A REASSESSMENT OF THE GENETIC CLASSIFICATION OF MILUK COOS

by

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A DISSERTATION

Presented to the Department of Linguistics
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

June 2012

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Title: A Reassessment of the Genetic Classification of Miluk Coos

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DISSERTATION ABSTRACT

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Doctor of Philosophy

Department of Linguistics

June 2012

Title: A Reassessment of the Genetic Classification of Miluk Coos

This work presents the first in-depth analysis of Miluk Coos, a language previously spoken on the southern Oregon Coast. Miluk is normally classified as a member of the Oregon Coast Penutian group, a sub-branch of the Penutian phylum. However, Miluk demonstrates a number of affinities with the Salish language family. These similarities can be seen in a variety of domains. There are morphosyntactic features in Miluk which appear to resemble phenomena seen in Salishan languages. Additionally, some apparent cognates with Proto-Salish are discussed, including some which seem to exhibit regular correspondences.

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Doty, Christopher S., Kaori Idemaru, and Susan G. Guion. 2007. Singleton and Geminate Stops in Finnish - Acoustic Correlates. Interspeech 2007.2737-2740.

ACKNOWLEDGEMENTS

The dissertation-writing process is an inherently solitary one, but I have been fortunate to have the support of a number of individuals while conducting this research.

Other graduate students here at the University of Oregon have proved invaluable as sounding boards while I explored parallels between Miluk and Salish, especially Shahar Shirtz, Linda Konnerth, and Prakaiwan Vajrabhaya.

The members of my committee have also provided invaluable feedback on this work. I am especially thankful to my advisor, Prof. Scott DeLancey, for his guidance throughout my research, and to Prof. Paul Kroeber, for his expertise on Salish languages, his familiarity and discussion of Miluk, and for his willingness to serve on my committee from afar. Any errors, of course, remain my own.

Prof. Susan Guion-Anderson's support, guidance, and friendship during my early years of graduate school were instrumental in the formation of my research interests and my maturity as a scholar. You are missed, Susan.

I am also indebted to Eugene Coffee Company and Rennie's Landing for providing liquid fortitude during the dissertation-writing process.

Finally, the support of my parents and my sister throughout graduate school has been invaluable. I couldn't have done it without them.

For Susan

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CHAPTER I

INTRODUCTION

This work presents the first in-depth analysis of Miluk Coos, a language previously spoken on the southern Oregon Coast. Here I argue that Miluk, despite its usual classification as a member of the Penutian stock, shows a significant number of syntactic, morphological, and lexical similarities to the Salish family.

This chapter provides an introduction to Miluk and a neighboring language usually taken to be a close relative, Hanis Coos, including a discussion of previous work on the languages, the current understanding of their classification, and an introduction to the methodology used to conduct the present research.

1.1. Background on Hanis and Miluk Coos

Miluk and Hanis are normally classified together as part of the Coosan (sometimes "Kusan") subbranch or stock. These two languages, along with two other languages of the Oregon Coast – Alsea and Siuslaw – comprise the Oregon Coast Penutian (OCP) branch of the Penutian stock.

Both of the Coosan languages were previously spoken along the southern edge of Coos Bay, forming the southern end of the OCP branch, as shown in Figure 1.1. Frachtenberg traces the word *Coos* itself to a reduplicated form of the Hanis word for south, which he writes *kukwîs* (probably /kʷəkʷis/) (1922); a cognate form *q*^{w}*ši* 'south' is also found in Miluk.

The two Coosan languages are broadly similar in many respects. In addition to a number of cognate lexical items, the languages have syntactic similarities as

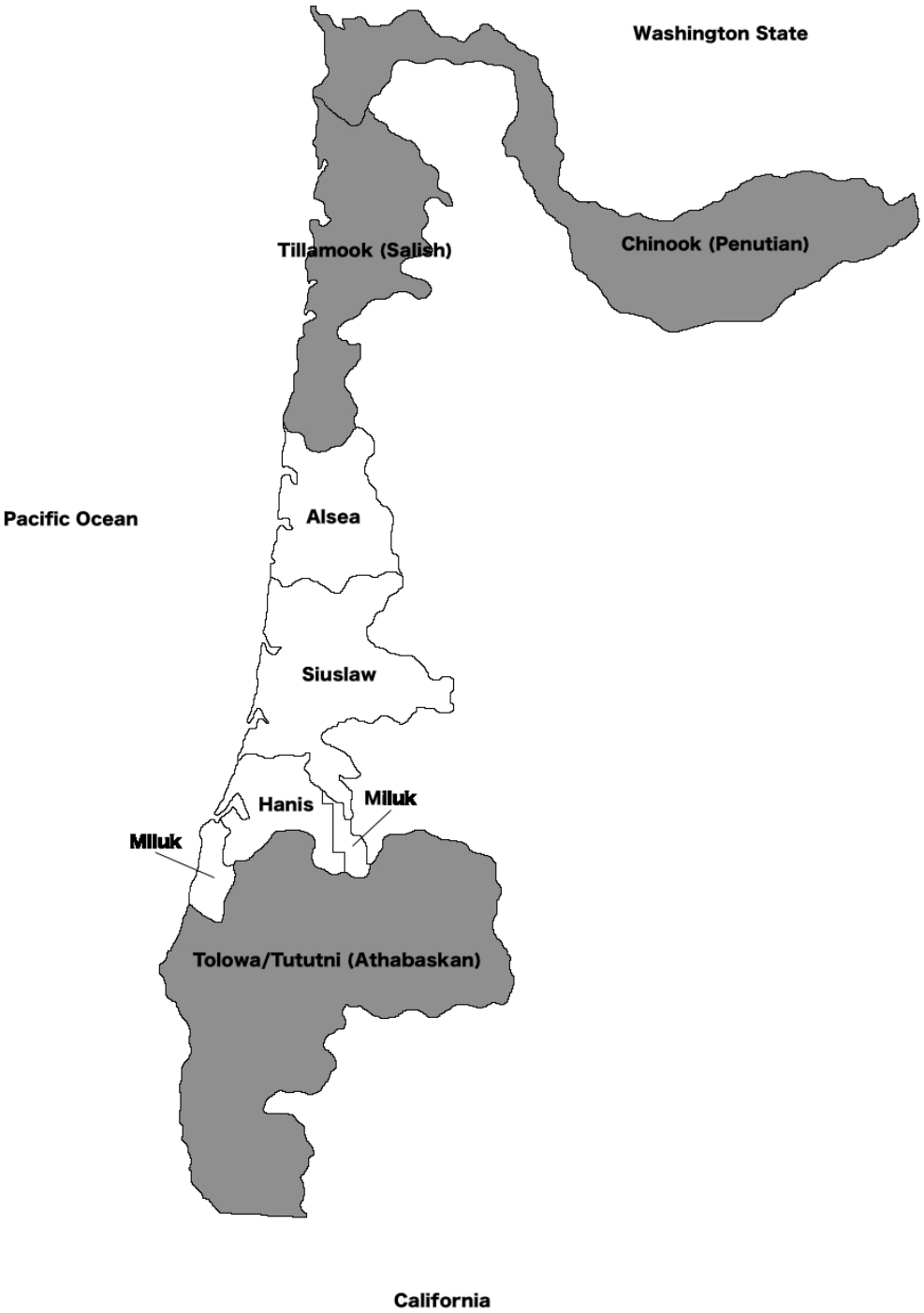

FIGURE 1.1. Map of the Pacific Coast of Oregon, showing the location of the Coosan languages in relation to neigboring languages.

well – both, for example, make use of ergative/absolutive alignment, and have similar ways of expressing possession (discussed in Section 5.1.1).

There are a number of differences between the two languages, however. Hanis, for example, uses pre-verbal clitics for person marking, while Miluk places pronominal morphology in second position, along with its TAM morphology. Additionally, a number of core lexical items varies between the two languages. For example, Miluk has *wə* '1S' while Hanis has *ʔn̩-*.

The differences between Hanis and Miluk were commented on by Frachtenberg as well, who wrote a grammar of Hanis (see Section 1.2 below): "As far as can be judged from the scanty notes on Miluk... this dialect exhibits only in a most general way the characteristic traits of the Kusan stock. Otherwise it is vastly different from Hanis in etymological and even lexicographical respects" (Frachtenberg, 1922:305).

1.2. Previous Work on the Coosan Languages

Hanis is first attested in a list of vocabulary items collected in 1856 by Dr. John Milhau (Grant, 1996). The first documentation of Miluk occurred in 1885, with Dorsey collecting a list of some 104 lexical items, including nouns, pronouns, and some numbers (Mithun, 1999). A few additional notes on Miluk were collected by St. Clair, along with Hanis texts from James Buchanan and Tom Hollis (Mithun, 1999). Leo J. Frachtenberg conducted the most research on Hanis (with some attention paid to Miluk) in 1909 at the Siletz reservation in Oregon, working primarily with two speakers of both Hanis and Miluk, James Buchanan and Frank Drew. Frachtenberg's research resulted in the publication of a collection of Hanis texts in 1913, followed by a grammar of Hanis in 1922. At the time that

Frachtenberg conducted his research on Hanis, he believed Miluk to be "practically extinct".

Frachtenberg's linguistic work on North American languages is problematic, however. He seems to have had limited ability to hear important contrasts, such as that between velars and uvulars, and his grammatical analyses are often problematic as well (Buckley, 1988).

In 1933, Melville Jacobs began work on Coos, collecting texts in both Hanis and Miluk, which were later published in two volumes, *Coos Narrative and Ethnographic Texts* (1939) (henceforth, "CNET") and *Coos Myth Texts* (1940) (henceforth, "CMT"). When Jacobs began his work on the Coosan languages, he believed that Miluk was extinct, likely due to Frachtenberg's comment. It was not until he met Mrs. Annie Miner Peterson, the sole consultant for the Coos texts in his volumes, that he discovered that Miluk still had at least one living speaker, for although Mrs. Peterson was a fluent speaker of Hanis and used it regularly in her adult life, her first language was Miluk. Jacobs took advantage of this situation, collecting the vast majority of the texts in his volumes in Miluk, with occasional stories and fragments in Hanis, along with a few texts in both Miluk and Hanis.

One of the stories collected by Jacobs ("Origin of death", CMT, p. 135) was obtained from Mrs. Peterson by reading her one of the Hanis texts from Frachtenberg's *Coos Grammar* and asking her to repeat the phrases back to him so that he could check Frachtenberg's phonetics. Mrs. Peterson's response to this procedure underscores the problems with Frachtenberg's work.

> "[Mrs. Peterson] objected continually and strongly to what I gather she felt was crudity, ineptitude, or improper style and phrasing in the Frachtenberg version. She was made to hold to his idioms, phrases

FIGURE 1.2. Photograph of Mrs. Annie Miner Peterson and Melville Jacobs conducting a recording session.

> and words only with reluctance and upon my insistence that I needed such duplication for purposes of study of his material. Her reaction to this procedure was such as to confirm my hunch that Frachtenberg's informant, Jim Buchanan, spoke another Hanis village provincialism; and, in addition, it is likely that he dictated to Frachtenberg at a speed rate that may have introduced stylistic awkwardnesses, which Mrs. Peterson would object to, of course." (Jacobs, 1940:135)

This statement stands in stark contrast to what Jacobs says about Mrs. Peterson elsewhere, where he praises her cooperativeness, frankness, and good sense of humor in dictating myths and stories to him.

In addition to the texts that Jacobs transcribed during the course of his work with Mrs. Peterson, he also conducted audio recording sessions, first on wax cylinders in 1933, and on RCA pre-grooved records in 1934; these recordings are housed in the Melville Jacobs' papers at the University of Washington. Much of this material, especially the recordings on wax cylinders, documents the songs that occur in the texts that Jacobs collected. The later recordings that Jacobs made on records, however, also contain text dictations from Mrs. Peterson. Although the quality and history of transfer from one medium to another preclude the use of these materials for any quantitative acoustic analysis, they are largely audible, and reference will be made to Mrs. Peterson's pronunciation of various items when relevant.

Despite the quantity of textual material collected by Jacobs, he did not conduct any extensive linguistic analysis of Miluk or Hanis, and his two volumes simply contain the Coos texts alongside free English translations. A sample page from Jacobs' *Coos Narrative and Ethnographic Texts* is presented in Figure 1.3. In

1942, Harrington collected Hanis and Miluk vocabulary items from Frank Drew, with additional Hanis items from Lottie Jackson Evanoff, marking the end of data collection on the Coosan languages. Jacobs' texts and audio recordings thus represent the only substantial documentation of the Miluk language beyond word lists and the few stories collected by Frachtenberg.

This was essentially the end of linguistic investigation of Miluk until recently, with Paul Kroeber examining a number of aspects of both Hanis and Miluk, including the pronominal system (Kroeber, 2011) and possessive constructions (Kroeber, 2012).

Thus, although Hanis has been the subject of some linguistic work, especially in the past, Miluk has received relatively little attention in the literature until recently, a fact which may help to account for its misclassification as Penutian. We now turn to a discussion of how Miluk came to be classified as Penutian in the first place, and the evidence presented for this claim.

1.3. On the Penutian Language Family

Penutian as a language family was first proposed by Dixon and Kroeber (1913), focusing on languages of California. In 1920, Sapir expanded this language family to some languages of Oregon, first establishing Penutian as a language group outside of California.

The status of Penutian as a "family" is somewhat controversial, "seem[ing] ill-defined and amorphous, with Penutianists disagreeing not only about its boundaries, but about its very existence, and about the nature (genetic or not) of the relationship between the various language groups" (Tarpent, 1997:66-7). Since Sapir's first outline of the family in 1920, the languages grouped together

NARRATIVE TEXTS IN MILUK

1. The person who died from cold[27]

The people were going somewhere, a number of children were going (too). (Said one child,) "Grandma! I want to go also, to where the people are going to the place of the inland people" (to Camas Prairie, an Athabaskan-speaking locality on the Upper Coquille). "Go then! But wear this." (1) "Oh! I don't want it. I will not get cold." "So you will not get cold? Now you put on your gloves anyway, and also your moccasins." "Oh grandma! I don't want them. I will not get cold." (2) "So you will not get cold? you wear this blanket!" "Oh I don't want to." The people went, he went along too, he played as he went along. That is the way the people went on. He got behind. (3) He was no longer with them. The people reached the place of the inland people. He did not arrive. One of the people went back then, and sure enough he found him dead, stiff from the cold. (4) He returned with the news to his grandmother. (Resentfully, angrily, bitterly:) "Humph. I guess he was not so great (powerful and a person of consequence), and that is why he died. I tried to give him things to wear, and he did not want them. He said he would not get cold. He could not have been so great, and so he died."

2. The woman who dreamt, but who did not do what her dream told her[28]

1. A woman had an ocean dream (power), and also dentalium (dream power). She had already become a great shaman. Now this is what her (new) dream told

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1. tɬə-ƙa'ʿ x̱-gɛ'inɛis-tsa'u

tsu'-kwi-hu'wɛ'ɛ'tsəm-dəƙa'ʿ, hi·'mɛ-dəga·'ɬ kwi'-huhu'wɛ'ɛ'tsəm. "u'ma·t'ɬi'! hi's-wantɬ-ɛ'n·ɛ'-ɬaʿ, di'n·ɛ'yuwu'djɛ tsa'ntɬ ɬa·'-də'ƙaʿ." "ɬa'ya'ɋai'i'! di·-tɬə'-t'ɬa'ha." (1) "u·'! an-wu'du·'ha''ya. an-wa'ntɬ-gɛ'inɛ." "an·a'ntɬ-gɛ-gɛ'inɛ? his-na'ntɬ-kwə-nəmilt.si'ya·ɬ'is, wi·'-his-kwə-nəqɛ'ilusni." "ɛ·'· u'ma·t'tɬi! an-wu'-du·ha'ya. an-wa'ntɬ ɛx̱ɛ·'x̱." (2) "kwi·-ha'ntɬ-gɛ-a'n-ɛx̱ɛ·'x̱! di·-na'ntɬ t'ɬa'ha-ɛt'ɬha'i!" "u·' an-wu'duha·'ya." tsu'-ɬa·-də'ƙaʿ, his-hi'dji-ay·u·'-ɬa, alica·'nida' i'-ɬa'a'yam. wɛ·'n-ɬ'a'yim-də'ƙaʿ. qɬi'mniyu'wiyɛ. (3) a'nya igɛ·'ƙ. tsu'-dji·-də'ƙaʿ də'n·ɛ'yuwu'djɛ. a'N-dji. tsu'-hit'ci-ƙa'ʿ bi·'na't's, hɛ'i-ma·'tsi-ɛ'q kwi·'-giƙi'l·i·du, sƙɛ·'nɛn x̱-gɛinɛ'is. (4) tsu'-ƙwɛ·'n wusu·'su tɬə-də'u'mna·t'ləɋja. "hu'ʿ-an-da-x̱-su·dɛt, na'u-ɋa'yau. tɛ·'tc-u'ni''ni'ya, wi'-an-du·'ha'ya. an-tsa'ntɬ ɛx̱-ɛ·'x̱. an-da'-x̱-su·dɛt, na'u-ɋa'yau."

2. tɬə-hu·'mis gwa'aʔə'sdə, a'N-ma-x̱-wɛ·'n dji'-i'ldwa tɬə-dɛx̱-gwə'ns

1. hu·'mis kwi·'-ba'ldi·mis dəgwə'ns, wɛ'n-his-tɋa'yau. wi·'-kwi·-wa·'-i'l·-a'x̱ɋain. wi·-wɛ'n-i'l·dwa tɬə-dɛx̱-gwə'ns. (2) "in·antɬ-gɛ'ʿ-ɬa, wi·'-dlukʷda·'t-

[27]A Miluk tale recited to show how children will disobey and what fate may be theirs in consequence; it is supposed that this is a true story of a child who lived at the time of the first coming of the whites or just before.

[28]Mrs. Peterson heard this told by t'cicgi'yu, a part Upper Coquille Dené; the tale may be considered to be one known to Miluks. It is supposedly a true story of a woman shaman who lived some generations ago. She had a new power dream which told her to proceed face covered to Mussel Reef village, north of the lighthouse, where Miluk speaking people lived. She was not to uncover outside of a house lest she see the ocean.

FIGURE 1.3. A sample page from Jacobs' *Coos Narrative and Ethnographic Texts.*

by the Penutian hypothesis, and their relationships with each other, have changed somewhat, with DeLancey and Golla (1997) providing the most recent state-of-the-art look at the Penutian hypothesis. They provide several lines of evidence, from lexical comparisons to grammatical features. Nonetheless, the evidence at present is not substantial enough to allow for the kind of widespread reconstruction of Penutian that has been done for Proto-Salish, in terms of both cognate lexical items (as in the *Salish Etymological Dictionary* (Kuipers, 2002)) and syntactic structures (as in Kroeber's reconstruction of Proto-Salish complex clause structures (1999)).

Despite the problems with widespread, thorough reconstructions, there are features common to a number of Penutian languages which serve to indicate, in a general way, the rough character of the proto-language. Penutian languages tend to rely more on dependent marking than head marking when compared to other languages of North America, often making use of nominal case markers (DeLancey and Golla, 1997). A comparison of Penutian languages led Sapir (1921) to conclude that proto-Penutian had a prototypical stem shape of $CV_1CV_1(C)$, with various changes in this structure leading to the shape of roots in modern Penutian languages. Vowel harmony and ablaut also play an important role in the Penutian languages (DeLancey and Golla, 1997).

1.3.1. On the Classification of the Coosan Languages as Penutian

In 1921, Sapir published a seminal article on Penutian, 'A Characteristic Penutian Form of Stem', expanding on Penutian in Oregon and including Hanis and Miluk Coos, which he grouped with Siuslaw and Alsea into a branch called Oregon Coast Penutian.

> "On the appearance of Frachtenberg's Coos grammar it soon became clear to me that the morphological and lexical resemblances between Takelma and Coos were too numerous and fundamental to be explained away by accident or plausibly accounted for by borrowing. The appearance of Frachtenberg's Siuslaw material has only tended to confirm this impression, further, to make it perfectly obvious that Coos and Siuslaw, as Frachtenberg announces, are divergent representatives of a single linguistic stock. Meanwhile comparisons of Takelma, Coos, and Siuslaw with Dixon and Kroeber's Penutian group of California (Costanoan, Miwok, Yokuts, Wintun, and Maidu) disclosed an astonishing number of both lexical and morphological correspondences..." (Sapir, 1921:58)

Note, however, that this line of argumentation from Sapir is based almost entirely on data from Hanis, as those were the data that he had available to him, with little accounting given to the data from Miluk. We have already seen that, even from the few Miluk forms collected by Frachtenberg, there was some doubt in his mind about their similarity.

A portion of the resemblances that Sapir found between California Penutian and the languages of the Oregon Coast – which presumably served as the basis of the claim he made in 1921 – appears in 'Coos-Takelma-Penutian Comparisons', prepared and published after Sapir's death by Morris Swadesh (1953). This article documents a number of apparently cognate lexical items between Coos (mostly Hanis, with a few Miluk terms) and Takelma on the one hand, and California Penutian on the other. We will return to a discussion of these forms in the conclusion; as we will see, after we have had a chance to consider Miluk's

resemblance to the Salish language family, a number of the forms given by Sapir as possible cognates between the Coosan languages and California Penutian are not as convincing as they initially appear, with some roots being much closer to Salish once we understand the sound changes that have occurred in Miluk since it began to diverge from Proto-Salish.

The placement of the Coosan languages within Penutian is somewhat controversial. The vast majority of scholars continued to place them within Penutian, following Sapir's classification. Mithun (1999), however, discusses the evidence of a relationship between the Coosan languages and Penutian family, but still places the languages within their own distinct grouping, the Coosan family. DeLancey and Golla (1997), on the other hand, list the Coosan languages, along with the other members of the OCP group, within the Penutian family.

The clear similarities between Hanis and Miluk have been used in the literature to argue for the placement of both languages within the Penutian stock. However, there are a substantial number of differences between the two languages, so much so that the idea that Hanis and Miluk are extremely close relatives has been questioned in the literature. Pierce (1965) discusses lexical correspondences between the two languages, showing that they have relatively little in common, and argues that the two languages may in fact represent distinct languages which have converged over time, rather than a single language which diverged. We will consider Pierce's arguments in detail in the conclusion when we return to a discussion of the relatedness of the two Coosan languages.

1.4. On the Salish Language Family

Because this work discusses the similarities between Miluk and the Salish language family, a brief introduction to Salish is also in order before we begin an examination of Miluk.

The Salish language family is made up of about 23 languages and is centered in modern-day Washington and southern British Columbia, but extends into a number of adjacent states, including Idaho, Montana, and Oregon. Salish languages show a large degree of similarity in terms of both cognate vocabulary and their morphological and syntactic structures. The Salish language family is the largest, universally accepted language family in the Pacific Northwest, and has been since Powell's 1891 classification of North American languages (Kroeber, 1999). The Salish family is divided into three main branches: Coast Salish (sometimes called Central Salish), Tsamosan, and Interior Salish. Additionally, there are two languages which are classified as their own branch of the family: Bella Coola, spoken at the northern end of the Salish language area in British Columbia, and Tillamook, spoken on the northern Oregon coast (Kroeber, 1999; Kuipers, 2002).

The grammars of most Salish languages are broadly similar, making using of prefixing to a some extent, especially in the marking of possession via pronominal prefixes. Person marking on verbs consists of subject and object suffixes which trace their roots back to two distinct sets of pronominals in Proto-Salish which are attested in various ways in the modern languages, most often with one set used in main clauses, and the other in subordinate clauses. In addition to person-marking on verbs, subject-marking clitics also occur, with varying functional loads, in the Salish languages. Verbs also make use of suffixes to indicate alternations in transitivity, with most verb roots in most languages being inherently intransitive.

These verb suffixes are also used in various combinations with the person-marking suffixes to demote agents and patients – which is to say, to form passives and antipassives (Kroeber, 1999). Nominal morphology is relatively straightforward, with extensive use of articles marking masculine and feminine genders, and with case marking usually reserved for oblique arguments. The similarities seen between the various languages in the Salish family, as well as the number of distinct languages represented, allows for a rather detailed reconstruction of what the proto-language must have looked like, with Paul Kroeber estimating a time depth of approximately 4,000 years for the proto-language (*p.c.*).

1.5. On Methodology

At the beginning of this research, I began entering Jacobs' Miluk texts into the Toolbox software program developed by the Summer Institute for Linguistics for analysis. I continued to enter texts until the inclusion of additional texts stopped yielding a significant number of new lexemes or grammatical constructions. This produced a text database of 2,768 clauses, and a lexicon of 529 words. Beyond this, a number of other texts presented by Jacobs were read and considered, especially in terms of cognates, but were not included in the text database.

Once the Salish affinities of Miluk became apparent, an effort was made to compare the material in the Miluk database to Salish languages. Because of the large degree of similarity of the languages within the Salish family, Suttle's *Musqueam Reference Grammar* (2004) was selected as the main comparator for syntactic – and occasionally lexical – comparisons, as the grammar itself is extremely well-written and conducive to this kind of comparative work.

Nonetheless, future work should explore parallels between Miluk and other Salish languages.

In addition to comparisons with Musqueam, Miluk lexemes were also compared to the reconstructed Proto-Salish roots provided in Kuipers' *Salish Etymological Dictionary*. The results of these root-by-root comparisons are discussed in Chapters VI and VII.

Throughout this work, a number of pieces of evidence are presented which demonstrate affinities between Miluk and the Salish language family. Not all evidence is equal, however – the discussion of verb-initial word order in Miluk, for example, is much less convincing in terms of genetic relatedness (or even language contact) than are the various grammatical morphemes which appear to be cognate between Miluk and Salish. Likewise, resemblances between open-class roots such as nouns and verbs are less convincing than resemblances between grammatical morphemes. Despite the different strengths of the various kinds of evidence, I have chosen to include all of them, so that the reader can consider all of the types of evidence that show affinities between Miluk and Salish.

The examples given throughout this work contain four lines. The first line presents the material as it appears in Jacobs' volumes, while the second line shows the material in a modified, more phonemic transcription. Line three presents a morpheme-by-morpheme gloss, and line four contains Jacobs' translation of the clause. Enclosed in parentheses after the translation is an abbreviated form of the story title given by Jacobs,[1] followed by the clause number. Note that these numbers were assigned automatically by Toolbox, and thus do not correspond to the numbering used by Jacobs in his texts.

[1]The full versions of the titles, alongside the abbreviations used here and the page on which they appear in Jacobs' volumes, may be found in Appendix B.

Throughout this work, examples in the text which reproduce Jacobs' transcriptions of Miluk verbatim are presented in {braces}, with the phonemic transcription following in italics. Jacobs' volumes contain far less texts in Hanis, however, which makes it more difficult to draw firm conclusions about the phonological inventory of that language. For this reason, examples in Hanis are presented essentially as they appear in Jacobs, with only a few updates to his conventions to make the Hanis examples readable in terms of the Miluk orthography used here. When in doubt about a form from Hanis, I have erred on the side of caution in reproducing Jacobs' data to avoid leveling contrasts which may have been present in Hanis.

It should also be noted that the analysis presented in this work, conducted without access to a native speaker and based on texts collected more than seventy years ago, necessarily contains some speculation. At all points, especial effort has been taken to explain my reasoning about certain phenomena, in an effort to aid the reader – and future researchers – in understanding not only Miluk as represented in Jacobs' texts, but also how the current analysis of Miluk has been reached.

Chapter I presents the phonological system of Miluk, as inferred from Jacobs' orthographic conventions and the few audio recordings available. Chapter II examines the use of second position clitics, along with basic word order and variations thereof. The pronominal system of Miluk is considered in Chapter III, and shown to have a number of similarities with Salish languages. Chapter IV discusses some aspects of nominal syntax, including the use of articles and relics of an old gender system found in Miluk. In Chapter V, various aspects of the

verbal morphology of Miluk are considered, including the marking of transitivity. A particularly Salish feature – that of inverted roots, where a root of the historical form C_1VC_2 appears in a modern language as C_2VC_1 – is discussed in Chapter VI, and shown to also be present in Miluk. Finally, Chapter VII presents a number of regular correspondences between Miluk roots and the roots reconstructed for Proto-Salish.

CHAPTER II

PHONETICS AND PHONOLOGY

This chapter presents the phonetic system of Miluk Coos, with special attention paid to places where the present analysis differs from that of Jacobs. The differences found here are perhaps not surprising, given that the orthographic conventions used by Jacobs were not entirely phonemic, capturing a number of minor phonetic differences.

2.1. Vowels

The vocalic inventory of Miluk Coos is presented below in Table 2.1. This system is relatively unremarkable for a language of the Pacific Northwest, and I am essentially in agreement with Jacobs' analysis here. It is worth mentioning, however, that the vowel transcribed as /e/ is, in fact, realized much closer to the vowel [æ], perhaps occasionally trending a bit upward towards [ɛ]; in CMT and CNET, Jacobs writes this vowel as {ɛ}.

