

STUDIES IN SOUTHERN WAKASHAN (NOOTKAN) GRAMMAR

by

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Abbreviations and Symbols

General abbreviations

1	First person	EPEN	Epenthetic vowel
2	Second person	FUT	Future
3	Third person	GoIMPER	‘Go’ Imperative
ADVISE	Advisitive	GRAD	Graduative
APPEN	Appended vowel	HAB	Habitual
ART	Article	IMPER	Imperative
ASSER	Assertive	INCEP	Inceptive
BEN	Benefactive	INCR	Velar increment
BFR	Buffer consonant	INDEF	Indefinite
CAUS	Causative	INDIC	Indicative
CNTR	Contrastive particle	INFER	Inferential
ComeIMPER	‘Come’ Imperative	INFERI	Inferential I
COND	Conditional	INFERII	Inferential II
CONT	Continuative	INTENT	Intentive future
CONTENT	Content Interrogative	INTERR	Interrogative
DEF	Definite	IRR	Irrealis
DEM	Demonstrative	ITER	Iterative
DIM	Diminutive	Kw	Kwakwala (= Kwakiutl)
DISC	Discourse particle	M	Makah
DISTR	Distributive	MIR	Mirative
DUB	Dubitative	N	Nuuchahnulth (= Nootka)
DUR	Durative	NW	Northern Wakashan

PERF	Perfective	QUOT	Quotative
PINV	Passive-inverse	REL	Relative
PL	Plural	REP	Repetitive
POLAR	Polar Interrogative	RESP	Responsive
POSS	Possessive	SUBOR	Subordinate
PRED	Predicative	SW	Southern Wakashan (= Nootkan)
PSW	Proto-Southern-Wakashan	TEMP	Temporal specifier
PURP	Purposive	VOC	Vocative
PW	Proto-Wakashan		

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HW	Helma Swan Ward	MP	Meredith Parker
HS	Hugh Smith	KH	Katie Hunter
II	Isabell Ides	RC	Ruth Claplanhoo

Morpholexical diacritics

- boundary between affix and base
- = boundary between clitic and host
- <x> infix or epenthetic vowel that separates the consonants of a morpheme (in Makah)
- V· long vowel
- V: persistently long vowel (§3.1)
- ʔ = ʔ glottalizing suffix or clitic (§3.3.2, §3.4.2)
- ʼ leniting suffix (§3.3.3, §3.4.2)
- =° mutating clitic (§3.4.2)

- .- after a consonant, a final segment that resists the effects of glottalizing and leniting suffixes and instead requires insertion of glottal stop (§§3.3.2-3.3.3). After a vowel, a segment that does not undergo reduction with following *ʔV* sequences (§3.3.4).
- .’ non-reducing glottalizing suffix (§3.3.4)
- .ʔ suffix with non-reducing initial glottal stop (§3.3.4)
- h^w*- final *h* in Nuuchahnulth that becomes /*w*/ preceding glottalizing suffixes and /*w*/ preceding leniting suffixes (§§3.3.2-3.3.3)
- t^w*- final *t* that becomes /*w*/ in Nuuchahnulth and /*w*/ in Makah preceding glottalizing suffixes and /*w*/ preceding leniting suffixes (§§3.3.2-3.3.3, §3.4.2)
- P-*, *T-* root-final /*p*/ or /*t*/ in Makah that become /*b*/ or /*d*/ preceding glottalizing and leniting suffixes (§3.4.2)
- q*- buffer consonant inserted between certain (generally vowel-final) bases and certain suffixes (§5.2.2.1)
- (*t*)- final *t* that is lost preceding glottalizing/leniting suffixes and a few other suffixes (§3.3.7)
- (*č*), -(*y*), -(*q*), etc. suffix-initial consonant that is lost following consonant-final bases but retained following bases with final vowels or (in Nuuchahnulth) coda nasals (§3.3.8)
- č̣*, -*č̣̣* suffix-initial consonant in Nuuchahnulth that has variable surface realizations depending on the final segment of the base (§3.3.9)
- [L], [R], [R+L], etc. indicate the CV template associated with a particular affix (§3.3.1) or semantic category (§5.5.4)

ABSTRACT

Studies in Southern Wakashan (Nootkan) Grammar

by

Matthew Davidson

This dissertation is a study of Southern Wakashan (Nootkan) grammar using data from two languages, Makah and the Tseshaht dialect of Nuuchahnulth (Nootka). The phonology, morphology, and syntax of each language are examined with emphasis on structurally important or typologically interesting features. The description of Makah is based mostly on field data collected in Neah Bay, Washington by the author. Nuuchahnulth data is drawn from Sapir and Swadesh's two published text collections on the language (Sapir & Swadesh 1939, 1955).

Chapter One introduces the Southern Wakashan family and describes the nature of the present study, explaining how the dissertation came to be written, the corpus used in the study, and previous literature on Southern Wakashan. Chapter Two summarizes Southern Wakashan segmental phonology with a presentation of the Nuuchahnulth consonant and vowel inventories, basic allophonic processes, ablaut patterns, and discussion of the special behavior of nasals when they appear in syllable codas. The accent systems of the two languages are also briefly described and compared. Chapter Three, Phonological Alternations, describes a variety of alternations triggered by affixation, including glottalization and lenition of final base segments by affixes, alterations to the CV skeleton of bases required by affixes, and, in Makah, widespread patterns of vowel insertion and loss. Chapter Four is a grammatical sketch of Southern Wakashan divided into sections on word classes, morphology (word structure, lexical suffixes, and aspect), predicate structure, basic clause structure (referring phrase functions, constituent order, clause types), referring phrases, and complex constructions. Chapter Five examines the recursive polysynthetic word structure more closely. Chapter Six presents the aspect system. Chapter Seven, Clitics, describes

mood and pronominal clitics, as well as other clitics associated with predicates. Chapter Eight argues that, although word classes are very weakly grammaticalized in Makah and Nuuchahnulth, distributional evidence is available for distinguishing nouns (and other nominal subcategories) from verbs. It goes on to show many examples of nominals and verbs in each of their possible syntactic contexts. Lists of lexical suffixes in Makah and Nuuchahnulth and selected Makah vocabulary are provided in two appendices.

1 Introduction

This dissertation is a description of major features of Southern Wakashan (Nootkan) grammar using data from two languages, Makah and Nuuchahnulth (formerly called Nootka).¹ Because the dissertation is descriptive in intent and written for a general linguist audience rather than practitioners of a particular linguistic theory, no specific grammatical formalism or framework is employed. Southern Wakashan does, however, raise various issues of theoretical import, and, at appropriate points, theoretical implications are considered. The grammatical concepts and terminology used in the description are generally vernacular among linguists, apart from those specific to the Southern Wakashan descriptive tradition; these are defined as necessary.

The dissertation is organized as follows. The remainder of the present chapter is divided into sections on the genetic affiliation of Makah and Nuuchahnulth (§1.1), an explanation of how the dissertation came to be written (§1.2), a discussion of the corpus (§1.3), and consideration of previous literature on the languages (§1.4). Chapters Two and Three describe segmental phonology and phonological alternations, respectively. Chapter Four is a general overview of Southern Wakashan morphology and syntax. Chapter Five is a description of certain features of the polysynthetic word structure. Chapter Six gives an account of the aspect system. Chapter Seven describes clitics, and Chapter Eight describes word classes.

1.1 Genetic affiliation

Southern Wakashan (also known as Nootkan), the southern branch of the Wakashan language family, is a small and fairly homogeneous subfamily comprised of three languages. Nuuchahnulth is spoken in British Columbia, Canada along the west coast of Vancouver Island from Cape Cook to Pachena Point. Aboriginal settlement patterns, in part necessitated by weather and distribution of economic resources, have created several dialect groups, each containing a few distinct dialects

or subdialects (cf. Drucker 1951: 3-10). The dialects represented in Sapir and Swadesh's publications on the language (and hence in this dissertation, §1.3) are Barkley Sound and Alberni Canal dialects, mostly Tseshah̄t (*ciša'ʔath̄*), but also Ucluelet (*ywʔuʔiʔath̄*) in texts dictated by the speaker Kwishanishim in Sapir & Swadesh (1955). A few forms from the more northern Clayoquot (*ʔaʔwʔkʷiʔath̄*) and Ahousah̄t (*ʔaʔhʷsʔath̄*) dialects can be found in some of the history texts in Part 8 ("Warfare") of Sapir & Swadesh (1955).

The other two languages in the family are Ditidaht (also Nitinaht or Nitinat), spoken south of Nuuchahnulth on the southern coast of Vancouver Island, and Makah, the only Wakashan language in the United States, spoken in the vicinity of Cape Flattery on the Olympic Peninsula in Washington State. Today, most Makah speakers reside in Neah Bay, Washington, but this was originally only one of five Makah villages: Neah Bay (*diʔya*), Bahaada (*biʔidʔa*), Sooes (*cuʔyas*), Waatch (*waʔač̣*), and Ozette (*ʔuseʔiʔ*). With the exception of Ozette, all these sites are still occupied, but Neah Bay is the most populous.

1.2 Genesis of the dissertation

My first exposure to a Southern Wakashan language took place during thirteen months of field work on Makah under the auspices of the Makah Cultural and Research Center at Neah Bay. The thirteen months were spread over three trips from 1996 through 1998 (mid-August through mid-September 1996; May-June 1997, and February-December 1998). The present dissertation was originally intended to be a comprehensive grammar of Makah based on material gathered during these trips, but data problems intervened to prevent this plan. Not having anticipated certain challenges of working in a language death situation,² I failed to gather Makah data that was sufficient in either quantity or reliability to support the kind of grammar I planned to write. Because Southern Wakashan languages are so closely related (the main differences between them are phonological and lexical), a logical solution to the data quandary was to augment my Makah data

with Nuuchahnulth material from Sapir and Swadesh's (1939, 1955) text collections on this language, thereby widening the scope of the project to a general study of Southern Wakashan grammar.

An essentially complete draft using only Nuuchahnulth data was written first. Generalizations were either drawn from the previous literature on Nuuchahnulth (§1.4), which was then cited accordingly, or reformulated or expanded based on earlier analyses in the literature, or, if necessary, formulated anew. Most generalizations fall into the second of these categories. In any case, all analysis was tested against the corpus described in §1.3. Considerable effort was made to use fresh examples from the corpus even when the analysis was based on the work of earlier authors.

The first Makah section written was the Makah appendix to Chapter 3 (Phonological Alternations). Jacobsen's papers on Makah were an especially important resource for this section (and for Chapter 7), although original data from my fieldwork (§1.3) was introduced wherever possible. Next, Makah data was compared with the generalizations achieved from the investigation of Nuuchahnulth described in the rest of the dissertation. Sometimes Makah examples could simply be added with no changes to the accompanying text, but more often Makah-specific description had to be added. The final sections prepared were the list of lexical suffixes and the Makah vocabulary found in Appendices A and B.

1.3 Corpus

The Nuuchahnulth corpus consists of all 80 texts in Sapir's (1924) and Sapir & Swadesh's (1939, 1955) publications on the language. The texts were entered in a Microsoft Access database. The complete computerized Nuuchahnulth corpus amounts to 16,648 sentences, 28,590 distinct word types, and 81,413 word tokens.

The corpus locations of example words in the phonology and word structure chapters (Chapters 2-3, 5) are usually not given, but sentence examples in other chapters are cited by page and line number in Sapir (1924) (abbreviated “RW”), Sapir & Swadesh (1939) (“NT”), and Sapir & Swadesh (1955) (“NA”), e.g. NA 159.4 indicates the example is found on the fourth line of page 159 in Sapir & Swadesh (1955).

Sentences illustrating this or that grammatical construction often contain complications that might obfuscate, rather than illuminate, it. Accordingly, I have introduced two sorts of modification when citing Nuuchahnulth text sentences in support of grammatical claims. The first is omission: grammatically optional words or clauses irrelevant the point being made are sometimes left out. Ellipses indicate omitted material. For example, a text sentence intended to demonstrate a simple transitive clause like the Nuuchahnulth analogue of *The next morning they charred their canoe-bottoms to make them smooth in the water* might be simplified in the dissertation example to *...They charred their canoe-bottoms...*

The second sort of modification involves altering (but not omitting altogether) some feature of an example sentence, or, occasionally, adding material to it to clarify its structure. For example, a first person mood marker with overt form might be substituted for a zero third person form, or *They charred their canoe-bottoms* might be changed to *The men charred their canoe-bottoms* in an example intended to show the typical position of the subject expression. A modified example sentence is indicated by “based on” (e.g. “based on NA 159.4”).

The published translations are generally more faithful to the structure of the original Nuuchahnulth in Sapir (1924) and Sapir & Swadesh (1939). As Swadesh (Sapir & Swadesh 1955: 2-3) explains, translations in the 1955 volume tend to paraphrase rather than translate exactly. For this reason I have modified some original translations in example glosses to more closely reflect the original structure.

The 1955 text volume is, unfortunately, riddled with spelling errors, presumably printing or typographic errors, which renders it almost useless as a data source to linguists not thoroughly familiar with Nuuchahnulth grammar and vocabulary. Nearly every page has at least one error, and many have multiple errors. Page twenty-one, for example, has at least eight: e.g. the suffix ‘on the ocean’ in the word *q^wama·qimłašistmaʔi·qłukʔitq* ‘however many roundish objects they wish to have on the ocean’ on line four is a misprint for *-ačišť* (the correct form of the word is thus *q^wama·qimłačistmaʔi·qłukʔitq*), the root *minaʔi* ‘fishing bank’ on line 14 should be *minaʔi*, *inksyiqinqa* on line 39 ‘using a stick as bait’ is missing an initial glottal stop (the correct form is *ʔinksyiqinqa*), etc. Such errors have been corrected in cited examples without comment.

The grammatical notes and especially the lexical materials in Part III of Sapir & Swadesh (1939: 235-334) were very important in the preparation of the present work. Analysis of the composition of the Nuuchahnulth lexicon and all claims about the occurrence or non-occurrence of forms in it is based on the lists of “primary stems” and suffixes in this source.

Makah data informing the present description comes from several sources. In addition to my own elicitation notes and texts that I have collected (primarily from speaker HW), several researchers (Ann Renker, Maria Pascua, and Cora Buttram) kindly allowed me access to their Makah notes. I have also made use of various texts that are on file in manuscript form at the Makah Cultural and Research Center. These were written or recorded by various speakers in the 1980’s and 1990’s and edited either by myself or by members of the Makah Language Program. Example sentences from texts are cited in the dissertation with the speaker’s initials and the name of the text. I also consulted a long text by speaker KH that was recorded by Scott Tyler and transcribed by John Thomas in late 1970’s. Papers on various topics in Makah grammar by Jacobsen (listed below in §1.4) were also consulted as noted in relevant places in the dissertation.

1.4 Previous literature

Despite the fact that the Southern Wakashan languages have attracted some of the finest minds in North American linguistics, only one complete grammar is available, Rose's (1981) grammar of the Kyuquot dialect of Nuuchahnulth. This work provides an important counterbalance to the rather anemic view of Nuuchahnulth syntax presented by Swadesh (1939) and, among other discoveries, recognizes the imperfective/perfective nature of the aspect system. There is a fair amount of descriptive material on Southern Wakashan in theses, journal articles and conference presentations. Much of this material is about the Tseshaht dialect of Nuuchahnulth, and is the work of Edward Sapir (Sapir 1911a, 1915, 1924, 1929, 1938), who initiated the scientific study of Nuuchahnulth, and his student and colleague, Morris Swadesh (Swadesh 1931, 1933, 1939, 1948a). There are also the two volumes of Nuuchahnulth texts edited by Sapir and Swadesh (1939; 1955). Other notable works on Southern Wakashan languages other than Makah or not exclusively on Makah include two Nitinaht texts with grammatical analysis (Swadesh & Swadesh 1933, Touchie 1977), papers on historical reconstruction by Haas (1969) and Jacobsen (1969a), a discussion of labialization in Nootkan languages (Jacobsen 1969b), an investigation of Nootka-Nitinaht stem and root structure (Haas 1972), a discussion of variable-length vowels in Nuuchahnulth (Klokeid 1975), a thesis on Nuuchahnulth phonology (Rose 1976), studies of Nitinaht enclitics (Klokeid 1976, 1978), a note on Nitinaht numerals (Hess 1990), a discussion of Mary Haas's contributions to Wakashan linguistics (Jacobsen 1997b), and several papers on Nootkan syntax (Rose & Carlson 1984, Whistler 1985, Emanatian 1986, Jacobsen 1993, Nakayama 1997b). The interaction of discourse and morphosyntactic structure in Nuuchahnulth is discussed in Nakayama (1997a); Nuuchahnulth-Nitinaht ablaut and reduplication patterns are discussed in Stonham (1994a). Stonham (1999) describes noun phrase structure in Nuuchahnulth.

Work on Makah was begun in the early 1960s by W. H. Jacobsen, Jr. His research has focused on various aspects of the (morpho)phonology, morphology, syntax, and lexicography of the language. This research program has produced the bulk of our knowledge of Makah. A number of papers concentrate on phonology or morphophonology. Jacobsen (1968) addresses the issue of glottalized resonants in the historical reconstruction of Makah and uses this reconstruction to account for some synchronic morphophonemic processes in the language. Jacobsen (1971) discusses the widespread patterns of vowel insertion and vowel loss. Ablaut in vocative forms is presented in Jacobsen (1994). Jacobsen (1996) describes the morphophonemic processes of “hardening” (i.e. glottalization) and “softening” (i.e. lenition) in Makah. Two papers, (Jacobsen 1997a, 1998a), deal with ablaut/reduplication patterns. Jacobsen (1998c) describes labialization dissimilation. Finally, Jacobsen (1999a, 2000) discuss the “velar increment”, an excrescent /k/ that appears in certain forms. In addition to these papers, there is another publication (Jacobsen 1979b, 1999b) that contains useful discussion of the segment inventory, pronunciation, and morphophonemics, as well as several modal paradigms.

Jacobsen’s works on Makah morphosyntax include Jacobsen (1973), which presents the system of pronouns and mood forms, and Jacobsen (1979a), an important paper that uses Makah data to establish morphological and syntactic criteria for distinguishing word classes in Nootkan languages, which are often claimed to have no noun/verb contrast (cf. Sapir & Swadesh 1939: 235-36 and Renker 1987). Other papers are Jacobsen (1979c), which considers the relationship of Makah to the other Wakashan languages and discusses the history of Wakashan comparative studies, Jacobsen (1980), on the semantics of Makah neologisms, and Jacobsen (1986), which presents the Makah evidential system. Jacobsen (1998b) discusses an early Makah word list collected in 1792 by Spanish explorers.

The other researcher who has worked on Makah is A. Renker. Her American University dissertation (Renker 1987) examines the behavior of AUX elements in Makah grammar and con-

cludes that an appropriate characterization of these elements obviates the need for a noun/verb distinction in Makah. In the course of the analysis, she presents part of the clitic system that codes tense, person, mood, and evidentiality, as well as a classification of stem types based on their co-occurrence patterns with various AUX elements.

Several anthropological works contain information on Makah, including Waterman (1920), a discussion of Makah whaling equipment, Gunther (1936) on ethnozoology, and Gunther (1945) and Gill & Renker (1985) on ethnobotany.

2 Segmental Phonology and Accent

This chapter and the next describe aspects of Southern Wakashan phonology. I have organized the discussion according to two of the three basic tasks of phonological description (cf. Kenstowicz 1994: 57). Thus, the present chapter is concerned with the inventory of consonant and vowel phonemes in Nuuchahnulth. It also touches on ablaut patterns (patterns of functionally significant changes in vowel quality and quantity) and the accent system. Chapter 3 then describes the most important automatic and non-automatic (morpheme-specific) phonological alternations in Nuuchahnulth. Unfortunately, time has not permitted much discussion of phonotactics, that is, the patterns of the distribution of phonemes in the various units of phonological structure (see, however, §2.3), but other authors have made references to the subject, e.g. Sapir (1911a, 1933, 1938), Jacobsen (1969a), Haas (1972), Stonham (1994a), *inter alia*. Rose (1981: 29-31) provides basic information on phonotactics and morpheme structure in Kyuquot dialect. A brief discussion of Makah phonology is provided in §0.

