long object” and finally to Sḵwx̱wú7mesh “torso” and the classifier “rope, yarn” is plausible.

72. LCS *%=unax*^{w} “wave”

a. *=unexw* “id.”

b. Cx-Sl *=unax*^{w} “id.”, Se *=unax*^{w} “id.”

This suffix is limited to the forms *hiy=únexw* “big waves” (√*hiyí* “big”) and *ḵey=únexw* “rough water” (√*ḵey* “bad”). The resemblance of this form to the PS suffix **=anax*^{w} “salmon, season, weather” is striking and certainly not a coincidence, but the initial vowel correspondence is highly irregular. It could possibly represent a reduction of the connective *=aw=*, via **=aw=anax*^{w} > **=əw=ənax*^{w} > **=əw=nax*^{w} > **=unax*^{w}.

73. LCS *%=c'* “bone?”

a. *=ts'* “bone, spine”

b. Ms *=θ'* “?”, Ck *=θ'* “small portion”

Only three forms have been recorded with this suffix in Sḵwx̱wú7mesh: *skwéṁkwem=ts'* "lump" (√*kwem* "lump"?), *es-kw'émkw'em=ts'* "be bony, skinny" (√*kw'em* UR), and *nexw-7éx̱=ts'=ch* "backbone" (√*7ex̱* UR, =*ch* "back"). The first has a clear cognate in Musqueam *skʷəmθ'* "lump on the body", while the last is related to Lushootseed *sχəχc'* "backbone of fish" and Lillooet *ʔəχc'* "backbone" (Kuipers 2002: 221).

74. LCS *%=als* "weapon"

    a. *=ḵ=aẏ́s* "id."

    b. Ms *=əls* "id."

The phonological similarity between this suffix and PS **=als(t)* "rock" is certainly not coincidental, since most pre-contact weapons would have used stone as either a blunt head or sharp edge. It is found in only three words in Sḵwx̱wú7mesh: *waḵ=áẏ́s=tn* "weapon" (√*waḵ* UR), *p'ayḵ=áẏ́s* "get a weapon" (√*p'áyaḵ* "be fixed"), and *húẏ́=ḵáẏ́s-m* "ready one's weapons" (√*huy* "stop, finish"). Since both the roots √*waḵ* and √*p'áyaḵ* end in /ḵ/, it may be that the underlying form of the suffix is just *=aẏ́s*, which would bring it in line with the Musqueam cognate, and the presence of /ḵ/ in *húẏ́=ḵáẏ́s-m* is due to analogy with the other two forms. Another possibility is that is a compound of the suffixes *=aẏ́s* "rock" and *=ḵ* "base, bottom".

75. LCS *%=akʷ'a* "dead person"

    a. *=akw'a* "dead person?"

    b. Se *=akʷ'a* "corpse, dead body, outer appearance of a person", Ms *=kʷ'eʔ, =kʷ'aʔ* "dead person?"

The existence of this suffix as a productive form in Sḵwx̱wú7mesh is somewhat doubtful: only one word, *néw=akw'a* "coffin" (√*new* "put something inside"), is clearly morphologically analyzable. This word has cognates with the same meaning in Sechelt *náw=akʷ'a* and Musqueam *náẇ=akʷ'eʔ ~ náẇ=akʷ'aʔ*. Interestingly, there is also a word *snewákw'a* "ring around the moon" which appears to be the word for "coffin" plus the nominalizing *s-* prefix. What the relationship between these two words is, and whether there even is one, I am not sure.

Sḵwx̱wú7mesh also has the words *mákw'a=lhnay-em* "join someone in fasting" (*=lhnay* "throat"), *mákw'a-tsut* "share someone's fate voluntarily" (*-tsut* "reflexive"), *es-máẃakw'a-s* "share in someone's sorrow or discomfort" (*-s* "causative"), and *smekw'a=7ál* "graveyard" (*=ál* a unique *l*-form of the suffix *=ay* "place, container"), all of which are connected to the idea of "sorrow". Suttles includes the Musqueam form *cmékʷ'eʔ* "attend a funeral" under this suffix (Suttles 2004:415), which clearly resembles the Sḵwx̱wú7mesh forms in sound and meaning. Cognates of the word for "graveyard" are found in Sechelt *mákʷ'=ali* and Nanaimo *šməkʷ'=élə*, both of which have the "container" suffix. The exact connection between all these forms and the "dead person" suffix is presently unclear. It may be that this root *√*makʷ'a* is the origin of this lexical suffix (see section 3.1 "Introduction" for a discussion on the origin of lexical suffixes through loss of the initial consonant).