TABLE 2.1. Orthographic versions of the Miluk vowels and IPA equivalents.

i [i], [ɪ]	u [u], [ʊ]
ə	
e [æ], [ɛ]	a [ɑ]

The occurrence of diphthongs (or perhaps vowel + glide sequences) in Miluk is somewhat obscure, due to Jacobs' convention of writing what might be glides as /i/ or /u/ if they appear in a syllable coda, but using /y/ or /w/ when a glide

occurs in a syllable onset. The audio recordings that are available are too limited to make any clear decision about the status of these segments. I've thus chosen to keep Jacobs' conventions throughout, without making any theoretical claims about their status.

Vowel length is also somewhat problematic in Miluk. As Jacobs' orthography is not phonemic, there are a number of words which get written with varying degrees of vowel length. The word 'indeed', for example, is alternately written as {*ayu*}, {*a·yu*}, {*ayu·*}, and {*a·yu·*}, along with a number of other lengths which are clearly pragmatic (e.g., {*a···yu*}).

To what extent these variations represent vowel length contrasts, as opposed to pragmatic lengthening, is unclear, especially as no minimal pairs based on vowel length have thus far been found in the texts collected by Jacobs. The closest example to a minimal pair based on vowel length that I have found is the pair of words *qeneeč* and *qeneč*. In seven cases, *qeneeč*, with a long vowel, appears as part of the phrase *qeneeč k'ah* 'young women'; in three other occurrences of this phrase, the word appears as *qeneč* with a short vowel. However, there is a second word, 'joke, trick' which appears only as *qeneč*, but also appears only once in the texts examined.

With this limited evidence, it's difficult to say if Miluk possessed vowel length contrasts. As with diphthongs/glides, I've chosen to maintain Jacobs transcriptions of vowel length.

2.1.1. Vowel Harmony

Vowel harmony is clearly present in Miluk, although its occurrence is somewhat sporadic. Most commonly, vowel harmony involves the harmonization

of /e/ in roots with /a/ in suffixes. For example, this kind of harmony is seen with the suffix *-ya*, a transitivizer (see Chapter VI for discussion), as in 2.1 and 2.2, two adjacent clauses from the same text.

(2.1) *hadáiʔmis* *hántɬ* *hégwən!*
hataiʔmis hanɬ̓ hekʷən!
money FUT come.in
"Money will come in from the water!" (Dream.23)

(2.2) *báldiˑmis* *hántɬ* *kwi* *hagwə́n* *-ya*
paltiimis hanɬ̓ kwi hakʷən -ya
ocean FUT EST come.in T
"The ocean will bring it ashore!" (Dream.24)

All of the verbs in the current corpus undergo this alternation with the *-ya* suffix. However, there is one case of a word which has a suffix of similar phonological shape, but does not undergo vowel harmony: the word *kʷeis* 'girl', which appears once as *kʷeya* (2.3). The word *kʷeis* itself appears to be composed of an otherwise-unattested root, *kʷe*, and a nominalizing suffix, *-is*, with *-ya* taking the place of *-is* in 2.3.

(2.3) *tsú* *áˑyu* *wə́sˑi* *tɬə* *gwɛ́* *-ia*
cu aayu wəssi ɬə kʷe -ya
then indeed go.home ART girl ?
'Indeed the girl went back home' (Seaotter.104)

Given the occurrence of this *-ya* on a noun rather than a verb in this example, it may well be a completely different suffix.

Vowel harmony is also seen with the locative suffix *-(V)ča*, although most often with the vowel of the suffix changing, rather than those in the root, as in 2.4. This suffix also has more exceptions than does *-ya*, though, and does not always undergo vowel harmony, as in 2.5.

(2.4) *tsú* *yɛ́ˈdz* *-ədj* *də-* *tdjí* *-y* *-u*
cu yeec -əče tə- tči -y -u
NR house LOC REDUP enter T INTRS.PRF

'Now they took him in to their home' (Swordfish.052)

(2.5) *tsú* *má* *gɛˈ* *yáhwi* *tɬə* *də-* *yɛ́is* *-ədja*
cu ma qee yah^{w}i ɬə tə- yeis -əča
now CONT there rub ART 3S.POS mouth LOC

'and he kept rubbing it on her mouth' (DangerousBeing.60)

Although the exact details of the vowel harmony system thus remain somewhat obscure, the fact that we have different roots and different suffixes behaving in different ways implies that this process is morphophonemic rather than purely phonological.

2.2. Consonants

The consonant inventory of Miluk is presented below in Table 2.2. Overall, the system is unsurprising for a language of the Pacific Northwest, but there are a few items of note.

First, as will be discussed later (see Chapter VIII), the Miluk phonemes /h/ and /h^{w}/ appear to correspond with Proto-Salish /*x/ and /*x^{w}/ in many cases. It appears that this sound change was in progress when Jacobs' texts were collected, as a number of words are inconsistently transcribed as having either /x/ or /h/, or /x^{w}/ and /h^{w}/. The similarity of these segments was noted by Jacobs himself, as least for Hanis:

> "Hanis x and xw (xu, x^{w}) are so lightly rubbed that I fear I have several times written h and hw when x and x^{w} were actually present." (Jacobs, 1939:13)

Given the variability in the pronunciation of these segments, it isn't entirely clear if /h/ and /h^{w}/ have true phonemic status in Miluk. Nonetheless, there are a number of lexical items which Jacobs consistently transcribes as having either the velar or the glottal fricative, so both the glottal and velar fricatives are included in the table.

There are two things about the consonantal inventory of Miluk which look rather odd in terms of the Salish language family, and are thus worth noting in a consideration of affinities between Miluk and Salish. First, Miluk has both ejective and non-ejective versions of the lateral affricate, while Salish languages generally have only an ejective lateral affricate (Kroeber, 1999). Second, within the Salish family, Proto-Salish velars have, in some languages, been palatalized, while remaining velars in other languages, yielding modern languages which have either a palatal series or a velar series, but not both (Kroeber, 1999). Miluk, however, has both a palatal and a velar series.[1]

[1]Both of these statements about the consonantal inventory of Miluk are also true of Hanis.

TABLE 2.2. The consonant inventory of Miluk Coos.

	Bilabial		Alveolar		Lateral		Alveo-palatal		Velar		Labio-velar		Uvular		Labio-uvular		Glottal	
Stop	p [p]	p' [p']	t [t]	t' [t']					k [k]	k' [k']	k^w [k^w]	k'^w [k'^w]	q [q]	q' [q']	q^w [q^w]	q'^w [q'^w]	ʔ [ʔ]	
Fricative			s [s]		ɬ [ɬ]		š [ʃ]		x [x]		x^w [x^w]		x̌ [χ]	ɣ [ɣ]	$x̌^w$ [$χ^w$]		h [h]	h^w [h^w]
Affricate			c [$\widehat{ts}$]	c' [$\widehat{ts'}$]	ƛ [$\widehat{tɬ}$]	ƛ' [$\widehat{tɬ'}$]	č [$\widehat{tʃ}$]	č' [$\widehat{tʃ'}$]										
Resonant	m [m]	m' [m̥]	n [n]	n' [n̥]	l [l]	l' [l̥]	y [j]	y' [j̥]			w [w]	w' [w̥]						

We now turn to a discussion of how the phonemic analysis as presented here differs from that of Jacobs in three different areas: the number of consonant-series contrasts, the absence of a palatalized velar series, and the presence of glottalized resonants.

2.2.1. Types of Stop Consonants

Jacobs' transcriptions of Miluk show three voicing distinctions for the stops: unaspirated, aspirated, and ejective. However, it appears that the contrast between unaspirated and aspirated stops is phonologically conditioned. In the vast majority of cases, Jacobs' unaspirated variant appears in syllable onsets when the consonant directly precedes a vowel, while the aspirated variant appears in codas, or when the consonant is the first segment of a consonant cluster. This pattern of stops being realized as aspirates in final position is a common one seen in languages throughout the Pacific Northwest.

Word-final consonants provide an opportunity to test whether or not this alternation is purely phonological, or if final neutralization is masking a contrast. This test is made quite easily in Miluk, given the frequency of both nominal and verbal suffixes. Despite this, I can find no example of a consonant which appears as an aspirate when word final, and also maintains that aspiration after suffixation puts the consonant in onset position. For example, the verb root {*umit*} *ʔumit* 'follow' surfaces as {*umid*} when followed by a suffix that begins with a vowel, but as {*umit*} if the suffix begins with a consonant.

It should be noted that there are a handful of words which Jacobs consistently transcribes as having a syllable that begins with an aspirated consonant – for example, *kim* 'cry' and *neqe* 'flee'. However, lexical items with

aspirated segments in syllable onsets are extremely rare in the corpus, and even in these cases, there is often some evidence that the initial stop, which Jacobs writes as an aspirate, is in fact part of a cluster. For example, {*neqe*} 'flee' is occasionally also written as {*neq'e*} (where /'/ represents /h/). A similar situation is seen with {*ta*} and {*t'a*} 'to throw'.

Given the inconsistencies in transcription, the rarity of aspirates in syllable onsets, and the phonologically-explicable alternation between aspirated and unaspirated segments, these two series are collapsed in the current analysis.

2.2.2. The Palatal Series

Jacobs also transcribes a series of palatalized velars – Jacobs' {k͡ k͡' g͡ x͡ x͡ – as distinct from both the alveopalatal series and the velar series. However, as with the voiced stop series, there are a number of reasons to doubt that this series is phonemic. First, there is a large amount of variability in the way that Jacobs transcribes these palatal segments for a given lexical item. For example, in the story "The girl who had a dog husband", the word 'dog' is written sometimes as {*yɛk͡'lu*} and sometimes as {*yɛk'lu*}, without any obvious pattern to motivate the difference, given the occurrence of the consonant in the middle of the word.

Second, the vast majority of occurrences of palatalized velars in Jacobs' materials occur in an environment which would be phonologically conducive to velars being palatalized: when adjacent to /e/ or /i/ or when preceding a lateral. Velars are also palatalized in word-final position. Although word-final position is not usually considered to be an environment which induces palatalization, word-final palatalization is seen in at least one language: the Salish language Bella Coola (Newman, 1947).

In the same story mentioned above, a text of approximately 167 clauses, every occurrence of a palatalized velar can be explained by these rules.

There are a few cases – rare though they are – where palatalized velars appear outside of these conditioning environments. In one such case, for example, the verb root $\sqrt{k'\partial x}$[2,3] appears in a single story, 'He eats human children', first in the form $\{\underset{\frown}{k'}\underset{\frown}{x}iya\}$, and then later as $\{\underset{\frown}{k'}xuunam\}$, maintaining the palatalization despite the change in the following vowel. However, there is another verb which appears in this story – $\{k'xu\text{ʻ}nam\}$, from the root $\sqrt{k'\partial x^{w}}$[4] 'be lost' – which would be homophonous if not for the palatalization. I believe this to be an overcorrection on Jacobs' part, an attempt to keep distinct two roots which are, in fact, homophonous in some conjugations.

Given the variability in Jacob's transcriptions, along with the fact that, when palatalized velars do occur, they do so in a predictable environment, it appears that this palatalization is a phonological process, and that palatalized velars do not represent a distinct series of consonants.

2.2.3. Glottalized Resonants

Glottalized resonants are found throughout the Pacific Northwest in unrelated languages, such as Tolowa (Athabaskan, Northern California) (Bommelyn, 2006), Klamath (Penutian, Southern Oregon) (Barker, 1964), and the Salish language family (Kroeber, 1999). The realization of glottalization varies somewhat by language. In Tolowa, the resonant is produced with a following glottal stop, and

[2]The $\sqrt{}$ symbol is used throughout to denote a root which is not seen in this form in the corpus, the form presented having been reconstructed based on analogy with other verb roots.

[3]The meaning of this root is rather obscure, as it only occurs with the noun *yeis* 'mouth' immediately following it; together, the meaning is 'to say, speak'.

[4]Or perhaps $\sqrt{k\text{ʻ}^{w}\partial x^{w}}$.

then a short echo of the resonant. In Nuuchahnulth, glottalized resonants are realized with a preceding glottal stop, while similar segments in Nlaka'pamux have a preceding glottal stop intervocalically, and a following glottal stop elsewhere, along with laryngealization of the resonant (Esling, Carlson, and Harris, 2002).

Jacobs does not write any glottalized resonants for Coos[5] (assuming that we exclude sequences like {'l}, which seem to represent what Jacobs heard as glottal stop-resonant sequences, although these might indeed represent glottalized resonants in at least some cases). However, there are a number of lines of evidence which indicate that Miluk likely had glottalized resonants.

The first piece of evidence for glottalized resonants comes from inconsistencies in Jacobs' transcriptions of certain words. This is most commonly seen in initial segments when a word that begins with a resonant is preceded by the oblique/third-person possessive marker *tə-*. For example, when possessed, the word {*maˑni'yas*} 'parents, relatives' appears as {*dəmaˑni'yas*}, while {*miduˑn*} 'daughter-in-law' appears as {*də'miduˑn*}. It would thus appear that the initial /m/ of *m'ituun* 'daughter-in-law' is glottalized, while the initial /m/ of *maani?yas* 'parents, relatives' is not. A similar situation is seen with nouns that begin with

[5]Jacobs does, however, once mention a glottalized resonant. In a footnote for an onomatopoetic interjection in the story "The young man who lived alone", Jacobs says,

> "Mrs. Peterson gave an intriguing pronunciation to this interjection, which I have written here merely *dim*, the printer lacking a glottalized m. This m is incompleted, lacking bilabial release; there is very brief if any sonancy, and there is a brief concomitant glottal closure. Mrs. Peterson provided it with a dull, choked, thudding quality. I never heard it elsewhere." (Jacobs, 1940:168)

The description here seems to clearly represent a glottalized /m/, and although I would certainly not make an argument for glottalized resonants based solely on onomatopoeia, this quote is nonetheless telling in light of the other evidence presented here.

/l/; compare {*dəlaġawiyat'aʷs*} 'story, tale' and {*də'luwe*} 'heart'. Glottalized resonants are difficult to hear in initial position in at least one Salish language (Suttles, 2004), so the lack of a written distinction on Jacobs' part when these words don't carry a prefix is not surprising.

The second line of evidence for glottalized resonants comes in the formation of reduplicated forms of some verbs. Changes in the glottalization of resonants as part of a reduplicative process is a common pattern in the Pacific Northwest, and is seen in both the Salish family and the Penutian family. In Musqueam, for example, one finds the glottalization of resonants in some progressive verb forms (Suttles, 2004), while in Klamath, the first resonant of reduplicated roots is glottalized (Barker, 1964).

The type of reduplication we are interested in for Miluk involves roots which are of the structure $C_1VR(R)C_2$, where C is any consonant, and R is a resonant. When reduplicated, these roots become $C_1əC_2C_1VR'(R')aC_2$. If one of the Cs in the root is an ejective, it loses its glottalization when it appears in the reduplicated portion of the word. Table 2.3 presents a number of examples.

TABLE 2.3. Reduplicants in Miluk Coos showing glottalization.

Miluk Root	Reduplicated Form	Jacobs' Orthography	Gloss
manč'	*məč-m'in'ač'*	{*mitcminʷat'c*}	'ask'
wəlx	*wəx-w'əl'ax*	{*wix'wulʷax*}	'be sent'
$\sqrt{}$*x̌ʷəmƛ'*	*x̌ʷəƛ-x̌ʷəm'aƛ'*	{*x̌ʷutɬx̌umʷat'ɬ*}	'swing'
$\sqrt{}$*k'imc*	*kəc-k'im'ac*	{*kitsk'imʷats*}	'pick up'
$\sqrt{}$*mil*	*mil'm'il'i*	{*mil'milʷi*}	'swim'

The third piece of evidence comes from the audio recordings of text dictations collected by Jacobs, where a number of words have consonants which sound glottalized. The word transcribed by Jacobs as {*k'ilʷga*} 'child', for example, is pronounced with clear glottalization of the /l/, and is written here as *k'il'ka*.

Finally, there is some comparative evidence that at least some of the resonants which Jacobs transcribes as long are perhaps glottalized. For example, Miluk *il't* {*il·t*} 'tell' appears to be cognate with Salish *ʔiln* 'sing', with the glottal stop having moved and coalesced with the /l/.

Given these lines of evidence, along with the ubiquity of glottalized resonants in the Pacific Northwest, it seems likely that Miluk did possess these phonemes. However, Jacobs is rather inconsistent in how he writes these segments – sometimes, glottalization appears to not be written at all (especially in word-initial position, as discussed); in other cases, they appear as a glottal stop-resonant sequence; and in others, especially when the segment is immediately followed by a consonant or between two vowels, Jacobs writes the resonant as long.[6]

This inconsistency, however, makes the decision about whether a particular word has a glottalized resonant or not rather difficult. For this reason, I have kept Jacobs convention of writing a long segment in any case where there is no additional evidence to indicate whether segment is glottalized as opposed to something else, be it a true geminate, a purely phonetic lengthening, or even a typographical error. Only in cases where there is some additional evidence – whether it be a reduplicated form, a clearly-cognate Salish form with glottalization, or acoustic evidence from the audio recordings – have I written these segments as glottalized.

[6]There is also some evidence that the glides /y'/ and /w'/ are somewhat different in their realization compared to /n'/, /m'/, and /l'/, but it is not substantial enough to draw any firm conclusions from.

CHAPTER III

SECOND POSITION, DISCOURSE, AND WORD ORDER

This chapter explores a number of phenomena in Miluk that are related to the word order of clauses, including the use of second-position particles to mark tense, aspect, mood, and evidentiality, as well as basic word order and variations thereof, in order to aid the reader in understanding the examples which occur later in this work. We also compare the Miluk evidentials to those found in Musqueam, a modern Salish language. Although Miluk pronominals also occur in second position, they are discussed separately in the next chapter.

In examining second position phenomena in Miluk, it is important to note that *wi*, a frequent, clause-initial narrative particle meaning 'and' or 'then', is a bit odd in that it does not count in determining second position.

3.1. Tense, Aspect, Mood, and Evidentiality

This section explores the various tense, aspect, mood, and evidentiality particles that occur in second position in Miluk.

3.1.1. Tense

Miluk has two morphemes that occur in second position to indicate tense distinctions. The first, *han*, marks prospective tense – an event that is about to occur – as in 3.1 and 3.2. This is usually translated as "was going to" by Jacobs, although the sense of Miluk *han* does not seem to have the same implication of not completing the action that the English phrase has.

(3.1) *tsú* *han* *t'á·mi* *tɬə* *də-* *t'ím*
cu han t'aami ƛə tə- t'im
NR PRSP carry ART 3S.POS pack

'Now she was going to pack her load' (GirlDogHusband.42)

(3.2) *tsú* *han* *á·yu* *ɢ́ɛlts*
cu han aayu qelc
NR PRSP indeed cross

'And then she was going to cross on it indeed' (BlackBearPackBear.138)

The second tense particle, *hanƛ*, marks the future tense, as in 3.3 and 3.4. There is some indication that this word combines *han* 'PROSPECTIVE' and a distinct future marker, *ƛ*, as the latter also appears with the irrealis mood marker *aǰ* (see Section 3.1.3 below).

(3.3) *ɢ́ɛ* *is* *hantɬ* *ɬa* *-'áy* *-am*
qe is hanƛ ɬa -ʔay -am
there 2D FUT go IMPRF INTRS

"you will go to that place there" (CrowMyth.55)

(3.4) *hís* *w=* *antɬ* *ɛ́n·ɛ́* *ɬa*
his w= anƛ enne ɬa
also 1S FUT 1S.EMPH go

"I am going to go, too" (BluejayPubicHair.7)

3.1.2. Aspect

Miluk has three aspectual particles which occur in second position. The first of these, *tu*, seems to mark a habitual, or perhaps an iterative, as in 3.5 and 3.6. This particle often co-occurs with *kuus min* 'all the time, always', as in 3.5. Note especially Jacobs' translation in 3.6, which indicates that the event will happen over and over through time.

(3.5) *gú˙s* *mín* *du* *hí˙mɛ* *k'uxú* *-xwi*
kuus min tu hiime k'əx^{w} -x^{w}i
all time HAB children be.lost IMPRF

'Children were being lost all the time' (EatsChildren.1)

(3.6) *wí* *x̣-* *k'á'* *hantɬ* *du* *kwi˙* *gi-* *tsk̓'ím˙ats*
wi x̌- k'ah hanɣ tu k^{w}ii k̂i- ck̓'immac
NR ERG people FUT HAB EST REDUP gather

"The people will pick them up (then, and every year after)" (Dream.14)

The second aspectual particle, variously transcribed by Jacobs as *ma*, *maa*, or *mah*, marks continuative aspect, as in 3.7 and 3.8.

(3.7) *wí* *má* *x̣-* *wɛ˙n* *íl˙at*
wi ma x̌- ween illat
NR CONT ADV thus speak

'She would continue to speak thus' (Adultery.14)

(3.8) *á˙yu* *itc* *má'* *x̣-* *wɛ́˙n* *q'dál*
aayu ič mah x̌- ween qtal
indeed 3D CONT ADV thus shoot

'And indeed they kept on shooting like that' (ManyPeople.40)

In cases where *ma* co-occurs with *tu*, *ma* precedes *tu*, as in 3.9 and 3.10.

(3.9) *wí* *dəngi* *idzí˙mis* *ma˙* *dú* *wɔ́s˙i*
wi tənk̂i iciimis maa tu wəssi
NR every year CONT HAB go.home

'Every year he would go back home' (YoungManLivedAlone.2)

(3.10) *wí* *dí˙ɬɛ́^{i}* *dɛ́ngi* *qɬəm* *ma˙* *dú* *ak^{w}'ái* *tɬə* *də-* *tsí˙nɬ*
wi tiiɬei tenk̂i qɬəm maa tu ak^{w}'ai ɣə tə- ciinɬ
NR today every night CONT HAB want(?) ART 3S.POS adze

'And now today every night he is still wanting his adze' (YoungManOwl.27)

The third aspectual particle, *ha*, appears to mark a recent perfective, as in 3.11 and 3.12. However, these two clauses are the only two in the present corpus that make use of this particle, so its exact distribution and meaning are not entirely clear. This is especially true in light of example 3.11, as *his* 'also' does not normally occur in second position. This may imply that *ha* is in fact a preverbal particle, and not a second-position particle.

(3.11)

hɛi	*dú*	*his*	*há*	*wɛˑs*	*ditc*	*tɬə*	*k'á‘*
hei	tu	his	ha	wees	tič	ƛə	k'ah
NR	HAB	also	REC.PRF	go.home	thing	ART	person

'And when that person had just gotten back again' (JackrabbitMan.20)

(3.12)

tit'sɛ́ˑwəs	*tsú*	*ha*	*dlúqʷs*	*-əm*
tic'eewəs	cu	ha	ƛuqʷs	-əm
young.girl	now	REC.PRF	get.up	INTRS

'A girl (daughter of a well-to-do person) who had just passed her first menses had just now arisen (from the first menses seclusion)' (DangerousBeing.1)

3.1.3. Mood

Miluk has two second-position particles that indicate mood, and one modal particle which occurs outside of second position. The first of these particles, *ax̌*, marks a clause as irrealis, as in 3.13 and 3.14, where it is translated by Jacobs as "might".

(3.13)

tsú'w	*-á'míˑ*	*n=*	*ax̣*
cəʔw	-aʔmi	n=	ax̌
kill	1A2O	2S	IRR

"I might kill you (if you lie)" (Adultery.12)

(3.14) *hɛ^{i}* *n=* *á̱x* *q'ala* *-u*
hey n= aǎ̱ q'ala -u
NR 2S IRR get.hurt INTRS.PRF

"You might get hurt" (WhiteWifeMouse.13)

This particle also appears in negative imperative clauses, as in 3.15 and 3.16, and occasionally in affirmative imperatives, as in 3.17. In some cases – namely, when the verb of the clause is in first position – this particle appears to function as a verb suffix, as in 3.16 and 3.17.

(3.15) *ditc* *n=* *a̱x* *t'swá·l* *-al*
tič n= aǎ̱ c'waal -al
thing 2S IRR bother REDUP

"You must not disturb it" (YoungManLivedAlone.14)

(3.16) *án* *a̱xadz* *-í·y* *-a̱x*
an aǎ̱ac -ʔiiy -aǎ̱
NEG cry IMPRF IRR

"Do not weep" (Seaotter.113)

(3.17) *bí·nat's* *-í·y* *-ə̱x*
piinac' -iiy -əǎ̱
return IMPRF IRR

"Come back here!" (TricksterPerson)

The irrealis *aǎ̱* sometimes co-occurs with a *-ƛi* suffix, presumably from the same morpheme as the lateral affricate marking future tense seen in *hanƛ*, as discussed above. In these cases, the morpheme complex *aǎ̱ƛi* functions as a conditional, as in 3.18.

(3.18) (a) *í* *n=* *a̱xtɬi* *gál* *-id* *-a·mi*
i n= aǎ̱ƛi qal -it -aami
if 2S COND cross T 1A2O

"If I were to put you across," (BlackBearPackBear.126)

(b) *wí* *tɬgáidz* *-a* *-t'a˙* *n=* *axtɬ* *-əl* *kwə* *'n̓-* *djíl˙ɛ*
wi ƛ̓qaits -a -t'a n= aǩƛ -əl k^{w}ə ʔn̓ə- čille
NR break 3O DL.O 2S COND ? ART 1S.POS legs
"you might break my leg" (BlackBearPackBear.127)

There is one other mood particle, the abilitative *či*, which occurs preverbally, rather than in second position, as in 3.19 and 3.20.

(3.19) *náyəm* *iɬ* *án* *dji* *kwí˙* *g̓alám*
nayəm iɬ an či k^{w}ii q̓alam
because 3P NEG ABIL EST grab
'because they could not catch her' (DangerousBeing.25)

(3.20) *wi* *án* *dji* *kwi* *hálk^{w}* *-t*
wi an či k^{w}i halk^{w} -t
NR NEG ABIL EST take.out T
'and he was unable to get it out' (Snail'sBack.8)

3.1.4. Evidentiality

Evidentiality – a grammaticalized system for marking the source of one's information (Aikhenvald, 2004) – is present in both the Penutian and Salish families. We begin with a discussion of the evidential particles in Miluk before comparing that system to what is found in the Salish and Penutian families.

3.1.41. The Evidentials of Miluk Coos

Evidentiality in Miluk is marked via a set of second-position clitics, which occur after pronominals, should any be present. Two types of evidentiality are indicated by these particles: hearsay and inferential. The interrogative particle *ʔi* is also discussed in this section.

The particle *ca* marks hearsay, or reported speech, as in 3.21 and 3.22.

(3.21) *hídji* *tsa* *k̓'él'ɛ* *íl'áx̣q'ain* *tɬə* *ɣɛ'yén'ɛ'*
hiči ca k'elle illaǎq'ain ƛə ɣeʔyenne
that.one HRSY good shaman ART bluejay

"They say that bluejay shaman is a good shaman" (BluejayShaman.6)

(3.22) *é'cən* *-iyɛ'* *tsa*
eešən -iyee ca
wild.being ? HRSY

"She said she had become a wild being" (DangerousBeing.73)

The particle *x* marks a clause as an inference, as in 3.23. In some cases, this *x* surfaces with a preceding *ta*, a deictic, without any obvious change in meaning (3.24).

(3.23) *wí* *g̓é'* *na* *x̂* *ɬá*
wi qeh nə x ɬa
NR there 2S INFR go

"And then you went there anyway" (SeagullMyth.24)

(3.24) *an* *dá* *x̂* *su'dɛt*
an ta= x suutet
NEG DEIC INFR great

"I guess he was not so great" (Cold.36)

Also discussed here, for the sake of comparison, is the Miluk interrogative *ʔi*, which occurs as a clause-final particle, as in 3.25.

(3.25) *ámi* *k'á'* *də-* *g̓aháis* *í?*
ami k'ah tə- qahais ʔi?
PRIV person OBL day Q

"Is there nobody (here)?" (lit., "Is the day (world) without people?") (LooseWomen.12)

3.1.42. A Comparison of Miluk Evidentials to Penutian and Salish

Table 3.1 presents the evidentials of Patwin, a Penutian language of California (Schlichter, 1986). Note that, although similar dimensions of evidentiality are found in Patwin, the Miluk forms do not appear to be at all similar to the Patwin ones.

TABLE 3.1. Comparison of Miluk and Patwin evidentials.

Miluk Gloss	Miluk Lexeme	Patwin Lexeme	Patwin Gloss
-	-	*pi*	"declarative"
"interrogative"	*ʔi*	*pa*	"interrogative"
"quotative"	*ca*	*ʔupu*	"quotative"
"inferential"	*(ta=)x*	-	-

Another Penutian language of Oregon, Takelma, also has an evidential system based on verbal suffixes. The suffix *-k^h* marks an inferential, and the suffix *-(i)hiʔ* marking a quotative (de Haan, 2001); these are compared to Miluk in Table 3.2. The Takelma quotative marker does not appear to be terribly similar to the Miluk form, although the inferential *-k^h* could be related to Miluk *(ta)x*.

TABLE 3.2. Comparison of Miluk and Takelma evidentials.