2.1 Consonants

Nuuchahnulth has 37 consonant phonemes, laid out in Table 1 (based on Sapir & Swadesh 1939: 12). International Phonetic Alphabet equivalents for Americanist symbols are listed in Table 2.

Because Table 1 is a table of phonemes, not phones, I have organized it giving relatively more consideration to the phonological properties of segments than to similarity of articulation per se. For instance, from a purely phonetic point of view, the glottal stop might be considered a plain voiceless stop, but I have placed it in the “Ejectives” row because, from a phonological and phonotactic point of view, it patterns more like an ejective stop than a voiceless stop — glottal constriction evidently has more influence on its phonological behavior in Nuuchahnulth than lack of voicing. The “ejective pharyngeal stop” /ʕ/ is a similar case. Phonetically, the segment is a glott-

Table 1. Nuuchahnulth consonant inventory

	Labial	Dental	Alveolar	Lateral	Alveo-Palatal	Velar	Labialized Velar	Uvular	Labialized Uvular	Pharyngeal	Glottal
Stops	<i>p</i>	<i>t</i>	<i>c</i>	<i>ɬ</i>	<i>ç</i>	<i>k</i>	<i>kʷ</i>	<i>q</i>	<i>qʷ</i>		
Ejectives	<i>p̣</i>	<i>ṭ</i>	<i>c̣</i>	<i>ɬ̣</i>	<i>ç̣</i>	<i>ḳ</i>	<i>ḳʷ</i>	<i>q̣</i>	<i>q̣ʷ</i>	<i>ʔ</i>	<i>ʔ</i>
Fricatives			<i>s</i>	<i>ʈ</i>	<i>ʃ</i>	<i>x</i>	<i>xʷ</i>	<i>χ</i>	<i>χʷ</i>	<i>ħ</i>	<i>h</i>
Sonorants	<i>m</i>	<i>n</i>			<i>y</i>		<i>w</i>				
Glottalized Sonorants	<i>ṃ</i>	<i>ṇ</i>			<i>ỵ</i>		<i>ẉ</i>				

Table 2. Symbol correspondences

Nuu.	<i>c</i>	<i>ɬ</i>	<i>ç</i>	<i>ʃ</i>	<i>x</i>	<i>ħ</i>
IPA	[ts]	[tʰ]	[tʃ]	[ʃ]	[χ]	[ħ]

tal stop with pharyngeal constriction (Sapir & Swadesh 1939: 12-13, Swadesh 1939: 78), but, like the plain glottal stop, it patterns with the ejectives phonologically. Tables of the Nuuchahnulth inventory in other publications sometimes appear to follow phonetics instead of phonology by placing the two glottal stops with the plain stops (e.g. Sapir & Swadesh 1939: 12, Nakayama 1997a: 9). For Sapir and Swadesh at least, this may have been unwitting, since both recognized the importance of phonological considerations (over purely phonetic ones) in the organization of the phonemic system of a language (cf. Sapir 1925, Swadesh 1934). Their practice with other segment classes clearly follows phonology rather than phonetics. Like myself, for example, they (and Nakayama) group the plain and ejective affricates with the plain and ejective stops, whereas a strictly articulation-based classification would have them in separate categories.³ Another case of the phonology-over-phonetics principle in Table 1 is the grouping of the nasals and glides into a single manner category, the “Sonorants” category. Sapir & Swadesh (1939: 12), Rose (1981: 13) and Nakayama (1997a: 9) agree in putting these segments together in a single category.⁴ The phonological motivations for the groupings in Table 1 will become apparent in Chapter 3.

A note on orthography: various symbols have been used for the pharyngealized glottal stop in the literature. To cite a few, Sapir (1924) and Sapir & Swadesh (1939) use an apostrophe with underdot, Sapir & Swadesh (1955) use a turned apostrophe (the symbol traditionally used to transliterate Arabic *‘ain*), and, more recently, Rose (1981) and Nakayama (1997a) have used a turned glottal stop. I have avoided these symbols in this dissertation because Sapir and Swadesh’s modified apostrophe is not a standard symbol in either the Americanist or IPA traditions, and the turned glottal stop and *‘ain* symbols are phonetically misleading in that they normally represent a voiced pharyngeal fricative. Instead, I use a glottal stop with superimposed tilde, the IPA diacritic for velarization or pharyngealization (Pullum & Ladusaw 1986: 221); ‘ʔ’ is a closer symbolic representation of the segment’s articulation.

The Nuuchahnulth consonant inventory has many features of typological interest, most of which are shared by other languages in the Northwest Coast area. An obvious one is its size: with 37 segments, it is large by cross-linguistic standards, but typical of the area, where all the languages have rich consonant systems. Other areal traits of the inventory include:

- A full complement of velar and post-velar segments that includes an opposition between labialized and non-labialized segments;
- An opposition between a plain voiceless stop series and an ejective stop series;
- An opposition between a plain sonorant series and a glottalized sonorant series;
- Multiple lateral segments, including the lateral affricates / λ λ' /;
- Glottal stop featured as a segment in the inventory parallel to other stops;
- No labial fricatives, despite an almost complete set of fricatives at other places of articulation;
- No /r/ segment.

For further details and references on Northwest Coast areal phenomena, both phonological and grammatical, see Thompson & Kinkade (1990).

The consonants show little allophonic variation. One process is coda aspiration (Sapir 1924: 84, note 8; Sapir & Swadesh 1939: 12): Sapir's (1924) phonetic transcription shows that voiceless plain (non-ejective) non-affricate stops /p t k k^w q q^w/ are aspirated when they appear in syllable codas; otherwise they are only lightly aspirated or unaspirated. (See note 7 for a brief description of syllable structure.) Thus (with normalized transcription), *ma'ʔak* [ma:ʔak^h] 'California whale', but *kaxi'kis* [kaxi:kɪs] 'Kahikis (place name)'. This rule also applies in coda clusters: *ʕitkpiλ* [ts't^hk^hptɬ] 'lie down in the house on (one's) back'.

2.2 Vowels

Sapir & Swadesh's (1939: 12–13) analysis of the vowel inventory is shown in Table 3.⁵ Symbols are adjusted to reflect current orthographic practice in the Southern Wakashan descriptive literature (see note 6). Approximate phonetic values (inferred from Sapir's 1924 phonetic transcription system and Sapir & Swadesh's 1955: 3-4 pronunciation notes) are as follows:

<i>i</i>	[ɪ]	high front unrounded lax, as in Standard American English (SAE) <i>pit</i>
<i>i'</i>	[i:]	high front unrounded tense long, as in SAE <i>Pete</i>
<i>u</i>	[ʊ]	high back rounded lax, as in SAE <i>put</i> (but see below)
<i>u'</i>	[u:]	high back rounded tense long, as in SAE <i>hoot</i> (but see below)
<i>a</i>	[a]	low central unrounded, as in SAE <i>pot</i>
<i>a'</i>	[a:]	low central unrounded long, as in SAE <i>father</i>
<i>e</i>	[ɛ]	mid front lax, as in SAE <i>pet</i>
<i>e'</i>	[e:]	mid front tense long, as in SAE <i>pate</i>
<i>o</i>	[ɔ]	mid back lax, as in SAE <i>bought</i>
<i>o'</i>	[ɔ:]	mid back lax long, as in SAE <i>dog</i>

Table 3. Nuuchahnulth vowel inventory

	Front	Central	Back
High	<i>i i'</i>		<i>u' u'</i>
Mid	<i>e e'</i>		<i>o o'</i>
Low		<i>a a'</i>	

The high back vowels are actually more open than the cardinal value, having the lip rounding of the vowel in *hoot* but the height of the vowel in *coat* (Sapir & Swadesh 1939: 13, 1955: 4).⁶

The mid vowels in Table 3 are phonemically marginal. Although common on the surface (except the short mid back vowel — see below), most occurrences are secondary, arising from one of two sources. First, the long mid vowels /*e' o'*/ often appear as ablauted variants of the six basic (i.e. non-mid) vowels /*i i' u u' a a'*/ in emphatic vocative and “calling out” forms (§2.4), and also in some interjections, e.g.

- (1) ?*e'* (expressing dissatisfaction)

hane' ‘hey!’

he' (implying that a statement is true in a surprising way or to a surprising degree)

ho'wi (expressing willingness and intention of doing as requested)

Second, the mid front vowels /*e e'*/ can result from an umlaut rule that raises and fronts /*a a'*/ to /*e e'*/ preceding /*i i'*/ with only glottal stop intervening, e.g. *taña* ‘child’, *tañe?is* ‘little child’ (§3.2.1).

Since the ablaut variants /*e' o'*/ have functional significance, they must be considered phonemic. There are also a very few occurrences of /*e e'*/ in underlying forms of native vocabulary (not attributable to umlaut) that support their phonemic status. The short mid front vowel appears underlyingly (and not from umlaut) in a few interjections and a single root in Sapir & Swadesh’s (1939: 243-316) list of “primary stems”: *ke?e'ckat-* or *kacke?e:t-* ‘jump on one leg, hop’. The long front mid vowel also appears in this root as well as in a few personal names (some of which

may not be of Nuuchahnulth origin), e.g. woman's name *čeʔakam*. The short mid back vowel /o/ seems to occur only as an allophonic variant of /u/ and is therefore probably non-phonemic.

Vowels show more tendency for allophonic variation than the consonants. There is no complete, systematic account of Tseshaht dialect vowel allophony that I am aware of, but the following allophones can be posited from comments in Sapir (1924) and Sapir & Swadesh (1939: 13).

All vowels are characterized by “a breath-release” in word-final position (Sapir 1924: 84, note 9). It is not heard when the word is pronounced in close proximity to the next word. Thus, Sapir (1924: 76) transcribes *ʔinkʔiʔ* ‘the fire’ as [ʔɪnək^hʔɪ^h] (transcription normalized; for the aspiration of /k/ see §2.1; for [ə] see §2.3).

The pharyngeal consonants condition another set of allophonic vowel processes. These consonants have certain coarticulatory effects on adjacent high vowels. The pharyngeal fricative /ħ/ is said to have a “voiceless *a*-timbre [that] colors and lowers following high vowels” (Sapir 1924: 83, note 3). The examples in (2) show two roots with short high vowels preceded by /ħ/, both in phonemic representation (in slashes) and Sapir’s phonetic notation (in brackets).

- (2) /ħis-/ [ħɛs] ‘blood’
 /ħus-/ [ħɔs] ‘salt water’

These lowered allophones of the high vowels are tenser than the mid-vowel phonemes in Table 3, ensuring that we are dealing with an allophonic process here rather than a neutralizing one (cf. Sapir 1924: 85, note 22).

This “coloring” also affects long vowels, creating what Sapir & Swadesh (1939: 13) refer to as “pseudo-diphthongs”, e.g. the suffix *-asħuʔ* (ʔ) ‘at the chest’ is transcribed by Sapir (1924: 87, note 44) as [asħauʔ]. In word-final position, however, /i/ is usually [e:] after /ħ/, e.g. *ʔatħiʔ* ‘night’ is transcribed as [ʔatħe:]. Sapir also records the [e:] allophone word-medially in a few cases: *ħiħiʔssuʔ* ‘bloody-eyed’ is transcribed as [ħeħe:ssuʔ].

Evidently this lowering influence also extends to some preceding high vowels:

- (3) /*tuh-*/ [tʰɔh] ‘head’ (Sapir 1924: 85, note 20)
 /*kuh*/ [kɔh] ‘hole’ (Sapir 1924: 87, note 36)

Table 4 summarizes the effects of pharyngeals on the high vowels that can be gleaned from Sapir’s (1924) transcriptions. More study is required to determine the conditioning environments for those segments listed with multiple allophones, and also to determine whether the gaps in Table 4 are real or only due to lack of data.

Table 4. Articulatory effects of pharyngeals

	<i>i</i>	<i>i</i> ʰ	<i>u</i>	<i>u</i> ʰ
<i>h</i> _____	[ɛ]	[ɛ] [e:] [ɛi] [ai]	[ɔ]	[au] [ɔu]
_____ <i>h</i>	[ɛ]	[i:] [i ^ɛ]	[ɔ]	
<i>ʔ</i> _____	[ɛ]	[ɛi] [ai]	[ɔ]	[au] [ɔu]
_____ <i>ʔ</i>	[e]			

Uvular stops have similar effects to the pharyngeals, although these appear more sporadic; Sapir & Swadesh (1939: 13) speak of “*e*-glides due to *q*”. For example, the suffix *-qi* ‘on top’ in *ʔapqi* ‘(on) the summit’ is transcribed by Sapir (1924: 87, note 44) as [qɛ^h].

2.3 Coda nasals and post-nasal murmur-vowels

Nasal consonants in syllable codas are pronounced with a schwa-like murmur-vowel release (Sapir & Swadesh 1939: 13), e.g. *cikimin* ‘iron’ [tsɪkɪmɪnə], *čims* [tʃɪməs] ‘black bear’, *hunqsimč* [hunəq^hsɪmətʃ] ‘do a ritual to catch drift-whales’, *ʔink*^w [ʔɪnək^h] ‘fire’.⁷ Sapir described the sound of this post-nasal release vowel in several passages over the course of his writings on the language. In one early work he called it a “short open *i*-vowel of rather unclear quality” (1915, reprint 1949: 196). Later, he referred to it variously as a “murmured *i*-vowel” (1924: 84, note 9), a “murmured vowel of *i*-timbre” (1933, reprint 1949: 57), a “light *i*-murmur release”

(1938, reprint 1949: 235), and (with Swadesh) a “voiced murmur-vowel release” (Sapir & Swadesh 1939: 13). My characterization of it as schwa follows Rose (1981: 21).

The status of these murmured schwas as mere phonetic concomitants to coda nasals may imply that they are phonologically inert, but this is only partially accurate. It is true that they are invisible for purposes of syllable counting (and hence not represented in the current orthography⁸), e.g. *?ink^w* ‘fire’ is monosyllabic, as the behavior of attached suffixes with long vowels (§3.1) shows: the vowel in the locative suffix *-a’s* ‘on a horizontal surface’ is long if the suffix falls in the first or second syllable of a word (e.g. *cik-a’s* ‘aslant on it’), but, in third or later syllables, it is short (e.g. *samat-as* ‘crawling around on it’). In *?ink^w-a’s* ‘fire on it’, the vowel is long, proving *?ink^w* is monosyllabic. However, murmur-vowels *do* count as vowels for “linear” phonological processes — suffixes that directly follow murmur-vowels take post-vocalic forms. For example, certain suffixes have an initial consonant that is lost following consonant-final bases, but retained following vowel-final bases, including bases with final coda nasals and murmur-vowels (§3.3.8). The locative suffix *-(c)sa:’ta* [L] ‘on the forehead’ is one such suffix.⁹ The bracketed initial consonant is lost following the consonant-final base *wik* ‘not, nothing’ in (4)a, but retained following the vowel-final base *ka-* ‘stick-like object protruding’ in (4)b. (4)c shows that the initial consonant is also retained following the coda nasal and its murmur-vowel.

- (4) a. **Consonant-final base**
wi’ksa’ta
wik-(c)sa:’ta [L]
 not-on.forehead
 ‘nothing on the forehead’
- b. **Vowel-final base**
ka’csa’ta
ka-(c)sa:’ta [L]
 stick.like.object.protruding-on.forehead
 ‘(feather) protruding from the forehead’

c. **Base with final coda nasal and murmur-vowel***ʔimcsa:ta* [ʔimətssa:ta]*ʔim-(c)sa:ta* [L]

locative.root-on.forehead

‘on the forehead’

Leniting suffixes (§3.3.3) provide another example. These suffixes, symbolized by -‘, have no effect following stop consonants (5)a, but following vowels (5)b or coda nasals with murmur-vowels (5)c, they require insertion of a glottal stop:

(5) a. **Stop-final base***ʔiqis**ʔiq-‘is*

still-on.beach

‘still on the beach’

b. **Vowel-final base***ʔaʔwʔis**ʔa-‘u:-‘is*

schooling.fish-lie.in.wait.for-on.beach

‘camp on the beach waiting for schools of fish’

c. **Base with final coda nasal and murmur-vowel***ʔapwinʔis* [ʔapwɪnəʔɪs]*ʔap-win-‘is*

locative.root-in.middle-on.beach

‘in the middle on the beach’

For a third example, the possessive clitic takes the form =*uk* when following consonant-final bases (6)a, but =*ʔak* following vowel-final bases (6)b. Bases ending with coda nasals and murmur-vowels are again treated as vowel-final bases (6)c:

(6) a. **Consonant-final base***čakupukʔi**čakup = uk = ʔi-‘*

man=POSS=ART

‘her husband’

b. **Vowel-final base***čiħaʔakʔi**čiħaʔ = ʔak = ʔi-‘*

ghost=POSS=ART

‘his ghost’

c. **Base with final coda nasal and murmur-vowel***ʔačsaʔimʔakʔi**ʔač-(c)sa:ta* [L]–*im* = *ʔak* = *ʔi*

wedge.up–on.forehead–thing=POSS=ART

‘his head-flattener’

Syllables containing coda nasals pattern with syllables containing long vowels with respect to a morpheme-specific process of vowel lengthening (§3.3.1). Some suffixes require phonological alterations to the first syllable of their base such as initial CV reduplication or vowel lengthening. If the first syllable vowel is already long, it is not affected — there are no overlong vowels. Compare the effect a suffix of this type has on bases with underlying short and long vowels (7)a-b with its effect on a base with an underlying coda nasal in the first syllable (7)c.

(7) a. **Base with an underlying short vowel in first syllable***wiksaʔta**wik-(c)sa:ta* [L]

not–on.forehead

‘nothing on the forehead’

b. **Base with an underlying long vowel in first syllable***ʔušsaʔta**ʔuš-(c)sa:ta* [L]

something–on.forehead

‘something on the forehead’

c. **Base with an underlying coda nasal in first syllable***ʔimcsaʔta* [ʔimətssa:ta]*ʔim-(c)sa:ta* [L]

locative.root–on.forehead

‘on the forehead’

Neither the underlying long vowel in (7)b nor the syllable with the coda nasal in (7)c are affected by the suffix-induced length. However, the underlying short vowel in *wik* ‘not’ in (7)a is lengthened to *wi.k*.

Post-nasal murmur-vowels are in origin reductions of original full vowels, either through historical change or through synchronic alternation. To begin with the historical, compare the Makah and Nuuchahnulth forms in (8). For present purposes, the Makah forms are assumed to represent

the original Proto-Southern-Wakashan vowels. (Note that Nuuchahnulth nasals /*m ṃ n ṇ*/, reflexes of original PSW nasals, correspond to voiced stops /*b d*/ in Makah; here it is Nuuchahnulth that is more conservative).