76. LCS *%=ič, =al=ič, =aw=ič*

    a. *=ich, =ech, =aẃ=ich, =eĺ=ech* "hundred"

    b. Ms *=əc* "id.", Ck *=əwəc* "id.", Sa *=əč* "id.", Sg *=ələč* "id."

This suffix is looks like it is derived from the suffix *=ich* "back" with the addition of a connective, but the semantic motivation for this is difficult to understand. It could simply be an instance of homophony, meaning that this suffix may have a different, currently unknown origin.

77. LCS *%=aw=iqʷ* "hat"

    a. *=aẃ=ak̲w, =aw=ik̲w, =aw=ek̲w* "id."

    b. Ms *=áẃəqʷ* "id.", Ck *=á:wəqʷ, =áwəqʷ* "id."

This suffix is derived from **=iqʷ ~ *=aqʷ* "head" plus the connective **=aw=*. In Sḵwx̱wú7mesh, there are only three words with this suffix, each with a different phonological variant: *slép'lep'=áẃ=ak̲w* "old warpy hat" (√*lep'* "be wrinkled"), *tl'tl'=áw=ik̲w* "straw hat" (√*tl'etl'* "grass used for basket-making"), *sxw7umtn=áw=ek̲w* "*sxw7úmten*'s hat" (√*sxw7úmten* "Indian doctor"). No cognates of these forms are recorded in Musqueam or Chilliwack; it is possible that the three languages independently innovated this form, or that one language provided the model for the others to innovate.

78. LCS *%=iqʷ=uya(=ač)* “finger”

a. *=ḵ̲wuy̓=ach* “id.”

b. Cx-Sl *=iqʷ=uj̓a* “id.”, Se *=iqʷ=uya* “id.”

This suffix in Sḵ̲wx̲wú7mesh is clearly related to the Comox-Sliammon and Sechelt forms, but it appears that it has undergone morphological reanalysis in Sḵ̲wx̲wú7mesh. The first element is clearly **=iqʷ* “head” (see “Combining lexical suffix with lexical suffix” for discussion of this suffix in other body-part compound suffixes). The second element is **=uya*, which is a lexical suffix for “hand” in both Comox-Sliammon and Sechelt. Sḵ̲wx̲wú7mesh appears to have reanalyzed this combination of suffixes as a single suffix meaning “digit” (see (79) **=iqʷ=uya=šən* “toe” below), to which the suffix *=ach* “hand” was added to get the meaning “digit of the hand”, or “finger”. This is an example of boundary loss in morphological change (Koch 1996), as the once separate morphemes **=iqʷ* and **=uya* have become fused into the single *=ḵ̲wuy̓*.

79. LCS *%=iqʷ=uya=šən* “toe”

a. *=ḵ̲wuy̓=shn* “id.”

b. Se *=iqʷ=úy=šən* “id.”

This suffix also contains the reanalyzed suffix *=ḵ̲wuy* meaning “digit”, to which the suffix *=shn* “foot” is added for the complete meaning “toe”.

80. LCS *%=yuɬ* “ceremony” (cf. **=ay=əɬ* “child, offspring”?, **=úl=əɬ* “young individual”?)

a. *=yulh, =éyulh* “id.”

b. Ms *=éyəɬ, =áyəɬ, =ey̓ɬ* “child, people, ceremony”[46]

Only three words with this suffix are known: *tseḵ̲w=yulh* “unidentified mortuary office” (√*tseḵ̲w* “dig up”?, c.f. *tseḵ̲wíyu7* “dig up bones of dead”, *tsiḵ̲wálch* “dig up potatoes”), *x̲am=éyulh* “mourner, wailer” (√*x̲aam* “cry”), and *x̲7=éyulh* “menstruate” (√*x̲e7* “sacred”?, c.f. *Sx̲ex̲elhnát* “Sunday”, *X̲ex̲e7énaḵ̲* “Creator”).