Miluk Gloss	Miluk Lexeme	Takelma Lexeme	Takelma Gloss
"quotative"	*ca*	*-(i)hiʔ*	"quotative"
"inferential"	*(ta=)x*	*-k^h*	"inferential"

One the other hand, Table 3.3 compares the Miluk evidentials to those of Musqueam. Here we find that, not only do Miluk and Musqueam have the same dimensions of evidentiality, they also have particles to mark these categories which are striking similar phonetically – far more similar, in fact, than the evidentials from either of the Penutian languages just considered.

TABLE 3.3. Comparison of Miluk and Musqueam evidentals.

Miluk Gloss	Miluk Lexeme	Musqueam Lexeme	Musqueam Gloss
"interrogative"	*ʔi*	*ʔə*	"interrogative"
"quotative"	*ca*	*c'ə*	"quotative"
"inferential"	(*ta=*)*x*	*yəx*^{w}	"inferential"

3.2. Summary of Tense, Aspect, Mood, and Evidentiality

Based on these examples, as well as other examples from the corpus, we can, for the most part, describe the ordering of morphemes in second position. Pronominal clitics occur first, followed by mood and evidentiality, then tense, and finally aspect. I can find no examples of a modal and an evidential occurring in the same clause, however, so the ordering of these two elements with respect to each other is not clear at present.

TABLE 3.4. Schematic representation of the classes of particles that occur in second-position in Miluk indicating the order in which they appear, and the particles that occur in each position.

Pronominals	**Modality / Evidentiality**	**Tense**	**Aspect**
w '1S'	*aǩ* 'IRR'	*han* 'PRSP'	*tu* 'HAB'
nə '2S'	cə 'HRSY'	*hanƛ* 'FUT'	*ma* 'CONT'
etc.	(*ta=*)*x* 'INFR'		*ha* 'REC.PRF'?

3.3. Word Order and Its Variations

In his volume on complex clauses in Salish languages, Kroeber states that,

> "In all Salish languages, the predicate is most often clause-initial, followed by nominal expressions and prepositional phrases coding participants in the event." (Kroeber, 1999:37)

Word-order can be a tricky proposition in the Pacific Northwest (consider, e.g., Underriner's (2002) examination of the interaction of intonation and word order in Klamath), never mind in cases where a language makes use of zero-marking for third-person arguments, as Miluk does. Nonetheless, with as strong a statement as Kroeber's, it is worth considering what the basic word order of Miluk is, if it can be determined, and if that word order looks like what is seen in Salish languages.

And indeed what we find in Miluk looks quite similar to the Salish situation. In clauses which have both arguments expressed via NPs, and which don't exhibit variation in word order, we find a strong tendency in Miluk to have an initial predicate, followed by the arguments of the verb. The ordering of the arguments themselves, however, appears to be rather arbitrary, or, more likely, based on nuanced discourse factors which are not yet clear. In 3.26 and 3.27, we see the ergative argument preceding the absolutive one; in 3.28 and 3.29, the absolutive argument precedes the ergative one.

(3.26) *á·yu* *ás·* *-d* *-a* {*tɬə* *-x̣* *hú·'mik̓'*}$_{\text{ERG}}$ {*tɬə* *də-*
aayu ass -t -a {ɬə -x̌ huu$^{\text{ʔ}}$mik'}$_{\text{ERG}}$ {ɬə tə-
indeed decorate T 3O ART ERG old.woman ART 3S.POS
dím·sin}$_{\text{ABS}}$
timmsin}$_{\text{ABS}}$
grandson

'Indeed the old woman decorated her grandson' (BluejayPubicHair.9)

(3.27) *wí* *kwí* *itc* *gú·s* *ní·* *-das* {*tɬə* *-x̣* *hí·mɛ*}$_{\text{ERG}}$ {*tɬa*
wi k$^{\text{w}}$i ič kuus nii -tas {ɬə -x̌ hiime}$_{\text{ERG}}$ {ɬə
NR EST 3D all give ? ART ERG children ART
hadái'məs}$_{\text{ABS}}$
hatai$^{\text{ʔ}}$məs}$_{\text{ABS}}$
money

'and the children handed out all that money' (EatsChildren.65)

(3.28) *gaˑsíya* *duˑ* *ġalam* {*tɬə* *máqtʼɬ*}$_{\text{ABS}}$ {*tɬə* *-ẋ* *gwéis*}$_{\text{ERG}}$
kaasiya tu qalam {ɬə maqɬʼ}$_{\text{ABS}}$ {ɬə -x̌ k$^{\text{w}}$eis}$_{\text{ERG}}$
almost HAB grab ART crow ART ERG girl

'The girl almost caught the crow' (CrowMyth.10)

(3.29) *tsú* *wɛn* *ílˑdᵘwa* {*tɬə* *di-* *híˑmɛ*}$_{\text{ABS}}$ {*tɬɛ* *-ẋ* *tʼsmíˑẋwən*}$_{\text{ERG}}$
cu wen illtwa {ɬə tə- hiime}$_{\text{ABS}}$ {ɬə -x̌ c'miix̌$^{\text{w}}$ən}$_{\text{ERG}}$
NR thus say ART 3S.POS children ART ERG trickster

'Then this is what the trickster told his children' (ManyPeople.3)

Like core arguments, oblique phrases most frequently follow the verb, as in 3.30 and 3.31.

(3.30) *tsú* *kʼwɛ́ˑn* *wus-* *úˑs* *-u* *tɬə* *də-* *ʼúmnaˑtʼɬ*
cu k'$^{\text{w}}$een wus- wus -u ɬə tə- umnaaɬ'
now news REDUP go.home INTRS.PRF ART 3S.POS grandmother
-ədja
-əča
LOC

'He returned with the news to his grandmother' (Cold.30)

(3.31) *tsú* *má* *gɛˑ* *yáhwi* *tɬə* *də-* *yɛ́is* *-ədja*
cu ma qee yah$^{\text{w}}$i ɬə tə- yeis -əča
now CONT there rub ART 3S.POS mouth LOC

'and he kept rubbing it on her mouth' (DangerousBeing.60)

3.3.1. Presentational Constructions

One of the most common reasons that an argument is fronted in Miluk is as part of a presentational construction, which serves "to call the attention of the addressee to the hitherto unnoticed presence of some person or thing in the speech setting" (Lambrecht, 1994:39). This is especially common in the first line of a story, as in both 3.32 and 3.33.

(3.32)

gwɛ́is	*guʼs*	*mín*	*duʼ*	*kwí*	*alam*	*yúġwa*
kʷeis	kuus	min	tu	kwi	alam	yuqʷa
girl	all	time	HAB	EST	myrtle.nut	gather

'There was a girl who was always picking myrtle nuts' (BluejayShaman.1)

(3.33)

tit'sɛ́ʼwəs	*tsú*	*ha*	*dlúqʷs*	*-əm*
tic'eewəs	cu	ha	ƛuqʷs	-əm
young.girl	now	REC.PFT	get.up	INTRS

'A girl who had just passed her first menses had just now arisen (from the first menses seclusion).' (DangerousBeing.1)

Presentational fronting also occurs beyond the first line of a story, however, when a new participant in the discourse is introduced, as in 3.34, or when a participant in the discourse reappears after an absence, as in 3.35.

(3.34)

úmáʼt'łi!	*k̂íts*	*wú*	*tsaʼu*
umaaƛ'i!	kic	w	caaw
grandmother	elk	1S	kill

"Grandmother! I killed an elk" (Pheasant.8)

(3.35)

wí	*yə*	*wɛ́ʼst*	*wí*	*tłə*	*də-*	*x̣-*	*dɛ́ʼməł*	*ġálam*	*tłə*	*də-*
wi	i	weest	wi	ƛə	tə-	x̌	teeməł	qalam	ƛə	tə-
NR	when	get.home	NR	ART	3S.POS	ERG	man	grab	ART	3S.POS

t'ə́m
t'əm
pack

'When she got back her husband would take her pack' (CrowMyth.46)

Having provided a grounding in the word order and TAM morphemes of Miluk, we now turn to an examination of the other Miluk particles that occur in second position, the pronominals. As we shall see, the pronominal system of Miluk has a number of parallels to the pronominal systems of Salish languages.

CHAPTER IV

PRONOMINAL SYSTEM

Before beginning an examination of similarities between the pronominal systems of the Coosan languages and Salish family, I present a new analysis of the Hanis pronominal system, which differs somewhat from that of Frachtenberg (1922).

4.1. A New Analysis of Hanis Pronouns

In his grammar, Frachtenberg treats the pronominals of Hanis as an essentially undifferentiated group of preverbal morphemes (1922). A careful analysis of the phonological evidence from CMT and CNET, however, demonstrates that there is reason to believe that the first- and second-person singular pronouns are true prefixes (or possibly clitics), while the other pronouns are phonologically-independent pre-verbal words.

The first-person singular marker, which is underlyingly /ʔn̩-/[1], has four allomorphs, conditioned by the initial segment of the root. If the root begins with a non-sonorant alveolar, the pronoun is realized as /ʔn̩-/, as in 4.1.

(4.1) *x̌-* *wenč* *le* *lew* *ʔn̩-* *ƛq'aya*
ADV thus ART ART 1S believe
'That was what I believed' (Hanis; CNET, p. 23)

If the root begins with a sonorant alveolar, the morpheme is realized as /n̩ʔ-/, as in 4.2.

[1]Recall that data from Hanis, unlike Miluk, is reproduced here with only a few modifications to Jacobs' orthography, and the Hanis examples thus have only one line of Coos text; the dot used under the /n/ throughout represents a syllabic consonant.

(4.2) *lew* *lee* *n̥-* *kaawəl* *n̥ʔ-* *laʔadz* *-u*
ART ART LOC basket 1S put.in 3A

'and she put me into her basket' (Hanis; CNET, p. 22)

If the root begins with a non-alveolar consonant, the morpheme is realized as /nV-/, where the vowel is a copy of the first vowel in the root, as in 4.3. This vowel is occasionally reduced to /ə/, depending on conditions which are not entirely clear.

(4.3) *ne-* *ǧelʰt* *hee*
1S cry IMPRF

'I used to cry' (Hanis; CNET, p. 22)

Finally, if the root begins with a vowel, this morpheme is realized as /nVʔ-/, where the vowel is again a copy of the first vowel in the root, as in 4.4.

(4.4) *neʔ-* *eʰlǧes*
1S be.afraid

'I was afraid' (Hanis; CNET, p. 22)

A similar, albeit less complicated, set of alternations is seen for the second-person singular marker. Underlyingly /eʔ-/, this morpheme is realized as /eʰ-/ when it proceeds a non-sonorant 4.5 and as /eʔ-/ elsewhere 4.6.

(4.5) *lew* *x̌-* *uuƛ'uuš* *hanƛ* *eʰ-* *sǧedz* *-u*
NR ERG monster FUT 2S take INV.3/INV

"Then a dangerous thing will take you." (Hanis; CNET, p. 22)

(4.6) *le* *heeniye* *eʔ-* *leǧeuwe*
ART long.ago 2S die

"Oh you died long ago" (Hanis; CNET, p. 23)

When we consider all of the other pronouns in Hanis, however, we see no alternations based on the following word. And, in fact, Jacobs' transcriptions tend to write the first- and second-person morphemes as part of the word which follows, without a break, while the other pronouns are usually spaced out as a separate word. The distinction between prefix/clitic and free word has important implications when considering the similarity between the Coosan pronouns and those of the Salish family, a discussion to which we now turn.

4.2. The Pronominal System of Miluk

The pronominal system of Miluk consists of second-position pronominal clitics to mark A, S and O arguments of a clause.[2] These pronouns show no variation for grammatical role: the first-person singular pronoun *w(ə)* is shown as the S in 4.7, the A in 4.8, and the O in 4.9.

(4.7)

an	*w=*	*ántɬ*	*g̓ɛ́ʻ*	*bíˑnát's*
an	w=	anƛ	qeh	piinac'
NEG	1S	FUT	there	go.back

"I will not go back there" (ChokedWithFood.18)

(4.8)

úˑ!	*an*	*wú*	*dúˑhá'*	*-y*	*-a*
uu!	an	w	tuuhaʔ	-y	-a
oh	NEG	1S	want	T	3O

"Oh! I dont want it" (Cold.8)

(4.9)

naqsí	*u*	*x̣-*	*wɛ́ˑn*	*ílld*	*-uˑn*	*tɬə*	*'nə-*	*x̣-*	*g̓wə́ns*
naqsi	w	x̌-	ween	il't	-uun	ƛə	ʔnə-	x̌-	q^{w}əns
?	1S	ADV	thus	tell	3A	ART	1S.POS	ERG	dream

"Oh my dream told me to do it like that" (ChokedWithFood.51)

The complete set of second-position pronominals is presented in Table 4.1.

[2]Although a few domains of person-marking make use of verbal morphology; see Chapter VI for discussion.

TABLE 4.1. Miluk second-position pronominals

	Singular	Dual	Plural
1	*w(ə)*	*s* (INCL)	*ɬ*
		nə (EXCL)	
2	*nə*	*is*	*čil*
3	Ø	*ič*	*iɬ*

4.3. A Comparison of the Coosan and Salish Pronominal Systems

As Kinkade (2005) notes, the pronominal systems of languages within OCP, especially that of Alsea, look extremely similar to the transitive suffixes reconstructed for Proto-Salish; more similar, in fact, than the Alsea suffixes do to pronominal forms in other Penutian languages.[3] Table 4.2 reproduces the data from Kinkade's Table 2 and Table 3, alongside the relevant pronominal forms from the Coosan languages. So similar are the Alsea and Salish forms to each other that they warrant little comment, except perhaps to repeat Kinkade's comment that such a resemblance is "startling to a Salishanist", and perhaps to anyone when we consider that these two sets of pronominal markers come from purportedly unrelated languages.

On the other hand, the resemblance between the Coos pronouns and the Proto-Salish transitive suffixes presented in Table 4.2 is less apparent. There are a handful of similarities, to be sure, but the situation is far less startling than what is seen in Alsea. For Hanis, we might see the first-person singular *ʔn̓-* coming from Proto-Salish **-an*. We likewise see some similarity between the first-person plural

[3]I have not provided any forms from other Penutian languages here; the interested reader is referred to Kinkade (2005), where Chinookan forms are included. Briefly, though, one can say that the pronouns of OCP do not resemble Penutian forms in any obvious way, beyond the occurrence of an /n/ in the first-person, which is a phenomenon that occurs throughout North America among unrelated languages.

TABLE 4.2. Comparison of Alsea pronouns and Proto-Salish transitive subjects from Kinkade 2005, alongside the equivalent Hanis and Miluk morphemes. Note that the third-person plural form in the Proto-Salish column is Moses-Columbia, not Proto-Salish; no third-person plural form is reconstructed for Proto-Salish (Kroeber, 1999).

		Proto-Salish		
Gloss	Alsea	Transitive Subjects	Hanis	Miluk
1S	*-an*	**-an*	*n̓-*	*wə*
2S	*-ax̣*	**-ax^{w}*	*ʔe-*	*nə*
3S	*-Ø*	**-as*	*Ø*	*Ø*
1P	*-aɬ*	**-aɬ*	*ɬin*	*ɬ*
2P	*-ap*	**-ap*	*šin*	*čil*
3P	*-aɬx̣*	*-lx*	*iɬ*	*iɬ*

forms for all of the languages considered, but overall, the resemblance between the Coosan languages – especially Miluk – and Proto-Salish looks much less convincing.

However, Salish languages have a variety of different person-marking paradigms, and thus far, we have only considered the reconstructed forms of one set of pronouns: the Proto-Salish transitive subject markers. If we instead consider the Proto-Salish possessive affixes – presented alongside the Hanis and Miluk forms in Table 4.3 – two things stand out.

TABLE 4.3. Hanis and Miluk pronominals and Salish possessive markers.

			Proto-Salish
Gloss	Hanis	Miluk	Possessive Markers
1S	*n̓-*	*wə*	**n-*
2S	*eʔ-*	*nə*	**ʔən-*
3S	*Ø*	*Ø*	**-s*
1P	*ɬin*	*ɬ*	**-iɬ*
2P	*šin*	*čil*	**-alap/*-imp*
3P	*iɬ*	*iɬ*	**-s*

First, in Proto-Salish, only first- and second-person singular possessors were marked with prefixes, and the rest with suffixes; in Hanis, it is the same two forms that occur as actual prefixes, instead of pre-verbal words, as discussed above.

Second, it appears that one can account for the second-person singular forms in both Hanis and Miluk via distinct sound changes from the same protoform *ʔən-: in Hanis, the loss of the final /n/ may have led to compensatory lengthening, with the /ə/ becoming /e/; in Miluk, the /ə/ is further reduced and the glottal stop lost – a phenomenon that well see again momentarily – giving a form /n/, which often surfaces with an epenthetic /ə/, as /nə/.

Beyond this, though, Miluk does not appear to be particularly similar to either the Proto-Salish transitive subjects that show such a similarity with Alsea pronouns, nor with the possessive forms that helped to clarify the situation in Hanis. However, consider Table 4.4, which presents a comparison of some additional pronominal forms from Miluk – namely, first- and second-person possessives and emphatics – alongside the Proto-Salish possessives and pronominal emphatics from a modern Salish language, Musqueam, a dialect of Halkomelem (Suttles, 2004).

TABLE 4.4. Comparison of various Miluk possessives and emphatics with Proto-Salish possessives and Musqueam emphatics. Musqueam forms from Suttles 2004.

Gloss	Miluk	Comparison Form
Proto-Salish 1s possessive	*ʔnə-*	**n-*
Proto-Salish 2s possessive	*nə-*	**ʔən-*
Musqueam 1s emphatic pronoun	*enne*	*ʔənθə*
Musqueam 2s emphatic pronoun	*new*	*nəwə*

Here we have a situation which is nearly as striking as what is seen in Alsea, although the switch in glottalization in the first- and second-person marking here is rather odd. This switch might be explainable by an analogical change in the possessive markers after the change in the Miluk first-person non-possessive pronoun to *wə*. First, let us posit that Miluk previously had second-position clitics parallel to its possessive markers, but with the glottalization as one would expect from the Salish forms: **nə* for first person singular and **ʔnə* for second person singular. With the switch to *wə* for first-person singular as the clause-level marker, the previously contrastive glottalization on the second-person form could have been lost. The possessive system might then have switched the glottalization on the first- and second-person markers by analogy with the now-deglottalized second-person subject clitic. It is also possible that Miluk previously had a first-singular possessive form parallel to the second-position clitic *wə*, but borrowed the Hanis possessive form at some point (Paul Kroeber, *p.c.*).

As for the Miluk emphatic forms – which cannot, so far as I can tell, be internally reconstructed, and are not reconstructed by Kuipers in his *Salish Etymological Dictionary* – the first-person singular emphatic pronoun in Miluk appears to exhibit compensatory lengthening of the /n/ with the loss of a consonant which appears in Musqueam as an interdental fricative. And, as above, we see some cases of /ə/ in a Salish language which appear to correspond with /e/ in Coos.

4.4. Oblique Pronominals

Suttles (2004) notes that the possessive pronouns in Musqueam, along with the third-person demonstratives, are formed from a coalescence of the

pronominals and a morpheme *wə-* 'ESTABLISHED' (see Section 6.4 for discussion of this morpheme, and its occurrence in Miluk), as in forms like *nəswéʔ* 'it's mine', *ʔəθwéʔ* / *ʔəswéʔ* 'it's yours', and *swéʔs* 'it's his/hers/its' (Suttles, 2004:336).

Although no independent possessive words like these have yet been seen in Miluk, there are forms which are phonologically similar to the Musqueam possessives: a set of free pronominal words, phonologically distinct from both the second-position clitics and the emphatic forms just discussed, which are used in cases where a pronoun stands as an oblique. These forms have a range of meanings, as shown in examples 4.10 and 4.11.

(4.10)

wi	*né·wi*	*antɬ*	*bí·nát's*	*kwə*	*nə-*	*wútam*
wi	neewi	hanx̌	piinac'	k^{w}ə	nə-	wutam
NR	2S.OBL	FUT	go.back	ART	2S.POS-	arrow

"And your arrow will come back upon you" (SplitHimself.20)

(4.11)

gu·s	*dítc*	*ha*	*t'ccíl·is*	*hidjú·wi*
kuus	tič	ha	č'šillis	hičuwi
all	thing	AUG	sweet	3S.OBL

'Everything was so sweet tasting to her' (CrowGirl.6)

Thus far, only the second- and third-singular forms of this paradigm have been seen in Jacobs' texts, although the similarity of these two forms implies that, at least diachronically, these words are composed of two distinct morphemes: a pronominal – likely a prefix – and some sort of syntactic formative. Determining the underlying morphology of the 2nd person form is problematic, however, as it could be either *nə-* plus something like the Musqueam *wə* 'EST', or it could be the emphatic form *nəw* with a suffix of the form *-i*, or even a more-carefully pronounced form of the emphatic.

The 3rd person form, on the other hand, is more transparent, as it can be internally reconstructed as being formed from either *hič'i* 'one (number)' or *hiči* 'that one'. It thus seems probable that, historically, the source of these associative forms was something very much like what is seen in Musqueam – a pronominal prefix combined with a grammatical morpheme, perhaps originally something like **wi-* or **wə-*, which has since taken on a different range of meanings than what developed in Musqueam.

Note, too, that although the Musqueam morpheme *wə-* is realized with the vowel /ə/ when it occurs pre-verbally, that vowel becomes /e/ when it is stressed in these possessive forms, paralleling the Miluk /i/ at the ends of these words.

4.5. Summary

Table 4.5 summarizes the similarities between the Coosan languages and morphemes from various Salish languages, both reconstructed and attested.

The pronominal systems of both Hanis and Miluk do show a number of similarities to Proto-Salish, albeit in a less obvious way than Alsea – the parallels are seen between the Miluk pronominals and the Proto-Salish possessive prefixes, not the Proto-Salish transitive suffixes. The forms of the emphatic and oblique pronouns in Miluk also show a clear parallel to the forms found in Musqueam, a modern Salish language.

The fact that the pronouns of the Coosan languages show a resemblance to Salish, but to a different set of morphemes than do the Alsea pronouns, is especially telling. This would seem to preclude an explanation for these similarities in which Alsea speakers had some contact with Salish speakers, borrowed the pronouns which are so strikingly Salish, and then passed those pronouns on to the

Coosan languages. At the very least, these similarities to two distinct Proto-Salish systems indicate that contact between the OCP languages and Salish speakers was pervasive enough to allow different languages within the group to independently borrow different Salish forms into their pronominal systems.

TABLE 4.5. Summary of Coosan forms and their similarities to Salish languages. Proto-Salish and Moses-Columbia forms from Kinkade, 2005; Musqueam forms from Suttles, 2004.

Hanis			
Gloss	Coos Form	Resemblant Form	Resemblant Form Gloss
1S	*ʔn̓-*	**n-*	Proto-Salish first-person possessive
2S	*eʔ-*	**ʔən-*	Proto-Salish second-person possessive
3S	Ø	-	-
1P	*ɬin*	**-aɬ*	Proto-Salish first person plural transitive
2P	*šin*	-	-
3P	*iɬ*	*-lx*	Moses-Columbia third-person plural

Miluk			
Gloss	Coos Form	Resemblant Form	Resemblant Form Gloss
1S	*wə*	-	-
2S	*nə*	**ʔən-*	Proto-Salish second-person possessive
3S	Ø	-	-
1P	*ɬ*	**-aɬ*	Proto-Salish first person plural transitive
2P	*čil*	-	-
3P	*iɬ*	*-lx*	Moses-Columbia third-person plural
1S.POS	*ʔnə-*	*nə-*	Musqueam first-person singular possessive
2S.POS	*nə-*	*ʔən-*	Musqueam second-person singular possessive
1S.EMPH	*enne*	*ʔənθə*	Musqueam first-person singular emphatic
2S.EMPH	*new*	*nəwə*	Musqueam second-person singular emphatic
2S.OBL	*neewi*	*ʔəθwéʔ / ʔəswéʔ*	Musqueam second-person singular possessive
3S.OBL	*hičuwi*	*swéʔs*	Musqueam third-person singular possessive

CHAPTER V

NOMINAL MORPHOLOGY AND SYNTAX

This chapter discusses three aspects of the nominal morphology of Miluk that are similar to the corresponding features found in the Salish family. We begin with a discussion of possession, and show that the source for the marker of third-person possession is likely an oblique, which is also the source of possessive markers in some Salish languages. We then move to a discussion of the article system of Miluk, which shows similarities to the Salish family in terms of both the phonological structure of the articles and their usage. Finally, a number of fossilized gender markers are found in Miluk that appear to be related to older, Salish articles.

5.1. Miluk Possessives

The possessive constructions of Miluk are relatively straightforward. When both the possessor and the possessed are expressed as full nouns, the possessor NP usually precedes the possessed, the possessed noun takes no article, and is marked with the morpheme *tə-*, as in 5.1 and 5.2.

(5.1) *tɬɛ* *hɛ́ˑniyɛ́* *k'á‘* {*də-* *tá·má·ɬis*}
ƛə heeniye k'ah {tə- taamaaɬis}
ART long.time person OBL custom

'Long ago (this was) the custom of the people' (Adultery.1)

(5.2) *kwiˑ* *Ø* *dó-* *tɛ́lɛˑx̱* {*tɬə* *gwɛ́is* *də-* *'wɛ́ˑt'ɬ*}
kʷii Ø tə- teleex {ƛə kʷeis tə- w'eeƛ'}
EST 3S OBL pillow ART girl OBL dress

'his head rest was the girl's dress' (CrowMyth.16)

The vast majority of instances of possession in Miluk, however, consist of a single, possessed NP in conjunction with one of the possessive pronouns presented below in Table 5.1. In the singular, the forms are unitary morphemes, but in the dual and plural, they are composed of two parts: a pronoun from the same set used as second-position clitics, and a marker of possession. The possessive marker varies for SAPs and third-persons. For SAPs, the possessive morpheme is *nə-*, which could be a simplification or merger of the first and second singular possessives, or derived from another *nə-* that appears as part of a circumfix; *nə-*X*-e* 'to have X'. In the third person dual and plural, we find *tə-*, identical to the third singular possessive prefix, but preceded by the relevant pronoun.

Whether or not there is a null morpheme in the 3S case is beyond the scope of the present inquiry, and I make no theoretical claim about its existence (or lack thereof). However, in the examples in this chapter, I have written a null in clauses with 3S possessors for the sake of highlighting the structure of the NPs; elsewhere, *tə-* is glossed simply as '3S.POS' when it marks a possessive.

TABLE 5.1. Miluk possessive pronouns

	Singular	Dual	Plural
1	*ʔnə-*	*s=nə-* (INCL) *nə-* (EXCL)	*ɬ=nə-*
2	*nə-*	*is=nə-*	*čil=nə-*
3	(Ø=)*tə-*	*ič=tə-*	*iɬ=tə-*

For the most part, these markers are used regularly between an article and a noun, as in 5.3, 5.4, 5.5, and 5.6.

(5.3) *wɛ́n* *gɛ́'* *ɬgwá'* {*tɬə* *Ø* *də-* *t'ccíl*}
wen qeh ɬq^{w}ah {Ɂə Ø tə- č'šil}
thus there lace ART 3S OBL tule.mat

'he laced himself into the bag' (Lazy.12)

(5.4) *tsú* *hwə́ldi* *tɬə* *-tc* *hú·'mi̯k'*, {*tɬi* *iɬ* *də-* *'énɛ*}
cu hʷəlti ɣə -č huuʔmik', {ɣə iɬ tə- ene}
now jump ART Č old.woman ART 3P OBL mother

'The old woman, their mother, jumped up' (BearWoman.24)

(5.5) {*tɬi·* *snə-* *áx̲á·x̲i* *-tc*} *də-* *t'ɬdá·ya·s* *gɛ́'* *s* *hantɬ*
{ɣə snə- axaaxi -č} tə- ɣ'taayaas qeh s hanɣ
ART 1D.POS pat.uncle KIN OBL land there 1D.INC FUT
wə́s·i
wəssi
go.home

"We will go home to our uncle's (mother's brother's) place" (BlackBearPackBear.65)

(5.6) *kwi* {*iɬnɛ-* *hɛ́məlt'* *-idjə*}
kʷə {ɬnə- heməlt' -ičə}
ART 1P.POS fire LOC

"Come to our fire with us!" (TricksterMyth1.45)

However, there are some instances of third-person possessed arguments which take *tə* as a suffix rather than as a prefix. In most cases, this suffixation occurs when the possessed argument has been fronted in, for example, a presentational construction (see Section 3.3.1). In these cases, *tə* is suffixed to the end of the possessed noun, as shown in 5.7 and 5.8. There are a handful of other cases where this *tə* appears suffixed to a noun, although the motivation in these cases is less clear. This almost certainly has something to do with the importance of second position – when a noun occurs before second position, the pronoun (and its associated possessive marker) occur in the second-position slot; i.e., after the noun.