(8)	<u>M</u>	<u>N</u>	
	<i>ʔadaˀk^w</i>	<i>ʔink^w</i>	‘fire’
	<i>ʔadaˀba</i>	<i>ʔinma</i>	‘breast; milk’
	<i>-ˀadi</i>	<i>-ˀin</i>	‘making sound of ...’
	<i>-baˀda</i>	<i>-min</i>	formative suffix
	<i>-badaɣ</i>	<i>-minḥ</i>	plural suffix
	<i>-baɣi</i>	<i>-mḥi</i>	‘suitable for ...’
	<i>ʕeʔidiwa</i>	<i>ʕeʔinwa</i>	‘barnacle sp.’
	<i>ʕibiˀawiː</i>	<i>ʕimtuˀ</i>	‘squirrel’
	<i>-daba</i>	<i>-nim</i>	‘having the objective of obtaining ...’
	<i>-iːda</i>	<i>-in</i>	formative suffix
	<i>ʕabaˀs</i>	<i>ʕims</i>	‘soft fat, marrow’
	<i>-subač</i>	<i>-simč</i>	‘doing ritual for ...’
	<i>sibiˀt-</i>	<i>simt-</i>	‘roast fish over open coals’
	<i>ɣabaq-</i>	<i>ḥimq-</i>	‘dodge, evade’
	<i>widiˀs</i>	<i>wins</i>	‘vehicle right side up, on even keel’

These morphemes exhibit correspondences with regard to nasals and murmur-vowels that suggest three related changes in the history of Nuuchahnulth: 1) the reduction of original PSW full post-nasal vowels (retained in Makah) in vowel-nasal-vowel sequences to murmured non-nuclear (weightless) schwas; 2) incorporation of the now stranded nasals (along with any following consonants not immediately followed by a vowel) into the coda of the preceding syllable, followed by 3) “thinning” of the original pre-nasal vowels to /i/, apparently an assimilatory reaction to the

- (14) a. *ʔuʼsimč*
ʔu–simč [L]
 so.and.so–do.ritual.for
 ‘doing ritual for it’
- b. *taʼpanač* (**taʼpinč*)
ta–panač [L]
 drift–move.about.randomly
 ‘adrift’

There are also nasal-initial suffixes whose vowel does not reduce when the suffix is attached to vowel-final bases. Compare reducing *-nit* ‘stocked with ...’ with the non-reducing suffix *-naʼkʷ* ‘having ...’:

- (15) a. *ʔayint*
ʔaya–nit
 many–stocked.with
 ‘stocked with many, well stocked’
- b. *ʔayanak* (**ʔayink*)
ʔaya–naʼkʷ
 many–have
 ‘have many’

Finally, dialects can vary as to which morphemes have reduced sequences and which do not. In Tsessaht dialect, the dialect of most of our examples, the subordinating modal particle *ʔani* ‘that, because’ does not have a reduced vowel; in Kyuquot dialect (Rose 1981), on the other hand, this particle is reduced: *ʔin*.

Given the existence of both reducing and non-reducing morphemes, it is natural to ask whether any conditioning factors for reduction can be found. Unfortunately, little of substance can be said at this point. Sapir (1924: 84, note 9) relates reduction of post-nasal vowels to lack of accent on the reduced vowel: “The common Nootka groups *inⁱ* and *imⁱ*, in which the *i* represents a murmured-*i* vowel, go back to fuller forms of type *a* (or *ɪ, u*) + *n* or *m* + *a* (or *ɪ, u*), in which the second vowel is unaccented.” But this fails to account for morphemes like *-panač* in (14), where,

according to the basic accent rule (§2.5), the second vowel can never be accented, but remains unreduced.

It is also clear that, in at least some cases, reduction is optional. In the texts, we find, for example, both unreduced *yacḥa'qinuḷ* and reduced *yacḥa'qinḷ* ‘climb up (to the summit)’ and unreduced *yaq^wa'nu'ḷ* and reduced *yaq^winḷ* ‘that’s why, therefore, for this reason’:

- (16) a. *yacḥa'qinuḷ* and *yacḥa'qinḷ*
yac-ḥa'qi-nuḷ
 walk-on.summit-PERF
 ‘climb up (to the summit)’ (unreduced form at NA 147.44; reduced form at NA 142.29, 31, 32)
- b. *yaq^wa'nu'ḷ* and *yaq^winḷ*
yaq^w-a'nu:ḷ
 that.which-because.of
 ‘that’s why’ (unreduced form at NA 142.14, 260.18, 440.28, etc.; reduced form at NT 186.32, NA 70.17, 150.11, etc.)

The reduced forms seem more common.

2.4 Ablaut

The long mid vowels /e' o'/ replace the six basic vowels in vocative or emphatic calling out forms that occur in direct address. The attested replacement patterns are shown in (17) with examples:

- (17) a. *i* → *e'*
ḥawit ‘chief’ → *ḥawet*
ʔaḥkuʔaḷuk^weʔic ‘here is yours’ → *ʔaḥkuʔaḷuk^weʔe'c*
ʔasčihink ‘parent and child together’ → *ʔasčihenk*
- b. *i'* → *e'*
ʔaktck^wi' ‘debris from gnawing’ → *ʔaktck^we'*
ʔatck^wi' ‘vomit’ → *ʔatck^we'*
ča'kupi'ḥ ‘men’ → *ča'kupe'ḥ*

c. $a \rightarrow e'$

ćiša'ʔath 'Tsisha people' → *ćiša'ʔe'th*

ćíta'qma 'weather board' → *ćíta'qme'*

ʔeʔi'wa boy's name → *ʔeʔi'we'*

d. $a' \rightarrow e'$

ha'wiya't man's name → *ha'wiye't*

hica'k 'bed platform' → *hice'k*

k^watyart name of mythological character → *k^watye't*

e. $u \rightarrow o'$

naneʔiqsu 'uncles' → *naneʔiqso'*

ća'haqsu't 'Toughmouth (man's name)' → *ća'haqso't*

ćićišaʔaqsup 'Tsisha women' → *ćićišaʔaqsop*

f. $u' \rightarrow o'$

ćimtu' 'squirrel' → *ćimto'*

ka'ʔuc 'grandchild' → *ka'ʔoc*

These replacements are sometimes found in other emphatic circumstances as well, e.g. *yi't* 'yonder' may be emphasized as *ye't* (with long, drawn out vowel) 'faaaaaar off yonder'. See Jacobsen (1994) and Stonham (1994a) for further details and analysis.

2.5 Accent

Like vowel allophones, accent in Nuuchahnulth has received little systematic attention from researchers, forcing us again to rely on Sapir (1924) as our source. This text is too short (284 word tokens) for a complete analysis, but a preliminary rule of thumb is presented below that accounts for much of the data.

Sapir's transcription shows that accent placement in Nuuchahnulth is governed by a rather different rule from that found in Makah, formulated by Jacobsen (1979b: 4) as follows: "If the first vowel of a word is long, the accent falls on this syllable; if it is short, the accent falls on the

second syllable.”¹⁰ The apparent basic rule in Nuuchahnulth is, if the first vowel of a word is short *and* the second vowel is long, the accent falls on the second syllable; otherwise the accent falls on the first syllable. In other words, the first syllable is accented by default.¹¹ The Makah and Nuuchahnulth rules place accent identically except when the first two syllables are both short. In this case, Makah has accent on the second syllable, whereas Nuuchahnulth has accent on the first. The words in (18) show the Nuuchahnulth rule in action. (Here, as elsewhere in the dissertation, Sapir’s orthography has been normalized. The glosses are Sapir’s word glosses. Accented vowels are underscored).

(18) a. **Default placement**SS

<i>č<u>it</u>kpiʔaλ</i>	‘Now lay down in the house on (his) side’ (ln. 3)
<i>ka<u>λ</u>hš<i>i</i>λ</i>	‘appeared’ (ln. 7)
<i>tu<u>h</u>čiti</i>	‘head’ (ln. 7)
<i>tu<u>tu</u>hcaqču</i>	‘Head-at-each-end’ (ln. 15)
<i>wi<u>k</u>aλuk</i>	‘Now of (him) was not’ (ln. 4)

LS

<i>ʔa<u>γ</u>imkš<i>i</i>ʔaλ</i>	‘Now began to obtain many in hunting’ (ln. 8)
<i>k^w<u>i</u>:spanu<u>ł</u>š<i>i</i>ʔaλ</i>	‘Now began successively (to jump) from side to side’ (ln. 20)
<i>tu<u>w</u>csma</i>	‘woman’ (ln. 5)
<i>ma<u>γ</u>ʔak</i>	‘California whale’ (ln. 1)
<i>ʔu<u>s</u>imč<i>a</i>λ</i>	‘Now trained secretly for success in so and so’ (ln. 1)

LL

<i>ʔi<u>h</u>tu<u>p</u></i>	‘humpback whale’ (ln. 2)
<i>mu<u>č</u>i<u>ł</u></i>	‘was for four days’ (ln. 43)
<i>na<u>γ</u>csa<u>λ</u></i>	‘Now was looking at’ (ln. 5)
<i>qa<u>γ</u>a<u>γ</u>ana<u>č</u>qa</i>	‘being drifting aimlessly’ (ln. 32)
<i>yu<u>q</u>^wa</i>	‘likewise’ (ln. 76)

b. **First syllable short, second syllable long -- accent on long syllable**SL

<i>haw<u>i</u>:ʔaλ</i>	‘Now finished’ (ln. 3)
<i>hayu<u>γ</u>ipš<i>i</i>λ</i>	‘had obtained ten’ (ln. 86)
<i>na<u>p</u>x<u>ta</u>:ʔaλ<u>q</u>urwe<u>γ</u>in</i>	‘Now would die immediately, it is said’ (ln. 24)
<i>š<u>i</u>λ<u>st</u>i:s</i>	‘move inland’ (ln. 36)
<i>ta<u>š</u>i:ʔak<u>γ</u>i</i>	‘the door of (them)’ (ln. 6)

This rule works in most cases, but there are exceptions. Quick tabulation shows the rule accounts for 206 of 284 word tokens (78 exceptions from a population of 284 = 206/284 or 73%). Many of

the exceptions involve 1) words that have no accent marked or 2) tokens of the Ditidaht personal name *čaʔaci·b*. If these two classes of exceptions are set aside, the percentage conforming to the rule rises somewhat (39 exceptions from a population of 245 = 206/245 correct or 84%). Explaining the remaining exceptions is extremely difficult given the small amount of data, although some may be systematic (assuming the basic rule is correct in the first place). We are not aided by the fact that the reliability of the transcription is suspect in places, since accent is sometimes inconsistently marked across tokens of the same word type, e.g. *ʔath̄i·* ‘night’ at line 28, but *ʔath̄i·* at lines 6 and 44; *huʔacač̄iλ* ‘return’ at line 58, but *huʔacač̄iλ* at line 69.

I mentioned earlier (§2.3) that syllables containing coda nasals pattern with syllables containing long vowels with regard to a certain phonological alternation involving length. The available evidence is contradictory as to whether this parallelism continues with accent placement. Stoham (1994a: 126, 1994b: 16) cites data from Sapir’s unpublished field notes on Nuuchahnulth that suggests it does: *č̄ims̄mi·t* ‘Son of Bear’, *ħač̄ims̄iqs̄akʔi* ‘her brothers’, *hiš̄im̄ȳu·p* ‘gather together’. However, Sapir (1924) contains several words in which a coda nasal in the second syllable does not attract stress from a short first syllable as we would expect given the examples in (18)b: *λ̄iš̄λ̄in* ‘foot’ (ln. 19), *ħ̄is̄im̄ȳawiʔaλ̄* ‘now became blood-covered’ (ln. 20), *hił̄yinʔi* ‘the one at the bow’ (ln. 50). Further research is required to address these discrepancies.

3 Phonological Alternations

A variety of phonological alternations take place during word formation, the most important and common of which are described in this chapter. The presentation is descriptive in intent and informal for the most part, although, for descriptive purposes, it does assume a model of phonology with extrinsically ordered rules applied to underlying forms.

The alternations are presented in order of application to underlying forms except that the automatic alternations in §3.2 are ordered after the morpheme-specific alternations in §3.3 even though they are described first for expository reasons. The important issue of vowel-length alternations is discussed apart from the other alternations in §3.1. Only alternations of some generality are discussed individually in this chapter; those that are restricted to a few morphemes or are rarely encountered are introduced as necessary.

Underlying forms, which do double duty as citation forms, frequently contain diacritics that specify how or if certain morpheme-specific rules apply. It has not been possible to avoid using morphemes with diacritics in examples before the diacritics themselves have been introduced; readers may consult the list of abbreviations and symbols after the Table of Contents for brief explanations of them. Most are used in the same way as in Sapir and Swadesh's works, where they were originally introduced (see especially Sapir & Swadesh 1939: 236-39), although their diacritic conventions have been simplified in a few cases. Some of their original diacritics are used to abbreviate sets of allomorphs (cf. McCawley 1967: 108): they represent the phonological properties of each allomorph in a single citation form by "superimposing" the allomorphs on one another. Sometimes, however, the present analysis posits a single underlying form for such lexical items rather than an allomorph set, which eliminates the need for Sapir and Swadesh's diacritic. For example, labialized consonants alternate with their non-labialized homorganic counterparts in word-final position and a few other environments (§3.2.2), e.g. we find *mama·siyak^w-i·c*

‘belonging to a mud shark’, but *mama’siyak* ‘mud shark’ without the suffix. In Sapir and Swadesh’s analysis, the ‘mud shark’ root has two allomorphs, the word-final allomorph /*mama’siyak*/ and the pre-vowel allomorph /*mama’siyak^w-*/. They merge these to produce the citation form *mama’siyak^{(w-}*), where the parentheses and hyphen show that the labialized allomorph appears before vowel-initial suffixes. The analysis proposed in §3.2.2, on the other hand, posits the underlying form *mama’siyak^w* and an automatic delabialization rule. With this analysis the parentheses and hyphen are redundant: since no labialized final consonant fails to alternate in the relevant environment, there is no need for a special mark to signal the alternation.¹²

Many of the alternations described in this chapter are triggered by affixation. The language distinguishes an inner layer of affixes, mostly suffixes but also a few infixes, from an outer layer of enclitics. The inner affixes include various aspectual formatives and “lexical” suffixes, suffixes with relatively concrete meanings like the verbalizing suffix *-simč* ‘doing ritual for ...’. The clitics are more loosely joined to their host phonologically, and typically have more abstract grammatical functions than inner-layer affixes, coding grammatical categories like tense, mood, and person and number of the subject. The inner affixes and the clitics behave differently with regard to several of the phonological alternations described. Differences will be noted piecemeal as we go along, and a summary list of them can be found in Chapter 7.

3.1 Neutralization of vowel length

Table 3 in Chapter 2 showed that vowel length is contrastive in Nuuchahnulth. The length contrast is demonstrated by the following minimal pairs of roots, which are distinguished only by vowel length. (The period in *tał.*- ‘undried, fresh’ and *tuk.*- ‘mass of small round objects strewn about’ is a diacritic signaling a morpholexical rule described in §3.3.2).

(19)	Short vowel	Long vowel
	<i>tał.</i> -	<i>ta^ł</i>
	‘undried, fresh’	‘warmed’

<i>ti-</i> 'wipe'	<i>ti'-</i> 'sink under water'
<i>siq-</i> 'get cooked'	<i>si'q-</i> 'stick-like object gets pushed along'
<i>tuk.-</i> 'mass of small round objects strewn about'	<i>tu'k-</i> 'planted, planting'
<i>sut-</i> 'you (sg.)'	<i>su't-</i> '(to) drill'

Frequently, however, the contrast between long and short vowels is neutralized. Compare the length of the bold-face vowels in the first column of (20) to the length of those in the second column. In each case the bold-face vowel is long in the second syllable of the word, but short in the third or later syllables. Thus, the length alternation is neutralized in syllables after the second in the word.

(20)	Long vowel in second syllable	Short vowel in third or later syllable
a.	<i>caqi'c</i> <i>caqi'c</i> twenty 'twenty'	<i>cacaqic</i> [R]– <i>caqi'c</i> PL–twenty 'twenty each'
b.	<i>ʔuna'k</i> <i>ʔu-na'k^w</i> so.and.so–have 'have it'	<i>čapacnak</i> <i>čapac-na'k^w</i> canoe–have 'have a canoe'
c.	<i>čax^wi'nak</i> <i>čax^w-i'nak^w</i> spear–imitate.in.dance 'Spear-Dance (man's name)'	<i>čiptax^winak</i> <i>čiptax^w-i'nak^w</i> somersault–imitate.in.dance 'perform a somersault dance'
d.	<i>kapʔu'kt</i> <i>kap-.ʔu'kt</i> rob–obtained.by 'stolen goods'	<i>ʔačaxʔukt</i> <i>ʔačax^w-.ʔu'kt</i> snare–obtained.by '(fish) obtained by snaring'
e.	<i>ʔi'he'ʔic</i> <i>ʔi'h^w=(m)a' = ʔic</i> big=INDIC=2sg 'you (sg.) are big'	<i>nunu'k^we'ʔic</i> <i>nunu'k=(m)a' = ʔic</i> sing=INDIC=2sg 'you (sg.) are singing'

This alternation can be accounted for by the following neutralization rule:

(21) Neutralization of Vowel Length

Long vowels become short in the third syllable of the word or later.

There are cases where the neutralization rule fails to apply. Some roots have underlying long vowels in the third or later syllable, e.g. *ʔamaʔa:s* ‘in the very act of doing’, *ʔi:šʔini:ʔa* ‘uni-valve shell’, *ćawayu:s* ‘rainbow’. (These are free roots; that is roots that may also occur as words, §5.2.2.) Suffixes such as *-i:cs* ‘bringing, carrying ...’ and *-sýu:č* ‘exposed’ have long vowels that never shorten regardless of their position in a word:

(22)	Suffix with long vowel in second syllable	Suffix with long vowel in third or later syllable
a.	<i>ću'ćki'cs</i> <i>ću'ćk-i:cs</i> all-bring ‘bringing all’	<i>meʔiʔqaci'cs</i> <i>meʔiʔqac-i:cs</i> boy-bring ‘bringing a boy’
b.	<i>na'ʔksýu'č</i> <i>na'ʔk-sýu:č</i> [L] have.feet.located-exposed ‘have one’s feet sticking out’	<i>hu'ʔaksýu'č</i> <i>hu'ʔak^w-sýu:č</i> [L] early-exposed ‘out of bed early’

Nevertheless, the number of morphemes in the lexicon with long vowels that follow the neutralization rule exceeds the number with vowels that fail to neutralize. Following Jacobsen (1979a), “Persistently long” vowels, as I refer to them henceforth, are marked as exceptions to the neutralization rule with a colon in underlying form, e.g. *ćawayu:s* ‘rainbow’, *-i:cs* ‘bringing, carrying ...’, *-sýu:č* ‘exposed’. The persistent-length colon is the first of many diacritics in this chapter that indicate a segment behaves peculiarly with respect to some phonological rule. Not all morphemes with long vowels occur in the texts in forms that would show whether the vowels neutralize or are persistently long. I assume neutralization as the default case.

An addendum to Rule (21): long vowels also regularly become short in prefixed reduplicative syllables (cf. Swadesh 1948a: 107). Reduplication is used for various grammatical purposes in

Nuuchahnulth, e.g. plural marking in (23), where [R] stands for reduplication. See §3.3.1 and Chapter 5 for others.

- (23) a. *ququʔas* (due to two subsequent changes this form surfaces as *quq^waʔs*; see (88)c)
 [R]–*quʔas*
 PL–person
 ‘people’
- b. *ʔiʔiʔh* (due to two subsequent changes this form surfaces as *ʔeʔiʔh*)
 [R]–*ʔiʔh^w*
 PL–big
 ‘big ones’

Persistently long vowels do not shorten in reduplicative syllables:

- (24) *taʔtaʔyi*
 [R]–*taʔyi*
 PL–older.brother
 ‘older brothers’

Other discussions of length alternations in Nuuchahnulth can be found in Sapir & Swadesh (1939: 237), Klokeid (1975), Jacobsen (1979a: 145, note 3) Rose (1981: 27), Stonham (1994a). The present analysis is based on Jacobsen’s.