[46] Compare also the Saanich, Klallam, and Lushootseed forms under **=ay=əɬ*, which lack the “ceremony” meaning.

At first glance, the Musqueam forms seems to be a clear cognate of the Sḵwx̱wú7mesh suffix, but there are some problems with identifying it as such. The presence of /u/ in the second syllable should trigger umlaut in the Musqueam form, giving expected ***=áyəɬ* rather than the attested *=éyəɬ*. The similarities between this suffix and the **=ay=əɬ* "child, offspring" suffix cannot be completely dismissed, especially since the *=aẏlh* suffix in Sḵwx̱wú7mesh is also frequently used in the context of ceremony (c.f. 48-49 above). One possibility is that the *%=yuɬ* and **=ay=əɬ* suffixes were originally distinct and unrelated, but became entangled in Musqueam and other languages due to their phonological similarity and overlapping semantics. Unfortunately, since Sḵwx̱wú7mesh is the only language which attests to a form with /u/ in the second syllable, the history of this suffix may remain unknown.

81. LCS *%=iwa* "tree"

    a. *=iwa, =iwa7* "id."

    b. Se *=iwa* "id."

This suffix has a distinct semantic function from the more common *=aẏ* "tree, plant" suffix. The *=iwa* suffix is used specifically as a classifier for counting trees, while the *=aẏ* suffix almost exclusively occurs in the names of trees or bushes[47], where the root refers to a fruit or product derived from that tree (Kuipers 1967:127). Some examples include *apels=áy* "apple tree" (√*7apels* "apple") and *ḵ'emeĺ=áẏ* "maple tree" (√*ḵ'emel* "paddle").

By contrast, the suffix *=iwa* refers to trees in general, and is never used in naming specific kinds of trees. It frequently occurs with adjectival or verbal roots to define some attribute of a tree, as in *eḵwís=iwa* "thin (about a tree)" (√*7eḵwis* "thin"), *es-ḵexw=íwa7* "be bunched together (about trees)" (√*ḵexw* "be gathered"), and *sep=íwa* "hard wood" (√*sep* "stiff"). The two suffixes can even co-occur in the same word, as in *stsa7tsḵ=aẏ=íwa* "large shoot; one year old shoot" (√*tseḵ* "tree, wood"). Although the forms involved are not cognate, this distinction between the two suffixes exactly parallels

[47] The exception in *staṁ=áẏ* "what kind of tree?".

what Czaykowski (1982) finds for the Columbian suffixes *=áɬp* “tree, plant” and *=álqʷ* “something long or tall, tree” (Czaykowski 1982: 14-15).

82. LCS *%=úl=kʷɬ* “dance, dancer”

    a. *=álkwlh* “id.”

    b. Ms *=álkʷɬ, =əlkʷɬ* “winter dancer, possessing song”, Ck *=á:lkʷəɬ* “spirit power, spirit dancer”, Sn *=aləkʷəɬ, =alkʷəɬ* “side of body, dance”, Kl *=uykʷɬ* “side of body, dance”

This suffix is very interesting because it is the only lexical suffix for which there is clear evidence that it was borrowed from another language, in this case one of the Halkomelem dialects. This is shown by the irregular sound correspondence of Sḵwx̱wú7mesh /a/ to Halkomelem /a/, and Sḵwx̱wú7mesh /l/ to Halkomelem /l/. The Klallam suffix shows clearly that the original form contained the connective **=úl=*, which regularly shifts to *=ál=* in Halkomelem and Saanich, but would be expected to surface as ***=uy=* in Sḵwx̱wú7mesh. Halkomelem is often used in the context of Sḵwx̱wú7mesh ceremonial speech (Bouchard & Kennedy 1986: 95), so it is not surprising that a morpheme in this semantic field would be borrowed from Halkomelem.