(5.7) *x̣-* *hɛ́t'ɬɛ́·* *-də* *kwi·* *há·wau*
x̌- heɣ'ee -tə kʷii haawau
ERG older.brother OBL EST raise

'It was his older brother who raised him' (Snail'sBack.3)

(5.8) *wén* *tgidzín* *-ʾitc* *-də* *dzəgága*
wen tkitsin -ʔič -tə cəqaqa
NR granddaughter KIN OBL hanging

'And their granddaughter was hanging up' (i.e., in bed upon her first menses). (OldCoupleAshamed.5)

5.1.1. On the Source of *tə*

There is both Miluk-internal and comparative evidence that the possessive marker *tə* developed from, and in some cases still is, an oblique marker.

Internally, we find that some cases of *tə* prefixed or suffixed to a noun do not have a possessive meaning, but instead indicate one of two distinct meanings. In the first case, *tə* means 'about', as in 5.9 and 5.10.

(5.9) *hɛi* *djíˑʻ* *-də* *n̥-* *djicdjílt'su*
hei či -tə nə čiščilc'u
NR QW OBL 2S ashamed

"Hey! What are you ashamed about?" (CrowMyth.19)

(5.10) *t'ɬx̂ínx̂* *-də*
ƛxinx -tə
encounter.power OBL

'About encounter power' (Story title)

In the second case, *tə* functions as a broader kind of oblique marker, where it indicates a partitive. This usage of *tə* is especially common with the word *qaaɬ* 'lots', as in the two lines of text presented in 5.11.

(5.11) (a) *áN* *héˑniye* *mán* *ga̱ɬ* *-əl* *-ya* *də-* *gúˑs* *ditc,*
an heeniye man qaɬ -əl -ya tə- kuus tič
NEG long.time already lots REDUP ? OBL all thing

'In no long time she had quantities of everything,' (GirlDogHusband.88)

(b)	*q'wə́n·yau*	*-də,*	*lɛg̣ɛg̣ɛ́i*	*-də,*	*gú·s*	*də-*	*djɛ́·nen*	*ditc*	*də-*
	q'ʷənnyau	-tə,	leqeqei	-tə,	kuus	tə-	čeenen	tič	tə-
	food	OBL	hide	OBL	all	OBL	type	thing	OBL
	dzɛ́·t'ɬəs								
	ceeƛ'əs								
	fur								

'of food, of hides, of all sorts of furs (of small animals, to use for baby clothes)' (GirlDogHusband.89)

When we compare Miluk to Hanis, we can see further evidence that the possessive in Miluk developed from an oblique. First, note that the Hanis morpheme which is parallel to Miluk *tə* is *u*, as show in 5.12, where (a) is Hanis and (b) is Miluk.

(5.12)	(a)	*lee*	*-x̌*	*hiime*	*-u*	*huuˀmik'*
		ART	-ERG	children	-OBL	old.woman

'the children (ERG) of the old woman' (Hanis)

(b)	*ƛə*	*-x̌*	*hiime*	*tə-*	*huˀmik'*
	ART	-ERG	children	OBL-	old.woman

'the children (ERG) of the old woman' (Miluk)

We also see a presumably cognate *u* in Miluk, which has a variety of uses. When paired with a prefixed *x̌-*, it indicates an instrumental, as in 5.13 and 5.14.

(5.13)	*wí·*	*x̣-*	*kwí*	*-'yu*	*dúha'ya*	*pq'áᵘ*
	wii	x̌-	kwi	-ˀyu	tuhaˀya	pq'au
	NR	INST	EST	INST	want	descend

'and then when she wanted to go down by means of that' (WaterGotHigh.24)

(5.14)	*ú··*	*gwálɣi*	*w=*	*antɬ*	*kwə*	*'nə-*	*x̣-*	*wál'wal*	*-u*
	uu	qʷalɣi	w=	anƛ	kʷə	ˀnə-	x̌-	walˀwal	-u
	oh	rip.up	1S	FUT	ART	1S.POS	INST	knife	INST

"Oh, I will rip him up with my knife!" (SəgandasPeople.12)

In at least one clause, shown in 5.15, this instrumental meaning occurs without the *x̌-*; the motivations for this are not clear.

(5.15)

má·tsi	*hit'cí*	*k̓'iɬá·n*	*-u*	*kwi·*	*galám*
maaci	hič'i	k'iɬan	-u	k^{w}ii	qalam
just	one	hand	INST	EST	grab

'He took it in just one hand' (ChokedWithFood.94)

Additionally, *-u* appears in a number of cases which, while not strictly instrumentals, seem to have an instrumentally kind of feel, in that they indicate the location of an action performed with an instrument, as in 5.16, or the location by which something is grabbed, as in 5.17. In these cases, the *x̌-* is not present.

(5.16)

wí	*gígwá'*	*k̓tá*	*hɛ́l*	*-u*	*-də*
wi	kik^{w}ah	kta	hel	-u	-tə
NR	little.bit	cut	face	INST	OBL

'he would cut (with a knife) just a little on her face' (Adultery.8)

(5.17)

sɛ́l	*-u*	*gálám*
sel	-u	qalam
head	INST	grab

'he grabbed his head' (SəgandasPeople.23)

This *-u* also occurs in at least one word which, although it is homophonous with *helu* 'by the head' in 5.16, and is likely related to it historically, has the extended meaning of 'first', as in 5.18 below.

(5.18)

tsú	*má·tsi*	*hídji*	*kwí*	*tgántɬts*	*hɛ́lú*
cu	maaci	hič'i	k^{w}i	tqanχc	helu
now	just	one	EST	stab	first

'But then he (the little sgandaas traveler) stabbed him first' (SəgandasPeople.25)

In Miluk, then, we see the morpheme *tə* used as both an oblique marker and a possessive marker. And in Hanis, we also have evidence of the possessive morpheme *u* having developed from a morpheme of the same phonological shape as an oblique marker which still occurs in Miluk. It thus appears that the two Coosan languages developed a parallel possessive construction, but with the construction in each language being based on a different oblique marker.

5.1.2. The Marking of Possession in the Salish Family

The development of a possessive construction from an oblique is also found within a few Salish languages. In Lushootseed, for example, obliques are the only way that NP possession is expressed, as in 5.19 and 5.20.

(5.19) *x̌ʷúbt* *ʔə=* *tə=* *həd̓li*
paddle OBL ART Henry
'Henry's paddle' (Lushootseed (Kroeber, 1999:73))

(5.20) *šaw'* *ʔə=* *ti=* *sqʷəbayʔ*
bone OBL ART dog
'the dog's bone' (Lushootseed (Kroeber, 1999:73))

The somewhat strange order of the possessive constructions in Miluk, especially when compared to the case in Lushootseed, might have to do with the important of second position in Miluk. With the structure 'ART PRO= POSS- NOUN', the pronoun is in the second position within the noun phrase (see Chapters III and IV for discussion of second-position and pronominals in Miluk).

Although the development of possession from obliques is certainly not unique to Salish, or even to the Pacific Northwest, the parallel development here between a Coast Salish language and Miluk warrants note, especially considering that

both Miluk and Hanis developed a similar construction, but based on distinct morphemes.

5.2. The Articles ƛ̓ə and *kʷə*

This section discusses the article system of Miluk. A brief introduction to the use of the articles is given – including the factors that determine which of the two Miluk articles is used in a given situation – before comparing the Miluk articles to those of a typical Salish language.

5.2.1. The articles and their uses

Miluk has two articles, ƛ̓ə and *kʷə* (the difference between the two is discussed below in 5.2.2). Most nouns appear with one of these two articles when they occur in a clause, as in 5.21 and 5.22.

(5.21)

gaˑsíya	*duˑ*	*galam*	*tɬə*	*máqtʼɬ*	*tɬə*	*-x̣*	*gwɛ́is*
kaasiya	tu	qalam	ƛ̓ə	maqƛ̓’	ƛ̓ə	-x̌	kʷeis
almost	HAB	grab	ART	crow	ART	ERG	girl

‘The girl almost caught the crow’ (CrowMyth.10)

(5.22)

níˑm	*kʷə*	*nə-*	*hadái’məs*
niim	kʷə	nə-	hataiʔməs
give.2/1	ART	2S.POS	money

“Give me your money (large dentalia)” (TricksterMyth1.54)

There are a few circumstances where nouns appear without an article, however. One such place is in presentational constructions (discussed in Section 3.3.1), where a noun referring to a newly-introduced participant in the discourse is fronted, as in 5.23 and 5.24.

(5.23)

gwɛ́is	*guˈs*	*mín*	*duˈ*	*kwí*	*alam*	*yúgwa*
kʷeis	kuus	min	tu	kwi	alam	yuqʷa
girl	all	time	HAB	EST	myrtle.nut	gather

'There was a girl who was always picking myrtle nuts' (BluejayShaman.1)

(5.24)

tit'sɛ́ˈwəs	*tsú*	*ha*	*dlúqʷs*	*-əm*
tic'eewəs	cu	ha	ƛuqʷs	-əm
young.girl	now	REC.PFT	get.up	INTRANS

'A girl who had just passed her first menses had just now arisen (from the first menses seclusion).' (DangerousBeing.1)

Nouns also appear without an article when the noun is being used without making reference to a specific entity, as in 5.25 and 5.26. This is especially common with the noun *k'ah* 'person, people' when it refers to a generic group, as in both of these examples.

(5.25)

ámi	*k'á‘*	*də-*	*gaháis*	*í?*
ami	k'ah	tə-	qahais	ʔi?
PRIV	person	OBL	day	Q

'Is there nobody (here)?' (lit., 'Is the day (world) without people?') (LooseWomen.12)

(5.26)

qɬə́mˈniyu k'á‘		*n=*	*antɬ*	*du*	*hɛ́mɛˈq'*	*-ɛ́in*
qɬemniyu	k'ah	n=	hanƛ	tu	hemeq'	-ein
behind	person	2S	FUT	HAB	see	3A

'When the next people (the Indians to come later) will see you...' (BearWoman.22)

Although exploring the functional dimensions of the articles is somewhat difficult based only on textual evidence, the articles seem to function, for the most part, as they do in many languages: they mark nouns as *definite*, which is often associated with nominal phrases which are *identifiable* (in the sense of Lambrecht (1994)). The use of articles in Salish languages, although based on

the same notion of identifiablity, is along a slightly different dimension than the prototypical example. While identifiability usually indicates an entity as uniquely identifiable to the *listener*, in Salish languages, the articles mark nouns as being uniquely identifiable to the *speaker* (Kroeber, 1999).

However, based on the lack of articles in presentational constructions, where an NP is not identifiable by the listener, but is by the speaker (as in examples 5.23 and 5.24, above) Miluk would seem to be marking referentiality based on the more common pattern of listener identifiability, rather than the Salish pattern of speaker identifiability. A more thorough analysis of Miluk discourse is necessary before making any strong claims about a topic as nebulous as identifiability.

We now turn to a discussion of the factors which determine the choice of article in those situations where a noun appears with one of the two articles, whether *ƛə* or *kʷə*.

5.2.2. *ƛə* Versus *kʷə*

Although the distinction between the two Miluk articles is somewhat difficult to nail down using only textual material, it appears that the main factor conditioning the selection of one or the other is distance – whether physical or metaphorical – with *ƛə* used in conjunction with nearby nouns and *kʷə* used with more distant ones. Consider, for example, the stretch of text from a single story presented in 5.27 - 5.31, where the main character moves from one place to another, with the same entity being referred to in each place. While the young man is killing the giant (5.28), the article used is *ƛə*. Later, when the man returns home and reports his actions, the article switches to *kʷə* (5.31).

(5.27) *áyú* *tsx̣á˙* *du-* *'wɛ́'*
ayu cx̌aa tə- weh
indeed split 3S.POS belly

'indeed he split open his belly' (SəgandasPeople.26)

(5.28) *áyu* *kwi˙* *tsá˙u* ***tɬɛ*** *hɛthɛ́˙dɛ*
ayu k^{w}ii caaw **ƛə** hetheete
indeed EST kill ART headman

'indeed he killed the wealthy (giant) head man.' (SəgandasPeople.27)

(5.29) *tsú* *má˙tsi* *bí˙nát's*
cu maaci piinac'
then just return

'So then he turned back (north again)' (SəgandasPeople.28)

(5.30) *tsú* *wɛ́˙s* *-t*
cu wees -t
then return.home PRF

'and reached home' (SəgandasPeople.29)

(5.31) *tsá˙u* *'u* ***kwə*** *hɛthɛ́˙dɛ*
caaw w **k^{w}ə** hetheete
kill 1S ART headman

"I have killed that wealthy headman!" (SəgandasPeople.30)

This same contrast in distance can also be seen in a number of other stories. In 'The girl with the dog husband', for example, a young woman meets an attractive young man while she is out digging fern roots. Upon returning home, her thoughts are presented in 5.32, with *k^{w}ə*. When she returns to the same place the next day, and encounters the young man for a second time, the article switches to *ƛə*, as shown in 5.33

(5.32) *hɛ́i gwa áN nəhɛ́ˑwudzən kwə dɨ́ˑluɬ*
hei kʷa an nəheewətsən **kʷə** tiiluɬ
NR like NEG goodlooking ART young.man

"That was so nice looking a young man" (GirlDogHusband.26)

(5.33) *hɛi máˑtsi áˑyu kwi dá' -itc tá‘ tɬə dɨ́ˑlúɬ*
hei maaci aayu kʷi taʔ -ič tah **ƛə** tiiluɬ
NR just indeed EST there LOC DEIC ART young.man

'To be sure, the young man was already there' (GirlDogHusband.32)

Similarly, in 'Two loose women', two women are traveling around. They arrive at a place and speak to a man's nephew, who says that the man isn't at home. One of the women speculates about the uncle using *kʷə*, shown in 5.34. Once the uncle has returned to the house, we see a similar sentiment expressed, but this time with *ƛə*, shown in 5.35.

(5.34) *kwíˑ ta kwə hɛthɛ́ˑdɛ*
kʷii ta **kʷə** hetheete
EST DIEC ART headman

"He must be the wealthy head man" (LooseWomen.31)

(5.35) *kwíˑ x̌ kwí -ya tɬə də- hɛthɛ́ˑdɛ*
kʷii x kʷi -ya **ƛə** tə- hetheete
EST INFR EST ? ART OBL headman

"I guess he must be the wealthy head man" (LooseWomen.33)

It thus seems that the choice of article, whether *ƛə* or *kʷə*, is based on distance. We now leave the issue of article usage, and turn to a comparison of the Miluk articles with a typical Salish system.

5.2.3. Comparing Miluk and Salish Articles

The Miluk article system has a number of parallels to what is seen in Salish languages, but is rather simplified. Here, we will compare the Miluk articles to what is found in Musqueam, the article system of which is presented in Table 5.2.

TABLE 5.2. The articles of Musqueam (Suttles, 2004:Table 1).

	Non-feminine	Feminine	Oblique
Present and visible	*tə* (*t$^{\theta}$ə*)	*θə*	
Nearby and invisible	*k^{w}θə, k^{w}ə, k^{w}*	*ɬə, k^{w}ɬə, ɬ, k^{w}ɬ*	*ƛ'*
Remote or hypothetical	*k'^{w}ə, k'^{w}*	*k^{w}sə*	

If we take the Musqueam articles as a typical example of a Salish system, and compare them to what is found in Miluk, we see a number of similarities. Miluk *k^{w}ə* appears to be the result of a merger of invisible and remote articles, across the genders (or simply via a loss of some of the article distinctions). This analysis matches the use of the Miluk articles presented above – namely, that *k^{w}ə* is used for distant entities. There is also some evidence that the present, non-feminine article persisted in the words for male human beings (see Section 5.3 below for a discussion.)

Miluk *ƛə* is a bit more enigmatic, but there appear to be two possible sources for it – either from the oblique article, or via a coalescence of a velar stop and a lateral in something like the nearby and invisible feminine article *k^{w}ɬə*, a phenomenon also seen in some OCP roots (see Chapter VII). I find its descent from the oblique article to be the more likely, for one main reason.

Hanis and Miluk make use of an ergative/absolutive alignment system, and one of the most common ways in which languages are believed to change from a nominative/accusative system to an ergative/absolutive one is via a reanalysis of a passive construction with an oblique agent, with the oblique marker being

reanalyzed as an ergative marker (Estival and Myhill, 1988).[1] Speculatively, if this is the path that Miluk took in its development of ergative/absolutive alignment, this could have lead to a widespread use of the oblique article in transitive clauses which, after the development of a distinct ergative marker *x̌*, may have freed the oblique article *ƛə* to spread to other clause types.

5.3. Gender

This section discusses two phenomena in Miluk that appear to represent relics of an old, Salish-like gender system. We begin with a brief discussion of gender in Salish languages before turning to the facts of Miluk.

5.3.1. Gender in Salish Languages

Salish languages have a gender distinction in their article system between a masculine gender, usually referred to in the literature as "non-feminine," and a feminine gender, with the feminine articles often containing *ɬ*, *c*, or *kʷs*. The feminine forms are more marked in their occurrence across the Salish family, and are most often used when referring to animate female beings, although some languages have developed other uses for the feminine forms; especially common is its development into a diminutive. (Kroeber, 1999)

As discussed previously, the two Miluk articles *ƛə* and *kʷə* look similar to the Salish articles. Given that gender is an important facet of the article systems of Salish languages, we might consider that the difference between the Miluk articles has something to do with gender in addition to distance. However, an examination

[1]It should be noted that ergative/absolutive alignment is found within the Southern Interior branch of the Salish family (Kroeber, 1999).

of the occurrence of the articles in Miluk indicates that they do not represent a difference in gender, as they are both found within the same discourse in reference to the same entity, as was seen in the stretch of text presented above in 5.27 - 5.31; the relevant clauses are repeated below as 5.36 and 5.37.

(5.36) *áyu* *kwiˑ* *tsáˑu* *tɬɛ* *hɛthɛ́ˑdɛ*
ayu kʷii caaw ƛə hetheete
indeed EST killed ART headman
'Indeed he killed the wealthy (giant) head man' (SəgandasPeople.27)

(5.37) *tsáˑu* *ʾu* *kwə* *hɛthɛ́ˑdɛ*
caaw w kʷə hetheete
killed 1S ART headman
'I have killed that wealthy headman!' (SəgandasPeople.30)

Based on examples like this, it can be demonstrated that Miluk does not have a gender distinction like that found in Salish languages, with no masculine and feminine genders indicated by the form of the articles. However, there are two places where Miluk does exhibit what appear to be fossilized relics of an old gender system: in a suffix that sometimes follows the articles, and in the lexical items for male and female people throughout life.

5.3.2. Articles with the Suffix -*č*

Both of the Miluk articles ƛə and *kʷ*ə occasionally occur in Jacobs' texts with a suffix, -*č*, as in 5.38.

(5.38) *tsú* *hwə́ldi* *tɬə* *-tc* *húˑʾmiq̓ʾ,* *tɬi* *iɬ* *də-* *ʾɛ́nɛ*
cu hʷəlti ƛə -č huuʔmik' ƛə iɬ tə- ene
now jump ART Č old.woman ART 3P OBL mother
'The old woman, their mother, jumped up' (BearWoman.24)

An examination of the articles with this suffix shows that it is used in three circumstances. The first is with nouns that refer to feminine beings, human or otherwise. In these cases, this marker appears to be optional, and perhaps even uncommon – there are only a few cases of a feminine noun taking an article with -č, as in 5.39; most often, though, an article without -č precedes the feminine noun, as in 5.40.

(5.39)

wíˑ	*wɛ́ˑn*	*tɬi*	*tɬə*	*-tc*	*gwɛ́is*
wii	ween	ƛi	ƛə	-č	k^{w}eis
NR	thus	speak	ART	Č	girl

'Then the girl spoke thus' (FogMyth.30)

(5.40)

wí	*míˑt'ci*	*duˑ*	*kwíˑ*	*tsíˑm*	*tɬə*	*gwɛ́is*
wi	miič'i	tu	k^{w}ii	ciim	ƛə	k^{w}eis
NR	alone	HAB	EST	lay.down	ART	girl

'Though the girl slept alone...' (DugOutChild.2)

The second place where -*č* occurs suffixed to articles is in cases where the noun refers to a small or young person, either masculine or feminine[2] (5.41). This is often, though not always, paired with the word *eek'* 'small', which seems to condition the use of -*č*, as in 5.42 (see also 5.38 above).

(5.41)

láˑmaq̂	*x̂*	*tɬə*	*də-*	*p'ílk^{w}*	*tɬə*	*-tc*	*dí'lut'ɬ*
laamak	x	ƛə	tə-	p'ilk^{w}	ƛə	-č	tii^{ʔ}luƛ'
bone	INFR	ART	3S.POS	penis	ART	Č	boy

'That boy's penis is just a bone.' (LooseWomen.28)

[2]It is also possible that example 5.39 above is simply a case of a small girl, and that the -*č* is not used, except as a diminutive, with words for females. Unfortunately, a number of examples in Jacobs' corpus make no mention of whether or not the female should be viewed as small or not, so I have chosen to keep its occurrence with female beings as a separate instance.

(5.42) *tsú* *t'á˞mi* *tɬə* *də-* *tgídzən,* *tɬə* *-tc* *é˞k̂'* *tgídzən*
cu t'aami ɬə tə- tkitsən, ɬə -č eek' tkitsən
NR carry ART OBL granddaughter ART Č small granddaughter
-də
-tə
OBL

'She carried her granddaughter on her back, her tiny granddaughter' (OgressMyth.10)

The third place that articles with *-č* are seen is with two nouns for the elderly – *huuʔmik'* 'old woman' and *tuuʔməɬ'* 'old man', as in 5.43 and 5.44. Unlike the other two cases discussed above, the use of the suffix *-č* with these two words is much more frequent. In an examination of thirty occurrences of these words for elders, only two lack the *-č*: one of these is fronted as part of a presentational construction (see Chapter III), which has no article at all; the other takes the article ɬə, without the suffix.

(5.43) *g̓é˞qɬ* *tɬə* *-tc* *hú˞'mik̂'*
qeeqɬ ɬə -č huuʔmik'
sleep ART Č old.woman

'The old woman was sleeping' (FogMyth.29)

(5.44) *tsú* *wɛ́˞s* *-t* *tɬə́* *-tc* *tú˞'mət'ɬ*
cu wees -t ɬə -č tuuʔməɬ'
now go.home PRF ART Č old.man

'Now the old man got back home' (FogMyth.39)

Given these facts, the suffix *-č* appears to function synchronically as a diminutive marker (perhaps edging into a reverential with the terms for elders), while its occasional occurrence with feminine beings indicates that some sense of *-č* as a feminine marker has likely been retained in Miluk, as in example 5.39, above.

The origins of this diminutive/feminine marker are not entirely clear. However, the palatalization of velars is a common process in the Salish family (Kroeber, 1999). Recall that feminine articles in Salish languages often contain *ɬ*, *c*, or *kʷs* (Kroeber, 1999). This -*č*, then, might derive from the feminine articles with velars, such as *kʷs*, or perhaps from palatalization of an old article with *c*.

5.3.3. Words for Men and Women

The second place where Miluk shows relics of an old gender system is in the words for people, both male and female, throughout life, as presented in Table 5.3. These forms have certain phonological similarities which point to them having fossilized previous gender markers.

TABLE 5.3. List of life-cycle terms and corresponding approximate age ranges in Miluk. Age ranges are from Jacobs' field notes.

Masculine forms		Feminine forms	
Age Range	Lexeme	Age Range	Lexeme
3-5 to 10-11	*tiiʔluχ'*	3-4 to 9-10	*kʷeʔek'*
10-11 to 17-18	*tiiluɬ*	9-10 to 12-13 (menstruation)	*waawa*
17-18 to 50-60	*teemәɬ*	12-13 to 17-20 (marriage)	*kʷeis*
50-60 to death	*tuuʔmәχ'*	17-20 to 50-60	*huumәs*
		50-60 to death	*huuʔmik'*

The masculine forms are relatively straightforward, with all of the forms beginning with /t/. Many Salish languages have a masculine article with /t/ as the initial segment (e.g., Musqueam *tə*/*tθ*ə (Suttles, 2004)).

The feminine forms are more complex, but still seem to consist of a common initial element, at least historically. The words that begin with /hu/ and /w/ can be shown to have had the same initial segment historically, and perhaps synchronically, as an alternation between these onsets is seen in the verb *hums* / *wams* 'marry a woman', clearly derived from the same root as *huumәs* 'woman'.

This accounts for the /w/ seen in *waawa*, and would indicate that the /hu/ in some of these forms was likely /hʷə/ historically, as there is ample evidence that Jacobs often transcribed the schwa in sequences of glides and schwas, and rounded consonants and schwas, as the vowel corresponding to the glide (e.g., /wə/ being written as /wu/ or simply /u/). The forms with initial /kʷ/ are a bit trickier, although I posit later that Miluk /hʷ/ corresponds to proto-Salish /*xʷ/ (see Section 8.11). The initial /kʷ/ of these forms, then, may represent the oldest form of an initial morpheme, which was weakened to /xʷ/ and finally to /hʷ/.[3] Given these facts, it is likely that all of the words for women historically began with a labiovelar, perhaps a fossilized feminine article cognate with Salish articles beginning with *kʷs*.

It thus appears that the words for both men and women at various stages in their life historically began with segments which look quite similar to Salish articles.

5.3.4. Gender in Light of Penutian

Although gender distinctions in the Pacific Northwest aren't terribly common, the Salish family is not the only example in the region. The Chinookan languages, a group of closely-related Penutian languages spoken along the Columbia River, also have gender distinctions marked by nominal prefixes: masculine (*i-*), feminine (*ō-*), and neuter (*ɬ-*) (Boas, 1911). And indeed, these forms are similar to what we

[3]Note that there also appears to be some sound symbolism present in these roots, where the words the youngest and oldest stages of life having an ejective stop instead of the fricative found in the other forms (/ɬ'/ for /ɬ/ in the masculine forms, /k'/ for /s/ for the feminine forms), and perhaps glottalization of the medial sonorant (or, in the case of *kʷeʔek'*, the vowel). Although this is not a process that has been seen elsewhere in Miluk, the modification of the roots here parallels places where one would expect to find a diminutive, which, at least for the terms for elders, matches the co-occurrence of these terms and the *-č̌* suffix discussed above.

have just seen for the marking of gender and articles in Miluk. The alternating /u/ and /w/ in the feminine forms of Table 5.3 could be a reflex of the Chinookan *ō*-, and the Miluk article *ƛə* perhaps a reflex of the Chinookan neuter *ƛ*-.

Although these parallels between Miluk and the gender system of Chinookan could be viewed as evidence of a relationship between Miluk and the Penutian family, the directionality here seems more likely to be Salish influence on Chinookan, as Chinookan is the only example of a Penutian language which has gender distinctions (Scott DeLancey, *p.c.*). The similarities between the Chinookan forms and those in Miluk, then, could be the result of both languages having borrowed or inherited the forms, or at least the idea of a gender system, from the same source: the Salish language family.

CHAPTER VI

VERBAL MORPHOLOGY

This chapter discusses a number of elements of the verbal morphology of Miluk which resemble aspects of Salish verbal systems, including aspectual morphology, person marking on verbs, and the marking of transitivity.

6.1. Aspectual Morphology

In addition to the second-position particles used to indicate tense, aspect, and mood discussed in Chapter III, Miluk also has a number of verbal suffixes which indicate aspect. Three of these – *-u*, an intransitive perfective marker; *-ʔi*, an imperfective marker; and *-t*, a perfective marker – are discussed here. As we will see shortly, an understanding of this aspectual morphology is key to understanding the marking of transitivity in Miluk.

6.1.1. The Intranstive Perfective Marker *-u*

This *-u* never appears with a verb that has a clearly transitive meaning (although see Section 6.3 below for a discussion of this morpheme's use in passive constructions), as in 6.1 and 6.2 (as well as 6.7, farther below in Section 6.1.2).

(6.1)	*tsú*	*gwáˑniyuˑ*	*-də*	*xwáˑiɬ*	*-u*	*tɬə*	*híˑmɛ*
	cu	qʷaaniyu	-tə	x̌ʷaaiɬ	-u	ɣə	hiime
	NR	top	3S.POS	jump.to	INTRS.PRF	ART	children

'Then the children leaped over her' (BlackBearPackBear.105)

(6.2) *q'áya* *-u* *tɬə* *nə-* *'úmná·t'ɬ* *-ətc*
q'aya -u ɬə nə- umnaaɬ' -əč
die INTRS.PRF ART 2S.POS grandmother KIN

"Your grandmother died" (DoveMyth.8)

6.1.2. The Imperfective Marker -ʔ*i*

The morpheme -ʔ*i* marks an imperfective, and occurs with a variety of morphophonemic alternations. When -ʔ*i* is followed by the intransitive morpheme *-(ə)m* (discussed in Section 6.3.1), the *-(ə)m* is realized as *-am*, as the examples throughout this section indicate. If a verb root ends in a resonant which can be glottalized, it is glottalized and followed by /i/, which is, in turn, often followed by the glide /y/ if a vowel follows, as in 6.3 and 6.4.