Before concluding this section, a look at the historical origin of the length alternation is instructive, for it is a good example of the kind of messy, domain-straddling phenomena that arise when the output of regular historical change is disturbed by later developments. I draw upon Jacobsen (1979c: 779-81) for the following description of the probable course of development. Proto-Southern-Wakashan (PSW) originally had a simple three-vowel system with contrastive length: /*a aʔ i iʔ u uʔ*/. Both long and short vowels occurred in all positions in the word. Long vowels were then shortened in the third or later syllable for reasons that are as yet unclear. Later, in the post-PSW period, long vowels were reintroduced in the third and later syllables in the daughter languages by various additional changes. These more recently introduced long vowels are source of the persistently long vowels of modern Nuuchahnulth. Most obvious are vowels resulting from the vowel-glide contraction described in Haas (1969: 118) (cf. also Sapir 1924: 88,

note 51, 1938, reprint 1949: 233): **ay > i:* and **aw > u:*. To these we can add a few apparent cases of **uw > u:*.¹³ The results can be seen in comparison with Makah, which has in some cases preserved the original vowel-glide sequences. The surface sequence *ey* in Makah is from underlying */ay/* or */iy/*. The root example shows contraction in the first or second syllable rather than the third or later, because examples of the latter are hard to come by, but the long vowel in Nuuchahnulth is assumed to have persistent length for sake of discussion.¹⁴

(25)	<u>M</u>	<u>N</u>	
	- 'eyax	- 'i:h	'hunting, collecting ...'
	- 'eyik	- 'i:k ^w	'given to, fond of ... -ing'
	- 'awi 'waiting for ...'	- 'u:-	'intending to get ...; camping out for the purpose of getting ...; waiting in ambush to get ...'
	<i>xuwic-</i>	<i>xu:c-</i>	'intoxicated'

Klokeid (1996: 51) also notes borrowing as a source of persistently long vowels in Nuuchahnulth, e.g. *?o'pako:t* 'overcoat' (< Eng.). We must conclude that what began as a more or less phonological process resulting from a regular sound change is now at least partly a lexical matter, since lexical items with alternating vowels must be distinguished in the lexicon somehow from lexical items with more recently developed persistently long vowels.

3.2 Automatic alternations

3.2.1 Umlaut

The low central vowels */a a'/* are raised and fronted to */e e'/* when followed in the next syllable by */i/* or */i'/* and only */ʔ/* intervenes (Sapir 1924: 85, note 22). This environment may occur in derivation when a suffix or clitic beginning with glottal stop and a high front vowel is added to a base ending in */a/* or */a'/* (26)a-b, or it may occur morpheme-internally (26)c:

- (26) a. *ʔaya* ‘many’ → *ʔayeʔi* ‘the many’
ʔa'na ‘thus long’ → *ʔa'neʔis* ‘short’
- b. *ci'qa'* ‘chanting’ → *ci'qe'ʔi* ‘the ones chanting’
ʔana' ‘thus far’ → *ʔane'ʔi'* ‘get to be thus far’
- c. *keʔis* ‘going directly where one is going without swerving or pausing’
weʔič ‘sleeping’
yeʔisi ‘common clam, butter clam’

As noted earlier (§2.2), the umlauted vowels are articulatorily distinct from the allophones of the high vowels lowered by pharyngeals and (sporadically) uvular consonants. Sapir (1924: 85-86, note 22) writes: “[T]hese [umlauted] vowels are felt as distinct from secondary e, ε, and e' ... that are merely lowered from i, i' because of preceding or following velar consonant.” (By “velar” he means “uvular.” It is unclear why there is no mention of the lowering by pharyngeals). He also describes the umlauted vowels as “open”, probably indicating a lax quality versus the tenser quality of the high vowels lowered by the pharyngeals (and uvulars). The fact that the two sets of phones, the umlaut set and the lowered set, are distinct removes the possibility of a violation of bi-uniqueness, i.e. a situation in which a single allophone belongs to two phonemes.

This umlaut process occurs throughout the southern region of the Southern Wakashan speaking area: in Makah, Ditidaht, and the southern dialects of Nuuchahnulth represented in Sapir and Swadesh’s texts (Tsessaht and Ucluelet). More northerly dialects of Nuuchahnulth like Ahousaht and Kyuquot retain original /a a'/, cf. Ahousaht *k^waʔi:λ* ‘sit down on the ground’ (Nakayama 1997a: 19, ex. 20) (Tsessaht *k^weʔi:λ*), Ahousaht, Kyuquot *waʔič* ‘sleeping’ (Nakayama 1997a: 150, ex. 246; Rose 1981: 61, ex. 121).

3.2.2 Neutralization of labialized and non-labialized consonants

The contrast between labialized and non-labialized consonants is neutralized in several environments (cf. Sapir 1924: 87, note 33, 89, note 58, Swadesh 1933: 10, 1939: 80, Jacobsen 1969b).

Some neutralizing environments favor non-labialized consonants, others favor labialized consonants. A segment that occurs in a proscribed environment is replaced by its homorganic labialized or non-labialized counterpart.

Non-labialized consonants that are capable of labialization are replaced by their labialized counterparts when immediately preceded by a high back vowel:

- (27) *ćimtuq^was*
ćimtu-(q)a's
 squirrel–daughter.of
 ‘Squirrel-daughter’

See §3.3.8 for the significance of the parentheses in *-(q)a's*. They are irrelevant to the present discussion.

Labialized consonants are replaced by their non-labialized counterparts in the following three environments:

Environment 1: Immediately preceding non-pharyngeal and non-glottal consonants:

- (28) *makšiλ*
mak^w-šiλ
 buy–PERF
 ‘buy’

Compare the realization of *mak^w-* when it precedes

- an unrounded vowel, e.g. *mak^wink* ‘trade’ (< *mak^w-* + *-ink* ‘together with’)¹⁵
- a pharyngeal consonant, e.g. *mak^wħa* ‘buy’ (< *mak^w-* + *-ħa* ‘buy ... (perf.)’)
- a glottal consonant, e.g. *mak^wʔatu* ‘sell’ (< *mak^w-* + *-ʔatu* ‘come off (perf.)’).¹⁶

Delabialization is optional before pharyngeals:

- (29) *ya'ya'qħinʔas* or *ya'ya'q^wħinʔas*
yaq^w-ħin [LR+L]-'as
 that.which–at.end–outside
 ‘the end of the village’

Environment 2: Immediately preceding a rounded vowel

- (30) *makut*
mak^w-ut^w
 buy-place.for
 ‘store’

Compare (30) with *mak^w*- preceding a vowel other than /u/ or /uʷ/, e.g. *mak^wink* ‘trade’.

Environment 3: Immediately preceding a word boundary

- (31) *?ink*
?ink^w
 fire
 ‘fire’

Compare (31) with *?ink^w* preceding a (vowel-initial) suffix, e.g. *?ink^was* ‘fire on a horizontal surface’ (< *?ink^w* + *-as* ‘on a horizontal surface’).

Boundaries between clitics and their hosts are treated like word boundaries with respect to labialization. (Clitic boundaries are symbolized by ‘=’.)

- (32) *?ink?i*
?ink^w=?i
 fire=ART
 ‘the fire’

We would expect **?ink^w?i* given the condition listed in (28), which permits labialized consonants before glottal stops, but the clitic boundary triggers delabialization instead.

In circumstances where the rules for neutralization of labialization conflict, i.e. where a segment capable of labialization follows /u uʷ/, which would trigger labialization, but, at the same time, precedes a consonant that would otherwise prevent labialization (Environment 1), a rounded vowel (Environment 2), or a word boundary (Environment 3), labialization is optional. The texts that form the main body of our corpus are not a reliable guide here, since, as Jacobsen (1969b) points out, the orthography in Sapir & Swadesh (1939, 1955) is phonemically rather than phonetically significant with regard to this data. Thus, in these two volumes we find only transcriptions with non-labialized consonants in these environments, e.g.

- (33) *hi·nisuʔuk*
 ‘moving along up and down’ (NT 142.30, NA 48.32-33, etc.)

čaʔuk
 ‘man in a canoe, a manned canoe’ (NT 64.8, 150.19, etc.)

tuʔksimč
 ‘doing ritual to catch sea-lions’ (NT 112.22, NA 48.32)

tuxšič
 ‘jump’ (NA 81.17, 368.19, etc.)

However, in Sapir (1924), which uses a phonetically-based orthography, we find *hi·nisuʔuk* at 77.28, but *čaʔuk* at 78.2, and *tuʔksimč* at p. 82, note 1, but *nuʔkču* ‘music inside’ at p. 86, note 31 and *tuxšič* at p. 88, note 45. Klokeid (1977) notes similar variation in unpublished manuscripts.

While it is generally true that Sapir & Swadesh (1939, 1955) do not record the actual phonetic variation in labialization, even in these texts it can be found in few places. Consider the examples in (34): addition of the Subordinate mood clitic = *qaʔ* (§7.2.7) to *hayu* ‘ten’, a base ending in a rounded vowel, produces a form transcribed variously as *hayuqa* or *hayuq^wa*. As previously mentioned, clitic boundaries are treated like word boundaries for purposes of labialization, so such variation is expected:

- (34) *hayuqa* or *hayuq^wa*
hayu = qaʔ
 ten=SUBOR
 ‘that there were ten’ (first form at NA 344.20, second at NA 62.33-34)

3.2.3 Reduction of vowel sequences

Vowel sequences are not permitted. When two vowels come to be adjacent in the course of derivation, the sequence is reduced to a single vowel whose length and quality are determined by the length and quality of the underlying vowels (Sapir & Swadesh 1939: 236-37). The rules for reduction of vowel sequences that involve the first root vowel (i.e. the vowel following the initial

consonant of the root) differ slightly from those for sequences that do not involve the first root vowel. This involves a bit of morphological conditioning (because the rules need to “know” whether a vowel is the first vowel of a root — a morphological rather than phonological question), so reduction of vowel sequences is not a purely phonologically-conditioned process like the other processes in this section, but it is regular, unlike the morpheme-specific processes described in §3.3.

3.2.3.1 Sequences not involving the first root vowel

a) The quality of the resultant vowel is determined by the hierarchy $u > i > a$. The quality will be /u/ if one of the two underlying vowels is /u/, /i/ if an /i/ but no /u/ is involved, and /a/ only if both underlying vowels are /a/. The order of the underlying vowels is immaterial. Examples are wanting for $i + u$ and $a + u$ sequences due to the scarcity of /u/-initial suffixes.

- (35)
- | | |
|--|--|
| <p>a. $u + i \rightarrow u$
 <i>ḥayusta</i>
 <i>ḥayu-ista</i>
 ten-in.canoe.as.crew
 ‘ten crewmen’</p> | <p>$i + u \rightarrow u$
 unattested in corpus</p> |
| <p>b. $u + a \rightarrow u$
 <i>ḥayuyi</i>
 <i>ḥayu-ayi</i>
 ten-give.PERF
 ‘give ten’</p> | <p>$a + u \rightarrow u$
 unattested in corpus, but see (37)c</p> |
| <p>c. $i + a \rightarrow i$
 <i>ʔuyiyi</i>
 <i>ʔuyi-ayi</i>
 medicine-give.PERF
 ‘give (as) medicine’</p> | <p>$a + i \rightarrow i$
 <i>ʔayista</i>
 <i>ʔaya-ista</i>
 many-in.canoe.as.crew
 ‘many crewmen’</p> |
| <p>d. $a + a \rightarrow a$
 <i>ʔayayi</i>
 <i>ʔaya-ayi</i>
 many-give.PERF
 ‘give many’</p> | |

b) The length of the resultant vowel is determined by the hierarchy long > short: the resultant vowel is long if one of the two underlying vowels is long, otherwise it is short. (The [L] is explained in §3.3.1.)

- (36) a. *ʔu^wk^wi^hnu^h*
ʔu-č̣i-a^hnu(ʔ) [L]
 so.and.so-at-along.length
 ‘along its length’
- b. *hina^hč̣i^hλ*
hina-a^h-č̣i^hλ
 empty.root-go.out.to.sea-PERF
 ‘go out to sea’

A morpheme with a persistently long vowel carries this into combination. That such combinations produce persistently long vowels rather than ordinary long vowels is shown definitively by examples like (37)b,d, in which the resultant vowel appears in the third or later syllable.

- (37) a. *č̣awi^hc*
č̣awa^h-i^hc
 one-belong.to
 ‘belong to one’
- b. *ʔa^hʔayasč̣a^hpi*
ʔaya-a^hsč̣a-a^hpi [LR+S]
 many-on.roof-too
 ‘too many on the roof’
- c. *hi^hnu^hma^h*
hina-u^hma^h [L]
 empty.root-born.at
 ‘born at’
- d. *λu^wk^wa^hni^hč̣i^hλ*
λu^wk^wa^hna-i^hč̣i^hλ
 Wolf.Ritual-INCEP
 ‘Wolf Ritual begins’

3.2.3.2 Sequences involving the first root vowel

The resultant vowel is long and its quality is that of the underlying root vowel.

- (38) a. *k^waʔcapiλ*
k^wa-aʔcá-piλ
 move.backwards-at.vertical.surface-in.house.PERF
 ‘(to) back up against the wall’
- b. *caʔnak*
ca-iʔnak^w
 flow-imitate.in.dance
 ‘perform a river dance’
- c. *huʔs*
hu-aʔs
 fly.in.flock-on.horizontal.surface
 ‘having landed in a flock in a tree’

That the length of the resultant vowel is long in examples like (38) is evident in circumstances where this vowel comes to stand in the third or later syllable due to reduplicative processes. Sapir & Swadesh (1939: 237) demonstrate this with the alternation of vowel length in the word *ʔuʔuʔataḥ* ‘hunting it (whale)’ (< *ʔu-* ‘so-and-so’ + *-ataḥ* [R] ‘hunting ...’) and its distributive form, *ʔuʔuʔuʔataḥ*. The steps in the derivation of these words are shown in (39).

(39)	<i>ʔu-ataḥ</i>	<i>ʔu-ataḥ</i>	underlying form
	<i>ʔuʔuataḥ</i>	<i>ʔuʔuataḥ</i>	reduplication ([R] CV template, §3.3.1)
	<i>ʔuʔuʔataḥ</i>	<i>ʔuʔuʔataḥ</i>	reduction of vowel sequence
	N/A	<i>ʔuʔuʔuʔataḥ</i>	distributive reduplication (§5.5.4)
	<i>ʔuʔuʔataḥ</i>	<i>ʔuʔuʔuʔataḥ</i>	vowel-length neutralization (§3.1)
	‘hunting it’	‘hunting it here and there’	

The CV reduplication in the second step is the product of a rule we have not encountered yet. See §3.3.1. The crucial steps for the issue at hand are the third step, which shows the reduction of the *u+a* vowel sequence to a single long vowel, and the fourth step, in which distributive reduplication moves the long vowel to the third syllable where it is realized as a short vowel in the final step. The alternation in length between *ʔuʔuʔataḥ* and *ʔuʔuʔuʔataḥ* demonstrates unequivocally that the resultant vowel is long (rather than persistently long).

The symbols in (42) are abbreviations introduced by Swadesh (1939) and Sapir & Swadesh (1939) to indicate affixal effects in morpheme glosses.¹⁸

- | | | | | |
|------|----|--------|----|--------------------|
| (42) | a. | [L] | g. | [Rc+L] |
| | b. | [L+S] | h. | [LR] ¹⁹ |
| | c. | [S+S] | i. | [LRc] |
| | d. | [R] | j. | [LR+L] |
| | e. | [LR+S] | k. | [LRc+L] |
| | f. | [R+L] | | |

Each template is disyllabic except the first, which is monosyllabic. Words containing a template-specifying affix can be of any length but any portion of the word that falls outside that specified by the template is not affected by required changes to the skeleton. If the first template (a) [L] is applied to a polysyllabic word, for instance, only the first syllable is specified (it must be long). The second, third and subsequent syllables of the word are not affected (see, for example, (48) below).

The first three templates (a-c) specify vowel length. Template (a) requires that the first syllable of the word is long, while template (b) requires that the first syllable is long *and* the second syllable is short. Template (c) requires that both the first and second syllables are short.

The remaining eight templates (d-k) specify reduplication of the initial consonant and vowel of the word, usually in concert with specification of the vowel length of the reduplicative syllable, the original first syllable of the word, or both. The symbol V with no length marking (i.e. no breve or length dots) in these reduplicative templates stands for a vowel of nonspecific length; “nonspecific” here simply means the template has no particular requirements for the length of the vowel. As noted earlier (§3.1), original long vowels generally shorten in nonspecified reduplicative syllables.²⁰ Templates (g), (i), and (k) are counterparts of (f), (h), and (j), respectively, that specify insertion of the consonant /c/ into the coda of the reduplicative syllable.

The tests introduced earlier — putting a long vowel in the third syllable of the word or in a reduplicative syllable — show that vowels lengthened by affix templates are ordinary (alternating) long vowels rather than persistently long. Thus, the suffix *-nuk* [R+L] ‘at the hands’ redupli-

cates and lengthens the vowel of the root *mutq-* ‘amputate’ to produce *mumurtqñuk* ‘amputated at hands (i.e. fingers cut, shot off)’. The suffix is associated with template (f) [R+L], and the root is reduplicated with a long vowel in the original initial syllable in conformance with templatic requirements. That the vowel is not persistently long becomes evident when it comes to stand in the third syllable of the word through distributive reduplication.

- (43) *mumumutqñuk*
 [R]–*mutq*–*ñuk* [R+L]
 PL–amputate–at.hands
 ‘each with fingers shot off’ (NA 448.24-25)

The shortening of the original base vowel, now in the third syllable, shows that it must be long rather than persistently long. Another example along the same vein is the distributive form of *yáyaraqhi* ‘long-limbed’ (< *yaraq* ‘long’ + *-hi* [R+L] ‘at the limbs’), which is attested in the corpus at NA 20.8: *yáyayaqhi* ‘each having long limbs’.

As mentioned earlier (§3.1), long vowels normally shorten in prefixed reduplicative syllables. This fact can also be used to show that long vowels imposed by templates are not persistently long. For example, the suffix *-api* [L] ‘in the air, erect; standing’ is associated with template (a) [L]; applied to the root *capk^w-* ‘have head bowed’, the suffix produces the form *capk^wapuλ* ‘bow one’s head’ (the form also includes the perfective aspect suffix *-uλ*). Distributive reduplication places the initial vowel in the reduplicated syllable, where it appears short:

- (44) *caca^wapuλ*
 [R]–*capk^w*–*api* [L]–*uλ*
 PL–have.head.bowed–erect–PERF
 ‘each bowed their head’ (NA 449.1)

The requirements for vowel length made by affix templates have precedence over requirements on length that later rules in the derivation would otherwise impose. Section 3.2.3 described the reduction of vowel sequences involving the first root vowel to a single long vowel with the quality of the root vowel. Consider the derivation of *ʔuʔwtaḥ* ‘hunt it (whale)’ in (45), repeated from (39):

- (45) *ʔu-ataḥ* underlying form
ʔuʔuataḥ application of CV template (d)
ʔuʔuṭaḥ reduction of vowel sequence (§3.2.3)
 ‘hunting it’

The resultant long vowel falls in the second syllable. If, however, the word contains an affix like *-ityak* [LR+S] ‘fearing ...’ that specifies a short second base vowel, this precludes a long vowel; the vowel must be short:

- (46) *ʔu-ityak* underlying form
ʔuʔüityak application of CV template (e) [LR+S]
ʔuʔüṭyak reduction of vowel sequence
ʔuʔutyak resultant form
 ‘fear it’

Any portion of a word falling within the domain of a template that already meets the template’s specifications is unchanged. If template (a) [L] is applied to a word whose initial vowel is long, for example, then the word meets its specifications, and no changes are necessary.

(47) shows suffixes specifying each template with various short monosyllabic roots, except *hawā-* ‘eat’, which is disyllabic.