Kinkade states that “I know of no borrowed lexical suffixes, except as part of borrowed individual lexical items consisting of stem + lexical suffix” (Kinkade 1998:270). This was likely the pathway by which the suffix *=álkwlh* entered the Sḵwx̱wú7mesh language, but it can now occur with native roots as well.

83. Words with *=álkwlh*

    a. With Sḵwx̱wú7mesh and Musqueam roots

Sq *x̱ews=álkwlh*	Ms *χəws=álkʷɬ*	“new dancer”
Sq *iṁsh=álkwlh*	Ms *ʔəmx=álkʷɬ*	“run a new dancer”

    b. With Sḵwx̱wú7mesh roots

mix̱alh=álkwlh	“perform bear dance” (Ms *spéʔəθ* “bear”)
sx̱wi7shn=álkwlh	“perform deer dance” (Ms *sméyəθ* “deer”)

The data in (83.a) show that certain words were borrowed into Sḵwx̱wú7mesh in an analyzable form, since Sḵwx̱wú7mesh has cognates of the Musqueam roots. This would have allowed speakers to understand the meaning of the suffix, and extend it to native roots such as those in (83.b).

5.3. Lexical suffixes unique to Sḵwx̱wú7mesh

Since these suffixes have no known cognates outside of Sḵwx̱wú7mesh, rather than listing forms in other languages under each suffix, I have provided a few words in the language derived from each suffix.

84. *=mámin* “inside”

kw’ach=mámin	“look inside” (√*kw’ach* “look”)
newẃ=mámin	“put a plug in socket” (√*new* “insert”)
mikw’=mámin	“wash dishes” (√*mikw’* “wash”)

This suffix refers to the insides of objects, clothing, and houses/buildings. No plausible cognates exist, although the final syllable resembles suffixes derived from PS **=min* “instrumental”. The initial /m/ of the Sḵwx̱wú7mesh form and the problematic semantics make a connection between **=min* and this Sḵwx̱wú7mesh suffix unlikely.

85. *=tsa7* “side”

x̱ch’ít=tsa7	“be on near side of road/river” (√*x̱ch’it* “close”)
x̱eta7=tsá7	“on the other side of road/river” (√*x̱éta* “far”)
yekw’=tsá7=min	“be upstream” (√*yekw’* “upstream area”, *=min* “piece, half, side”)

This suffix is found only in these three forms and appears to be synonymous with the more common *=iẃilh*, with *x̱ch’ít=tsa7/x̱ch’it=íwilh* both meaning “be on near side of road/river” and *x̱eta7=tsá7/x̱etá=ýwilh* meaning “on the other side of road/river”.

86. *=alhx̱a* “throat”

ch’eyxw=álhx̱a	“have a dry throat” (√*ch’eyxw* “dry”)

itut=álhx̲a “have no appetite” (√*ítut* “sleep”)

tsik̲=alhx̲[a]-a7n “stab someone in the throat” (√*tsik̲* “stab”)

This suffix has a probable cognate in the Musqueam dialect: *=əɬχé*, which Suttles lists as a “possible lexical suffix” (Suttles 2004:32). It is found in a single word[48] which was recorded with variant pronunciations from two different speakers: *θəq̓=əɬχé* (√*θéq̓* “be speared”?) and *t̓ᶿəq̓=əɬχé* (√*t̓ᶿíq̓* “step on”), both meaning “kneel”. This word is cognate with Sḵwx̲wúmesh *ts’k̲’=álhx̲a* “kneel down” (√*ts’ek̲’* UR), although how either the Sḵwx̲wú7mesh or Musqueam words could be derived from the meaning “throat” is unclear.