(6.3) *hɛi* *má·t'si* *galə̓ɣ·is* *ɬ'ú'l* *-y* *-am*
hey maaci qaləɣɣis ɬʔyuʔl -y -am
NR just bee fly IMPRF INTRS

'Now bees were flying around' (BearWoman.3)

(6.4) *hu'w* *-íy* *-am* *də-* *k'a'*
huʔw -iy -am tə- k'ah
get.ready IMPRF INTRS OBL person

'People were making preparations' (BluejayPubicHair.1)

If a verb ends in a consonant which can not be glottalized, however, the glottal stop is lost and the final consonant of the root is reduplicated, and sometimes preceded by a schwa, as in 6.5 and 6.6.

(6.5) *mái* *n=* *antɬ* *kwi·* *qa'wá·ya* *sáih^{u}* *-hwíy* *-am* *kwətc* *tsə́nɛ*
mai n= hanɬ k^{w}ii q'aʔwaaya saih^{w} -əh^{w}iy -am k^{w}əč cəne
even.if 2S FUT EST hear jingle IMPRF INTRS ART come

"Even if you hear the jingling (of dentalia) as they come ashore" (Dream.8)

(6.6) *tsú* *iɬ* *má·tsi* *wə́s* *-si*
cu iɬ maaci wəs -si
now 3P just go.home IMPRF

'And then they went back home' (BearWoman.31)

If the verb root ends in a vowel, the final vowel of the root is followed by a glottal stop and an echo of the root vowel. The only example of a verb root which clearly ends in a vowel in the corpus is *ɬa* 'go', as in 6.7.

(6.7) *gú·s* *dítc* *cú·t'ɬ* *-u* *i* *dá'* *ɬa* *-'áy* *-am* *də-*
kuus tič šuuχ' -u i tah ɬa -ʔay -am tə-
all thing catch.fire INTRS.PRF when there go IMPRF INTRS OBL
hwíyɛ́·t
h^{w}iyeet
run

'everything caught on fire as they went running along' (OgressMyth.29)

There remain a number of verb suffixes in Miluk which might be TAM markers of some kind, but the evidence of their exact function is not yet clear.

We now turn to a discussion of verbal morphology used for person marking in Miluk.

6.2. Hierarchical Verb Marking in Miluk

We begin our discussion of person-marking morphology with an overview of hierarchical alignment before discussing the ways in which person and number are expressed via verb suffixes in Miluk.

6.2.1. Theoretical Grounding

Throughout this section, we will view the hierarchical person-marking system of Miluk within the framework of DeLancey (2001), which has previously been used

to explore hierarchical person marking in languages of the Americas (e.g., Zúñiga 2006). Within this framework, differential person marking is viewed as essentially deictic. Thus, **local** refers to a clause in which both the A and the O are speech-act participants. In a clause in which both arguments of a verb are third-persons, the clause is termed **nonlocal**. **Direct** indicates a clause in which an SAP A argument is acting on a third person O, and thus the most prototypical from the point of view of the speaker. Finally, **inverse** indicates a clause in which a third-person A is acting on an SAP O. A summary of this framework is presented in Table 6.1.

TABLE 6.1. Hierarchical alignment configurations (cf. DeLancey 2001).

	SAP Patient	**3 Patient**
SAP Agent	LOCAL	DIRECT
3 Agent	INVERSE	NONLOCAL (3A3O)

As we will see, Miluk has special verbal marking for both the local and inverse quadrants of Table 6.1, while the marking for the direct and nonlocal quadrants are collapsed into a single category.

6.2.2. Local Person Marking

For local clauses, Miluk relies on verbal morphology to indicate which of the SAPs is the A, and which the O, because, in local clauses, it is always the second-person pronoun which occurs, regardless of which argument is the A and which the O; there are no examples of a first-person pronoun occurring in local clauses.

For a first person acting on a second person, the verb suffix is *-aami*, as in 6.8 and 6.9.

(6.8) *k̓ɬú·* *-d* *-a·mí* *hən*
kɬəw -t -aami nə
see T 1A2O 2S

"I saw you all the time" (SeagullMyth.16)

(6.9) *há·* *ɬha* *-d* *-ámi* *n=* *antɬ*
haa ɬha -t -aami n= anƛ
oh heal T 1A2O 2S FUT

"I will cure you" (Swordfish.77)

In the other possible configuration within the local quadrant, in which second persons act on first persons, the morpheme *-ai* is used, as in 6.10 and 6.11.

(6.10) *ú·* *an* *n=* *ántɬ* *balax̌* *-á·ni* *-d* *-ai*
uu an n= anƛ palax̌ -aani -t -ai
oh NEG 2S FUT angry VBLZR T 2A1O

"Oh do not be angry with me" (DugOutChild.61)

(6.11) *í* *ís* *hántɬ* *dúhi* *-d* *-ai* *wi* *úmidə* *-d* *-ai* *n=* *antɬ*
i is hanƛ tuhi -t -ai wi umit -ət -ai n= anƛ
if 2D FUT want T 2A1O NR follow T 2A1O 2S FUT

"If you want me then follow me" (FogMyth.67)

One verb, *ni* 'give', has a unique form of the local marker in clauses with a second person acting on a first person, which is *niim*, as in 6.12.

(6.12) *ní·m* *kwə* *nə-* *hadái'məs*
niim kʷə nə- hatai?məs
give.2/1 ART 2S.POS money

"Give me your money (large dentalia)" (TricksterMyth1.54)

The sources of *-aami* and *-ai* are not clear at present. Proto-Salish has a second-person object **-mi*, although one would expect an object to occur directly after the transitive marker in a Salish language (Paul Kroeber, *p.c.*). Klamath also has a second-person pronoun of the form *mi* (Barker, 1964).

6.2.3. Inverse Person Marking

In inverse clauses, where a third-person argument acts on an SAP, the verb is marked with one of three allomorphs of a third-person A morpheme: *-een*, *-uun*, or *-iin*; the meaning difference between these is, at present, unclear, as they seem to occur in nearly-identical situations: 6.13 shows *-een* with a first-person O, and 6.14 with a second-person O; 6.15 shows *-uun* with a first-person O, and 6.16 with a second-person O. Examples 6.15 and 6.17 are also quite similar to each other, despite having a different form of the inverse marker.

(6.13)

tsúw	*-ɛˑn*	*w=*	*ántɬ*	*yu*	*w=*	*antɬ*	*á*N	*wɛ́ˑs*	*-t*
cəw	-een	w=	anɂ	i	w=	anɂ	an	wees	-t
kill	3A	1S	FUT	when	1S	FUT	NEG	go.home	T

"She will have killed me like that if I do not come back" (BlackBearPackBear.16)

(6.14)

tsúw	*-ɛˑn*	*n=*	*ántɬ*
cəw	-een	n=	anɂ
kill	3A	2S	FUT

"He will kill you" (SəgandasPeople.16)

(6.15)

x̣-	*dítc*	*u*	*'úmid*	*-əd*	*-úˑn*
x̌-	tič	w	umit	-ət	-uun
ERG	thing	1S	follow	T	3A

"There is something pursuing me!" (SnailsBack.38)

(6.16)

hɛi	*tcíl*	*'ax̣*	*sk'w*	*-dz*	*-úˑn*	*kwɛ́*	*-x̣*	*gaˑlə́ɣˑis*
hey	čil	ax̌	sk'^{w}	-ts	-uun	k^{w}ə	-x̌	qaaləɣɣis
NR	2P	IRR	sting	?	3A	ART	ERG	bee

"You might be stung by bees" (BearWoman.6)

Unlike the local cases presented above, in which the second-person pronoun is always used, inverse clauses take the relevant SAP pronoun for the O, whether

first or second person. In cases with a third-person plural A, the 3P pronoun *iɬ* also occurs, with the A preceding the O, as in 6.17.

(6.17) *úmid* *-id* *-ú˙n* *’iɬ* *nɛ*
umit -ət -iin iɬ nə
follow T 3A 3P 2S

“They are following you” (ChokedWithFood.25)

6.2.4. Direct and Nonlocal Person Marking

The issue of direct and nonlocal person marking is wrapped together too tightly with the marking of transitivity to consider the two phenomena separately. In this section, we consider two pieces of verbal morphology which relate to the marking of number of third-person arguments in the direct and nonlocal and which do not require an examination of transitivity to be understood. We will delay discussion of other dimensions of direct and nonlocal marking until we have considered transitivity.

The first morpheme, *-ʔəme*, marks a verb as having a plural, third-person argument, although without specifying which argument is plural in transitive clauses. 6.18 shows an S argument marked with *-ʔəme*, 6.19 an O argument, and 6.20 an A.

(6.18) *tsú* *gwum* *bɛ́lx̣* *-s* *-əm* *-’úma˙* *tɬə* *k’a‘*
cu kʷum pelx̌ -s -əm -ʔəme ƛə k’ah
now ? angry ? INTR PL ART person

‘Then the people became enraged’ (ChokedWithFood.122)

(6.19) *í* *n=* *antɬ* *án* *ɬu˙dəda˙ya* *-’áma* *ku* *húmɛ˙k̓’ɛ*
i n= anƛ an ɬuutətaaya -ʔəme kʷə humeek’e
if 2S FUT NEG watch PL ART women

“If you do not watch these women (I will punish you)” (LooseWomen.53)

(6.20)

wí	*má˙*	*gɛné˙tc*	*k'a‘*	*gu˙s*	*mín*	*du˙*	*kwi˙*	*g̓ém*	*yug̓wa*
wi	maa	qeneeč	k'ah	kuus	min	tu	k^{w}ii	qem	yuq^{w}a
NR	other	young.girl	person	all	time	HAB	EST	camas	gather

-'áma
-ʔəme
PL

‘(Some) other young persons (girls) were always digging camas’ (DugOutChild.29)

The morpheme *-ʔəme* is not exclusively verbal, and can also occur on nouns to indicate a plural, as in 6.21.

(6.21)

tɬi	*itc*	*də-*	*qɬa*	*-'áma*	*tɬi*	*itc*	*di-*	*k̓'íɬa*	*kwi*	*itc*	*q'x*	*-á˙*
ɬə	ič	tə-	qɬa	-ʔəme	ɬə	ič	tə-	k̓'iɬa	k^{w}i	ič	q'x̌	-aa
ART	3D	OBL	foot	PL	ART	3D	OBL	hand.P	EST	3D	cut.off	3O

-t
-t
T

‘They cut off their feet and hands’ (BlackBearPackBear.59)

The second morpheme, *-t'a*, marks a third-person dual object, as in 6.22 and 6.23.

(6.22)

wí	*áN*	*dji*	*g̓álm*	*-í˙*	*-t'a*	*tɬi*	*hí˙mɛ*
wi	an	či	qalm	-ii	-t'a	ɬə	hiime
NR	NEG	ABIL	grab	?	DL.O	ART	children

‘She was unable to grasp the (two) children’ (BlackBearPackBear.100)

(6.23)

g̓ɛ‘	*n=*	*antɬ*	*g̓íld*	*-i˙*	*-t'a*	*kwə*	*nə-*	*hí˙mɛ*
qeh	n=	anɬ	kilt	-ii	-t'a	k^{w}ə	nə-	hiime
there	2S	FUT	find	?	DL.O	ART	2S.POS	children

“There you will find your (two) children” (EatsChildren.23)

We now turn to a discussion of the marking of transitivity in Miluk, which will also allow us to understand the morphology of verbs in direct and nonlocal clauses.

6.3. On the Marking of Transitivity

Miluk has a number of ways of marking the transitivity of a verb via suffixes. One of the most common ways of making an intransitive verb transitive is via the addition of *-ya*. Recall that this *-ya* triggers vowel harmony in the verb root, causing any /e/ vowels to surface as /a/. Two adjacent lines of text are presented in 6.24. In the first line, the verb *hekʷən* 'come ashore' occurs as a simple intransitive. In the second line, the verb is transitivized with *-ya*, with the /e/ verb root undergoing vowel harmony and becoming /a/.

(6.24) (a) *hadáiʔmis hántɬ hégwən!*
hataiʔmis hanɤ hekʷən!
money FUT come.ashore
"Money will come in from the water!" (Dream.23)

(b) *báldiˑmis hántɬ kwi hagwán -ya!*
paltiimis hanɤ kʷi hakʷən -ya!
ocean FUT EST come.ashore T
"The ocean will bring it ashore!" (Dream.24)

In a few cases, however, the alternation of the vowels is the only thing that indicates a change in transitivity, as in the two adjacent lines of text presented in 6.25. Valence changes based solely on vowel alternation are far less common than verbs which take the *-ya* suffix (or the other marker of transitivity, *-t*, discussed below); *alqsa* is the only clear case of such an alternation in transitivity based only on a change in a root vowel.

(6.25) (a) *hûˑ élqsə dúˑ ʾu*
huu elqsə tu w
oh be.afraid HAB 1S
"Oh! I used to be so scared." (Swordfish.34)

(b) *má˙* *x̣* *k'á‘* *tɬə* *wə'* *álqsa*
maa x k'ah ɬə w alqsa
other INFR person ART 1S be.afraid.of
"It was some person I feared." (Swordfish.35)

Although the meaning of this *-ya* morpheme seems, at first glance, to be simply a transitivizer, there are a number of reasons to think that it is actually composed of two morphemes. Consider the transitivization of another verb, *teixe* 'go down to the water's edge'. The simple intransitive case in 6.26 occurs with the single argument of the verb clearly expressed with a pronoun, and with the intransitive perfective marker *-u* discussed in Section 6.1.1 above.

(6.26) *tsú* *iɬ* *tɛ́ix̣ɛ* *-u* *tɬi* *iɬ* *di-* *tɬgúwic* *-dja*
cu iɬ teixe -u ɬə iɬ tə- ɬkuwiš -ča
now 3P go.to.water INTRS.PFT ART 3P OBL canoe LOC
'They went down to the water towards their canoe' (DangerousBeing.11)

The verb *teixe* also appears on occasion with *-ya*, with a clearly transitive meaning, as in 6.27, with the A expressed via the pronoun *iɬ* '3P', and the O via a full NP.

(6.27) *má˙tsi* *iɬ* *gú˙s* *táix̣á* *-ya* *tɬi* *iɬ* *də-* *tɬgwə́ls*
maaci iɬ kuus taixa -ya ɬə iɬ tə- ɬk^{w}əls
just 3P all go.to.water T ART 3P OBL canoe
'They merely took their canoes down to the water' (SəgandasPeople.62)

There is one additional form of *teixe*, however, which is rather more interesting, presented in 6.28. Here, we again see the intransitive perfective *-u*, but with the /y/ of the morpheme *-ya* (glossed for the moment simply as 'Y') still present.

(6.28)

áyu	*tɛ́ix̣ɛ*	*-y*	*-u*	*tɬə*	*dí·luɬ*
ayu	teixˇe	-y	-u	ɬə	tiiluɬ
indeed	go.to.water	Y	INTR.PFT	ART	young.man

'Indeed they took the young man down to the water' (Swordfish.44)

Although Jacobs doesn't translate this clause as such, I believe that it is a passive, for a number of reasons. Nowhere in Miluk can I find a case of a 3P pronominal being expressed by zero; if the clause has a 3P argument, it is always expressed, either with the pronoun *iɬ*, or with the plural suffix *-ʔəme*. 6.28 is also marked with the intransitive perfective marker, *-u*, which has no business being attached to a transitive verb, and never appears attached thusly in the corpus (assuming that we set aside for the moment the few potentially ambiguous cases like 6.28). Note also that, although we have seen that vowel alternations are sometimes sufficient in and of themselves to indicate a difference in transitivity, as in 6.25, we see no vowel alternation in 6.28.

It now appears that we have three pieces of morphology: *-y*, *-a*, and *-u*. We know that the *-u* is a marker of perfective intransitive verbs, and that the *-y* and the *-a* clearly have something to do with transitivity, but we cannot say for sure what yet. These might mark the A and the O, or one of these morphemes could mark either the A or the O, with the other marking the change in transitivity.

We can gain some insight into what these morphemes might be doing if we compare verb roots as they are inflected in a direct clause with how they appear in a local clause, as presented in Table 6.2.

Note that, in the direct, all of these verbs appear with a long /aa/ vowel in the root, and that some of them end in /i/. When we compare this to the local forms, we see two things. First, the verbs which lack the vowel /i/ in the direct also lack a /t/ in the local. The /i/ in the direct forms thus corresponds with the /t/

found in the local forms. Second, there is a change in the vowel of the root, with /ə/ in the local inflections and /aa/ in the direct, indicating that the hierarchical alignment markers *-aami* and *-een/-iin/-uun* correspond in some way to the vowel alternation seen in the roots of the direct forms.

TABLE 6.2. Comparison of verbs in direct and local forms. The occurrence of the /ʔ/ in the local form of 'kill' is consistent throughout the examples found in the corpus, but its function is not clear.

Root gloss	Direct	Local
'see'	*kɬaawi*	*kɬəw -t -aami*
'delouse'	*x̌ʷaƛ'i*	*x̌ʷəƛ' -t -aami*
'kill'	*caaw*	*cəw -aʔmi*
'eat'	*ƛaaw*	*ƛəw -iin*

To this story, we can add one more piece of evidence – the long vowel in the root of the direct forms is seen only in cases where the O is a third person, regardless of what person the A is, as in 6.29, 6.30, and 6.31.

(6.29) *tə́mˑɛtˑ'ɬɛ* *wu* *k̂ɬáˑwi* *-yəma*
təmmeƛ'e w kɬaawi -ʔəme
old.people 1S see PL

"I saw old people" (EatsChildren.12)

(6.30) *hɛ́ltˑ* *x̣-* *nɛ́u* *tˑ'áˑmi* *kwə* *'nə-* *qʷɬáⁱ*
helt' x̌- new t'aami kʷə ʔnə- qʷɬai
NR ERG 2S.EMPH carry ART 1S.POS rock

"Now you pack my rock" (ChokedWithFood.90)

(6.31) *hɛltˑ* *x̣wátˑ'ɬi*
helt' x̌ʷaƛ'i
NR delouse

'she hunted lice on her' (BlackBearPackBear.30)

Because of the occurrence of /aa/ only with third-person Os, and the fact that this /aa/ is paradigmatically parallel to the local person markers, it appears

that the long /aa/ in the root marks a third-person O. What, then, are we to say of verbs like *teixe*, discussed above, which take *-ya* for a transitive meaning, rather than a final /i/, and have no long /a/ vowel in the root? When we compare roots that exhibit a vowel alternation in the root itself to roots which take a final *-ya*, we see that all of those with vowel alternation in the root have a schwa as the only root vowel, while verbs which take *-ya* have full vowels.

Because of this, I propose that the morpheme *-y/-i*, along with the parallel *-t* morpheme, act as transitivizers, while the final /a/ for /ya/ sequences marks a third person object. In cases where the vowel of the root is a schwa, however, the third-person object marker is realized in place of the schwa. This analysis allows us to see verbs like *kɬaawi* and *taixaya*, which at first glance appear to have disparate morphology structures, as having the same morphology. Historically, however, it seems likely that these verbs were inflected in the same way, with *kɬaawi* appearing as **kɬawiya*. For roots with an underlying schwa, however, the final /a/ was lost, leaving only the coloring of the root vowel to indicate a third-person object. The loss of the final /a/ in these forms may also account for the long vowel seen inside the root, as the loss of a final vowel is known to induce compensatory lengthening in root-internal vowels in some languages (Hayes, 1989). This analysis of verbal morphology might also allow us to explain what is happening in examples like *alqsa*. In the corpus considered here, there is only one occurrence of the sequence /sy/. The form *alqsa*, then, might in fact be *alqs -ya*, with a deletion of the palatal glide.

Although the marking of both transitivity and intransitivity on the same verb with examples like *teixeyu* might appear to be a problem with this analysis, this

type of double-marking is also seen in Salish languages for verbs which have passive meanings, as in 6.32, an example from Musqueam.

(6.32) *ni* *c'éw* *-ət* *-əm*
AUX help T INTRS
'He was helped' (Musqueam (Suttles, 2004:43))

We are now left to explain why some verbs, like $\sqrt{}$*kɬəw* 'see', require a transitive marker, while others, such as $\sqrt{}$*cəw* 'kill', get by without one. Within the Salish language family, most verb roots are underlyingly intransitive, and transitivizing morphology is required for a transitive meaning (Kroeber, 1999; Suttles, 2004). In Miluk, this also seems to be largely true, but with a few verb roots being inherently transitive. If we look at the roots which lack a marker of transitivity, we see that they all have meanings which are semantically transitive – 'kill', 'eat', and, to a lesser extent, 'bother' – which may have led them to develop inherently transitive meanings (Table 6.3).

TABLE 6.3. Comparison of verb roots which do and do not take a transitivizing morpheme.

Without /i/	With /i/
cəw 'kill'	*kɬəw* 'see'
ƛəw 'eat'	*t'əm* 'carry'
c'wəl 'bother'	*x̌ʷəƛ'* 'delouse'

We are now in a position to explain the person-marking found in direct and nonlocal clauses in Miluk. The morpheme *-a*, which can occur either as a suffix or via changes in the root vowel, depending on the shape of the root, marks third-person objects. In addition, we also have two morphemes, *-t* and *-y*, which serve to make intransitive roots into transitive ones.

We will now consider the ways in which Miluk marks a verb as intransitive, and the ways in which the interaction of the transitive and intransitive markers yield passive and antipassive meanings.

6.3.1. The Intransitive *-(ə)m*

In addition to the intransitive perfective marker *-u* discussed above, Miluk has an additional intransitive verb marker, *-(ə)m*, which appears to be cognate with a Salish suffix of similar phonology and function (Kroeber, 1999). In the most basic case, this *-(ə)m* occurs on verbs with clearly intransitive meanings. If the verb to which *-(ə)m* is attached ends in a vowel, it is realized *-m*, with concomitant lengthening of the final vowel of the root, as in 6.33 and 6.34. If the verb ends in a consonant, *-(ə)m* is realized with the schwa, as in 6.35 and 6.36.

(6.33) *hɛi* *má·tsi* *dí·luɬ* *da* *tsí·* *-m*
hei maaci tiiluɬ ta cii -m
NR just young.man there lie.down INTRS

'and now a young man was lying down there' (CrowMyth.15)

(6.34) *t'cɛ́'* *kwi·* *mí·t'ci* *ləqlɛ́·m*
č'eh kʷii miič'i ləqlee -m
woods EST alone live.at INTRS

'He lived by himself far back in the woods' (YoungManLivedAlone.01)

(6.35) *tsú* *iɬ* *dlúqʷs* *-əm*
cu iɬ ƛuqʷs -əm
now 3P get.up INTRS

'and they arose' (BearWoman.21)

(6.36) *tɬə* *tsú* *bɛ́lx̣s* *-əm* *tɬə* *dí·lúɬ*
ƛə cu pelx̌s -əm ƛə tiiluɬ
ART now angry INTRS ART young.man

'Now the young man became angry' (Pheasant.20)

The morpheme *-(ə)m* has another function beyond simply marking a verb as intransitive, in that it can also decrease the valence of a transitive verb. Which argument of a transitive clause is removed depends on the morphology which precedes the *-(ə)m*. When *-(ə)m* follows the *-y-a* sequence just discussed, it is the O that is missing from the clause, and the verb marked with *-(ə)m* is an antipassive, as in 6.37.

(6.37)

gɛ́ʻ	*iɬ*	*hántɬ*	*pgálisí*	*-y*	*-a*	*-m*
qeh	iɬ	hanχ	pqalisi	-y	-a	-m
there	3P	FUT	catch	T	3O	INTRS

'there they were going to catch things' (SalmonDidIll.4)

In other cases with an antipassive meaning, as in 6.38 and 6.39, however, it appears that the marking might instead simply be the imperfective marker *ʔi*, followed by the intransitive marker *-(ə)m*, as in 6.38 and 6.39, and parallel to what was seen in Section 6.1.2 above, with the schwa of the *-(ə)m* suffix becoming /a/ after /y/.[1] Although it is possible that the transitivitizing morphology is also present in examples such as these, it seems more likely that these are cases of verb roots which are inherently transitive. Unfortunately, the verb root *χəml* 'spear fish' in 6.39 does not appear in a clearly transitive context in the corpus considered.

(6.38)

tuˑ'mít'ɬ	*ditc*	*dáʻ*	*dləm'l*	*-íy*	*-am*
tuuʔməχ'	tič	tah	χəmʔl	-iy	-am
old.man	thing	there	spear.fish	IMPRF?	INTRS

'An old man was spearing fish there' (BlackBearPackBear.111)

[1]Note that such an analysis is not possible in 6.37 as the reduplication of the final consonant that co-occurs with the imperfective *ʔi* is not present. It is possible, though, that 6.37 does not contain the 3O marker *-a*, and that the /a/ we see is instead the result of a change in the schwa of the intransitive morpheme, as discussed in Section 6.1.2.

(6.39) *hɛ́i* *má·tsi* *gɛ́‘* *dlu’w* *-íy* *-am*
hei maaci qeh ƛəʔw -iy -am
NR just there eat IMPRF? INTRS

‘She was just eating there’ (BearWoman.15)

There are fewer examples of *-(ə)m* following the transitivizer *-t*, but it appears that these verbs can have either a passive or an antipassive meaning, depending on the other morphology which is present. If the 3O marker *-a* occurs with the *-t-əm* sequence, the /a/ is realized in place of the schwa of the intransitive *-(ə)m*, and the clause is a passive, as in 6.40 and 6.41. In 6.40, note that the story makes it clear that more than one person goes to fetch Bluejay Shaman, and, as mentioned above, I can find no cases in Miluk where a third-person plural argument is expressed as a zero.

(6.40) *tsú* *wɛ·n* *á·yu* *ɬá·dz* *-it* *-a·* *-m* *tɬə* *íl·axq’ain*
cu ween aayu ɬaats -it -aa -m ƛə illaxˇq’ain
now thus indeed fetch T 3O INTRS ART shaman

‘And so then indeed they went for the shaman’ (BluejayShaman.8)

(6.41) *án* *tcíl* *ts=* *hantɬ* *djí·* *xaɬ* *-t* *-á·* *-m*
an čil c= hanƛ či xˇaɬ -t -aa -m
NEG 2P HRSY FUT thing do T 3O INTRS

“No harm will be done to you”[2] (SəgandasPeople.35)

When the *-t -əm* sequence appears without the 3O marker *-a*, the verb appears to function as an antipassive, as in 6.42.

[2]Jacobs translates this as “We will do no harm”. However, the context in which it is spoken – by an emissary who has traveled from one tribe to another – along with the structure of the clause itself, including the presence of the hearsay marker *ca*, make it clear that Jacobs’ translation is somewhat shy of literal.

(6.42)	*í*	*n̓-*	*tɬgwəls*	*-ɛˑ*	*k'á‘*	*wí*	*gɛ́‘*	*iɬ*	*x̓t'ɬúˑ*	*-t*	*-əm*
	i	nn-	ƛkʷəls	-ee	k'ah	wi	qeh	iɬ	xƛ'uu	-t	-əm
	if	have	canoe	have	people	NR	there	3P	get.into	T	INTRS

'The people who had canoes got into them there,' (WaterGotHigh.07)

The difference in function between the intransitive perfective *-u* seen above and the *-(ə)m* is not clear. The *-(ə)m*, however, seems to occur without respect to tense or aspect, occurring in clauses with both perfective (e.g., 6.35) and imperfective (e.g., 6.33 and 6.39) meanings.

The morpheme *-(ə)m* has apparent cognates throughout the Salish family, which have similar functions. In Musqueam, for example, verbs with *-əm* "indicate that the condition exists in the subject, or the action is performed by the subject, or that the action has consequences for the subject" (Suttles, 2004:229). We thus find examples in Musqueam for a range of intransitive meanings, from adjective-like verbs (e.g., *q'ét'əm* '(taste) sweet'), verbs with inherently intransitive meanings (e.g., *c'ísəm* 'grow'), and verbs which have transitive counterparts, where the transitivizer *-ət* alternates with *-əm* (e.g., *kʷə́nəm* 'get' versus *kʷə́nət* 'get [it], take [it]'), in addition to its use in decreasing valence in passives discussed above (Suttles, 2004).

6.4. On *kʷi* 'Established'

One of the most ubiquitous morphemes in Miluk is *kʷi* (sometimes *kʷii*; the difference in vowel length appears to be the result of Jacobs' phonetic transcriptions and not a meaningful difference). Although not strictly a verbal morpheme, *kʷi* most commonly occurs directly before a verb, and so it is discussed here.

The morpheme *k^{w}i* functions much as an anaphoric pronoun, and is glossed here as EST 'established'. However, it is not a part of the pronominal system of Miluk, as, unlike the other Miluk pronouns, it can occur outside of second-position, as in, e.g., 6.44. Recall from Chapter III that the narrative particle *wi* does not count in determining second position, and that, if two pronouns occur in second-position, the A argument precedes the O argument, while in 6.44, the *k^{w}i* is coreferential with the object and precedes the A. Taken together, these two facts indicate that the *k^{w}i* in 6.44 is in first position, and thus not a pronominal.