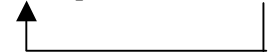
- (47) a. C_1V_1 *hiṭ-saṭa* ‘there on the forehead’ (*hiṭ* ‘there’)
 b. $C_1V_1C_2\check{V}_2$ *k^wa-cuʔuk* ‘go along backwards’ (*k^wa-* ‘go backwards’)
 c. $C_1\check{V}_1C_2\check{V}_2$ *ʔih-aqaq* ‘very big’ (*ʔiḥ^w* ‘big’)
 d. $C_1V_1C_1V_1$ *hahap-as* ‘hair on the cheeks’ (*hap-* ‘hair’)
 e. $C_1V_1C_1\check{V}_1$ *wiṭwik-ityak* ‘fear nothing’ (*wiṭ* ‘not, nothing’)
 f. $C_1V_1C_1V_1$ *ʔuʔu-k^wi:qa* ‘impeded by it’ (*ʔu-* ‘so-and-so’)
 g. $C_1V_1cC_1V_1$ *hachaṭwā-csuṭ* ‘drowsy from eating’ (*hawā-* ‘eat’)
 h. $C_1V_1C_1V_1$ *kuḥkuḥ-inqit* ‘hole at the ribs’ (*kuḥ* ‘hole’)

- i. $C_1V_1cC_1V_1$ *ha'chawa-csuplaʔ* ‘have an eating contest’ (*hawa-* ‘eat’)
- j. $C_1V_1C_1V_1$ *hi'hiʔ-hin* ‘there at the end’ (*hiʔ* ‘there’)
- k. $C_1V_1cC_1V_1$ *ʔucʔurma-hsa* ‘at the very edge’ (*ʔurma* ‘as far as’)

An affix-associated template must be satisfied regardless of how long a word is, or how far the affix is from the portion of the word specified by the template, either in number of syllables or in number of morphemes. The locative suffix *-api* ‘in the air, erect; standing’ selects the (a) template. If attached to the four syllable (synchronically) monomorphemic base *kaʔkintapimʔ* ‘strawberry’, the first syllable must be long even though the affix itself is separated from it by several intervening syllables:

- (48) *kaʔkintapimʔ-api* ‘strawberry up in the air’
- 

Similarly, the word *ʔačapuʔitim* ‘a pad underneath’ consists of four morphemes, the root *ʔač-* ‘support with a block or pad’ and three neutral (not associated with a template) suffixes, *-apu(ʔ)-* ‘underneath’, *-iʔ* ‘in the house’, and *-im* ‘... thing’ (lit. ‘thing serving as a pad underneath in the house’). If affixed by the suffix *-hʔwink^w* [L] ‘using ...’, which selects the (a) template, the first syllable is lengthened despite the three suffixes between the specifying suffix and the specified syllable:

- (49) *ʔač-apu-ʔiʔ-im-hʔwink* ‘using a pad underneath’
- 

Affixes are subject to their own templatic specification if their position in a base is within their template’s domain. Let us consider a straightforward example. The suffix *-ci:yuk* [L+S] ‘going to ...’ is associated with the (b) template, the two-syllable template that requires the first syllable of the word to be long and the second syllable short. If this suffix is affixed to a monosyllabic base such as the relative root *q^wi-* ‘whoever, whatever’, the persistently long first syllable of

the suffix ends up as the second syllable of the resultant base and is thus subject to shortening by the template: $q^w i \cdot ci \dot{y}uk$ ‘wherever one is going’:

$$(50) \quad \begin{array}{l} \text{underlying} \\ q^w i \cdot ci \dot{y}uk \end{array} \rightarrow \begin{array}{cccc} C_1 & V_1 & C_2 & \check{V}_2 \\ | & | & | & | \\ q^w & i & c & i \dots \dot{y}uk \end{array}$$

A word can contain multiple template-specifying affixes (suffixes or infixes). Three types of interactions are possible. The affixes can specify 1) the same template, 2) compatible templates, or 3) conflicting templates. The result of the first situation can be predicted from the principles I described above: because a base that conforms to a particular template requires no alteration upon addition of an affix associated with that template, we would correctly predict that a given template is only applied once; addition of a second affix associated with the same template as an earlier affix will thus produce no change. Example (51) demonstrates this with a word with two affixes specifying template (a):

$$(51) \quad \begin{array}{l} \text{?u-sim}\check{c}\acute{n}a\grave{h}i \\ \text{?u-sim}\check{c} \text{ [L]}-\acute{n}a\grave{h}i \text{ [L]} \\ \text{so.and.so-do.ritual.for-ready.to} \\ \text{‘ready to perform a ritual for it’} \end{array}$$

Assuming that templates are applied in order from left to right as their affixes are added to the base, we would expect the effects of compatible templates to be cumulative. That is, effects of later templates are applied to the form that results from application of earlier templates. Examples like (52) seem to bear this out:

$$(52) \quad \begin{array}{l} \text{?a?}a\text{qma}\acute{k}uk^w a\acute{n}u\grave{h} \\ \text{?aq-maq-kuk [R]}-a\acute{n}u(\acute{t}) \text{ [L]}-i:\acute{h} \text{ [L]} \\ \text{grass-plant-resemble-along.length-PL} \\ \text{‘made of hemp rope, pl.’ (NA 63.46)} \end{array}$$

The leftmost non-neutral suffix is $-kuk$ ($-maq-$ ‘... plant’ is neutral), which is associated with template (d), initial CV reduplication with nonspecified vowel length. This template applied to the underlying form $?aqma\acute{k}uk$ produces $?a?aqma\acute{k}uk$. The (a) template associated with

-a'nu(t) [L] ‘along a length’ is then applied producing *ʔa'ʔaɣmaqkuk^wa'nuʔ*. Addition of the plural suffix *-i:h* rounds out the attested form. (The final /t/ of *-a'nu(t)* is deleted before the plural suffix.)

Following the same logic, conflicting templatic effects ought to be resolved by the later template undoing the effects of the earlier template. Conflicts always involve conflicting length requirements. For example, when a suffix specifying the (a) template (long first syllable) is followed by a suffix that specifies the (c) template (first and second syllables both short), the resultant word should have a short first syllable. Comparison of (53)a-b supports this hypothesis:

- (53) a. *ʔa'ta'nuʔ*
ʔa'ta-a'nu(t) [L]
 thick–along.length
 ‘thick along its length’
- b. *ʔata'nuʔaɣaɣ*
ʔa'ta-a'nu(t) [L]–*aɣaɣ* [S+S]
 thick–along.length–very
 ‘very thick along its length’

The effect of the (a) template of *-a'nu(t)* [L] ‘along a length’ has been undone in (53)b by the (c) template associated with *-(q)aɣ -aɣaɣ* [S+S] ‘very’.

Although examples (51)-(53) are preliminary support for our predictions about templatic interactions, more study is necessary to determine how consistently they are born out. Rose (1981: 341) reports restrictions against the co-occurrence of suffixes associated with certain templates, e.g. (g) and (h), in Kyuquot dialect. I suspect this is a consequence of the semantic or grammatical incompatibility of the suffixes rather than an inherent property of the templates themselves. She also reports a dominance hierarchy among certain templates that determines which will prevail in combination. These possibilities require further investigation for Tseshaht. Incidentally, affixes are frequently associated with different templates in Kyuquot and Tseshaht, e.g. *-(c)siat* ‘reciprocally’ is neutral in Tseshaht but associated with template (i) in Kyuquot (Rose 1981: 361).

Some affixes are associated with more than one template. Sometimes the meaning of the affix depends on which template is used. For example, the locative suffix *-’aḥs* means ‘in a vessel’ when neutral and ‘at the teeth’ when associated with template (d):

- (54) a. **Neutral**
ḥiḥaḥs
ḥiḥ^w-’aḥs
 sit–in.vessel
 ‘sitting in a vessel’
- b. **Template (d)**
tatasʔaqḥ’aḥs–ip
tas.–’aqḥ–’aḥs [R]–ip
 rub–inside–at.teeth–CAUS.PERF
 ‘rub sth on sb’s teeth’ (NT 40.22)

Frequently, however, there is no discernible difference in meaning. The plural infix *-t-* is associated with one of four different templates:

- (55) a. **Template (a)**
haʔḥum
haʔḥum–<t> [L]
 fish–<PL>
 ‘fish(es)’
- b. **Template (d)**
hiḥiḥ’aqḥ
hiḥ–’aqḥ–<t> [R]
 illuminate–inside –<PL>
 ‘torches’
- c. **Template (f)**
ʔatʔa’sma
ʔasma–<t> [R+L]
 highborn.child–<PL>
 ‘highborn children’
- d. **Template (h)**
maʔtma’s (< *maʔtmaʔas*, see §3.3.4 for *aʔa > a’*)
maʔas–<t> [LR]
 tribe–<PL>
 ‘tribes’

The choice of which template is selected for each base appears to be purely lexical.

In the remainder of this section I have provided examples of each template with a variety of base types, i.e. bases with different numbers of syllables, as well as bases that already partially or fully meet templatic specifications. Since I have only used attested examples for the following catalog, it has not been possible to give the full range of base types for some of the less common templates. For simplicity, the bases are underived in most cases.

The block of examples for each template begins with its CV schema, as listed in (41). This is followed by the mnemonic abbreviation in square brackets, e.g. template (a) is abbreviated as [L]. In parentheses I indicate the approximate number of affixes associated with each template. We begin with examples of three neutral affixes.

Neutral Affixes

Neutral affixes have no effect on the base.

- | | | | | | | |
|------|----|--------------------------------|----|----------------------------------|----|-----------------------------|
| (56) | a. | <i>kamitq^wiʔiλ</i> | b. | <i>ʔeʔiʔktaqʔak</i> | c. | <i>čiʔwiʔ</i> |
| | | <i>kamitq^w-iʔiλ</i> | | <i>ʔeʔiʔktaq-ʔak^w</i> | | <i>či-wiʔ</i> |
| | | run-move.into.house.PERF | | miracle.occurs-instrument | | pull-point.comes.out.PERF |
| | | ‘run into the house’ | | ‘wondrous thing’ | | ‘(spear) pulls out (intr.)’ |

C₁V₁ [L] Affixes (125)

[L] affixes require the first syllable of the base to be long. The examples in (57) show [L] suffixes with one, two, and three syllable bases.

- | | | | | | | |
|------|----|---------------------------|----|----------------------------------|----|--|
| (57) | a. | <i>čuʔatu</i> | b. | <i>ħaʔyumiʔk</i> | c. | <i>maʔmiʔtaqsimč</i> |
| | | <i>ču-ʔatu</i> [L] | | <i>ħayu-mi:k^w</i> [L] | | <i>mamiʔta-q-simč</i> [L] |
| | | dive-sink.into.water.PERF | | ten-getter.of | | live.bait.fishing-BFR-do.ritual.for |
| | | ‘dive down into water’ | | ‘getter of ten’ | | ‘perform a ritual for live bait fishing’ |

The following three examples show [L] suffixes with bases that already have long vowels in their first syllables, and thus require no change on addition of the suffix.

- (58) a. *ʔi·h̄h̄wink*
ʔi·h̄^w–h̄wink^w [L]
 big–use
 ‘use a big one’
- b. *ʔu·ščinaqak*
ʔu·š–ćinaqak [L]
 sth–discuss
 ‘discuss something’
- c. *h̄u·č̄uq̄λisʔath̄simč*
h̄u·č̄uq̄λisʔath̄–simč
 Uchucklesit–do.ritual.for
 ‘perform ritual for (catch-
 ing) Uchucklesits’

$C_1V^*C_2\check{V}_2$ [L+S] Affixes (4)

This template is similar to the previous one except [L+S] affixes require that the second syllable be short in addition to the first syllable being long. An [L+S] affix can easily be mistaken for an [L] affix since the two templates only produce distinct results when applied to words with long second syllables, as in (59). If [L] affixes were affixed to these words instead of the [L+S] affixes, both the first *and* second syllables would surface as long. The fact that the persistently long vowel in *-i:s* ‘carrying’ in (59)a surfaces short is another example of the principle already mentioned that persistent length is overridden by templatically imposed length.

- (59) a. *hi·nisu·ʔuk*
hina–i:s–u:ʔuk [L+S]
 empty.root–carry–going
 ‘carry along’
- b. *ʔe·ʔišawi·qš*
ʔeʔi·š–awi:qš [L+S]
 hurry–call.for
 ‘call for sb to hurry’
- c. *ʔa·λsath̄awi·qš*
ʔaλ–sa·th̄–awi:qš [L+S]
 two–X.many.tribes–call.for
 ‘send for two tribes’

The words in (60) have underlyingly short second syllables and would therefore look identical with [L] affixes.

- (60) a. *hi·nawi·qš*
hina–awi:qš [L+S]
 empty.root–call.for
 ‘send for’
- b. *sa·č̄ici·yuk*
sač̄i–ci:yuk [L+S]
 unceasing–going.to
 ‘unceasingly going to’
- c. *qu·ʔacawi·qš*
quʔac–awi:qš [L+S]
 person–call.for
 ‘call for a person’

$C_1\check{V}_1C_2\check{V}_2$ [S+S] Suffix (1)

[S+S] suffixes require that both the first and the second syllable of the base be short. There seems to be only one suffix associated with the [S+S] template, the general intensifier suffix *-aqaq* ~ *-(q)aq* ‘very, big’. The following examples demonstrate this suffix with one and three syllable bases. The base in example (61)c has the suffix *-a·nu(ʔ)* ‘along a length’, an [L] suffix, so the form is actually *ʔa·ta·nuʔ* before affixation of *-aqaq*.

- (61) a. *ʔiħaqaq*
ʔi·ħ^w-aqaq [S+S]
 big-very
 ‘very big’
- b. *ʔayičiħaqaq*
ʔaya-i:čiħ-(q)aq [S+S]
 many-INCEP-very
 ‘become very many’
- c. *ʔaħaħuħaqaq* [S+S]
ʔaħa-a·ħu(ħ) [L]-aqaq
 thick-along.length-very
 ‘very thick along length’

If the base has only underlying short syllables, the effects of this template will, of course, be indistinguishable from those of a neutral affix:

- (62) a. *ħaʔuk^waq*
ħaʔuk-(q)aq [S+S]
 eat-very
 ‘eat a lot’
- b. *ħuħaqaq*
ħuħ-aqaq [S+S]
 good-very
 ‘very good’
- c. *ħiħmaqaq*
ħiħma-aqaq [S+S]
 secure-very
 ‘very secure’

Examples like (63) show that the suffix is in fact neutral in some cases, otherwise the first syllable of *ʔi·čim* would be short:

- (63) *ʔi·čimaq*
ʔi·čim-(q)aq
 old-very
 ‘very old’

C₁V₁C₁V₁ [R] Affixes (44)

These affixes specify initial CV reduplication of the word with both reduplicated and original vowel lengths nonspecified. The first set of examples shows [R] affixes on underived bases with one, two, and three syllables, the first of which in each case is short.

- (64) a. *ciciʔaħuk*
ciq-’aħuk [R]
 speak-attend.to
 ‘listen to sb speaking’
- b. *ʔaʔanas*
ʔana-as [R]
 only-on.cheeks
 ‘only that on the cheeks’
- c. *kukuħwisaʔi·ħ*
kuħwisa-q-’i:ħ [R]
 hair.seal-BFR-hunt
 ‘hunt hair-seal’

The pharyngealized glottal stop /ʔ/ in (64)a,c arises from underlying /q/ through the influence of the glottalizing suffixes -’aħuk and -’i:ħ (§3.3.2). Examples (65)a-c show [R] affixes on bases with apparent persistently long first syllables. The word in (65)b illustrates a minor rule we have not encountered: sequences of vowel-glide are sometimes reduced in derived contexts to single long vowel, which is /i:/ if the glide is /y/ or /j/, and /u:/ if the glide is /w/ or /w/. Thus, the underlying form of (65)b (following application of the [R] template) is *wawawiyikuk*.

- (65) a. *č̣i·č̣i·łataḥ* b. *ẉa·ẉi·kuk* c. *hu·hu·ʔič̣ułataḥ*
č̣i·ł-ataḥ [R] *ẉa:ỵi-kuk* [R] *hu:ʔič̣-uł-ataḥ* [R]
 escape-ready.to Wayi-resemble sleep.PL-PERF-ready.to
 ‘ready to escape’ ‘Wayi-Like (place name)’ ‘ready to fall asleep’

The vowels in (65) retain their original length in the nonspecified reduplicative syllable. Generally, however, original long vowels are short in nonspecified reduplicative syllables, as noted earlier (§3.1). The words in (66) illustrate this with suffixes associated with the [R] template, but the same applies to other templates with nonspecified reduplicative vowels:

- (66) a. *ʔaʔa·cataḥ* b. *yaya·č̣ap*
ʔa·c-ataḥ [R] *ya·-č̣ap* [R]
 go.fishing-ready.to sore-sore.with
 ‘ready to go fishing’ ‘feel sore’

$C_1V_1C_1\check{V}_1$ [LR+S] (2)

[LR+S] affixes specify initial CV reduplication with the reduplicated vowel long and the original vowel short. Only two suffixes are recorded with this template in Sapir & Swadesh (1939), *-ityak* [LR+S] ‘fear ...’ and *-a:pi* [LR+S] ‘too much, too ...’. (The latter is listed by them on p. 318 as [R+S], which (67)c shows it cannot be). Unfortunately, none of the attested bases has the crucial underlying CV structure (a long first syllable) to show definitively that either of these suffixes is [LR+S] rather than simply [LR] (for which see below).

- (67) a. *q^wi·q^wityak* b. *wi·wikityak* c. *sa·sayapi*
q^wi-ityak [LR+S] *wik-ityak* [LR+S] *saya-a:pi* [LR+S]
 whatever-fear not-fear far.off-too
 ‘whatever one fears’ ‘not fear it, fear nothing’ ‘too far off’

$C_1V_1C_1V_1$ [R+L] (19)

These affixes require initial CV reduplication with the reduplicated vowel non-specified and the original vowel long. Unlike the previous template, the [R+L] template is associated with a fair number of affixes. (68)a-b illustrate [R+L] suffixes with one and two syllable bases with short initial syllables; (68)c illustrates the plural infix *-t-* with the [R+L] template:

- (68) a. *ʔuʔu^wk^wiyaʔ*
ʔu-čiyaʔ [R+L]
 so.and.so-pursue
 ‘pursue it’
- b. *ʔaʔa^wimču*
ʔaya-mču [R+L]
 many-regale
 ‘regale many’
- c. *natna^wšuk*
naš.-uk-<t> [R+L]
 strong-DUR-<PL>
 ‘strong (ones)’

The next example has bases with long initial syllables.

- (69) a. *ʔuʔu^wštaq*
ʔu^wš-taq [R+L]
 something-work.on
 ‘do work’
- b. *haha^wʔinyu*
ha^wʔin-yu [R+L]
 invite-PL
 ‘several inviting’

$C_1V_1cC_1V_1$ [Rc+L] (1)

These affixes have effects identical to those in the previous section except the consonant /c/ is inserted in the coda of the reduplicative syllable. Only one suffix is attested with this template, *-(c)su(ʔ)* [Rc+L] ‘at the eyes’, which also appears with the simple [R+L] template in some words

(71). Example (70) shows words with one and two syllable bases:

- (70) a. *ʔic^wʔi^whsuʔ*
ʔi^wh-(c)su(ʔ) [Rc+L]
 red-at.eyes
 ‘red-eyed’
- b. *ʔu^wc^wʔurqsu^wʔiʔ*
ʔu^w:q-(c)su(ʔ) [Rc+L]-‘iʔ’
 merry-at.eyes-in.house
 ‘merry-eyed in the house’
- c. *hacha^wwacsuʔ*
hawa^w-(c)su(ʔ)
 eat-at.eyes
 ‘drowsy from eating’

- (71) *ʔi^wʔi^wcsu^wʔ*
ʔi^w-(c)su(ʔ) [Rc+L]
 shoot-at.eyes.PERF
 ‘get shot in the eye’

As described in §2.3, coda nasals function like long vowels with respect to most phonological alternations. Example (72) is further demonstration of this principle; it shows that template-specified length is satisfied by a coda nasal with no additional lengthening:

- (72) *ʔic^wʔinksuʔ*
ʔink^w-(c)su(ʔ) [Rc+L]
 fire-at.eyes
 ‘blinded by fire’

C₁V₁C₁V₁ [LR] (17)

This template is the converse of the [R+L] template: the reduplicated syllable must be long and the original initial base vowel is nonspecified. Only words with one and two syllable bases are attested in the corpus. No words containing a suffix associated with this template have been found with a long initial base syllable. (73)b is another case of the vowel-glide-vowel reduction rule. The input to the rule is *ci'ciyapči*. See the discussion of (65)b for more information.