87. *=ul̓a* “finger”

x̲ewtl’=úl̓a “break one’s finger” (√*x̲ewtl’* “break”)

saẇt=úl̓a “little finger” (√*saẇt* “youngest child”)

s7enwilh=úl̓a “middle finger” (√*7énwilh* “be in the centre”)

This suffix appears to have be synonymous with *=k̲wuy̓=ach*, with the dictionary providing examples such as *saẇt=úl̓a/saẇt=k̲wúy̓=ach* “little finger” and *s7enwilh=úl̓a/s7enwilh=k̲wúy̓=ach* “middle finger”. Kuipers states that the *=ul̓a* form was probably originally a diminutive (Kuipers 1967:128), which he connects to a suffix *=ul, =l* which he glosses as diminutive (Kuipers 1967: 131). However, many of the cases he presents of this suffix actually represent fossilized forms of the connectives *=al=, =el=,* and *=ul=*, such as *x̲wux̲ws=él̓=k̲en* “mountain goat” (√*x̲wus* UR[49], *=el̓=k̲en* “integument”, a fossilized /l/-form of *=i7=k̲in*)and *yék̲w=el=chp* “put wood on fire” (√*yek̲w* UR[50], *=el=chp* “fire, firewood”, a fossilised form of *=ikwup*). The evidence connecting the suffix for “finger” to a possible diminutive is therefore quite weak.

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[48] And its derivative *θəq̓=əɬχé?-əm* “pray”.

[49] Kuipers (1967: 371) gives the root for the word for “mountain goat” as √*x̲wes* “fat (adj.), although the vowels do not match. However, Kuipers (2002: 129) derives this word form PS **χʷus* “to foam”, which would give the underlying meaning of “foamy wool” for the word for mountain goat. The word *sx̲wúsum* “soapberries” is derived from this same root.

[50] Although unanalyzable in Sḵwx̲wú7mesh, the root is clearly descended from PCS **yəqʷ* “fire(wood)” (Kuipers 2002: 132).

Interestingly, both Comox-Sliammon and Sechelt have a similar suffix for “hand”; *=uj̓a* and *=úya, =uy* respectively, which must go back to an earlier form **=uya*. The problem with identifying this suffix with the Sḵwx̱wú7mesh one is that the correspondence of Sḵwx̱wú7mesh /l/ to Sechelt /y/ and Comox-Sliammon /j̓/ is irregular, and although Comox-Sliammon underwent a similar **l > y* shift as Sḵwx̱wú7mesh, /y/ from this sound change does not shift further to /j̓/, which can be shown by forms such as Cx *=aymix*^{w} “breast” from PCS **=al=mix*^{w}. However, irregular *y ~ l* alternations are known across Salish (Kuipers 2002: 6), so this suffix may have originally had variant forms **=ula ~ =uya*.

88. *=ḵwáy̓newa̓s* “stomach”

yulh=ḵwáy̓newa̓s “have heartburn” (√*yulh* “burn”)

a=ḵwáy̓newa̓s “have indigestion” (√*7ah* “hurt”)

ts’a[ḵ’]=ḵwáy̓newa̓s-n “hit someone in pit of stomach” (√*ts’aḵ’* “get hit”)

The ending of this suffix is identical to the *-newa̓s* “reciprocal” suffix, and likely has the same origin, deriving from a PS lexical suffix **=inwas ~ =anwas* with the meanings “chest; pair, mutual, middle, half” (Kuipers 2002:210). This first variant is the source of Sḵwx̱wú7mesh *=inas* “chest”. The reciprocal suffix *-newa̓s* is an interesting example of a former lexical suffix that has become totally grammaticalized (Koch 1996) and stripped of any lexical meaning (see Gerdts & Hinkson 2003 for applicatives derived from lexical suffixes in Halkomelem).

The lexical suffix *=ḵwáy̓newa̓s* therefore preserves a fossilized trace of the suffix ***=newa̓s* before it had lost its function as a body part suffix. Here, it occurs with the lexical suffix *=ḵw* “head” and the connective *=ay̓=*, uniquely occurring between two lexical suffixes here. It is difficult to be sure what body part this suffix originally referred to. Cognates in Central Salish vary in meaning from language to language between “chest”, “abdomen”, and “heart” (Kuipers 2002: 210).The simplest explanation is that it meant “abdomen” as it does in Saanich (Montler 2018: 1096), but this would leave the function of *=ḵw* in this compound form unexplained.