6.43 and 6.44 present two adjacent lines of a text in which the O of 6.43 is the O of the following clause, where it appears as *k^{w}i*. Throughout this section, subscript numerals will be used to indicate coreferentiality.

(6.43)

tsú	*itc*	*k'á$_1$*	*itc*	*kɬa·wi*
cu	ič	k'ah$_1$	ič	kɬaawi
now	3D	person	3D	see

'Now they saw a person$_1$' (FogMyth.56)

(6.44)

wí	*kwi$_1$*	*itc*	*tɬx̣á·li*
wi	k^{w}i$_1$	ič	ƛx̌aali
NR	EST	3D	be.enamored

'and they were enamored of him$_1$.' (FogMyth.57)

The morpheme *k^{w}i* can also occur when an S becomes the O of a later clause, as in 6.45 and 6.46.

(6.45)

hɛ́i	*tɬa*	*ɬaɬx̣wə́n$_2$*	*da'*	*dlú·ɣ̣wa*
hei	ƛə	ɬaɬx̌^{w}ən$_2$	tah	ƛuuq^{w}a
NR	ART	jackrabbit	there	be.at

'and only Jackrabbit$_2$ sat there,' (JackrabbitMan.28)

(6.46) *tsú* *kwiˈ*$_2$ *tsáˈu*
cu k^{w}ii$_2$ caaw
now EST kill

'and so he killed that$_2$' (JackrabbitMan.29)

Evidence of the function of *k^{w}i* can also be found in clauses which have a fronted argument as a presentational (discussed in Section 3.3.1), as in 6.47 and 6.48, where *k^{w}eis* 'girl' is fronted, but *k^{w}ii* appears later in the clause, and indicates that the girl and subject of the verb are coreferential.

(6.47) *gwɛ́is*$_4$ *guˈs* *mín* *duˈ* *kwí*$_4$ *alam* *yúġwa*
k^{w}eis$_4$ kuus min tu k^{w}i$_4$ alam yuq^{w}a
girl all time HAB EST myrtle.nut gather

'There was a girl who was always picking myrtle nuts' (BluejayShaman.1)

(6.48) *húˈmis*$_5$ *kwíˈ*$_5$ *báldiˈmis* *də-* *ġwə́ns*
huuməs$_5$ k^{w}ii$_5$ paltiimis tə- q^{w}əns
woman EST ocean 3S.POS dream

'A woman had an ocean dream (power)' (Dream.1)

When *k^{w}i* stands in for the A of a clause, it sometimes lacks an ergative marker, as in 6.47, as well as 6.20 and 6.24b. In other cases, however, the *k^{w}i* does take the ergative marker, as in the stretch of text presented in 6.49 - 6.51. The lack of an ergative marker in some clauses appears to occur when *k^{w}i* stands in for an argument in the same clause which has been fronted as part of a presentational construction (see Section 3.3.1).

(6.49) *hɛi* *áyu* *bíˈnát's* *tɬə* *də-* *'wútam*$_3$
hey ayu piinac' ɬə tə- wutam$_3$
NR indeed return ART 3S.POS arrow

'Sure enough his arrow$_3$ returned,' (SplitHimself.24)

(6.50) *mát'si -'ya sɛ́L -djɛ -də bí·nát's*
maaci -ʔya sel -če -tə piinac'
just ? head LOC 3S.POS return

'it$_3$ came back right onto his head,' (SplitHimself.25)

(6.51) *wí· x̣- kwí·$_3$ tsx̣á*
wii x̌- k^{w}ii$_3$ cx̌a
NR ERG EST split

'and it$_3$ split him in two.' (SplitHimself.26)

The morpheme *k^{w}i* appears to have its roots in a preverbal morpheme found in some Salish languages which indicates "an established or continuing state or an established fact" (Suttles, 2004:252); in Musqueam, this morpheme has the shape *wə-*. Although not an exact match to the meaning or function of Miluk *k^{w}i*, the origin of the initial /k/ in Miluk might provide a clue to the development of this morpheme. Miluk *k^{w}i* may be the result of a merger of two morphemes – the initial element from the article *k^{w}ə*, and the second from a morpheme cognate with Musqueam *wə-*.

There is also some phonological evidence that bears on this question. In a few circumstances, *k^{w}i* surfaces as *kuwi*, which may indicate the presence of another labiovelar or rounded vowel in the word, at least historically. This form occurs most often in cases where a clear deictic meaning is present, as in 6.52.

(6.52) *'á··· úma·t'ɬi! kúwi!*
ʔaa umaaƛ'i! kuwi!
oh grandmother.VOC KUWI

"Ah grandmother! That's it!" (BluejayPubicHair.14)

By providing a more concrete, nominal meaning, the fusion of the article with an established morpheme could thus provide an explanation for why *k^{w}i* seems to

function in Miluk as an anaphoric pronoun, marking not a continuing, established event or state, but instead a consistent participant in a connected series of events.

6.5. Conclusion

This chapter has discussed some of the facets of verbal morphology in Miluk which show similarities with Salish languages. We see that Miluk verb roots show alternations in transitivity which look rather Salish, in that they use transitivizing morphology with inherently intransitive roots, and that transitive and intransitive morphology can be attached to the same verb root to yield passive (and antipassive) meanings, with the transitive *-t* and the intransitive *-(ə)m* showing a strong similarity to the Salish morphemes of the same function and phonetic form. Additionally, the morpheme $k^{w}i$ appears to be derived from a coalescence of an article and a morpheme from Salish which has a similar function.

CHAPTER VII

INVERTED ROOTS

In addition to the discussion of pronominals (see Chapter IV), Kinkade (2005) also contains an appendix with a list of lexical resemblances between Alsea and Salish, prepared from Kinkade's own notes and included posthumously by Paul Kroeber. These resemblances are rather striking as well, in both their number and the similarity of many of the forms. Although Coosan and Siuslaw forms could be added to the list provided in Kinkade, I tend to agree with Kroeber's statement in his introduction to the appendix that, in light of the list of correspondences between Alsea, Siuslaw, and Coos provided by Buckley (1987), simply collating the two lists would not significantly contribute to this line of inquiry. Instead, I focus here on a number of items from the appendix in Kinkade, with additional data from Coos, to show that, beyond bare lexical similarities, a rather odd and quintessentially Salish process is apparent among the OCP languages.

When examining cognates from different languages within the Salish family, one finds a number of so-called "inverted roots" in which the initial and final consonant of CVC roots are found switched. For example, Noonan (1997) gives the example of a root meaning 'thaw', which appears in Bella Coola as $\check{x}^{w}ay$ but in Halkomelem as $ya\check{x}^{w}$. Noonan describes this process in some detail, presenting 100 examples of root inversion across the Salish language family. After discussing these examples, Noonan says,

> "[T]he phenomenon of inversion does not seem to be a characteristic of a single language or of a single division within the Salish family but seems rather to involve the entire Salish group. Examples can be

found in the lexicon of any well-described Salish language." (Noonan, 1997:504)

Likewise, Kuipers notes in his *Salish Etymological Dictionary* that "[i]nversion of root-elements (eg. $C_1VC_2 > C_2VC_1$) is remarkably frequent in Salish" (2002:5).

Given the affinities that we have seen so far between Miluk and Salish, we might also expect to find inverted roots in Miluk, and the other OCP languages. This is especially true given the similarity of the pronominal systems of the two groups, and the number of cognates between Alsea and Salish presented in Kinkade (2005). And, in fact, we do find a number of apparently inverted roots with the OCP group, as shown in Table 7.1.

TABLE 7.1. Oregon Coast Penutian languages and Proto-Salish showing metathesis between uvular and lateral consonants.

Gloss	Miluk	Hanis	Siuslaw	Alsea	Proto-Salish	Upper Chehalis
'boil'	*luq^w-*	*luq^w-*	*laq^w-*	*ƛq-*	**q^{w}əl'*	
'buy, sell'	*ƛuu-*	*ƛuu-*		*qɬoˑ-*	**ləq, *ʔiləq*	
'believe'	*ƛq'a-*	*ƛq'a-*	*ƛ'xuˑ-*		*q'al	
'rain' (N)	*il'qes*			*ɬlášus*	**k'ə̓ɬ*	
'place, where'	*qen*	*ǧen*	*čik*	*naˑk^y*	**ka(n)*	
'black'				*qeˑnš*		*náq-*
'meet'				*tink^y*		*qtínu-*
'(pussy-)willow'				*cq'alíˑm*		*qalíc-n'ɬ*

For 'boil', the transposition seems straightforward, except for the Alsea form, which takes /ƛ/ in place of /ɬ/, perhaps becoming an affricate via the influence of the following stop. For 'buy, sell', it would appear that the Coosan form comes from a simplification of /qɬ/ – which is the form still seen in Alsea – to /ƛ/. The change from /lq/ to /ƛq/ also appears to be present in the forms for 'believe' in Coosan and Siuslaw. Note, too, that although the ejective uvular has become

a fricative in Siuslaw, the glottalization is nonetheless retained on the preceding lateral affricate.

'Rain' seems a bit odd, in no small part because Proto-Salish appears to have had a velar stop here in place of the uvular found in Miluk and Alsea, although we also see such a change in the forms for 'place, where,' and this change is not entirely unheard of in Salish proper (and indeed, differences in velar/uvular consonants are seen quite extensively even between Miluk and Hanis). And, similar to what was seen for 'believe' in Siuslaw, we have a loss of glottalization on the stop, but with retention of the glottalization on the preceding resonant.

Note also that, with the forms for 'place, where', only Alsea shows metathesis, while the other languages have lexemes which look like the Proto-Salish forms. As with the discussion of Coosan and Alsea pronouns relating back to distinct Salish systems (see Chapter IV), the fact that this metathesized form is present only in Alsea would seem to preclude an explanation in which Alsea borrowed this form from a Salish language, and then passed it on to the other OCP languages. We thus have evidence which implies that, if the OCP languages are not Salish, they must have had extensive contact with at least two different Salish languages, with Alsea borrowing its form from a language with an inverted root for 'where, place', but with Siuslaw and the Coosan languages borrowing from one without the inversion.

An analysis of Jacobs' Coos texts has provided a number of additional inverted roots, some of which are presented in Table 7.2 (see Chapter VIII for additional examples of this phenomenon).

Although the words above the line in Table 7.2 are relatively straightforward, those below the line perhaps warrant some comment.

TABLE 7.2. Additional Coosan forms showing root inversion, compared to Proto-Salish. All Coosan forms are Miluk, unless followed by (H), which indicates a form from Hanis. The inverted portion of the Coos word is underlined in cases where it is not immediately apparent.

Coos Gloss	Coos Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
'Trickster'	*c'miix̌ʷən*	**məc'*	'to cheat, trick, lie'
'tule mat'	*čšil*	**suliʔč*	'(cattail wall-)mat'
'sea lion'	*tux̌x̌si*	**ʔasxʷ*	'seal'
'black bear' (H)	*šximɬ*	**mix̌aɬ*	'black bear'
'eat' (H)	*q'm*	**məqʷ*	'to swallow'
'duck'	*kʷalx̌aya*	**muʔqʷ*	'waterfowl'
'head'	*sel'*	**mʔus*	'face, head'
'near'	*nelč'*	**k'i/aməl*	'almost, near'
'to laugh (at)' (?)	*hal'*	**lax̌ʷ / x̌ʷay*	'to laugh'

Both 'duck' and 'head' appear to have changed Proto-Salish /m/ to /l/; this change is also seen in a number of other roots (see Chapter VIII). 'Near' appears to have changed /m/ to /n/, as well as palatalized the velar, a rather Salish-looking process (see Chapter II). The lexeme for 'to laugh (at)' also appears to be a bit strange, but note that Coos /h/ and /hʷ/ appear to show a regular correspondence to Proto-Salish /x/ and /xʷ/ (see Chapter VIII). The only peculiarities here, then, are the addition of glottalization, and the lost of labialization.

In addition to finding inverted roots when one looks across the entire Salish family, there are cases of languages which have semantically related roots, some of which exhibit inversion and some which don't. Noonan (1997) gives examples from Coeur d'Alene: *χʷaɬ* 'dart' and *ɬaχʷ* 'rush'. There is one root in Coos which appears in both and inverted and non-inverted form: *či-č'iƛ-tis* and *ƛ'ič-tis*. Both of these words mean 'length' and occur in the same story without any obvious semantic difference. The role of reduplication in the first form is not clear, but the

final *-tis* in both words is an abstract nominalizer, perhaps etymologically from *tə* 'oblique' – which sometimes occurs as a genitive marker (see Section 5.1.1) – and *-is*, a more general nominalizer. Note also that these appear to be cognate with Proto-Salish **ƛ'ak/q* 'protrude, come (forth); long' (Kuipers, 2002). The palatalization of the final velar/uvular is particularly interesting in light of the Salish family, where languages have either a velar series or a palatal series, but not both (Kroeber, 1999). Based on Jacobs' transcriptions, the Coosan languages appear to have both series, but nonetheless, the palatalization of this velar looks particularly Salish.

It should be noted that metathesis is also seen in the Penutian family, albeit less frequently. Shipley (1966), for example, discusses metathesis of the Klamath word for 'one', from **pal* to *lab*. Metathesis is also seen in a few roots in California Penutian, as Pitkin and Shipley's 1958 survey contains a number of items which appear to exhibit metathesis. The occurrence of these metathesized roots in Penutian, however, is far more sporadic and less frequent than the phenomenon of root inversion in Salish, and certainly not so extensive that one might consider it a process which is uniquely characteristic Penutian.

CHAPTER VIII

REGULAR CORRESPONDENCES

This chapter documents a number of apparent regular and semi-regular correspondences between Proto-Salish and Miluk beyond the inverted roots discussed in the last chapter. Hanis forms are also considered where illustrative; these words are indicated by "(H)" following the gloss. Additionally, some phonetic alternations found in the Salish language family are also found in Miluk, and are discussed here.

Throughout this section, data on Proto-Salish are taken from Kuipers' *Salish Etymological Dictionary* (*SED*) (2002). The *SED* is divided into three sections – words which are reconstructed for the entire Salish family, words which reconstruct in Coast Salish, and words which reconstruct in Interior Salish. Data in this chapter are drawn from the reconstructed forms for the entire family, as far fewer cognates are found between Miluk and Interior Salish or Coast Salish. In some cases, the definitions from the *SED* have been abbreviated for clarity.

A few notes are in order before we begin. Many of the reconstructed Salish forms are preceded by *s-*. This is an old stative marker/nominalizer found throughout the Pacific Northwest in unrelated languages. Although there is a nominalizer of this form in Miluk, the suffix *-əs*, the Proto-Salish *s-* prefix does not appear in the Miluk forms. The **s-* has thus been ignored when comparing roots. Likewise, Miluk words ending in *-əs* are nominalizations, and this morpheme has also been ignored when comparing the Miluk and Proto-Salish roots.

Additionally, a few roots in Miluk begin with a *x̌-* or *ha-/wa-* sequence which is not found in the Proto-Salish form; I have also disregarded these in comparing

the corresponding forms. Although the meaning and function of these verbal prefixes are not clear at present, they are separated from the roots by a hyphen to make the similarity of the roots more visible.

There are also a few roots which exhibit an infixed /l/ that is not present in the Proto-Salish forms, for example *c'alp* 'to pinch' compared to **c'ip'* 'to squeeze (shut), pinch'. Although the infixation of /l/ is a common phenomenon in at least some Salish languages (Suttles, 2004), I have no explanation for the /l/ in these forms, as they do not seem to change the semantics of the root.

As mentioned in the introduction, different kinds of evidence have different values. So, too, do the various resemblant forms presented in this chapter differ in their value. In some cases, the similarity of both the phonetic form and the semantics of the roots seem to leave little doubt that the root came into Miluk from Salish in some fashion, whether it be genetic inheritance or borrowing. In other cases, despite a good match semantically, only one or two segments of the root in Miluk appear to correspond to the Proto-Salish root. Despite the different strengths of the roots, I have chosen to include all of them here for the reader's consideration.

Note also that I can find no regular correspondences between the Proto-Salish pharyngeals and any segment in Miluk; these segments are thus not considered here.

Throughout this chapter, when a table is divided in half, the bottom portion of the table presents roots which are inverted compared to the form found in the *Salish Etymological Dictionary*.

This chapter is organized by manner first – moving from stops to affricates to fricatives to resonants – and then by place within each section. Rounded and

ejective consonants are grouped together when the presence or absence of these features appears to have had no influence on the Miluk segments; otherwise, they are separated into distinct sections. Finally, vowels are considered.

8.1. *p / *p' Correspondences

Proto-Salish *p and *p' appear to regularly correspond to Miluk *p and *p', although often with changes in glottalization, as shown in Table 8.1.

TABLE 8.1. Correspondence between Proto-Salish *p, *p' and Miluk /p, p'/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to spit	*paq*	**pə(tə)x̌^{w}*	to spit
to tip over	*ƛ-pəl*	**pul*	to tip over
to pinch	*c'alp*	**c'ip'*	to squeeze, pinch
to return	*piinac'*	**p'əlk'/q'*	to turn
penis	*p'ilk^{w}*	**s-pəlq*	penis
lined up	*k'^{w}peep*	**k'^{w}əp*	straight
to smoke tobacco (H)	*paut'*	**paw*, **puh*, **pu/ax^{w}*	to blow, breathe
red cedar roots	*pkiik'*	**c'apaʔx̌*	cedar root

There is also one case of *p apparently corresponding to Miluk /m/ in the word *min* 'time', compared to Proto-Salish **pan* 'time, period'.

8.2. *t / *t' Correspondences

Correspondences between Proto-Salish *t / *t' and Miluk forms are quite rare, although a few possible cognate forms are presented in Table 8.2.

One case of Proto-Salish *t' which might appear in Miluk as /ƛ/ is also seen in Miluk sƛaaq' 'to swim, bathe' compared to Proto-Salish *$t'əq^{w}$ 'to bathe, swim'.

TABLE 8.2. Correspondence between Proto-Salish *t, *t' and Miluk /t, t'/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
thimbleberry	*tpay*	**t'am*	in gooseberry
body, flesh	*t'e*	**s-t'əwin*	skin
to go/fall down	*tuuya*	**tuy*, **tiw*	to stoop, to go across
man	*teemiɬ*	**s-tu/amix*	man, warrior
gooseberry (H)	*taǰ̌ʔwai*	**s-t'aqʷm*	thimbleberry

8.3. *k / *k' Correspondences

Proto-Salish *k and *k' seem to regularly correspond to Miluk /q/ when the Proto-Salish velar preceded either /a/ or /ə/, as in Table 8.3. In cases where the ejective *k' became a uvular, it lost its glottalization (although in *il'qes* 'rain', it appears that the glottalization has moved to the /l/).

TABLE 8.3. Correspondence between Proto-Salish *k, *k' and Miluk /q/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to strike	*qeen*	**kən*	to hit
where, place	*qen*	**ka(n)*	(be) where, how?
to grab, take	*qalm*	**k'əm*	to grab a handful
winter	*qeelu*	**k'ay*	cold (season)
breath	*qaya*	**ʔask'ay'*	throat, breath
to wait for	*laaq*	**k'al*	to listen to, wait
rain (noun)	*il'q-es*	**k'ə̓ɬ*	rain, mud

Miluk *qaya* has lost an /s/, and either lost an initial /a/ from Proto-Salish, or undergone inversion to yield the final /a/; which of these analyses is correct is not presently clear.

Other possible correspondences between Proto-Salish *k and *k' and Miluk are less clear. In three cases, it appears that the proto-velar has been palatalized due to an adjacent *i or *y, as shown in Table 8.4. Note that *šičils* 'myrtle nuts'

appears to have an infixed /l/ – in this case, it could represent an old plural infix. However, no singular form of this word has been seen in the Miluk corpus.

TABLE 8.4. Correspondence between Proto-Salish *k' and Miluk /č, č'/ .

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to dry	*č'l*	**k'ay'(-x^w)*	to dry out, wither
myrtle nuts	*šičils*	**s-c'ik'/k*	cone, acorn, nut
near	*nelč'*	**k'i/aməl*	almost, near, but

There is also one case of Proto-Salish *k / *k' appearing in Miluk as /c'/: *piinac'* 'return' compared to **p'əlk'/q'* 'to turn (around, over)'.

One word may also preserve Proto-Salish *k' as a velar: *tka* 'to cut' compared to **nik'* 'to cut'. However, the change from *n to /t/ in clusters has not been seen in other roots.

8.4. *k^w / *k'^{w} Correspondences

Four roots show Proto-Salish rounded velar stops, whether ejective or not, apparently corresponding to the same segments in Miluk, as in Table 8.5.

TABLE 8.5. Correspondence between Proto-Salish *k^w, *k'^{w} and Miluk /k^w, k'^{w}/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
squirrel	*k^{w}isk^{w}is*	**s-k^{w}ayu*	squirrel
maternal aunt	*x^{w}k'^{w}ən*	**k'^{w}uy*	mother, aunt
lined up	*k'^{w}peep*	**k'^{w}əp*	straight
to warm (oneself) (H)	*k^{w}əl*	**k^{w}əl*	warm

In a few cases, the rounding and/or glottalization appears to have been lost, shown in Table 8.6. In three of these four cases, however, the velar appears as part of a cluster, which may have influenced the loss of the glottalization and/or rounding.

TABLE 8.6. Correspondence between Proto-Salish *k^{w}, *k'^{w} and Miluk /k^{w}, k'^{w}/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to try	*k'in*	*$k^{\text{ʔ}w}an$	to inspect (try out)
to take out	*halk^{w}*	*$lək^{\text{ʔ}w}$	to pluck, pull out
stiff	*skeenen*	*$cək^{\text{ʔ}w}$, *$c'ək^{\text{ʔ}w}$	straighten, stiff
to cry	*x̌k*	*$k^{\text{ʔ}w}aq'$-*t*	scream, bellow, weep

Two cases of rounded velar stops apparently becoming palatal affricates are also seen in Miluk: *haič'* 'to wipe (eyes)' compared to *$x^{w}i/ak^{\text{ʔ}w}$, *$x^{w}ik^{w}$ 'to wipe, brush'; and *č'ča* 'pull (on fishing line)' compared to *$cək^{w}$, *$cək^{\text{ʔ}w}$ 'to pull (out), drag'. Miluk *haič'* 'to wipe (eyes)' is especially interesting, as it may have both the vowels which are given as possible reconstructions in the proto-form. This may imply that the proto-form in fact contained both vowels, with most Salish languages loosing one or the other, while Miluk (or the language that it borrowed the word from) maintained both.

There is also one example of Proto-Salish *k'^{w} apparently corresponding in Miluk /q'^{w}/ in the word *$q^{\text{ʔ}w}$ees-is* 'wind' as the inverted reflex of *$suk^{\text{ʔ}w}$ 'to be blown along, float with current'.

Likewise, there is one case of Miluk /w/ as the apparent reflex of Proto-Salish *k'^{w} in the word *wee* 'belly' compared to *$k^{\text{ʔ}w}al$ 'stomach, belly'[1].

8.5. *q'/*q'^{w} and *q/*q^{w} Correspondences

In many cases, Proto-Salish *q' appears in Miluk as /x̌/, as in Table 8.7.

From the last two non-inverted lexemes in the table, it appears that some of these uvular fricatives have gone through an additional sound change, becoming

[1]The loss of the final /l/ in this form is discussed in Section 8.14

TABLE 8.7. Correspondence between Proto-Salish *q', *q'^{w} and Miluk /x̌/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to open	*wəx̌*	**wiq'*	to remove, open
to split in two	*cx̌ə*	**səq'*	to split, crack
to stretch s.t. across	*ɬx̌a*	**ɬəq'*	to spread, stretch
to rub (on)	*yah^{w}i*	**ʔi/aqʔ^{w}*	to scrape, rub
hair	*haam-is*	**qʔ^{w}um*	(hair on) head; skull
to cry	*x̌k*	**kʔ^{w}aq'-t*	scream, bellow, weep

velars and then /h/ or /h^{w}/, as discussed in Sections 8.10 and 8.11, below. In Miluk *haam-is* 'hair', we also have evidence that rounded velar fricatives have lost their rounding before the vowel /a/ (see Section 8.11, below).

In other cases, the uvular stop seems to have been preserved, sometimes with loss of glottalization; this appears to have been the case when the Proto-Salish uvular immediately follows a nasal, as in Table 8.8.

TABLE 8.8. Correspondence between Proto-Salish *q', *q'^{w} and Miluk /q', q/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to pile up	*wa-nq*	**məqʔ^{w}*	to pile up, lump
to choke on food	*təmq'*	**məq'*	to swallow

In one case, *q' appears to correspond to Miluk /k/, as in the inverted *laamak* 'bone' compared to Proto-Salish **q'awaɬ* 'bone'.

Apparent correspondences for non-ejective uvulars are rarer than their ejective counterparts, but the few that are found are presented in Table 8.9. These often evince changes in glottalization and/or rounding.

There is one case of Proto-Salish *q apparently corresponding to Miluk /k^{w}/ in *stuuk^{w}i* (underlyingly probably *stək^{w}*) 'to stand' compared to **cəq* 'to be in position, stand'.

TABLE 8.9. Correspondence between Proto-Salish *q, *q^{w} and Miluk /q, q^{w}/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to stab, spear	*cqʷa*	**ciq*	to dig, stab
to swim, bathe	*sƛaaq'*	**t'əqʷ*	to bathe, swim
crow	*maqƛ'*	**qʷlaq/q'a*	crow, raven

8.6. *c / *c' Correspondences

A few Miluk lexemes seem to preserve Proto-Salish *c / *c', shown in Table 8.10.

TABLE 8.10. Correspondence between Proto-Salish *c, *c' and Miluk /c, c'/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to pinch	*c'alp*	**c'ip'*	to squeeze, pinch
to stab, spear	*cqʷa*	**ciq*	to dig, stab
feces	*c'ehɣ-əs*	**x̌ʷu/ic'*	defecate

In other circumstances, *c appears palatalized in Miluk, as shown in Table 8.11. Note also that some cases of Proto-Salish *c / *c' appear to have become a fricative when it occurs as the first member of a cluster, as in the last two items in Table 8.11.

TABLE 8.11. Correspondence between Proto-Salish *c, *c' and Miluk /č, š/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to pull out	*č'čah*	**c'aw'*	to pull out
woods	*č'eh*	**c'əl*	(a stand of) trees
whittling	*šč'ay*	**cək*	to adze, whittle, carve
myrtle nuts	*šičils*	**s-c'ik'/k*	cone, acorn, nut

We can also find evidence of some *c / *c' consonants apparently corresponding to fricatives in non-palatalized contexts, as in Table 8.12.

TABLE 8.12. Correspondence between Proto-Salish *c / *c' and Miluk /s/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
stiff	*skeenen*	**cək'ʷ*, **c'ək'ʷ*	straighten, stiff
to sharpen	*spay*	**c'əm*	sharp pointed

This change from affricate to fricative may also be present in Miluk *timmsi* 'grandson' from **ʔimac* 'grandchild', with the initial /t/ in the Miluk form coming from a fossilized masculine gender marker (see Section 5.3).

Two cases of Proto-Salish *c' apparently becoming Miluk /k'/ are also found, presented in Table 8.13.

TABLE 8.13. Correspondence between Proto-Salish *c' and Miluk /k'/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to shout	*k'al*	**c'ay*	to resound
red cedar roots	*pkiik'*	**c'apaʔx̌*	cedar root

8.7. *ƛ' Correspondences

A few apparent correspondences between *ƛ' and Miluk /ƛ/ are presented in Table 8.14. Recall that Proto-Salish, and most Salish languages today, have no non-ejective counterpart of /ƛ'/.

TABLE 8.14. Correspondence between Proto-Salish *ƛ' and Miluk /ƛ/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
quickly	*ƛee*	**ƛ'əx̌*	fast, quick, swift
snail	*maaƛik'*	**q'(y)aƛ'an*	snail, slug
to break	*ƛqay*	**x̌ʷəƛ'*	to break, cut

In two cases, it seems that *ƛ' may appear as /t/ in Miluk: *tqa* 'to win, defeat' compared to **ƛ'əx*^{w} 'to win, beat in game'; and *taqa* 'upstream(wards)' compared to **ƛ'aǎ-ilx* 'to go upstream'.

8.8. *s Correspondences

A few apparent correspondences between *s and Miluk /s/ are found, presented in Table 8.15.

TABLE 8.15. Correspondence between Proto-Salish *s and Miluk /s/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
both	*məsa*	**was*	both of a pair, mutual
to smell s.t.	*sit*	**si/at'*	to sniff
wind	*q*^{w}*eesis*	**suk*^{w}	to be blown along

There is one example in which Proto-Salish *s may have been palatalized in Miluk: *ališˇ* 'game, to play' compared to **s-(h)ayas* 'to play'. There is also one example in which *s may have strengthened to /c/ in Miluk *cǎa* 'to split s.t. in two' compared to **səq'* 'to split, crack', perhaps due to its presence in a cluster.

8.9. *ɬ Correspondences

In many cases, Miluk has /ɬ/ where Proto-Salish does, as in Table 8.16.