- | | | | | | | |
|------|----|---|----|--|----|---|
| (73) | a. | <i>ku'kuħinqiʃ</i>
<i>kuħ^w-inqiʃ</i> . [LR]
hole-at.ribs
'hole at the ribs' | b. | <i>ci'ci'pči</i>
<i>ciyap-č<i>̣</i>i</i> [LR]
hat-attached
'a hat attached' | c. | <i>ča'čimwayi'k</i>
<i>čama-wa'ʃ-'i:k^w</i> [LR]
proper-speak-adept.at
'Speaks-Right (man's name)' |
|------|----|---|----|--|----|---|

C₁V₁cC₁V₁ [LRc] (1)

These affixes are /c/-inserting analogues of [LR] affixes. Only one suffix is attested with this template, *-(c)supta:ʃ* [LRc] 'competing in ...'. Example (74) shows words with one and two syllable bases. No bases with initial long vowels have been found.

- | | | | | | | |
|------|----|--|----|--|----|---|
| (74) | a. | <i>λi'cλiħsupta:ʃ</i>
<i>λiħ-(c)supta:ʃ</i> [LRc]
move.pointwise-compete.in
'have a canoe race' | b. | <i>ʔu'cʔuksupta:ʃ</i>
<i>ʔu-(c)supta:ʃ</i> [LRc]
so.and.so-compete.in
'compete in it' | c. | <i>ha'chawacsupta:ʃ</i>
<i>hawā-(c)supta:ʃ</i> [LRc]
eat-compete.in
'have an eating contest' |
|------|----|--|----|--|----|---|

C₁V₁C₁V₁ [LR+L] (6)

[LR+L] suffixes specify initial CV reduplication with both vowels long. Examples show the [LR+L] suffix *-ħin* 'at the end' with mono- and disyllabic bases that have initial short syllables. Example (75)c has a monosyllabic base with a long initial syllable.

- | | | | | | | |
|------|----|--|----|--|----|--|
| (75) | a. | <i>tu'tu'pkħin</i>
<i>tupk-ħin</i> [LR+L]
black-at.end
'black-tipped' | b. | <i>hi'hi'šcithin</i>
<i>hiš-cit-ħin</i> [LR+L]
all-at.X.end-at.end
'at both ends' | c. | <i>ni'ni'ħmaqā</i>
<i>ni'ħ-maqā</i> [LR+L]
1pl-for.sake.of
'for our sake' |
|------|----|--|----|--|----|--|

Example (76) shows the [LR+L] template applied to a base with a coda nasal (§2.3) in the original base syllable.

- (76) *čičimciḥinʔas*
čim–cit–ḥin [LR+L]–’as
 right–on.X.end–at.end–outside
 ‘(at) the right end of the village’

C₁V₁cC₁V₁ [LRc+L] (1)

The only suffix attested with the [LRc+L] template is the locative suffix *-(q)ḥsa* ‘at the brink’.

The suffix *-ma* ‘as far as’ in (77)b is sometimes associated with the [L] template, which means the base for *-(q)ḥsa* in this word is either *ʔuma* or *ʔu^wma*.

- (77) a. *hi^wchinḥsacpa* b. *ʔwcʔu^wmaqḥsa*
hin–(q)ḥsa [LRc+L]–*cpa* *ʔu–ma–(q)ḥsa* [LRc+L]
 empty.root.–at.brink–on.X.side so.and.so–as.far.as–at.brink
 ‘on the beach side’ ‘at the very edge (of a bluff)’

3.3.2 Glottalizing suffixes

Nearly fifty suffixes, symbolized by –’ in citation form, glottalize immediately preceding consonants.²¹ Stops are glottalized to homorganic ejectives, except /q q^w/, which become /ʔ/. Fricatives become glottalized glides. Dental, alveo-palatal, and lateral fricatives /s t š/ become /y/. A few instances of /ʃ/ (generally following /u/, but sometimes other vowels) become /w/ instead of /y/. These are written ‘ʃ^w’ in underlying form. Labialized velar and labialized uvular fricatives /x^w x^w/ become /w/. Most non-labialized velar, non-labialized uvular, and pharyngeal fricatives /x x h/ are unaffected by glottalization and require insertion of a glottal stop instead. Some pharyngeal fricatives, indicated by ‘h^w’ in underlying form, become /w/. Glottalizing suffixes rarely occur after /y/ or /w/ because these segments do not normally appear in morpheme-final position due to a phonotactic constraint on morpheme structure. A very few roots like *ia^w-* ‘sleep with’ violate this constraint. With these, the glide is glottalized. Table 5 summarizes the effects of glottalizing suffixes.

Table 5. Effects of glottalizing suffixes

<i>p</i>	→	<i>p̣</i>	<i>hap-</i> ‘hair’ + -’ <i>iλ</i> [L] ‘get ... (perf.)’ → <i>ha’p̣iλ</i> ‘get hair’
<i>t</i>	→	<i>ṭ</i>	<i>mat-</i> ‘fly’ + -’ <i>as</i> ‘on the ground’ → <i>ma’tas</i> ‘perched on the ground’
<i>c</i>	→	<i>c̣</i>	<i>caqi·c</i> ‘twenty’ + -’ <i>aḥs</i> ‘in a vessel’ → <i>caqi·c̣aḥs</i> ‘twenty in a vessel’
<i>λ</i>	→	<i>λ̣</i>	<i>maλ-</i> ‘tied up’ + -’ <i>aḥs</i> ‘in a vessel’ → <i>maλ̣aḥs</i> ‘tied in a vessel’
<i>č</i>	→	<i>č̣</i>	<i>ʔiłč-</i> ‘dog’ + -’ <i>i’s</i> ‘consuming ...’ → <i>ʔiłč̣i’s</i> ‘eating dog’
<i>k</i>	→	<i>ḳ</i>	<i>čurčk</i> ‘all’ + -’ <i>as</i> ‘on the ground’ → <i>čurčḳas</i> ‘all on the ground’
<i>k^w</i>	→	<i>ḳ^w</i>	<i>nik^w-</i> ‘hold with claws’ + -’ <i>iλ</i> [L] ‘get ... (perf.)’ → <i>ni·ḳ^wiλ</i> ‘pick up w/ claws’
<i>q</i>	→	<i>q̣</i>	<i>siq-</i> ‘cooked’ + -’ <i>aλ</i> formative suffix → <i>siq̣aλ</i> ‘ripe, cooked’
<i>q^w</i>	→	<i>q̣^w</i>	<i>ʔaλi·q^w</i> ‘forty’ + -’ <i>i’s</i> ‘consuming ...’ → <i>ʔaλi·q̣^wi’s</i> ‘consuming forty’
<i>s</i>	→	<i>ṣ</i>	<i>čis-</i> ‘strung out’ + -’ <i>apuḥa</i> [L] ‘under’ → <i>či·ṣapuḥa</i> ‘strung out under’
<i>ʈ</i>	→	<i>ʈ̣</i>	<i>ʔaλak^waḥ</i> ‘eight’ + -’ <i>i’s</i> ‘consuming ...’ → <i>ʔaλak^waḥ̣i’s</i> ‘consuming eight’
<i>ʈ^w</i>	→	<i>ʈ̣^w</i>	<i>-uḥ^w</i> ‘... place’ + -’ <i>as</i> → <i>-uḥ̣^was</i> ‘... place on the ground’
<i>š</i>	→	<i>ṣ̌</i>	<i>λimš-</i> ‘boiled’ + -’ <i>i’s</i> ‘consuming ...’ → <i>λimṣ̌i’s</i> ‘consuming sth boiled’
<i>x</i>	→	<i>xʔ</i>	Jacobsen (1969a: 143); not attested in corpus
<i>x^w</i>	→	<i>x̣^w</i>	<i>čax^w-</i> ‘spear’ + -’ <i>aqλ</i> ‘inside’ → <i>čax̣^waqλ</i> ‘speared inside’
<i>h</i>	→	<i>hʔ</i>	<i>cih-</i> ‘sour’ + -’ <i>aqλ</i> ‘inside’ → <i>cihʔaqλ</i> ‘crab-apple’
<i>h^w</i>	→	<i>ḥ^w</i>	<i>ʔi·h^w</i> ‘big’ + -’ <i>as</i> ‘on the ground’ → <i>ʔi·ḥ^was</i> ‘big on the ground’
<i>m</i>	→	<i>ṃ</i>	<i>kim-</i> ‘resting prone with chin on surface’ + -’ <i>as</i> ‘on the ground’ → <i>kiṃas</i> ‘animal crouched to spring with head low to ground’
<i>n</i>	→	<i>ṇ</i>	<i>hin-</i> empty root + -’ <i>i:λa</i> [L] ‘underneath’ → <i>hi·ṇi:λa</i> ‘underneath’
<i>w</i>	→	<i>ẉ</i>	<i>ía·w-</i> ‘sleep with’ + -’ <i>as</i> ‘go to ...’ → <i>ía·ẉas</i> ‘go to sleep with’

Some roots and suffixes have final consonants that unpredictably resist glottalization and instead require insertion of a glottal stop. These are symbolized with a following period, as in *pīṣ̌*- ‘bad’, e.g.

(78) *pīṣ̌*- ‘bad’ + - ‘*i*’s ‘consuming ...’ → *pīṣ̌ʔi*’s ‘eating sth bad’

Compare with *ʕiṃyi*’s ‘consuming sth boiled’ < *ʕiṃš*- ‘boiled’ + - ‘*i*’s

quʔ- ‘slave’ + - ‘*a*’s ‘in a vessel’ → *quʔʔa*’s ‘slave in a vessel’

Compare with *ʕisay*’s ‘blanket in a vessel’ < *ʕisaʔ* ‘blanket’ + - ‘*a*’s

his- ‘chop’ + - ‘*i*’λ ‘on the ground, perf.’ → *hisʔi*’λ ‘chop on the ground’

Compare with *cu*’i’λ ‘get buried in the ground’ < *cus*- ‘dig’ + - ‘*i*’λ

There is also a series of locative suffixes with final /ʔ/ that resist glottalization. These are symbolized ‘(ʔ)’. The lateral fricative is later deleted by a morpheme-specific final consonant deletion rule (79). See §3.3.7.

(79) *hita*’*pu*’*as*
hita-’*apu*(ʔ)-’*as*
 empty.root-underneath-on.ground
 ‘underneath on the ground’

All the examples we have seen so far have glottalizing suffixes following consonants. They can also follow vowels, in which case a glottal stop is inserted. This is often lost later in the derivation (§3.3.4) (but the glottal stop in examples like (79) is not subject to deletion, §3.3.7), e.g.

(80) *ʔa*’*λa*-’*ak*’*λi* underlying form (*ʔa*’*λa* ‘two’ + - ‘*ak*’*λi* ‘at the rear’)
ʔa’*λa*’*ʔak*’*λi* glottal stop insertion
ʔa’*λa*’*k*’*λi* reduction of VʔV sequence (§3.3.4)
 ‘two at the rear’

Why not simply analyze glottalizing suffixes as suffixes with initial glottal stops? This straightforward solution is prevented by the existence of suffixes with initial glottal stops that never trigger the effects described above, e.g. -*ʔatu* [L] ‘sink (perf.)’ and -*ʔu*’*kt* ‘obtained by

...'.²² These suffixes always appear with glottal stops (which may be lost later in the derivation) and have no effect on preceding sounds. (The period diacritic in *-ʔuʔkt* 'obtained by' is explained in §3.3.4).

- (81) a. *kʰapʔuʔkt*
kʰap-ʔuʔkt
 rob-obtained.by
 'stolen goods'
 Compare with *kʰapas* 'go to rob' < *kʰap-* + *'as* 'go in order to ...'
- b. *hupʔatu*
hup-ʔatu [L]
 round.object-sink.PERF
 'sun sets'
 Compare with *hupas* 'ball on the ground' < *hup-* + *'as* 'on the ground'.

In addition to glottalizing suffixes there are also several glottalizing clitics, e.g. = *'aλ* temporal specifier, = *'at* passive-inverse. These are similar to glottalizing suffixes, but have less influence on preceding sounds: they glottalize preceding stops just as glottalizing suffixes, but simply insert a glottal stop when following fricatives. They do not glottalize them:

- (82) *hatiʔaλ*
hatiʔ= 'aλ
 invite.to.participate=TEMP
 'invite sb to participate now'
 Compare with *hati'yas* 'go to invite' < *hatiʔ* + *'as* 'go in order to' (a glottalizing suffix)

3.3.3 Leniting suffixes

Three suffixes in Nuuchahnulth lenite immediately preceding fricatives.²³ These suffixes, symbolized by ' in citation form, change preceding fricatives to glides following the pattern of the glottalizing suffixes. The three leniting suffixes are *-iʔ* 'on the floor, in the house', *-is* 'on the beach', and *-ač'iλ* perfective inceptive aspect. Table 6 summarizes these patterns.

Table 6. Effects of leniting suffixes

<i>s</i>	→	<i>y</i>	<i>ćis-</i> ‘lined up’ + <i>-’is</i> → <i>ćiyis</i> ‘lined up on the beach’
<i>t</i>	→	<i>y</i>	<i>λut</i> ‘good’ + <i>-’ačičil</i> → <i>λuyačičil</i> ‘get well, become good’
<i>t^w</i>	→	<i>w</i>	<i>-ut^w</i> ‘... place’ + <i>’is</i> → <i>-uwis</i> ‘place on the beach’
<i>š</i>	→	<i>y</i>	<i>pīš.-</i> ‘bad’ + <i>-’ačičil</i> → <i>pīyačičil</i> ‘get bad’
<i>x^w</i>	→	<i>w</i>	<i>ćax^w-</i> ‘spear’ + <i>-’is</i> → <i>ćawis</i> ‘point foremost in the beach’
<i>h^w</i>	→	<i>w</i>	<i>ʔi·h^w</i> ‘big’ + <i>-’ačičil</i> → <i>ʔi·wačičil</i> ‘get big’

Leniting suffixes have no effect on /h/ and other consonants, e.g.

- (83) a. *λihis*
λih- ‘is’
 move.pointwise–on.beach
 ‘(canoe) touches beach’
- b. *weʔičičit*
weʔič- ‘it’
 sleep–in.house
 ‘sleeping in the house’
- c. *tīq^wit*
tīq^w- ‘it’
 sit–in.house
 ‘sitting in the house’
- d. *kaniit*
kan- ‘it’
 kneel–in.house
 ‘kneeling in the house’

Morphemes with final consonants that require insertion of glottal stops before glottalizing suffixes (§3.3.2) often require one before leniting suffixes as well:

- (84) a. *ʔustʔis*
ʔust.-’is
 locative.root–on.beach
 ‘on the beach’
- Compare with** *ʔustʔas* ‘on the ground’ < *ʔust.-* + *-’as* ‘on the ground’

- b. *hici·čʔiʔ*
hic-i·č.-iʔ
 spread.cloth-covering-on.floor

‘covered by a spread cloth on the floor’

Compare with *hici·čʔaʔs* ‘covered by a spread cloth in vessel’ < *-i·č.- + -ʔaʔs* ‘in vessel’

- c. *hita·puʔis*
hita-ʔapu(ʔ)-is
 empty.root-underneath-on.beach

‘underneath on the beach’

Compare with *hita·puʔas* ‘underneath on the ground’ (79)

There are a few morphemes, however, with final consonants that resist glottalization (and require insertion of a glottal stop instead) but accept lenition, e.g.

- (85) *ʔuyačil*
ʔuʔ-ʔačil
 good-INCEP
 ‘become good’

Compare with *ʔuʔʔas* ‘nice spot on the ground’ < *ʔuʔ. + -ʔas* ‘on the ground’,²⁴

The only two morphemes found with this property to date are the roots *ʔuʔ.* ‘good’ and *ʔiʃ.-* ‘bad’. In some cases *ʔuʔ* does resist lenition, however. Unlike the examples in (84), no glottal stop is inserted in these cases:

- (86) *ʔuʔis*
ʔuʔ.-is
 good-on.beach
 ‘clear beach’ (NA 321.17)

Following vowels, leniting suffixes insert a glottal stop like glottalizing suffixes:

- (87) *ʔeʔiʔ*
ʔa-iʔ
 stick-like.object.stands-in.house
 ‘(stick-like object) standing in the house’

In most environments the glottal stop is lost later in the derivation by reduction of VʔV sequences (§3.3.4).

3.3.4 Reduction of V?V sequences

In derived environments, sequences of vowel-ʔ-vowel where the first vowel is not in the initial syllable are often reduced to a single long vowel with the quality of the second underlying vowel: $V_1ʔV_2 \rightarrow V_2$.²⁵ Example (88) shows reductions in derivations involving glottal stops from the three possible sources:

(88) a. **Reduction involving a suffix-initial glottal stop**

ʔaʔa-ʔatu underlying form (*ʔaʔa* ‘two’ + *-ʔatu* ‘fall off (perf.)’)

ʔaʔaːtu reduction of V?V sequence

‘two fall off’

b. **Reduction involving a glottal stop derived from a glottalizing suffix**

ʔaʔa-ʔis underlying form (*ʔaʔa* ‘two’ + *-ʔis* ‘consuming ...’)

ʔaʔaʔis glottal stop insertion (§3.3.2)

ʔaʔis reduction of V?V sequence

‘consuming two’

c. **Reduction involving a root-internal glottal stop**

quʔas underlying form (*quʔas* ‘person, man’)

ququʔas distributive reduplication (§5.5.4)

quqaːs reduction of V?V sequence

quq^waːs labialization (§3.2.2)

‘people’

Several types of sequences systematically fail to reduce:

a) Sequences with a persistently long vowel:

- (89) *či'csʔuʔis*
či'-i:cs.-'u:-'is
 pull-carry.along-camp.out.for.purpose.of.getting-on.beach
 'camp out on the beach for the purpose of getting (fish) by trolling'

b) Sequences with a long vowel in the second syllable of a word followed by a glottal stop derived from a glottalizing clitic:

- (90) *čicswiʔaλ*
či-(c)swi' = 'aλ
 cut-through.PERF=TEMP
 'cut through now'

If the glottal stop derives from a glottalizing *suffix*, reduction is permissible:

- (91) *čicswa's*
či-(c)swi-'as
 cut-through.PERF-on.ground
 'cut through on the ground'²⁶

c) Sequences involving a glottal stop derived from glottalizing Imperative mood clitics, e.g.
 = 'i's second person singular acting on first person singular non-future Imperative (§7.2.20):

- (92) *načʔaʔatuʔis*
nač-ʔaʔatu = 'i's
 look-move.down.PERF=IMPER.2sg/1sg
 'Look down upon me!'

d) Sequences including a glottal stop from a clitic with an underlying initial glottal stop, e.g.
 = *ʔi'* article:

- (93) *ʔayeʔi*
ʔaya = ʔi'
 many=ART
 'the many'

e) Sequences including the first vowel of the root when it stands in the first syllable of a word:

- (94) *nuʔatu*
nu-ʔatu
 sing-leave.off.PERF
 'stop singing'

As (88)c shows, if the first root vowel comes to stand in the second syllable of the word by reduction, the sequence *can* reduce under certain circumstances, namely if the second underlying vowel is part of the root (as it is in (88)c) or part of an aspect suffix (Sapir & Swadesh 1939: 237). If the second underlying vowel is not one of these, the sequence cannot reduce:

- (95) *λaλeʔiʔ* (**λaλiʔ*)
 [R]–*λa*–*ʔiʔ*
 PL–stick-like.object.stands–in.house
 ‘(stick-like objects) standing here and there in the house’ (cf. (87))

There are also morpheme-specific exceptions. These fall into three categories:

- a) Suffixes with underlying initial glottal stops that do not reduce. These are symbolized *-ʔ*, e.g. *-ʔukt* ‘obtained by ...’