89. *=xw* “part of plant”

tewíṅ=xw “berry (unripe)” (√*tewíṅ* “raw, unripe”)

This is the only form where this lexical suffix occurs alone and not as part of a compound. Here it clearly contributes the meaning “berry” to the word, but in compounds it seems to refer in general to parts of plants, such as limbs, bark, and roots; c.f. (25) *=ach=xw* “branch of tree”, (90) *=ay=exw* “fibrous plant?”, and (91) *=amyexw* “root?”. This suffix may be compared to Chilliwack *=əx^{w}, =x^{w}* meaning “lump-like, round”, which is a good semantic fit for the “berry” meaning but not the others.

90. *=ay=exw* “fibrous plant?”

ts’ah=áy=exw=tn “instrument for beating red cedar bark” (√*ts’ah* “hit”, *=tn* “instrument”)

This is the only word with this suffix plus a connective. Kuipers glosses the compound tentatively as “fibrous plant”, but it seems that it could be defined more specifically as “bark of plant”.

91. *=amyexw* “root?”

t’kw’=ámyexw “root” (√*t’ekw’* “dig”)

This is another case of a lexical suffix appearing only in a single word. It may actually be that the *-ám* represents the middle suffix *-m* and therefore the form of the suffix is actually *=yexw*, with /y/ representing a reduction of the connective *=ay=*. Comparative evidence does not help clarify this matter: other Central Salish languages have words for “root” with similar endings, such as Chilliwack and Saanich *k^{w}ə́mləx^{w}*, but the initial portion cannot be related to the Sḵwx̱wú7mesh stem. However, Lillooet has a near exact phonological and semantic match in *ƛ̓ak̓^{w}ámlax^{w}* “root”, which is morphologically unanalyzable, although Van Eijk suggests the ending may relate to the Lillooet lexical suffix *=ul̓ax^{w}* “land” (Van Eijk 2013: 147). This word must represent an early borrowing between Sḵwx̱wú7mesh and Lillooet, likely from the former into the latter

92. *=ḵa* “side, member of pair”

sḵáy̓=ḵa “left foot” (√*ḵay̓* “left”)

ína=ḵa “be across from” (√*ína* “the other”)

ts’íp’=ḵ(a)=ay̓=us-m “wink” (√*ts’ip’* “close”)

Despite this suffix being quite transparent in its use and function, its origins are unclear since it does not resemble other lexical suffixes in Sḵwx̱wú7mesh or elsewhere.

93. *=x̱ak̲'* "?"

k̲'áy=x̱ak̲' "little shelter" (√*k̲'ey* "camp, stay overnight")

As this is the only word with this lexical suffix, it is difficult to speculate on the exact meaning. No cognates are known.

94. *=ayips, =aẏaps* "clothespin, button"

yex̱w=áyips "come undone (about button)" (√*yex̱w* "come loose")

k̲'ís=ayíps=tn "button" (√*k̲'is* "be tied", *=tn* "instrument")

ts'x̱w=áẏaps "button" (√*ts'ex̱w* "wash"?)

This lexical suffix is particularly interesting, since it has a corresponding full form in the language that contains it: *sáyips* "pin, clothespin". This indicates that it was formed via the process of "chopping off" the first consonant which Kinkade describes as the origin of many lexical suffixes (Kinkade 1998).

95. *=awaṅ̓* "roll of 50-60 blankets"

nch'=áẇan "one roll of 50 blankets" (√*nch'u7* "one")

chanat=áwaṅ̓ "three rolls of 50 blankets" (√*chánat* "three")

This suffix, as the meaning implies, occurs only with numeral roots for counting rolls of blankets (see "Numeral roots"). Terms derived from this suffix would likely have been used when counting out blankets to be given as gifts to guests at potlatches and other ceremonies (Peter Jacobs, p.c.).