TABLE 8.16. Correspondence between Proto-Salish *ɬ and Miluk /ɬ/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
many, lots	*qaaɬ*	**ʔi/ax*^{w}*əɬ*	some, different
to stretch s.t. across	*ɬǎa*	**ɬəq'*	to spread, stretch
to go	*ɬa(ʔ)*	**ɬaʔ*	close by, arrive there
black bear (H)	*šximɬ*	**miǎaɬ*	black bear

A few of these forms warrant comment. Miluk *qaaɬ* appears to have lost an initial syllable when compared to Proto-Salish. The final glottal stop in Miluk *ɬa(ʔ)*

is somewhat elusive in Jacobs' transcriptions, only appearing some of the time, and may not be present phonemically.

This *ɬ to /ɬ/ correspondence might also be present in Miluk *ɬhe / ɬha* 'to rest / to heal s.o.', perhaps from an inverted form of **maɬ* 'to rest', although the change from *m to /h/ is not attested elsewhere.

In other cases, Proto-Salish *ɬ seems to appear in Miluk as /l/, as in Table 8.17. In both 'child' and 'rain', this might be linked in some way to adjacent glottalization at some point in the words' history

TABLE 8.17. Correspondence between Proto-Salish *ɬ and Miluk /l/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
child	*k'il'ka*	**qaʔɬ / *qahɬ*	offspring
bone	*laamak*	**q'awaɬ*	(redup) bone
rain (noun)	*il'q-es*	**k'ə̓ɬ*	to drip; rain, mud

8.10. *x Correspondences

Proto-Salish *x appears to regularly correspond to Milk /h/, as shown in Table 8.18.

A few of these forms warrant some discussion. The alternation between /ee/ and /aa/ in the Miluk form for 'to grow up / to raise (to adulthood)' is a common alternation seen in pairs of transitive and intransitive roots throughout Miluk (see Section 6.3).[2]

The meaning of Miluk *hiit'* 'beach, come ashore' is perhaps not obviously related to the Proto-Salish gloss. However, in a number of Salish languages, this root has the meaning 'one long thing lies'. From there, one can see the beaching of

[2]This alternation is also seen in Hanis.

TABLE 8.18. Correspondence between Proto-Salish *x and Miluk /h/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
trail	*hewel*	**xəwal*	trail
to grow up / to raise	*heew* / *haaw*	**xaw*	to grow
go up, ascend	*helleq*	**xaḷ, *xal*	to hang spread out; steep
beach (as canoe), come ashore	*hiit'*	**xit'*	to be stretched out, project
cover st. over	*hit*	**xən*	to lie flat (also, cover, put a lid on)
first, in front	*helu*	**xəyt*	fore, front, first

a canoe as a case of a 'long thing lying', which then underwent semantic widening to mean 'come ashore' in a more general sense.

The final form in Table 8.18 *helu* 'first, in front' appears to be a complex form in Miluk, derived from *hel* 'face' and an oblique marker -*u*, and thus might not be related to the Proto-Salish **xəyt*.

8.11. *x^{w} Correspondences

Related to the previous correspondence, Proto-Salish *x^{w} appears to correspond to Miluk /h^{w}/, as in Table 8.19.

The forms *haac* and *haič'*, without rounding, may be the result of a process internal to Miluk; in an analysis of approximately one-third of the texts from Jacobs two volumes, there are no examples of /hw/ followed by /a/, which may indicate that these forms have lost their rounding in that environment. Recall that

TABLE 8.19. Correspondence between Proto-Salish *x^{w} and Miluk /h^{w}/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
hole	*huuhu*	*$x^{w}ul$ (often *$xəl$)	to turn, spin, drill
to whistle	$h^{w}iiw$	*$x^{w}iw$	to whistle
owl	*haac*	*$x^{w}up$	a night bird
to wipe (eyes)	*haič'*	*$x^{w}i/ak^{ʔw}$, *$x^{w}ik^{w}$	to wipe, brush
to laugh	$ha^{ʔ}l$	*$laǰ^{w}$ / $ǰ^{w}ay$	to laugh
canoe	*ƛkuus* / *ƛk^{w}əls*	*$x^{w}ə̓l$	to dig out

we also have *haam-is* 'hair', mentioned above, which seems to have lost rounding in the same environment.

The Miluk for 'canoe' appears in both of the forms presented in the table, *ƛkuus* and *ƛk^{w}əls*, without any obvious conditioning factor, and with *x^{w} corresponding to k^{w} instead of h^{w}, perhaps due to its presence in a cluster. If we compare these forms to *huuhu* 'hole' we might say that coda /l/ has been deleted in Miluk when following the vowel /u/. Although this process has not been seen elsewhere in Miluk thus far, it would seem to provide the beginnings of an explanation for the loss of the /l/ in 'canoe' in some situations (the details of which are, admittedly, not clear at present). There is one other example of final /l/ being lost in Miluk in the word *wee* 'belly', which might imply that final /l/ loss is a more general process, and has nothing to do with the preceding vowel (see Section 8.14, below).

Recall from the Introduction that the similarity between /h^{w}/ and /x^{w}/ in the Coosan languages was noted by Jacobs (1939).

8.12. *x̌ / *x̌^{w} Correspondences

In many cases, Proto-Salish *x̌ and *x̌^{w} appear in Miluk as uvular stops, as in Table 8.20.

TABLE 8.20. Correspondence between Proto-Salish *x̌, *x̌^{w} and Miluk /q/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to spit	*paq*	**pə(tə)x̌^{w}*	to spit
board, pitchwood	*qeɬew*	**x̌əl*	board covering
crab	*aƛaaq*	**ʔaʔyx̌, *c'a/uʔyx̌*	crab, crayfish
to break	*ƛqay*	**x̌^{w}əƛ'*	to break, cut
hole	*qal'*	**ləpəx^{w}/x̌^{w}*	(to make/go into) a hole

In other cases, the Proto-Salish uvular fricative appears to have become a velar, as Table 8.21. In the first item in the table, *haʔl* 'to laugh' we see that the uvular fricative has become a velar, which was subsequently weakened to /h^{w}/ and then lost its rounding due to the following /a/ vowel, as discussed above in Section 8.11. The first two inverted items show Proto-Salish fricatives strengthening to stops when following another stop, while the final item, *šximɬ* 'black bear', appears to show the uvular fricative becoming a velar fricative.

TABLE 8.21. Correspondence between Proto-Salish *x̌, *x̌^{w} and Miluk velars.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to laugh	*haʔl*	**lax̌^{w} / x̌^{w}ay*	to laugh
red cedar roots	*pkiik'*	**c'apaʔx̌*	cedar root
grandfather (H)	*pkaak(-ač)*	**x̌apaʔ*	(paternal) grandfather
black bear (H)	*šximɬ*	**mix̌aɬ*	black bear

Two words, presented in Table 8.22, appear to retain the Proto-Salish uvular fricatives.

Two other words appear to present reflexes of Proto-Salish *x̌ and *x̌^{w}: inverted Miluk *c'ehɣ-əs* 'feces' compared to **x̌^{w}u/ic'* 'to defecate'; and *ƛee*

TABLE 8.22. Correspondence between Proto-Salish *x̌ and Miluk /x̌/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to gnaw	*x̌ak'i*	**x̌iƛ'*	to cut, bite, gnaw
gooseberry (H)	*tax̌ʔwai*	**wənaʔx̌*	berry sp.

'quickly', which appears to have lost a final uvular fricative when compared to Proto-Salish **ƛ'əx̌* 'fast, quick, swift'.

8.13. *w Correspondences

Proto-Salish *w often appears to correspond to Miluk /w/, as in Table 8.23.

TABLE 8.23. Correspondence between Proto-Salish *w and Miluk /w/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to grow / raise	*heew / haaw*	**xaw*	to grow
trail	*hewel*	**xəwal*	trail
to finish	*eewi*	**huy, *wiʔ*	to cease, finish
to whistle	*hʷiiw*	**xʷiw*	to whistle
someone	*wi*	**(s-)wat*	who?, someone
good, thus	*ween*	**wənaxʷ*	real, true
to open	*wəx̌*	**wiqʼ*	to undo, open
gooseberry (H)	*tax̌ʔwai*	**wənaʔx̌*	berry sp.

In a few lexemes, Miluk as /m/ as the apparent reflex of Proto-Salish *w, as in Table 8.24. This may have been influenced by the presence of the vowel /a/, which immediately follows the *w in all of the Proto-Salish lexemes. Note, however, that such an analysis would make Miluk *wi* 'someone' from Proto-Salish **(s-)wat* 'who?, someone', shown above in Table 8.23, an exception.

TABLE 8.24. Correspondence between Proto-Salish *w and Miluk /m/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
both	*məsa*	**was*	both of a pair
to hunt	*ɬm*	**law*	to snare, catch
RECIPROCAL	*-mew*	**-wal*	RECIPROCAL
to follow	*ʔum*	**ʔaw*	to follow
bone	*laamak*	**q'awaɬ*	(redup) bone

8.14. *l Correspondences

In many cases, proto-Salish /l/ seems to correspond to Miluk /l/, sometimes with a loss of Proto-Salish glottalization, as in Table 8.25.

TABLE 8.25. Correspondence between Proto-Salish *l and Miluk /l/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to take out	*ha-lk*^{w}	**lək*^{w}	to pluck, pull out
to tip over	*ƛ-pəl*	**pul*	to tip over
salmon	*qelyeq*	**qal*	salmon sp.
to discuss, chat	*ɣal*	**q*^{w}*al*	to speak, think
sweathouse	*q*^{w}*əlleƛ'*	**q'əl*	in sweatbath
to ascend	*helleq*	**xal*	steep
trail	*hewel*	**xəwal*	trail
burned up	*č'il*	**q*^{ʔw}*al/y*	to scorch, ashes, black
to wait for	*laaq*	**k'al*	to listen to, wait
to boil (water)	*ləq*^{w}	**q*^{w}*əl'*	to boil (food), to cook
sun	*tqaals*	**q'ilt*	day(light), sky
to laugh	*haʔl*	**laχ*^{w} / *χ*^{w}*ay*	to laugh

Miluk *wee* 'belly' also likely belongs in this section, apparently corresponding to Proto-Salish **k*^{ʔw}*al* 'stomach, belly'. Although the final /l/ has been lost when the word occurs on its own, when the instrumental suffix *-u* is attached, *wee* appears as *weelu*.

Two morphemes appear to exhibit a sound change from *l to /w/, presented in Table 8.26.

TABLE 8.26. Correspondence between Proto-Salish */l/ and Miluk /w/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
hole	*wəx̌e*	**ləpəx^{w}/x̌^{w}*	(to make/go into) a hole
RECIPROCAL	*-mew*	**-wal*	RECIPROCAL

In addition to the verbal reciprocal suffix *-mew*, Miluk may have a second descendent of *-*wal* in a noun suffix, *-məɬ*, meaning 'own': *hiči* '(some)one', *hičiməɬ* '(some)one's own'. This morpheme might also be present, in fossilized form, in the word *taamaaɬis* 'customs', which could be analyzable with *taa* as a deictic element meaning 'there', and the nominalizer -əs, 'the things of a certain place'.

The word *č'eh*[3] 'woods' from **c'əl* '(a stand of) trees, rushes' also warrants note, although it seems that the synchronic Miluk form could have arisen from Proto-Salish via one of two processes: either the final /l/ here was simply lost, as in *wee* 'belly'; or the /l/ first went to /w/ before undergoing devoicing to yield the /h/ seen in the Miluk form. Which of these analyses is most appropriate in this situation is not clear.

8.15. *l / *y Alternations

The Salish language family evinces a sound change in which /l/ alternates with /y/. In his *Salish Etymological Dictionary*, Kuipers states that "[a]ll the l-languages have occasional forms with y instead, and the y-languages forms with l. Many but by no means all of these can be explained as loans from present-day neighbors..." (2002:6). In Miluk, too, we find a number of cases where /l/ and /y/ alternate when comparing Miluk and Salish, presented in Table 8.27.

[3]Jacobs' writing of word-final /h/ is rather sporadic, and it seems that it could represent either an actual segment, or a long vowel which is partially devoiced.

TABLE 8.27. Alternations of Proto-Salish *l and *y and Miluk /l/ and /y/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to dry	*č'l*	**k'ay'(-x^{w})*	to dry out, wither
to shout	*k'al*	**c'ay*	to resound
to play	*ališ*	**s-(h)ayas*	to play
father's brother	*puuye*	**s-m$^{\text{ʔ}}$al*	fathers brother

One case of Proto-Salish *y seems to occur in Miluk as the lateral fricative /ɬ/ in the word *x̌^{w}əɬ* 'younger sister' compared to **$^{\text{ʔ}}$uq$^{\text{ʔ}w}$ay* '(younger) sibling, cousin'. Additionally, Miluk *qelyeq* 'salmon' might evince this sound change when compared to Proto-Salish **qal* 'spring (salmon)', perhaps after reduplication of the root, and partial root inversion.

8.16. *l / *n Alternations

In addition to alternations between *l and *y, Proto-Salish also exhibits alternations between *l and *n. Kuipers says, "Somewhat less frequent [than *l/*y alternations] are parallel forms with l and n; these, too, are found all over..." (2002:6). Including, it would seem, in Miluk, as shown in Table 8.28.

TABLE 8.28. Alternations of Proto-Salish *l and *n and Miluk /l/ and /n/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
encounter power	*ƛ-xinx*	**k^{w}əlx*	spirit power
to return	*piinac'*	**p'əlk'/q'*	to turn
to bury	*eqeen*	**liq'*	to bury
to take out	*ha-lk^{w}*	**k^{w}an*	to take

8.17. *m Correspondences

Proto-Salish *m often appears to correspond to Miluk /m/, as in Table 8.29.

TABLE 8.29. Correspondence between Proto-Salish *m and Miluk /m/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to grab, take	*qalm*	**k'əm*	to grab a handful
Trickster	*c'miix̌^{w}ən*	**məc'*	to cheat, trick, lie
black bear (H)	*šximɬ*	**mixaɬ*	black bear
to choke on food	*təmq'*	**məq'*	to swallow

There are two examples of Proto-Salish *m which occur in Miluk as the second member of a cluster with an alveolar; in these cases, the *m seems to appear in Miluk as /p/, although only two examples of this sound change are found in the data, as shown in Table 8.30. The final *-ay* in these forms may be verbal morphology, and not part of the root.

TABLE 8.30. Correspondence between Proto-Salish *m and Miluk /p/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
thimbleberry	*tpay*	**t'am*	in gooseberry
to sharpen	*spay*	**c'əm*	sharp pointed

8.18. *n Correspondences

Apparent correspondences between Proto-Salish *n and Miluk /n/ are relatively rare; the few that are found are presented in Table 8.31.

TABLE 8.31. Correspondence between Proto-Salish *n and Miluk /n/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
where, place	*qen*	**ka(n)*	(be) where, how?
to strike (with arrow)	*qeen*	**kən*	to touch, hold; hit
to try	*k'in*	**k'^{w}an*	to inspect (try out)
good, thus	*ween*	**wənax^{w}*	real, true

One possible case of final /n/ being lost (or perhaps debuccalizing to /h/) is also found, with Miluk *k'ah* 'person, people, tribe' compared to Proto-Salish **nak'*,

which appears in derivatives meaning ‘family, tribe’. Recall that word-final /h/ in Miluk is only sporadically written by Jacobs, and its exact source is not clear.

8.19. *m / *n Alternations

Although the data are limited, there are four lexical items which appear to evince a sound change in which root-final *n seems to appear in Miluk as /m/ if a root was inverted; likewise, root-initial *m seems to appear as /n/ in Miluk when word-final, as presented in Table 8.32.

TABLE 8.32. Alternations of Proto-Salish *m and *n and Miluk /m/ and /n/ in inverted roots.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to swallow	*q’ʷən*	**məq’*	to swallow
snail	*maaƛik’*	**q’(y)aƛ’an*	snail, slug
neck	*maaq’*	**k’əspan*	neck
near	*nelč’*	**k’i/aməl*	almost, near, but

This sound change might also help to explain the Miluk form *ɬhe* ‘to rest’ compared to **maɬ* ‘to rest’, discussed above. We might expect the inverted form **ɬan* at some point in the word’s history. This final /n/ might then have debuccalized, as was seen for *k’ah/*nak’* in the previous section, leading to **ɬah*, and finally *ɬhe / ɬha*.

8.20. *ə Correspondences

Proto-Salish *ə appears to have undergone a split in Miluk. With a few exceptions, *ə has become /a/ when adjacent to a uvular consonant, as in Table 8.33, and /e/ when adjacent to a velar, as in Table 8.34.

In two cases, Proto-Salish *ə appears as /e/ in Miluk, despite the vowel being adjacent to a uvular: *qeɬew* ‘board, pitchwood’ compared to **x̌əl* ‘board covering’;

TABLE 8.33. Alternations of Proto-Salish *ə and Miluk /a/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to grab, take	*qalm*	**k'əm*	to grab a handful
to spit	*paq*	**pə(tə)x̌ʷ*	to spit
to stretch s.t. across	*ɬx̌a*	**ɬəq'*	wide, to spread, stretch
many, lots	*qaaɬ*	**ʔi/axʷəɬ*	some, different
to swim, bathe	*sƛ̓aaq'*	**t'əqʷ*	to bathe, swim
hole	*qal'*	**ləpəxʷ/x̌ʷ*	(to make/go into) a hole
to break	*ƛ̓-qay*	**x̌ʷəƛ̓'*	to break, cut

and *qeen* 'strike (with arrow)' compared to **kən* 'to touch, hold, keep steady; hit'. Note that this second case allows us to say something about the probable order of sound changes, with /ə/ becoming /e/ while the root still had a velar consonant, which subsequently became a uvular.

Two other examples are found in which *ə appears to correspond to /a/ *spay* 'sharpen' compared to **c'əm* 'sharp pointed' and *šč'ay* 'whittling' compared to **cək* 'to adze, whittle, carve'. However, the morphology in these two words is not clear, and the final /ay/ in these cases might be verbal morphology and not part of the root. A similar problem may also exist for *paq* 'to spit', which occurs sometimes as *pqay*, as well as the last item in Table 8.33, *ƛ̓qay* 'to break'.

TABLE 8.34. Alternations of Proto-Salish *ə and Miluk /e/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
stiff	*skeenen*	**cəkʼʷ*, **c'əkʼʷ*	straighten, stiff
trail	*hewel*	**xəwal*	trail
lined up	*kʼʷpeep*	**kʼʷəp*	straight

One exception to this is found, where *ə appears as /a/ despite being adjacent to a velar in the word *ƛ̓'aha* 'to wear' compared to **ɬəxʷ* 'to draw on,

wear'. There is also an exceptional case in which *ə seems to have /i/ instead of /e/ in the word *hit* 'cover st. over' compared to **xən* 'to lie flat'.

Proto-Salish *ə also appears to correspond to /e/ when a segment or syllable was lost, making the *ə word-final, as shown in Table 8.35.

TABLE 8.35. Correspondence between Proto-Salish *ə and Miluk /e/ in word-final position.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
quickly	*ƛee*	*ƛ'əx̌	fast, quick, swift
body, flesh	*t'e*	**s-t'əwin*	skin
woods	*č'eh*	**c'əl*	(a stand of) trees

There are also a few cases of *ə appearing to correspond to Miluk /i/ when a schwa was followed by /l/, shown in Table 8.36.

TABLE 8.36. Correspondence between Proto-Salish *ə and Miluk /i/ before /l/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
rain (noun)	*il'q-es*	*k'ə̓ɬ	to drip; rain, mud
encounter power	*ƛxinx*	**k*ʷəlx	spirit power
to return	*piinac'*	**p'əlk'/q'*	to turn (around)
penis	*p'ilk*ʷ	**s-pəlq*	penis

In some cases, Miluk appears to preserve Proto-Salish *ə, in apparent disregard for the rules just laid out. These forms are presented in Table 8.37.

TABLE 8.37. Correspondence between Proto-Salish *ə and Miluk /ə/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
sweathouse	*q*ʷ*əlleƛ'*	**q'əl*	in sweatbath
to swallow	*q'*ʷ*ən*	**məq'*	to swallow
to boil (water)	*ləq*ʷ	**q*ʷ*əl'*	to boil, to cook
to warm (H)	*k*ʷ*əl*	**k*ʷ*əl*	warm

I can find no examples of Proto-Salish *ə corresponding to /u/ in Miluk.

8.21. *a Correspondences

In the majority of cases, Proto-Salish *a appears to correspond to Miluk /a/, as in Table 8.38.

TABLE 8.38. Correspondence between Proto-Salish *a and Miluk /a/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
thimbleberry	*tpay*	**t'am*	in gooseberry
to wait for	*laaq*	**k'al*	to listen to, wait
to rub (on)	*yahʷi*	**ʔi/aqʔʷ*	to scrape, shave, rub
crow	*maqƛ'*	**qʔʷlaq/q'a*	crow, raven
to pull out	*č'čah*	**c'aw'*	to pull out
to wait for	*laaq*	**k'al*	to listen to, wait
snail	*maaƛɪk'*	**q'(y)aƛ'an*	snail, slug
to go	*ɬa(ʔ)*	**ɬaʔ*	close by, arrive there
bone	*laamak*	**q'awaɬ*	(redup) bone
to laugh	*haʔl*	**laxʷ / xʷay*	to laugh
to discuss, chat	*ɣal*	**qʷal*	to speak, think
to play	*ališ*	**s-(h)ayas*	to play
crab	*aƛaaq*	**ʔaʔyx, *c'a/uʔyx*	crab, crayfish
to grow up / raise	*heew / haaw*	**xaw*	to grow
grandfather (H)	*pkaak(-ač)*	**xapaʔ*	(paternal) grandfather
to smoke s.t. (H)	*paut'*	**paw, *puh, *pu/axʷ*	to blow, breathe
gooseberry (H)	*taxʔwai*	**s-t'aqʔʷm*	thimbleberry

Less common are apparent correspondences between *a and /i/ (Table 8.39), and *a and /e/ (Table 8.40). No clear conditioning factor is seen for these words.

TABLE 8.39. Correspondence between Proto-Salish *a and Miluk /i/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to try	*k'in*	**kʔʷan*	to inspect (try out)
to play	*ališ*	**s-(h)ayas*	to play
burned up	*č'il*	**qʔʷal/y*	to scorch, ashes, black
red cedar roots	*pkiik'*	**c'apaʔx*	cedar root
someone	*wi*	**(s-)wat*	who?, someone

In four cases, Proto-Salish *a appears to have been lost when compared to Miluk, as shown in Table 8.41.

TABLE 8.40. Correspondence between Proto-Salish *a and Miluk /e/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
where, place	*qen*	**ka(n)*	(be) where, how?
winter	*qeelu*	**k'ay*	cold (season)
to go up, ascend	*helleq*	**xaḷ, *xal*	to hang spread
salmon	*qelyeq*	**qal*	salmon sp.
RECIPROCAL	*-mew*	**-wal*	RECIPROCAL

TABLE 8.41. Correspondence between Proto-Salish *a and Miluk Ø.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to hunt	*ɬm*	**law*	to snare, catch
to cry	*x̌k*	**k'ʷaq'-t*	scream, bellow, weep
to dry	*č'l*	**k'ay'(-xʷ)*	to dry out, wither (dry)
to take out	*halkʷ*	**ləkʷ*	to pluck, pull out

There is also one case of *a apparently corresponding to /ə/ in *məsa* 'both' compared to **was* 'both of a pair, mutual'.

There is likewise one case in which /a/ may have become /u/ in *puuye* 'father's brother' compared to **s-mʔal* 'fathers brother'.

8.22. *i Correspondences

Proto-Salish *i often seems to correspond to Miluk /i/, as in Table 8.42.

TABLE 8.42. Correspondence between Proto-Salish *i and Miluk /i/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to whistle	*hʷiiw*	**xʷiw*	to whistle
to beach, come ashore	*hiit'*	**xit'*	to be stretched out
black bear (H)	*šximɬ*	**miǎaɬ*	black bear
to smell s.t.	*sit*	**si/ạt'*	to sniff
myrtle nuts	*šičils*	**s-c'ik'/k*	cone, acorn, nut

Almost as common are apparent correspondences between *i and Miluk /a/, as in Table 8.43, although no obvious conditioning factor is apparent.

TABLE 8.43. Correspondence between Proto-Salish *i and Miluk /a/.

Miluk Gloss	Miluk Lexeme	Proto-Salish Lexeme	Proto-Salish Gloss
to pinch	*c'alp*	**c'ip'*	to squeeze (shut), pinch
to stab, spear	*cq^{w}a*	**ciq*	to dig, stab
to gnaw	*x̌ak'i*	**x̌iƛ'*	to cut, bite, gnaw
sun	*tqaals*	**q'ilt*	day(light), sky

There is one case in which *i seems to correspond to /ə/ in *wəx̌* 'to open' compared to **wiq'* 'to undo, remove, open'.

There is also one example of *i apparently corresponding to /e/ in inverted *eqeen* 'to bury' compared to **liq'* 'to bury'.

8.23. *u Correspondences

Correspondences between Proto-Salish *u are sporadic in Miluk, with no clear phonological motivations for the changes seen. In two cases, /u/ compared to the Proto-Salish root: *tuuya* 'to go/fall down' compared to **tuy*, **tiw* 'to stoop, to go across'; and *huuhu* 'hole' compared to **x^{w}ul* 'to turn, spin, drill'.

In two cases, *u appears to correspond to Miluk /a/: *haam-is* 'hair' compared to **q$^{\text{ʔ}w}$um* '(hair on) head; skull' and *haac* 'owl' compared to **x^{w}up* 'a night bird'. Note also that, in both of these words, the following /a/ vowel has apparently resulted in the loss of rounding when compared to the proto-form.

In two cases, *u seems to correspond to Miluk /ə/: *ƛ-pəl* 'to tip over' compared to **pul* 'to tip over' and *x^{w}k$^{\text{ʔ}w}$ən* 'maternal aunt' compared to **k$^{\text{ʔ}w}$uy* 'mother, aunt'.

There is also one example of *u apparently corresponding to Miluk /e/: *q$^{\text{ʔ}w}$eesis* 'wind' compared to **suk$^{\text{ʔ}w}$* 'to be blown along, float with current'.

8.24. Summary and Discussion

In this chapter, we have seen that Miluk has a large number of lexical items which resemble Proto-Salish forms, some of which even appear to exhibit regular correspondences.

Because these correspondences have been considered by individual phonemes, it is worth considering a handful of lexical items in their entirety, walking them through the various sound changes seen above.

Consider Miluk *piinac'* 'to return' compared to **p'əlk'/q'* 'to turn (around, over)'. Here we can see an apparent preservation of the initial bilabial stop (albeit with a change in glottalization), Proto-Salish *l becoming /n/ in Miluk, and the final velar/uvular stop becoming /c'/.

Miluk *maaƛik'* 'snail' seems to demonstrate inversion of the Proto-Salish root **q'(y)aƛ'an* 'snail, slug'. This inversion appears to have triggered a change in the final *n to /m/, while the final uvular seems to have become a velar, perhaps under the influence of the *y in the proto-form, which has since been lost in Miluk.

Miluk *nelč'* 'near' compared to Proto-Salish **k'i/aməl* 'almost, near, but, only, etc.' appears to be partially inverted, with a change from *m to /n/ because of the root inversion. The *l seems to have been maintained here, and the velar palatalized, presumably from the influence of the following /i/ vowel, which was subsequently lost in Miluk.

As this last example makes especially clear, an understanding of some of the sound changes that seem to link Proto-Salish and Miluk allows forms such as *nelč* and **k'i/aməl* to be seen as similar, despite their distinct forms.

It is important to note that Kuipers' data is somewhat limited, constrained to only lexical items which can be reliably reconstructed, and containing very

few grammatical morphemes. The data from Miluk are likewise a somewhat random sample. Given the limited amount of text available in Miluk, we have but a fraction of the total number of lexical items in Miluk. Because we have two independent datasets, each with its own limits, we might presume that there would be few overlapping lexical items which are obviously cognate and with similar meanings. And yet, despite these limitations, we have just seen that some Miluk lexemes are quite similar to Proto-Salish forms. When we consider the total number of resemblant forms between Kuipers' *SED* and the Miluk lexicon, we find 94 apparent matches. This means that, of the 529 words in the Miluk lexicon, 17.7% match a form in the *SED*. Likewise, of the 575 Proto-Salish reconstructions presented in the *SED*, 16.3% match a form in the Miluk lexicon considered here. However, it is important to note that the lack of a resemblant form does not necessarily indicate that the Proto-Salish and Miluk forms do not match. For many lexemes, it is simply the case that a root present in one lexicon is not found in the other, and vice-versa. Thus, there may be an even greater overlap between the lexicons of the two languages than can be determined from the materials available.

Although some of these correspondences seem quite regular, such as Proto-Salish *x and *x^{w} with Miluk /h/ and /h^{w}/, others appear to be more sporadic. The frequency with which similarities are seen, however, must represent some kind of Salish influence on Miluk, although the exact nature of this influence is not entire clear at present.