- (96) *ʔuyiʔukt*
ʔu–*yi*–*ʔukt*
 so.and.so–at.X.time–obtained.by
 ‘obtained at such and such time’

- b) Glottalizing suffixes that do not allow reduction of the glottal stop inserted when they occur in post-vocalic position (§3.3.2). These are symbolized *-ʼ*, e.g. *-ʼaqsup* ‘woman of ...’

- (97) *ʕiʂaʔaqsup*
ʕiʂa–*ʼaqsup*
 Tsisha–woman.of
 ‘woman of the Tsisha (Tsashaht) Tribe’

- c) Morphemes with final vowels that do not permit reduction with following glottal stops derived from suffixes with initial glottal stops or glottalizing/leniting suffixes. These are symbolized with a following period, e.g. *-(c)sʔatu.* [L] ‘at the door’.

- (98) *hiʔsʔatuʔas*
hiʔ–*(c)sʔatu.* [L]–*ʔas*
 there–at.door–outside
 ‘there outside at the door’

Morphemes like *-(c)sʔatu*. may also resist reduction of simple VV sequences (§3.2.3). This possibility requires further research. These morphemes do allow reduction of sequences with glottal stops from glottalizing clitics.

- (99) *hiʔsʔataʔ*
hiʔ-(c)sʔatu. [L] = 'aʔ
 there-at.door=TEMP
 'He was there at the door.' (13.6.4)

Reduction of VʔV sequences occurs only in derived environments, i.e. at the boundary between a suffix or clitic and a base (88)a-b, or morpheme-internally in roots that have undergone distributive reduplication (88)c. Tautomorphic sequences never reduce otherwise, cf. unreduced sequences in roots like *ʔaʔaʔyaqsaʔa* 'blanket' and *ʕitiʔasim* 'copper'.

3.3.5 Denasalization

A small group of bound roots end in genuine nasals (not coda nasals, §2.3), e.g.

- (100) **Bound roots ending in genuine nasals, e.g.**

<i>ʔam-</i> locative root	<i>kum-</i> 'point, poke, press with finger'
<i>ʕim-</i> 'bulging muscle'	<i>kʷin-</i> 'stuck, glued on'
<i>ʕim-</i> 'plug up'	<i>ʕam-</i> 'two-pronged object attached on'
<i>kan-</i> 'kneel'	<i>ʕim-</i> 'stroke with hands'
<i>kim-</i> 'resting prone with chin on a surface'	<i>ʕin-</i> 'stem broken off, distended'
<i>kan-</i> 'camp, stop temporarily'	<i>sim-</i> 'pole-like object has position'

Unlike morphemes with final coda nasals, roots with genuine final nasals are consonant-final, as can be determined by examining their behavior in the alternations described in this chapter. For example, we saw in §2.3 that morphemes with final coda nasals require insertion of a glottal stop before glottalizing suffixes (§3.3.2), just as vowel-final morphemes do (101)a. Nasal-final roots, however, accept glottalization from these suffixes like most other consonant-final morphemes (101)b-c:

- (101) a. **Morpheme with final coda nasal**
ʔuʔuʔčnimʔas
ʔuč-nim [R+L]-ʔas
 woman-try.to.obtain-go.in.order.to
 ‘go to get a wife’
- b. **Root with final nasal**
ʔumʔaqʔ
ʔum-ʔaqʔ
 point.with.finger-inside
 ‘have one’s finger poked inside’
- c. **Root with final non-nasal consonant**
čaxʔakʔʔaqʔnuk
čaxʔ-ʔakʔʔaqʔ-nuk
 spear-instrument-inside-at.hand
 ‘(hold) a spear in the hand’

This parallelism between nasal-final and consonant-final morphemes continues through the other alternations.

When roots with final nasals precede consonant-initial suffixes, the nasal is replaced by a homorganic voiceless stop:

- (102) *ʔapcitim* ‘the side of the head’ < *ʔam-* locative root + *-citim* ‘at the side of the head’
- čipsaʔp* ‘flex muscles’ < *čim-* ‘bulging muscle’ + *-saʔp* causative perfective
- čipšišʔ* ‘plug up, caulk, jam in’ < *čim-* ‘plug up’ + *-šišʔ* perfective
- katšišʔ* ‘strike with knee’ < *kan-* ‘kneel’ + *-šišʔ*
- kipšišʔ* ‘close mouth’ < *kim-* ‘have lips tightly closed’ + *-šišʔ*
- katšišʔ* ‘(to) camp’ < *kan-* ‘camp, stop temporarily’ + *-šišʔ*
- ʔupčuqʔa* ‘finger inserted in mouth’ < *ʔum-* ‘point, press, poke with finger’ + *-čuqʔa*
 ‘in the mouth’
- ʔʔitpiʔ* ‘glued to one’s back’ < *ʔʔin-* ‘stuck, glued on’ + *-piʔ* ‘on the back’
- ʔipmaʔʔ* ‘stroke one’s face with fingers’ < *ʔim-* ‘stroke with hands’ + *-maʔ-* ‘moving
 about’ + *-(q)uʔ(ʔ)* ‘on the face’

ʔitʔatu ‘stem breaks off’ < *ʔin-* ‘stem broken off, distended’ + *-ʔatu* ‘come off (perf.)’

siptuʔp ‘pole’ < *sim-* ‘pole-like object has position’ + *-(š)tuʔp* ‘... thing’

Preceding vowel-initial suffixes, the nasal remains.

(103) *ʔamaʔcsi* ‘the front of the thighs’ < *ʔam-* locative root + *-aʔcsi* ‘on the lap’

kimačišť ‘resting with chin on the water’ < *kim-* ‘resting prone with chin on a surface’ +
-ačišť ‘on the ocean’

3.3.6 Nasalization

Clitics beginning with an /m/ that is subject to initial consonant deletion §3.3.8, which includes the Indicative mood clitic = (m)aʔ and the past tense morpheme = (m)it, regularly turn preceding voiceless labial stops to homorganic nasals.

- (104) a. *ʔačýaʔmitʔi*
ʔačýaʔp = (m)it = ʔiʔ
gather.wood=PAST=ART
‘the one who had come for wood’
- b. *ʔačýaʔmeʔic*
ʔačýaʔp = (m)aʔ = ʔic
gather.wood=INDIC=2sg
‘you are gathering wood’
- c. *ʔuʔčiqʔlisʔaqsumitʔi*
ʔuʔčiqʔlis-ʔaqsup = (m)it = ʔiʔ
Huchuktlis-woman.of=PAST=ART
‘the late woman of Huchuktlis (place name)’
- d. *ʔuʔaʔmin*
ʔu-ʔaʔp = (m)aʔ = ni
so.and.so-buy=INDIC=1pl
‘we bought it’

There are occasional exceptions, however, which seem to involve primarily the first person plural.

The past tense clitic also sometimes turns preceding voiceless dental stops (with preceding vowels) to homorganic nasals. The conditioning environments for this process require further re-search.

- (105) a. *wiki'nita*
wiki't = (m)it = a
 not.exist=PAST=INDIC
 'there was none'
- b. *miʔa'nitʔi*
miʔa't = (m)it = ʔi
 sockeye=PAST=ART
 'the former sockeye salmon (now cut up)'

3.3.7 Final /h/ deletion

All restrictive locative suffixes (§5.5.2) with final /uʔ/ or /uʔ/ and one with final /iʔ/ (*-piʔ* 'in the middle') undergo deletion of the /h/ when they precede glottalizing/leniting suffixes and a few other suffixes, e.g. *-ma -im -um* '... thing', *-i:h* plural. This is signaled in underlying form by parentheses around the deleting consonant, e.g. *-(q)uʔ(ʔ)* 'on the face'. By the processes described in §3.3.2 and §3.3.3, a glottal stop is inserted between the deleting final (prior to deletion) and glottalizing/leniting suffixes. This leaves a vowel-ʔ-vowel sequence after deletion of /h/. This sequence is never subject to the reduction processes in §3.3.4.

- (106) a. **Deletion preceding glottalizing suffix**
kʷaʔtuʔas
kʷaʔ-(q)uʔ(ʔ)-as
 branches-on.face-outside
 'Branches-on-face-Outdoors (man's name)'
Compare with *kʷaʔtuʔ* 'branches on face'
- b. **Deletion preceding -ma**
ʔuquʔma
ʔuq-(q)uʔ(ʔ)-ma
 inverted.hollow.object-on.face-thing
 'head mask'
Compare with *ʔuquʔ* 'wearing a head-mask'

c. **Deletion preceding plural suffix**

ħuqu'ħ
ħuq-(q)u'(t)-i:ħ
 inverted.hollow.object-in.face-PL
 'wearing a head-mask (pl.)'

Strictly speaking, marking suffixes that undergo deletion with a diacritic is redundant, since, with the exception of *-pi'(t)* 'in the middle', it is entirely predictable which suffixes fall into this category based on morpheme class and phonological shape. It is useful as a mnemonic device, though, because there are many other locative and non-locative suffixes that end in /t/, including a few non-locative suffixes that end in /uʔ/, that do not undergo deletion. These are subject to regular glottalization and lenition processes described in §3.3.2 and §3.3.3.

- (107) a. *mu'či'yas*
mu'-či't- 'as
 four-X.many.days-on.ground
 'four days on the ground'
- b. *čaxsimčuwās*
čax^w-simč [L]-uʔ^w- 'as
 hurl.point.foremost-do.ritual.for-place.for-outside
 'place outdoors for performing spearing rituals'

The final /λ/ in all allomorphs of the perfective aspect suffix and in all portmanteau morphemes with a perfective component, whether suffixes or roots, is lost before glottalizing clitics. A non-reducing glottal stop is inserted between morpheme and clitic. This is not marked by any diacritic since it applies with absolute regularity to forms signaling this grammatical category.

- (108) a. **Deletion involving an allomorph of the perfective suffix**
katši'ʔaλ
kan-šiλ = 'aλ
 kneel-PERF=TEMP
 'kneel down now'
- b. **Deletion involving a portmanteau morpheme with perfective component**
katpi'ʔaλ
kan-piλ = 'aλ
 kneel-in.house.PERF=TEMP
 'kneel down in the house now'

This segment undergoes regular glottalization preceding glottalizing suffixes:

- (109) *katšiʔas*
kan-šiʔ-ʔas
 kneel-PERF-about.to
 ‘about to kneel down’

The perfective allomorphs *-uʔ* and *-u:ʔ*, which occur with locative suffixes with final /*u(ʔ)*/ or /*uʔ(ʔ)*/ (e.g. *-(q)uʔ(ʔ)* ‘on the face’, perf. *-(q)uʔʔ*), take the form *-awiʔ* before glottalizing clitics:

- (110) *ʔuyiqawiʔaʔ*
ʔuyi-(q)awiʔ = ʔaʔ
 medicine-on.face.PERF=TEMP
 ‘put medicine on one’s (own) face’

Several inherently perfective suffixes ending in /*ʔ*/ also undergo /*ʔ*-deletion, which suggests that they may have the perfective suffix as an etymological component. Among these suffixes are *-awaʔ* [L] ‘find, come upon ... (perf.)’, *-iʔ* ‘lose ... (perf.)’, *-iʔ* [L] ‘go for, get, invite ... (perf.)’, *-pu:ʔ* ‘get paid (for) ... (perf.)’, *-su:ʔ* ‘... dies (perf.)’. This list may be complete.

- (111) a. *wiʔkawaʔaʔ*
wiʔ-awaʔ [L] = *ʔaʔ*
 not-find.PERF=TEMP
 ‘have nothing come to one now’ (Sapir 1924: 102, note 182)
- b. *muʔiʔaʔ*
muʔ-iʔ [L] = *ʔaʔ*
 four-get.PERF=TEMP
 ‘get four now’

Non-perfective morphemes that end in /*ʔ*/ undergo regular glottalization preceding both glottalizing suffixes and glottalizing clitics:

- (112) a. *ʔaʔaʔtuʔmaʔʔaʔas*
ʔaʔaʔtu:maʔʔaʔ-ʔas
 ask-intend.to-about.to
 ‘about to ask’
- b. *ʔaʔaʔtuʔmaʔʔaʔaʔ*
ʔaʔaʔtu:maʔʔaʔ = ʔaʔ
 ask-intend.to=TEMP
 ‘intend to ask’

3.3.8 Initial consonant deletion

Certain suffixes begin with consonants that are present when they follow bases ending in a vowel or coda nasal, but lost when they follow consonant-final bases. The following consonants are subject to initial deletion in a least one suffix: /č k^wq n š w y y/. There are other suffixes beginning with each of these consonants that never undergo initial deletion. Deleting consonants are symbolized with parentheses, e.g. *-(q)a's* ‘daughter of ...’. Compare this suffix in (113) to *-qi* ‘on top, on the head’ with non-deleting /q/ in (114):

- | | | | |
|-------|--|--|---|
| (113) | a. Vowel-final base
<i>čimtu^wq^{as}</i>
<i>čimtu-(q)a's</i>
squirrel–daughter.of
‘Squirrel-daughter’ | b. Base with final coda nasal
<i>ka'naqimqas</i>
<i>ka'naqim-(q)a's</i>
Kanakim–daughter.of
‘daughter of Kanakim’ | c. Consonant-final base
<i>ʔa'sicas</i>
<i>ʔa'sic-(q)a's</i>
bee–daughter.of
‘Daughter of the Bee’ |
| (114) | a. <i>hitaqi</i>
<i>hita-qi</i>
empty.root–on.top
‘on top’ | b. <i>čimqi</i>
<i>čim-qi</i>
ready–on.top
‘prepared on top’ | c. <i>himtqi</i>
<i>himt-qi</i>
crosswise–on.top
‘crosswise on top’ |

One unexplained exception to the general rule of retention after nasals has turned up thus far:

- (115) *ʔi'čimaq*
ʔi'čim-(q)aq
old–very
‘very old’

There are also several clitics subject to initial consonant deletion, e.g. *=(w)u:s* dubitative, *=(m)a'* Indicative mood (116). Note also the deleting /y/ of the continuative aspect suffix in (116)a:

- | | | | |
|-------|---|--|--|
| (116) | a. Vowel-final base
<i>huksa'maḥ</i>
<i>huks-(y)a' = (m)a' = aḥ</i>
count–CONT=INDIC=1sg
‘I am counting’ | b. Nasal-final base
<i>hahaqčimmaḥ</i>
<i>hahaqčim = (m)a' = aḥ</i>
hardly=INDIC=1sg
‘I hardly ...’ | c. Consonant-final base
<i>ʔani'taḥ</i>
<i>ʔana-'it = (m)a' = aḥ</i>
only–in.house = INDIC=1sg
‘only I am in the house’ |
|-------|---|--|--|

Another, much more restricted, initial deletion alternation involves several suffixes beginning with /c/, among them *-caqčú:* ‘at the end, at the ... end’, *-ca’s* ‘at one of a pair of body parts’, *-ciʔ* ‘on the edge, on the ... edge’, *-cit-* ‘on the ... side, end’ and *-cuwát* [L] ‘on ... side, on the ... side’. These lose initial /c/ following at least one root ending in /s/, the root *kʷis-* ‘different’ (117)a. It is unknown whether other /s/-final roots trigger the same alternation. The /c/ is retained after other consonants (117)b-c:

(117)	a.	After <i>kʷis-</i> <i>kʷisaqčú</i> <i>kʷis-caqčú:</i> different-at.X.end ‘at the other end’	b.	Post-consonantal <i>hišcaqčú</i> <i>hiš-caqčú:</i> all-at.X.end ‘at both ends’	c.	Post-consonantal <i>íuʔuhcaqčú</i> [R]-íuʔ-caqčú: PL-head-at.end ‘a head at each end’
-------	----	--	----	---	----	--

3.3.9 Alternating initial consonants

(118)	<u>PW</u>	<u>NW</u>	<u>SW</u>	
	*k	k [kʲ]	č	Kw <i>ʔupək</i> ‘root’; ²⁷ M, N <i>ʔupač</i> id.
	*k̥	k̥ [k̥ʲ]	č̥	Kw <i>k̥at-</i> ‘paint’; ²⁸ M <i>č̥at-</i> ‘write, draw, paint’
	*g	g [gʲ]	č	Kw <i>gamuła</i> ‘halibut hook’; ²⁹ M <i>čibw̥d</i> , ³⁰ N <i>čimun</i> id.
	*x	x [xʲ]	š	Kw <i>təx-</i> ‘road, trail’; ³¹ M, N <i>təš-</i> id.

As laid out in (118), the non-labialized velar consonant series /k k̥ g x/ in Proto-Wakashan developed to palatalized velars in Northern Wakashan and to alveo-palatals in Southern Wakashan (Sapir 1911a: 16, 1924: 87, note 32, 1938, reprint 1949: 231).³² Note also that the PW voiced and voiceless series have remained distinct in NW, but merged in SW (Sapir 1924: 84, note 8). Proto-Wakashan labialized velars have been retained in both branches of the family, as shown by correspondences such as Kwakwala *dəxʷ-* ‘to jump’ (Boas 1947: 216), Nuuchahnulth *tuxʷ-* id; Kw *təlqʷ-* ‘soft’ (Lincoln & Rath 1980: 100), N *tuqʷ-* ‘melted, dissolved’ (Kw /əl/ corresponds

to N /u/); Kw *ʔəlx^w*- ‘to shred cedar bark’ (Boas 1947: 223), Nu *ʔux^w*- id. (old word); Kw *-nuk^w* ‘having’ (Boas 1947: 348), N *-na^wk^w* ‘having ...’.

The different historical development of the two PW velar series, labialized and non-labialized, in SW has had morphophonological consequences in Nuuchahnulth. The language has inherited a group of suffixes, many of which are preserved in NW as well, that originally began with a non-labialized velar consonant. Following bases with final consonants or /a i/ this segment appears as /č/ in modern Nuuchahnulth, as we would expect from the correspondences in (118). Following /u/, however, it appears as /k^w/ today, since labial neutralization (§3.2.2), evidently an ancient alternation, replaced */k/ with */k^w/ in this environment and thus protected it from the palatalization process that affected it in other environments. The same applies *mutatis mutandis* to suffixes that began with */k/. Example (119) shows words in both environments containing suffixes that putatively began with original */k/ or */k/. I follow Rose (1981) in positing /č/ as the synchronic underlying initial segment of these suffixes.