96. *=aws* "old person?"

swi7k̲a=áws "old man" (√*swí7k̲a* "man")

syu7yuxwa7=áws "older person" (√*syú7yuxwa* "old person")

This lexical suffix clearly contributes the meaning of “old” in the word *swi7k̲a=áws*, but its function in *syu7yuxwa7=áws* “older person” is unclear since the root already means “old person”. Perhaps *syu7yuxwa7=áws* refers to a person older than just *syú7yuxwa*.

Lexical suffixes with similar forms occur in other Salish languages, e.g., Lillooet *=aẃs* “group, collective” (Van Eijk 1997: 127) and Musqueam *=éwəs* “figure, back, trunk of body” (Suttles 2004: 314), but none with similar meaning. Another possibility is that it is related to the common *=iws* “body” suffix with some for of ablaut, although once again the semantic relationship is unlikely.

5.4. Phonological innovations in Sḵwx̲wú7mesh lexical suffixes

Lexical suffixes in Sḵwx̲wú7mesh display certain phonological innovations which have “eroded” longer ancestral forms, sometimes down to a single consonant. This phenomenon was briefly discussed in Chapter 1, but will be given more detail here.

An important sound change in the history of the Sḵwx̲wú7mesh language was the deletion of schwa in all word-final syllables. Occasionally, this shift was fed by the reduction of certain unstressed full vowels to schwa, but this does not appear to have been consistent (c.f. *x̲éta* “far” for instance). This can be demonstrated by comparing cognates in other Central Salish languages, which preserve the word-final vowel.

97. Deletion of schwa in word-final syllables

Sq *meẃ*	Ms *méẃə*	“child, offspring”
Sq *ex̲*	Ms *ʔéχə*	“Canada goose”
Sq *sheỉ*	Ld *šəláʔ*	“penis”
Sq *sch’iyúy*	Ld *sč’íyuyaʔ*	“twins”

Since lexical suffixes occur word-finally, they have also been affected by this shift. Thus, Sḵwx̲wú7mesh lexical suffixes frequently lack the vowels found in ancestral forms. This is shown in the data in Table 5.1, reproduced from Table 1.2.

Table 5.1 Sḵwx̱wú7mesh single-consonant lexical suffixes

Gloss	Sḵwx̱wú7mesh	Proto-Central Salish
“mouth”	*=ts*	**=ucin*
“back”	*=ch*	**=ičən*
“head”	*=ḵw*	**=iqʷ, *=aqʷ*
“bottom (Sq), penis (PCS)”	*=ḵ*	**=aq, =aq’*

Sḵwx̱wú7mesh and other Central Salish languages have certain lexical suffixes which alternate between forms with and without a nasal ending, e.g. Sḵwx̱wú7mesh *=ch ~ =ichen, =achen, =echen* “back”. In Sḵwx̱wú7mesh, the shorter variant without the nasal ending is always the more productive form, while the form with the nasal typically only occurs in a few fossilised forms.

98. Lexical suffixes with alternating nasal ending

=ts ~ =utsin, =tsin	“mouth”
=ch ~ =ichen, =achen, =echen	“back”
=ḵs ~ =eḵsen, =ḵsen	“nose”

In other Central Salish languages, the alternating forms are in an allomorphic relationship with each other, meaning the choice of form is predictable based on the morphology of the word. For instance, in Musqueam, most suffixes ending in /ən/ such as *=qən* “throat”, *=á:yθən* “mouth”, *=ícən* “back”, *=éχən* “arm”, *=íwən* “inside” have forms without /ən/ when the lexical suffix is followed by the transitive suffix *-t*. Saanich displays similar alternations before *-t* in forms such as *=eχən ~ =χe ~ =eχ* “arm, side”, *=əqsən ~ =əqs* “nose, point”, and *=qin ~ =qi* “throat, language”. Sechelt also has alternating suffixes such as *=qin ~ =qi ~ =q* “head”, *=šən ~ =š* “foot”, and *=ucin ~ =uci* “lips”, with the shorter forms occurring before transitivizing morphemes. Thus it seems likely that Sḵwx̱wú7mesh once had a similar allomorphic relationship between nasal ending forms and simply generalised the shorter forms to all positions, leaving behind only a remnant of the older nasal forms.