It is possible that the these lexical items represent either extensive borrowing on the part of Miluk, or some sort of deeper genetic relationship between Miluk and Salish. Based on what we have just seen, however, I find the idea of extensive borrowing to be less likely than genetic inheritance, for a number of reasons.

First, in addition to the number and quality of correspondences seen between Proto-Salish and Miluk, we also find alternations of /l/ with both /y/ and /n/, a phenomenon which is prevalent enough in the Salish family that it warrants special note by Kuipers in his dictionary.

Second, the small number of correspondences for Proto-Salish alveolars – specifically *t *t' *s *n *ƛ' – is somewhat troublesome, and I see no obvious explanation for this gap in the data. Nonetheless, I find this curious gap itself to be more indicative of genetic inheritance than borrowing. If Miluk borrowed significant vocabulary from Salish, there seems to be no reason that a specific place of articulation would be less-well represented than any other. On the other hand, if some as-yet obscure sound change occurred in Miluk, the few alveolars found may in fact provide evidence of a process common to this place of articulation, and thus provide evidence of descent from Proto-Salish.

Finally, in Miluk we find possible cognates of multiple Salish roots with similar meanings. For example, we find both *qal'* 'hole' and *wəx̌e* 'hole' as possible reflexes of *$ləpəx^w$/$\check{x}^w$* '(to make/go into) a hole' and *huuhu* 'hole' as a reflex of *x^wul* 'to turn, spin, drill'. Similar to what was discussed for the inverted root *či-č'iƛ-tis* / *ƛ'ič-tis* 'length' (see Chapter VII), if we hypothesize that these are borrowings, we are left to explain why Miluk borrowed a number of words with roughly the same meaning.

Overall then, it seems more likely that the similarities between Miluk lexemes and Proto-Salish reconstructions represent not sporadic borrowing from a neighboring Salish language, but some deeper relationship between Miluk and Proto-Salish, the exact nature of which is not clear.

CHAPTER IX

CONCLUSION

This work has presented a number of lines of evidence indicating that Miluk Coos shows a strong affinity to the Salish language family, despite normally being classified as a Penutian language. Taken individually, none of these pieces of evidence is particularly strong – there is no "smoking gun" which makes the genetic affinities of Miluk clear. Any one of these facts might simply be the result of sporadic borrowing, or even random chance. Taken together, however, they seem to make a strong case for Miluk having a deep Salish influence, and perhaps having been misclassified by Sapir (1920).

By way of review, we have seen:

- second-position pronominals which, in most cases, appear to be derived from Proto-Salish possessive prefixes, along with oblique and emphatic pronominals which resemble forms found in Musqueam, a modern Salish language;
- nominal morphology – in terms of the form and use of the articles, the apparent presence of an old gender system in Miluk, and the structure of possessives – which shows similarities to what is seen in the Salish family;
- verbal inflectional morphology, including person marking in local clauses, which is phonological similar to Proto-Salish forms, as well as verbal morphology which is used in roughly the same way (for example, the marking of a verb as both transitive and intransitive for types of detransitive clauses);

– the presence of inverted roots in Miluk, both when compared to Proto-Salish roots, as well as in at least one root in Miluk which appears in both inverted and non-inverted form (*či-č'iƛ-tis* / *ƛ'ič-tis* 'length');

– roots in Miluk which appear to be cognate with Proto-Salish roots, a number of which evince regular correspondences between the proto-forms and those found in Miluk;

– evidence in Miluk of two sound changes found throughout the Salish family in which *l is seen to alternate with both *y and *n in some roots.

Now that we have had a chance to consider the similarities between Miluk and Salish, we can consider the cognate forms that Sapir used to place the Coosan languages with the Penutian stock.

9.1. On Lexical Comparisons between Coos, Takelma, and California Penutian

Recall from the Introduction that a number of Coos-Takelma-California Penutian comparisons was published by Morris Swadesh, based on Sapir's notes (1953). The lexemes in Sapir's notes show similar lexemes between either Coos *or* Takelma on the one hand, and California Penutian on the other. Of the 152 correspondences presented, only 73 contain a Coosan form, and only those will be considered here.

I will also not consider all of the Coosan forms listed by Sapir. For some, I have no similar Salish root, and, after all, it would not be horribly surprising to find some Penutian influence in the Coosan languages. I focus instead on Coosan roots which, although they might be viewed as cognate with the Penutian words

given, seem to show a greater affinity to Proto-Salish after the various sound changes discussed in the previous two chapters are considered.

Only two Miluk forms are present in Sapir's list. The first of these words is "ɬin-nuuq", transcribed by Jacobs as *ɬənneǎ* and meaning 'nose'. The Hanis form *čuuɬ* 'nose' is also listed here. As possible cognates, Sapir gives Takelma *sin-*, *sinii-x-*, Wintu *ƛinik* and *suno*, Yokuts *tüngük'*, and Yawelmani *tinik'*, all meaning 'nose'. Consider, though, the Proto-Coast-Salish form **məqsn* 'nose'. At first glance, this form does not appear to be at all similar to Miluk *ɬənneǎ*. However, by appealing to the sound changes seen in the previous chapter, we can show that the Miluk form can apparently be derived from the Proto-Salish reconstruction, as shown in Table 9.1.

Recall that we have *n becoming /l/ in some cases in Miluk. If we then partially invert this form and change the initial /m/ to /n/ (both phenomena seen in other roots, for example Miluk *nelč* 'near' compared to Proto-Salish **k'i/aməl* 'almost, near, but, only, etc.'), we are left with **sl(ə?)nəq*. We have seen a number of cases where Proto-Salish uvular stops seem to correspond to Miluk uvular fricatives, which would lead us to expect Miluk **sl(ə?)nəǎ*. A coalescence of the intial /sl/ cluster to /ɬ/ – which is speculative, but not phonologically implausible – yields **ɬ(ə?)nəǎ*, a form quite close to what we actually see in Miluk.

The other Miluk form given in Sapir's list is "č'il-li", which is transcribed by Jacobs as *č'ille*, meaning 'legs'. This word is slightly problematic in Miluk. More common for 'leg' is the word *qɬa*. Although the meaning difference is not clear, the contexts in which the words occur may indicate that *čille* is a suppletive plural form of *qɬa*. And in fact, the two words themselves might well be from the same root, with initial /q/ undergoing palatalization when followed by the vowel /i/.

TABLE 9.1. Sound changes leading from Proto-Coast-Salish **məqsn* to Miluk *łənneǎ*. Speculative sound changes and their results are enclosed in parentheses.

Reconstructed form	Process
**məqsn*	Proto-Salish form
↓	*n > l
**məqsl*	
↓	Partial root inversion
**slməq*	
↓	*m > n in inverted roots
**slnəq*	
↓	(Schwa insertion)
(**slənəq*)	
↓	*q > x̌
**slənəx̌*	
↓	(/sl/ coalescence)
(**łənəx̌*)	
łənneǎ	Actual Miluk form

Sapir lists the possible cognate forms of *čille* as Takelma *sal-* 'foot' and Wintu *ƛel-ma*. Consider, on the other hand, what we see from Proto-Salish, where we have two possible sources for *qłaǎ/čille*: **q'ʷaǎ/x̌ʷ* 'claw, leg, foot, nail', or Proto-Coast-Salish **yə-xən* 'lower leg, foot'. The second of these seems a more likely source for both Miluk words.

Let us consider *čille* first, shown in Table 9.2. Starting from **yə-xən*, the final /n/ may have become /l/. The root was then partially inverted, yielding **xəlyə*, with the /y/ becoming /l/, either due to the process discussed in the last chapter, or simply through assimilation with the preceding /l/. Proto-Salish *x to /x̌/ is attested before schwas in Miluk, and *x̌ appears to correspond to Miluk /q/, giving us *qəllə*. As shown in the previous chapter, Proto-Salish /ə/ corresponds to Miluk /i/ when it occurred before /l/, giving **qillə*. This /i/ may then have led to

palatalization of the /q/, giving *čillə*. Final /ə/ then appears to have strengthened to /e/, a sound change seen in other roots, giving us the form found in Miluk, *čille*.

TABLE 9.2. Sound changes leading from Proto-Coast-Salish **(yə-)xən* to Miluk *čille*. Speculative sound changes and their results are enclosed in parentheses.

Reconstructed form	Process
**yəxən*	Proto-Salish form
↓	*n > l
**yəxəl*	
↓	Partial root inversion
**xəlyə*	
↓	*y > l
**xəllə*	
↓	*x > x̌
**x̌əllə*	
↓	*x̌ > q
**qəllə*	
↓	*ə > i
**qillə*	
↓	Palatalization
**čillə*	
↓	Final /ə/ to /e/
**čille*	
čille	Actual Miluk form

Next, consider the other word for 'leg' in Miluk *qɬa*, as shown in Table 9.3, assuming that the initial *yə-* of the Proto-Coast-Salish lexeme was lost. We have already seen that Miluk appears to have changed a number of Proto-Salish velars to uvulars when they precede /ə/. Proto-Salish schwas, when adjacent to a uvular, appear to have become /a/, giving us **x̌al*. Further, Proto-Salish *n appears to correspond to Miluk /l/ in a number of cases, so getting from **xən* to **x̌al* is not problematic. This root may then have undergone partial inversion, yielding **x̌la*. As was mentioned in Chapter VIII, *x̌ often appears to correspond to Miluk /q/, yielding **qla*. The change from /l/ to /ɬ/ is not attested elsewhere, but could be due to the occurrence of /l/ in a cluster. Initial stops in Miluk are phonetically

realized as aspirates when they occur as the first member of a cluster (see Chapter II); over time, this may have led to a change from /l/ to /ɬ/.

TABLE 9.3. Sound changes leading from Proto-Coast-Salish **(yə-)xən* to Miluk *qɬa*. Speculative sound changes and their results are enclosed in parentheses.

Reconstructed form	Process
**(yə-)xən*	Proto-Salish form
↓	(Loss of initial *yə-*)
(**xən*)	
↓	(*x > x̌)
(**x̌ən*)	
↓	*ə > a
**x̌an*	
↓	*n > l
**x̌al*	
↓	*x̌ > q
**qal*	
↓	Partial root inversion
**qla*	
↓	(*l > ɬ)
(**qɬa*)	
qɬa	Actual Miluk form

It thus appears that, despite the fact that neither of the Proto-Salish roots **məqsn* nor **(yə-)xən* look terribly similar to the Miluk lexemes, an understanding of the apparent sound changes that seem to link Miluk to Proto-Salish allow us to see that the Miluk lexemes could be derived from Proto-Salish, using the sound changes evinced in the previous chapter.

Some of the forms included in Sapir's list, despite being from Hanis, appear to be derived from Salish as well. Consider *kʷin-c* 'throat, neck' and *kʷin* 'to swallow' (the related Miluk form is *qʷən* 'to swallow'). Given as possible cognates for this root are Takelma *kʷen-*, Yawelmani *ʔoogun*, and Maidu *kuyi*, all meaning 'neck'. However, the Coosan forms for 'to swallow' appear to be derivable from Proto-Salish, once we take into account root inversion. Proto-Salish has **məq'* 'to

swallow'. After inversion, and with initial /m/ becoming /n/ in inverted roots, these words in Hanis and Miluk appear much more obviously related to the Salish forms than to the California Penutian roots – as does the Takelma root, for that matter.

Also in Sapir's list is Hanis "šximɬ", which appears in Jacobs' field notes in the same form. Possible cognates are given as Takelma *xămk* 'grizzly bear' and Wintu *šilal* 'bear, grizzly bear'. However, as noted in the previous chapter, this word too appears that it might be derived from Proto-Salish **miǎaɬ* 'black bear' after root inversion.

Interestingly, a number of the California Penutian words from Sapir's notes appear rather close to the Salish forms. For example, once we have gone from Proto-Salish **məqsn* to Miluk *łənneǎ*, only a few additional sound changes would be required to arrive at Yokuts *tüngük'* and Yawelmani *tiniik'* (and, in fact, the final ejective in these forms seems more conservative than Miluk /x̌/). It thus seems that there may be more Salish influence in California Penutian than has previously been acknowledged.

The similarity of the Coosan lexemes and many of the Takelma forms listed by Sapir is also apparent in, for example, Hanis *k'ʷin-c* 'throat, neck' and Takelma *kʷen-* 'neck', which can also be derived easily from Proto-Salish, and may indicate a degree of Salish influence on Takelma as well.

9.2. The Descent of the Other Languages of the OCP Group

With such a strongly Salish character in Miluk, we are left to wonder about the other languages within the OCP group, and whether they might also have such Salish influence, and might have been misclassified as Penutian as well. In this

section, I discuss Hanis Coos, which, owing to its great degree of similarity with Miluk, seems the most likely to demonstrate affinities with Salish, before moving on to a discussion of Alsea and Siuslaw, the other two languages of the OCP group.

9.2.1. Hanis

Hanis Coos remains something of an enigma. Although Hanis appears quite similar to Miluk in many respects, there are a number of differences which lie in the areas where we saw that Miluk is so similar to Salish. For example, the Miluk articles *ƛə* and *kʷə* are quite Salish in appearance, as shown in Chapter V. The Hanis equivalents of these articles, *le* and *lew*, however, don't look particularly Salish (except in that they are indeed articles, which are not found in Pacific Northwest languages outside of the Salish family, excepting for the moment the OCP languages).

The evidential morphemes in Hanis also have forms which look less Salish than what was seen for Miluk (see Chapter VI); the Hanis and Miluk evidentials are presented side-by-side below, in Table 9.4. Recall that the Miluk evidential particles look quite similar to forms seen in Musqueam.

TABLE 9.4. Comparison of Miluk and Hanis evidentals.

Miluk Gloss	Miluk Lexeme	Hanis Lexeme	Hanis Gloss
'interrogative'	*ʔi*	*ʔi*	'interrogative'
'quotative'	*cə*	*hen*	'quotative'
'inferential'	(*ta=*)*x*	*(c)gʷə*	'inferential'

There are also differences in some basic verb roots and lexical items. As mentioned in Chapter I, Frachtenberg saw evidence of differences between the two languages during his fieldwork. And he wasn't alone.

Pierce (1965) examined a number of vocabulary lists from Hanis and Miluk, and found that 74% of the words on the lists "[did] not show any similarity" (p.324). As Pierce points out, there is no great difficulty in traveling around the Coos Bay area where these two languages were spoken, and certainly no geographical features which one might expect to cleave a speech community in two so starkly that three-quarters of their basic vocabulary items show no similarities. This led him to speculate that Hanis and Miluk are perhaps not related at all, and have only come to resemble each other due to extended contact:

> "The other possibility is that speakers of a totally unrelated language moved in next to the occupants of the Coos Bay area and the two groups became a single cultural unit, probably by the newcomers adopting the culture of the local inhabitants, with most of the members of both speech communities speaking both languages. This contact would have been of an exceedingly intimate nature and the mutual influence of the one language on the other might have been very great indeed. ... Hence, by any measure, it is questionable that these two languages could have diverged from a common parent, especially under the conditions prevailing at the time of white contact. Thus it is quite possible that Hanis and Miluk are totally unrelated languages and not dialects of a single language at all." (Pierce, 1965:325)

To the evidence presented by Pierce we can add one other fact about Miluk which makes it appear as if it has been in a long-term contact situation – in a number of respects, the grammar of Miluk seems to be a simplification of what is seen in Salish languages. For example, we see an extremely reduced set of article distinctions, gender markers being relegated to diminutives except for a few

fossilized forms, and a lack of most of the verbal person-marking that is found in Salish languages. This kind of morphosyntactic simplification is a known result of long-term language contact (Thomason and Kaufman, 1988). The differences between Miluk and Salish that we see, then, may be the result of exactly the kind of contact that Pierce (1965) argues for.

Despite all of this, I do not believe that there is yet enough evidence to decide on the relatedness of Hanis and Miluk one way or another. Given the similarities between Miluk and Salish, along with the differences seen between Hanis and Miluk, though, there does seem to be enough evidence to make us seriously reconsider how closely these languages are related to one another. And recall that the classification of Miluk as a Penutian language is based almost entirely on evidence from Hanis, along with an appeal to the similarity of the two languages. Regardless of what the final consensus is regarding the classification of Hanis, the differences that exist between Hanis and Miluk are substantial enough that I believe that the classification of Miluk as Penutian, based only on its purported similarity to Hanis, is incorrect. There are simply too many differences between the two languages to use one to correctly classify the other, especially when, as we have just seen, there is a strong Salish character in the grammar and lexicon of Miluk, not to mention that some of the Coosan forms used by Sapir to place Miluk within the Penutian family may be Salish as well.

9.2.2. Alsea and Siuslaw

While Hanis still looks somewhat Salish, owing to its similarity with Miluk, the other two languages in the OCP group, Alsea and Siuslaw, are less Salish in their appearance.

Considering the OCP languages in terms of their articles, for example, we move from Miluk *ƛə* and *k^wə* to Hanis *le* and *lew*. In Alsea, however, we see a rather more Salish-looking article system, with the articles *ta*, *ku*, and *a* (Buckley, 1989). Finally, in Siuslaw, we see no articles at all. If Siuslaw turns out to have certain affinities with Salish as well, the lack of articles is even stranger when we consider that the language spoken just north of Siuslaw, Tillamook, is Salish, and has an obviously Salish article system.

Despite the lack of articles in Siuslaw, we do find a few features in some of the OCP languages that look rather Salish, especially in Alsea. In addition to articles, we see a pronominal system which is strikingly Salish, along with roots which appear to be cognates with the Salish family (Kinkade, 2005), a number of which demonstrate root inversion (Chapter VII). This kind of binary comparison, examining the OCP languages in light of Salish, seems fertile ground for further discovery and clarification of the linguistic affiliations of these languages.

Additionally, there is a paper by Buckley which lists lexical correspondences between the Coosan languages (again, mostly using Hanis forms), Alsea, and Siuslaw (1987), which seem to indicate a relatively close relationship between these languages. This kind of multilateral comparison of the languages of the OCP group is also necessary to further clarify the relationship between these languages and others in the Pacific Northwest.

I believe that the degree of Salish influence on Alsea and Siuslaw remains an open question, pending further research. However, given the affinities we see between the Alsea and Salish pronominal systems, the apparently cognate items presented in Buckley 1987, and the fact that Miluk shows such strong affinities with Salish, it seems prudent to take the classification of any of the OCP languages as

Penutian as speculative at this point, until more thorough comparisons of these languages to each other, to other Penutian languages, and to Salish languages, are conducted.

9.3. On the Relationship between Miluk and Salish

Given the similarity of most of the Salish languages, and their wide geographic spread, the Salish family represents an important piece of the linguistic prehistory of the Pacific Northwest.

The exact relationship that pertains between the Salish family and Miluk remains something of a mystery. As Paul Kroeber has pointed out (*p.c.*), although there are a number of features in Miluk which look Salish, Miluk also lacks features that one would expect to find in a Salish language – a productive causativizer, for example. Where, then, did the Salish influence on Miluk come from: borrowing or genetic inheritance?

If we assume borrowing, there is no obvious candidate for a Salish language that Miluk might have borrowed from; no Salish language is known to have been spoken on the southern Oregon Coast. Although it is certainly not impossible that such a language – now lost to prehistory – was once spoken near enough to Miluk to result in such extensive influence, we have no evidence that such a language ever existed. Tillamook, being the geographically closest, acknowledged Salish language in Oregon would also seem to be a good candidate for a possible source for the Salish features of Miluk. However, Tillamook does not appear to be terribly similar to Miluk – Tillamook, for example, preserves a system of verbal person marking which is much more similar to Salish than what is seen in Miluk (Reichard, 1959). However, the fact that Alsea seems to also resemble Salish, but in ways distinct

from Miluk (e.g., in terms of the pronominal system), seems to make the possibility of intimate contact between the OCP languages and an unknown Salish language more plausible.

The other possibility for the Salish influence seen in Miluk is that Miluk represents a distinct branch of a larger family, which includes Miluk (and perhaps some of the other languages of the OCP group) as one branch, and the Salish languages as another. The idea of a prehistorical connection between Miluk and Proto-Salish might also be evident in the divergent character of Miluk, indicating that it split off from a larger family before the time of Proto-Salish. By adding Miluk – and other languages of the Oregon coast, should they too turn out to show Salish affinities – to the picture of linguistic prehistory in the Pacific Northwest, we may be able to push back the time depth of the proto-language of both Miluk and the Salish languages beyond Proto-Salish.

Kroeber also notes that

> "[T]he geographical spread of the [Salish] family has brought it into contact with diverse other languages. Salish is thus potentially a source of information on the diffusion of linguistic properties within a large portion of the famous Northwest linguistic area; when a feature is shared by a non-Salish language and a Salish language, there is a relatively good chance of being able to determine whether the feature was found in Proto-Salish – a valuable clue as to whether the feature diffused into or out of Salish." (Kroeber, 1999:1)

If a detailed comparison of Miluk and Hanis yields results which make it appear that the two are not related at all, but are similar due to extended contact,

we have an opportunity in Miluk to examine how features which predate Proto-Salish may have changed over time under influence from neighboring languages not at all related to the Salish group. In Hanis, too, we would be presented with an opportunity to examine in depth the diffusion of Salish-like features into a non-Salish language.

Given the limited extent of the materials that exist for Miluk – and, indeed, for other languages of the OCP group – determining definitively whether the Salish features that we see in Miluk are the result of borrowing or genetic inheritance may be impossible, although future work on the OCP languages will hopefully provide further clues.

Regardless of the final determination about the source of the Salish influence on Miluk, an understanding of that influence will nonetheless aid descriptive and historical work on Miluk itself. Because Miluk has no living speakers, comparisons between Miluk and the Salish languages are one of the few ways to determine the function of otherwise obscure morphology and syntax – comparisons which would not have been deemed relevant without an understanding of the depth and breadth of Salish influence on Miluk.

9.4. Penutian in Light of Miluk

The affinities seen between Miluk and the Salish family also have implications for the study of Penutian. As mentioned in the Introduction, the state of reconstruction of Proto-Penutian is a rather limited and messy affair, as are the classifications of the languages included in Penutian.

And indeed the history of Penutian studies demonstrates that at least some of the core groups of the family, such as California Penutian, are as much artifacts

of the history of the study of these languages and their geographical distribution as they are the result of rigorous multilateral comparisons. The Wintuan group, for example, shows no particular affinity with the other California Penutian languages – or at least no more affinity than it shows with other Penutian languages, such as Klamath – but nonetheless continues to be classified as part of the California Penutian group (DeLancey and Golla, 1997).

Part of the problem with reconstructing Proto-Penutian forms based on the current classification of these languages may lie in the fact that not all of the languages usually considered to be Penutian actually are, dooming any attempt at reconstructing a proto-language to failure. Although it is too early to say for sure what the genetic affiliations of the languages of the OCP group are, if binary and multilateral comparisons of these languages with each other, Miluk, Salish, and Penutian point to these languages not being Penutian, removing them from the set of languages used by Penutian scholars may help spur advances in the study of Proto-Penutian.

Multilateral comparisons of a number of languages from Oregon, both Salish and Penutian, seem to provide the most promise in clarifying the relationships of these languages. Much of the current state of thinking on the Penutian hypothesis rests on binary comparisons of various languages, but if one is to argue for large language groupings which are internally consistent, multilateral comparisons are key (DeLancey and Golla, 1997). The use of multilateral comparisons is especially important given what we have just seen regarding the previous classification of Miluk as Penutian. Relying only on binary comparisons, the line of reasoning that says that "Takelma is Penutian. Takelma looks like Hanis, and Hanis looks like Miluk; therefore, Miluk is Penutian" is inherently flawed. By including a

broader view of these languages, and examining relationships and potential relationships holistically in order to develop what DeLancey and Golla call "a skein of etymologies and sound correspondences" (1997:176), we stand the best chance of developing a more consistent view of linguistic relationships on the Oregon Coast, and indeed throughout the Pacific Northwest.

Even if most of the languages currently included as part of the Penutian stock remain classified as such after thorough investigation, an understanding of the degree of Salish influence on these languages will help to clarify which roots are best candidates for having developed from Proto-Penutian, and thus which represent the best roots to work from when attempting reconstruction. For example, the California Penutian roots for 'tongue' given above in Section 9.1 look like they may be ultimately derived from Salish, making them poor candidates for Proto-Penutian reconstructions.

Even as Miluk is removed from the Penutian family, other language groupings of the Pacific Northwest are being included under the Penutian umbrella. Marie Lucie-Tarpent, for example, has demonstrated that Tsimshianic shows a strongly Penutian character, essentially confirming Sapir's 1921 suspicion that the Tsimshianic languages represent a subgroup of Penutian languages (1997). In addition to excluding languages such as Miluk from consideration as Penutian, the inclusion of language groups such as Tsimshianic will help to further clarify the history of the Penutian group, aiding scholars in their attempts at reconstruction.

APPENDIX A

LIST OF GLOSSING ABBREVIATIONS USED

1A2O	first person acting on second person
1D.INC	first-person dual, inclusive
1D.POS	first-person dual possessive
1P.POS	first-person plural possessive
1S	first-person singular
1S.EMPH	first-person singular emphatic
1S.POS	first-person singular possessive
2A1O	second person acting on first person 2P
second-person plural	
2S	second-person singular
2S.EMPH	second-person singular emphatic
2S.OBL	second-person singular oblique pronominal
2S.POS	second-person singular possessive
2D	second-person dual
3D	third-person dual
3O	third-person object
3P	third-person plural
3S.POS	third-singular possessive
3S.OBL	third-person singular oblique pronominal
ABIL	abilitative
ADV	adverbializer
ART	article

AUG	augmentative
AUX	auxiliary
COND	conditional
CONT	continuative
DEIC	deictic
DIM	diminutive
DIR	directional marker
DL.O	dual object
ERG	ergative
EST	established
EXCL	exclusive
FUT	future tense marker
HAB	habitual aspect
HRSY	hearsay / reported speech
IMPRF	imperfective aspect
INCL	inclusive
INFR	inferential
INST	instrumental
INTRS	intransitive
INTRS.PRF	intransitive perfective
INV.3/SAP	inverse, third person acting on speech-act participant
IRR	irrealis
KIN	kinship term suffix
LOC	locative suffix
NMZR	nominalizer

NR	narrative particle
NEG	negative particle
OBL	oblique
PL	plural
PRF	perfect
PRIV	privative
PRSP	prospective tense
Q	question particle
QW	question word formative
REC.PRF	recent perfective
REDUP	reduplicant
T	transitive marker
VOC	vocative
VBLZR	verbalizer

APPENDIX B

ABBREVIATIONS USED FOR JACOBS' TEXTS

Adultery	"Adultery before marriage" (CNET, p. 71)
BearWoman	"The bear woman" (CMT, p. 147)
BlackBearPackBear	"Black bear and pack basket bear (grizzly)" (CMT, p. 152)
BluejayPubicHair	"Myth of bluejay, ..." (CMT, p. 181)
BluejayShaman	"Bluejay shaman" (CMT, p. 138)
ChokedWithFood	"Choked-with-food, ..." (CMT, p.156)
Cold	"The person who died from cold" (CNET, p. 39)
CrowGirl	"Crow girl" (CMT, p. 166)
CrowMyth	"I will tell you a crow myth" (CMT, p. 170)
DangerousBeing	"A girl became a dangerous being of the woods" (CNET, p. 43)
DoveMyth	"Dove myth" (CMT, p. 143))
Dream	"The woman who dreamt, ..." (CNET, p. 39)
DugOutChild	"Dug-out-of-ground child, popped-out-of-fire" (CMT, p. 150)
EatsHumanChildren	"He eats human children" (CNET, p. 56)
FogMyth	"Fog myth" (CMT, p. 139)
GirlDogHusband	"The girl who had a dog husband" (CMT, p. 159)
JackrabbitMan	"Jack rabbit man" (CMT, p. 148)
Lazy	"Lazy young man" (CNET, p. 41)
LooseWomen	"The two loose women" (CMT, p. 143)
ManyPeople	"There were many people at that place" (CMT, p. 222)
OgressMyth	"Ogress myth" (CMT, p. 142)
OldCoupleAshamed	"The old couple ... became ashamed there" (CMT, p. 141)

Pheasant	“Pheasant” (CMT, p. 173)
SalmonDidIll	“Salmon did ill to boys” (CNET, p. 51)
SəgandasPeople	“sə́gandáas people” (CNET, p. 59)
SeagullMyth	“The young man became a sea gull” (CMT, p. 137)
Seaotter	“Sea otter narrative” (CNET, p. 48)
Snail’sBack	“The young man stepped on snail’s back” (CNET, p. 54)
SplitHimself	“A young man lived alone, ...” (CNET, p. 53)
Swordfish	“Swordfish narrative” (CNET, p. 45)
TricksterMyth1	“Myth about a trickster” (CMT, p. 224)
TricksterPerson	“The trickster person who made the country” (CMT, p. 184)
WaterGotHigh	“The water got high” (CNET, p. 58)
WhiteWifeMouse	“The white wife of mouse” (CMT, p. 165)
YoungManLivedAlone	“The young man who lived alone” (CMT, p. 168)
YoungManOwl	“The young man who became an owl” (CMT, p. 167)

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