5.5. Summary

This chapter demonstrates how Central Salish languages continued to innovate on the lexical suffix system after Proto-Central Salish had already begun to diverge. The ultimate origin of most of these suffixes is currently unclear, but if they derive from full words originally, it may be that these full forms still exist in languages outside the Central Salish branch. A wider search of lexical materials of the Salish family may answer some of the questions.

This innovation in the lexical suffix system continued into the Sḵwx̱wú7mesh language. Once again, the majority of these suffixes have unclear origins. Additionally, the unique phonological attrition of lexical suffixes in Sḵwx̱wú7mesh is explained as a combination of regular sound change and irregular morphological analogy.

Chapter 6. Conclusion

The primary goal of this thesis is simply to describe the system of lexical suffixes as it exists in the Sḵwx̱wú7mesh language, and to analyze how they evolved to be this way. The first chapter gives an overview of the Sḵwx̱wú7mesh language and a brief description of what lexical suffixes are and what previous researchers have said about them. I also discuss the methodology used in this thesis, primarily focusing on the comparative method of historical linguistics.

In Chapter 2, I give an overview of the Sḵwx̱wú7mesh lexical suffix system. This begins with a description of the morphophonology, primarily how lexical suffixes interact with stress and glottalization. The remainder of the chapter is devoted to morphology and morphosyntax, focusing on how lexical suffixes relate to the root they attach to and other suffixes in the word. As such, there is a semantic component to this description as well. Finally, the inventory of compound lexical suffixes in Sḵwx̱wú7mesh is given, and how their meanings are derived from their components was described.

The remaining chapters focus on the history of Sḵwx̱wú7mesh lexical suffixes. Chapter 3 traces lexical suffixes in Sḵwx̱wú7mesh back to Proto-Salish, providing a few examples of lexical suffixes that do not occur in previous descriptions of Proto-Salish, thus furthering our knowledge of that reconstructed language. Chapter 4 discusses how the system changed from Proto-Salish to Proto-Central Salish, and adds a significant amount of material to the reconstruction of that poorly-known proto-language. This chapter also contains a description of connective morphemes and how they may have functioned at the Proto-Central Salish level, as well whatever function they maintain in the Sḵwx̱wú7mesh language. Finally, Chapter 5 details the lexical suffixes which occur only in Sḵwx̱wú7mesh and neighbouring languages, or just in Sḵwx̱wú7mesh, thus describing how lexical suffixes evolved in this part of the Proto-Central Salish dialect continuum as these languages diverged over time.

Why is any of this important? From the outset, my main interest has been in how historical and comparative linguistics can provide useful information for language revitalization. In a language like Sḵwx̱wú7mesh, where fieldwork with first language speakers is no longer possible, we have only the data that currently exists. Thanks to the elders, community researchers, and linguists who worked with the language, there is a

substantial amount. Questions will always remain, and the answers can be informed by looking at data from related languages and determining what Sḵwx̱wú7mesh does similarly, and what it does differently.

Lexical suffixes are an interesting, but challenging subject from the perspective of language revitalization. Their meanings can be extremely varied, and learners often have a difficult time recognizing them. Even more difficult is using them productively, since they are so different from any morpheme found in English. However, they are vital in the context of language revitalization, since they are an incredibly productive and creative way of forming new words. This is an urgent task for the new generation of speakers, since so many new pieces of technology, culture, and daily life do not have words in the Sḵwx̱wú7mesh language, making these concepts almost impossible to talk about without code switching into English. However, I have observed second language speakers using creative word forming devices to talk about these things while remaining in the Sḵwx̱wú7mesh language, including the occasional use of lexical suffixes. The use of lexical suffixes is a culturally authentic way of coining new words in the language, and their ability to combine with each other and with other morphemes allows them to be used in expressing practically any concept. The next generation has a difficult task in this regard, but as long as people are speaking the language, the lexical suffix system of the Sḵwx̱wú7mesh language will continue to evolve long into the future.

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