- | | | |
|-------|--|---|
| (119) | a. Following consonants or /a i/
<i>ʔaʔa^wyač^wi^wqa</i>
<i>ʔaya-č^wi^wqa</i> [R+L]
many–impeded.by
‘impeded by many’

<i>čičič^wap</i>
<i>čič-č^wap</i> [R]
tooth–sore.in
‘have a tooth-ache’ | b. Following /u/
<i>ʔuʔuk^wi^wqa</i>
<i>ʔu-č^wi^wqa</i> [R+L]
so.and.so–impeded.by
‘impeded by it’

<i>ʔuʔuk^wap</i>
<i>ʔu-č^wap</i> [R]
so.and.so–sore.in
‘suffer from it’ |
|-------|--|---|

The underlining of the initial segment (e.g. *-č^wi^wqa*) is to distinguish these suffixes from suffixes like *-čas* [R] ‘fond of ...’ that have initial /č/ that does not alternate with /k^w/. There are very few non-alternating suffixes, and some of these may ultimately prove to alternate when tested in the appropriate environments.

Many suffixes of this type have deleting initial consonants (§3.3.8). These suffixes are similar to those in (119) except the initial consonant deletes after consonant-final bases instead of appear-

ing as /č/. (Recall from §2.3 that bases with final coda nasals count as vowel final with regard to consonant deletion.) Example (120) demonstrates with *-(č)it* ‘on the body’. There is no need for underlining with most of these suffixes because most suffixes with deleting initial /č/ have a velar alternate. The cognate Northern Wakashan suffix *-(g)it* ‘body’ is included for comparison. The first word of the NW examples is Haisla (kindly provided by Emmon Bach, p.c.), and the final two are Kwakwala from Boas (1947: 353).³³

(120)	a. Following /a i/ <i>čačit</i> <i>ča-(č)it</i> water-on.body ‘water on the body’	b. Following /u/ <i>mu^wk^wit</i> <i>mu^w-(č)it</i> four-on.body ‘four on the body’	c. Following a consonant <i>čaqucit</i> <i>čaquc-(č)it</i> bubble-on.body ‘Bubbly-Body (name)’
	<i>digita</i> <i>di-(g)it-a</i> wipe-body-TRANS ‘to wipe body’ (Haisla)	<i>ʔug^widiʔ</i> <i>ʔu-(g)it-iʔ</i> locative.root-body-NOM ‘body of pole, tree’ (Kw)	<i>kəlqita</i> <i>kəlq-(g)it-a</i> lick-body-TRANS ‘to lick body’ (Kw)

Thus far, all alternating suffixes have begun with the alternating consonant followed by a vowel. Many of these suffixes, however, begin with a consonant cluster that consists of the alternating consonant followed by one or two consonants. This occasions certain phonological changes in the alternating consonant. First, due to optional neutralization of labialization between /u/ and a consonant, the alternate following /u/ may be pronounced either /k/ or /k^w/, although it is always written /k/ (§3.2.2).

(121)	a. Following /a i/ <i>hisačta</i> <i>hisa-(č)ta</i> there-have.as.name ‘named after that place’	b. Following /u/ <i>ʔukta</i> <i>ʔu-(č)ta</i> so.and.so-have.as.name ‘have it as name’	c. Following a consonant <i>čih^hta</i> <i>čih^h-(č)ta</i> ghost-have.as.name ‘have a ghost name’
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The alternate that follows /a i/ is also subject to variation. Before alveolar consonants /s c/ it is realized as /c/.

- | | | | | | |
|----------|---------------------------|----|---------------------------|----|-------------------------------------|
| (122) a. | Following /a i/ | b. | Following /u/ | c. | Following a consonant |
| | <i>ʔimcsa'íta</i> | | <i>ʔu'ksa'íta</i> | | <i>ʔa'čsa'itim</i> |
| | <i>ʔim-(c)sa:íta</i> [L] | | <i>ʔu-(c)sa:íta</i> [L] | | <i>ʔač-(c)sa:íta</i> [L]– <i>im</i> |
| | locative.root–on.forehead | | so.and.so–on.forehead | | pad–on.forehead–thing |
| | ‘on the forehead’ | | ‘have it on the forehead’ | | ‘head-flattener’ |

Note that alternating consonants are represented in underlying form by the shape they take following /a i/.

Before dental /t/ the alternate following /a i/ is realized as /š/. (Underlining of the alternating segments distinguishes these suffixes from those with deleting initial /š/ segments that do not alternate; see, for example, (125) below.)

- | | | | | | |
|----------|------------------------------------|----|---------------------------|----|--------------------------|
| (123) a. | Following /a i/ | b. | Following /u/ | c. | Following a consonant |
| | <i>ʔu'k^waštis</i> | | <i>ʔu'ktis</i> | | <i>wi'ktis</i> |
| | <i>ʔuk^wa-(š)tis</i> [L] | | <i>ʔu-(š)tis</i> [L] | | <i>wik-(š)tis</i> [L] |
| | oneself–act.with.ref.to | | so.and.so–act.with.ref.to | | nothing–act.with.ref.to |
| | ‘act of one’s own accord’ | | ‘act based on it’ | | ‘act without permission’ |

Not all deleting initial /k/ or /š/ segments alternate, although they may have at one time in history. The suffix *-(k)či* ‘along with ...’ begins with a deleting, but non-alternating /k/.

- | | | | | | |
|----------|---------------------------|----|-------------------------------|----|-----------------------|
| (124) a. | Following /a i/ | b. | Following /u/ | c. | Following a consonant |
| | <i>ʔanakčič</i> | | <i>ʔukčič</i> | | <i>ʔuščič</i> |
| | <i>ʔana-(k)či-č</i> | | <i>ʔu-(k)či-č</i> | | <i>ʔuš-(k)či</i> |
| | only–along.with–in.house | | so.and.so–along.with–in.house | | someone–along.with |
| | ‘along with only indoors’ | | ‘along with him indoors’ | | ‘along with sb’ |

Similarly, the suffix *-(š)ti'p* ‘doing to while ...’ begins with a non-alternating /š/.

- | | | | | | |
|----------|-----------------------|----|-----------------------|----|-----------------------|
| (125) a. | Following /a i/ | b. | Following /u/ | c. | Following a consonant |
| | <i>saya'stip</i> | | <i>su'stip</i> | | <i>hi'ti'p</i> |
| | <i>saya'-(š)ti'p</i> | | <i>su-[L]-(š)ti'p</i> | | <i>hič-(š)ti'p</i> |
| | distant–do.to.while | | hold–CONT–do.to.while | | there–do.to.while |
| | ‘do to while distant’ | | ‘do to while holding’ | | ‘do to while there’ |

Table 7. Realization of alternating initial consonants

Underlying	/a i/___	/u/___	C___	Example
- <u>č</u> V...	-čV...	-kV...	-čV...	(119)
- <u>č̣</u> V...	-č̣V...	-ḳV...	-č̣V...	(119)
-(<u>č</u>)V...	-čV...	-kV...	-V...	(120)
-(<u>č</u>)tV...	-čtV...	-kt...	-tV...	(121)
-(<u>c</u>)sV...	-csV...	-ksV...	-sV...	(122)
-(<u>č</u>)tV...	-štV...	-ktV...	-tV...	(123)

Table 7 (after Rose 1981: 17) summarizes the realizations of alternating initial consonants we have discussed. Labialization of the pre-vocalic -čV... and -č̣V... alternates in the /u/___ environment is handled by the regular labial neutralization rules (§3.2.2).

3.4 Appendix on Makah

In this section I introduce the main points of Makah phonology. Data on Makah is less abundant than on Nuuchahnulth, and the discussion is accordingly less detailed. Original description of most of the processes can be found in Jacobsen (1968, 1969b, 1971, 1973, 1994, 1996, 1997a, 1998a, 1998c, 1999a-b, 2000).

In general, Makah presents a very similar picture to what we have seen in Nuuchahnulth: Makah has the typical Wakashan glottalizing/leniting suffixes, affixal CV templates, reduction of VV and V?V sequences, deleting initial and final consonants, etc., but it has developed additional complexities of its own. Among the most prominent of these are the “mutating” clitics (§3.4.2) and widespread patterns of vowel insertion and loss (epenthesis, syncope, and apocope) (§3.4.3). In the discussion that follows I concentrate on these Makah-specific processes. A typologically interesting process in Makah not described here is labialization dissimilation (Jacobsen 1998c).

3.4.1 Segment inventory

Makah has 34 consonant phonemes.

Table 8. Makah consonant inventory

	Labial	Dental	Alveolar	Lateral	Alveo-Palatal	Velar	Labialized Velar	Uvular	Labialized Uvular	Glottal
Voiceless Stops	<i>p</i>	<i>t</i>	<i>c</i>	<i>λ</i>	<i>č</i>	<i>k</i>	<i>k^w</i>	<i>q</i>	<i>q^w</i>	
Ejectives	<i>p̣</i>	<i>ṭ</i>	<i>c̣</i>	<i>λ̣</i>	<i>č̣</i>	<i>ḳ</i>	<i>k^w</i>	<i>q̣</i>	<i>q^w</i>	<i>ʔ</i>
Voiced Stops	<i>b</i>	<i>d</i>								
Fricatives			<i>s</i>	<i>ʈ</i>	<i>š</i>	<i>x</i>	<i>x^w</i>	<i>χ</i>	<i>χ^w</i>	<i>h</i>
Sonorants	<i>(m)</i>	<i>(n)</i>		<i>l</i>	<i>y</i>		<i>w</i>			

The nasals /*m n*/ are marginal in Makah, occurring in only a few words, e.g. *ham* ‘feces’, *na'ni* ‘grizzly bear’. See below. In addition to the phonemes in Table 8, one word in Makah contains /*g*/: *χigi'dit* ‘Clallam Bay (place name)’, a borrowing from Clallam, a neighboring Salish language.

The Makah and Nuuchahnulth inventories (see Table 1) differ in four ways.³⁴ First, as described in Jacobsen (1969a), the Proto-Southern-Wakashan ejective uvular stops and uvular fricatives shifted to pharyngeals in Nuuchahnulth, but were retained in Makah:

(126)	<u>PSW</u>	<u>M</u>	<u>N</u>	
	<i>*q̣</i>	<i>q̣</i>	<i>ʔ</i>	M <i>q̣idi'λ</i> , N <i>ʔini'λ</i> ‘dog’
	<i>*q̣^w</i>	<i>q̣^w</i>	<i>ʔ</i>	M <i>q̣^wič-</i> , N <i>ʔič-</i> ‘rotten’
	<i>*χ</i>	<i>χ</i>	<i>ħ</i>	M <i>χači'</i> , N <i>ħači'</i> ‘deep down’
	<i>*χ^w</i>	<i>χ^w</i>	<i>ħ</i>	M <i>ʔiʔi'χ^wa</i> , N <i>ʔi'ħ</i> ‘big’ ³⁵

The other three differences have to do with historical changes in the original sonorant system. These have interconnected results, so it is convenient to describe them together. These changes are as follows:

1. The PSW nasals have shifted to voiced stops in Makah, which accounts for the rarity of /m/ and /n/ in the language.
2. The PSW glottalized sonorants have merged with the plain sonorants in Makah. Loss of glottalization has been accompanied by compensatory lengthening of preceding vowels (Jacobsen 1968).
3. PSW */l/ has merged with /n/ in Nuuchahnulth, but remains in Makah as /l/.

These changes produce the correspondences shown in (127). I have chosen examples with original word-medial glottalized sonorants to make the effects of compensatory lengthening in the Makah forms more apparent.

(127)	<u>PSW</u>	<u>N</u>	<u>M</u>	
	*m	m	b	N <u>ma-</u> , M <u>ba-</u> ‘dwelling’
	*ṁ	ṁ	b (+ length)	N <u>huṁaʔq</u> , M <u>huʔbaʔq</u> ‘wild rhubarb’
	*n	n	d	N <u>nunuk</u> , M <u>duduk</u> ‘singing’
	*ṅ	ṅ	d (+ length)	N <u>čuṅa</u> , M <u>čuʔda</u> ‘vulva’
	*ɰ	ɰ	y (+ length)	N <u>ʔuyi</u> , M <u>qʔuya</u> ‘medicine’
	*w̥	w̥	w (+ length)	N <u>cuw̥it</u> , M <u>cuʔwit</u> ‘silver salmon’
	*l	n	l	N <u>nak^w</u> -, M <u>lak^w</u> - ‘tongue extended’

These changes influence the outcome of several phonological alternations in Makah, which we will see as the discussion progresses (§3.4.2).

The change of nasals to stops is uncommon cross-linguistically, but has occurred in other languages of the Northwest Coast region, both related and unrelated, viz. Ditidaht (Southern Wa-

kashan), Quileute (Chimakuan), Lushootseed (Salish), and Twana (Salish) (Thompson & Kinkade 1990).

Makah vowels are shown in Table 9. Pronunciation details are similar to those given in §2.2 for Nuuchahnulth except that, as pronounced by most speakers, the Makah high back vowels are closer to cardinal value, the long mid back vowel is tense rather than lax, the short central vowel is [ʌ] rather than [a], and the long mid front vowel is [æ:] rather than [e:].

Table 9. Makah vowel inventory

	Front	Central	Back
High	<i>i i'</i>		<i>u u'</i>
Mid	<i>e e'</i>		<i>o o'</i>
Low		<i>a a'</i>	

Short vowels frequently have tense allophones. More research is required before definitive statements can be made, but at this point it seems fairly certain that the short high vowels and sometimes /a/ have tense allophones before sonorants, e.g.

- (128) *hiyu'* [hiyu:] 'stop, finish'
tiquwił [t̥iquwił] 'sitting room'
ʔayisaquk [ʔayisʌqʊk^{wh}]³⁶ 'tricky, mischievous'

The short high back vowel also seems to have a tense allophone before labial stops, e.g. *tupksa:p* 'blacken sth' [tup^hk^hsa:p^h].

We noted in §2.2 that the mid vowels in the Nuuchahnulth inventory given by Sapir & Swadesh (1939) (see Table 3) were phonemically marginal. The same applies to Makah: they frequently arise by secondary processes, but belong in the inventory because they appear in several words where they cannot be accounted for by rule, e.g. *ʔed* discourse particle, *kʊʔuł-* 'further away, a little ways', *koloʔo'* 'wild currant'.

Southern Wakashan languages have no underlying diphthongs. On the surface, however, there are environments in Makah in which they appear (§3.4.3).

3.4.2 Glottalization and lenition

Jacobsen (1996) describes glottalization in Makah. The facts, summarized in Table 10, are similar to those described for Nuuchahnulth in §§3.3.2: stops are glottalized and most fricatives are changed to glides. Makah, however, shows some distinct developments. First, the change of fricatives to glides is accompanied by lengthening of immediately preceding vowels. For example, the final /s/ of *wiǰis* ‘dirty’ in (129) is changed to /y/ by the glottalizing suffix -’akλi ‘at the end, rear’. The /i/ preceding the new glide is lengthened to /iː/. (The loss of the final vowel of the suffix is explained in §3.4.3.)

- (129) *wiǰiːyakλ*
wiǰis-’akλi
 dirty-at.end
 ‘dirty end’

Preceding length is indicated in Table 10 by ‘:’ before the resulting sonorant. This concomitant lengthening is the result of the historical loss of glottalized sonorants and accompanying compensatory lengthening of preceding vowels mentioned in §3.4.1.

Second, a small group of bound roots with final /p/ or /t/ have this segment voiced rather than glottalized when followed by a glottalizing suffix, e.g. when followed by /š/, the final segment of *kaT-* ‘kneel’ surfaces as /t/ (130)a, but when followed by a glottalizing suffix, the segment becomes /d/ (130)b:

- (130) a. *katšiλ*
kaT-šiλ
 kneel-PERF
 ‘kneel’

Table 10. Effects of glottalizing suffixes in Makah

<i>p</i>	→	<i>p̣</i>	<i>ḡabup-</i> ‘know (a person)’ + -’ <i>ida</i> ‘treated as ...’ → <i>ḡabuḡid</i> ‘famous’
<i>P</i>	→	<i>:b</i>	<i>ḡaP-</i> ‘two-pronged object clamped on’ + ’ <i>iḡ</i> ‘get ... (perf.)’ → <i>ḡa’biḡ</i> ‘pick up with tongs’
<i>t</i>	→	<i>ṭ</i>	<i>k^widiḡt-</i> ‘Quileute’ + -’ <i>aḡsup</i> ‘woman of ...’ → <i>k^widiḡtaḡsup</i> ‘Quileute woman’
<i>T</i>	→	<i>:d</i>	<i>k^wiT-</i> ‘stuck on’ + -’ <i>aḡḡ</i> ‘inside’ → <i>k^wiḡdaḡḡ</i> ‘sth stuck inside’
<i>c</i>	→	<i>c̣</i>	<i>pic-</i> ‘cedar bark’ + -’ <i>up</i> formative suffix → <i>piḡup</i> ‘(inner) cedar bark’
<i>ḡ</i>	→	<i>ḡ̣</i>	<i>baḡ-</i> ‘tied up, fastened’ + -’ <i>as</i> ‘on the ground’ → <i>baḡ̣as</i> ‘(door) locked’
<i>č</i>	→	<i>č̣</i>	<i>šuč-</i> ‘tree’ + -’ <i>as</i> formative suffix → <i>šuč̣as</i> ‘tree’
<i>k</i>	→	<i>ḳ</i>	<i>wik-</i> ‘not’ + -’ <i>ič</i> ‘clothed in ...’ → <i>wikič̣</i> ‘undressed, not wearing’
<i>k^w</i>	→	<i>ḳ^w</i>	<i>bak^w-</i> ‘buy’ + -’ <i>as</i> ‘go to ...’ → <i>baḳ^was</i> ‘go to buy’
<i>q</i>	→	<i>q̣</i>	<i>siq-</i> ‘suppurating’ + -’ <i>aḡḡ</i> ‘inside’ → <i>siḡaḡḡ</i> ‘pimple, abscess’
<i>q^w</i>	→	<i>q̣^w</i>	<i>ḡuq-</i> ‘feather’ + -’ <i>aḡḡ</i> ‘inside’ → <i>ḡuḡ^waḡḡ</i> ‘feather mattress’
<i>s</i>	→	<i>:y</i>	<i>ḡus-</i> ‘tired’ + -’ <i>atu</i> ‘stop ... -ing’ → <i>ḡuḡyat</i> ‘rest after work’
<i>ṭ</i>	→	<i>:y</i>	<i>waḡṭ-</i> ‘say’ + -’ <i>aḡḡ</i> ‘inside’ → <i>waḡyaḡḡ</i> ‘think (said of a man)’
<i>ṭ^w</i>	→	<i>:w</i>	<i>-uḡ^w</i> ‘... place’ + -’ <i>as</i> → <i>-uḡ^was</i> ‘... place on the ground’
<i>ṭ/l</i>	→	<i>:l</i>	<i>baḡṭ/l-</i> ‘cold’ + -’ <i>aḡs</i> ‘in a vessel’ → <i>baḡlaḡs</i> ‘cold water’
<i>š</i>	→	<i>:y</i>	<i>taš-</i> ‘door, trail’ + -’ <i>as</i> ‘on the ground’ → <i>taḡyas</i> ‘road, trail’
<i>x</i>	→	<i>:w</i>	<i>čaḡyax</i> ‘pick berries’ + -’ <i>eḡḡis</i> ‘go to ...’ → <i>čaḡyaḡweḡḡis</i> ‘go to pick berries’ ³⁷
<i>x</i>	→	<i>xḡ</i>	<i>čaḡyax</i> ‘pick berries’ + -’ <i>eḡḡis</i> ‘go to ...’ → <i>čaḡyaxḡeḡḡis</i> ‘go to pick berries’
<i>x^w</i>	→	<i>:w</i>	<i>kax^w-</i> ‘fall’ + -’ <i>aḡatu</i> ‘move down (perf.)’ → <i>kaḡwaḡat</i> ‘fall down off’
<i>x̣</i>	→	<i>xḡ</i>	<i>ḡiḡ-</i> ‘red’ + -’ <i>aḡḡ</i> ‘inside’ → <i>ḡiḡiḡaḡḡ</i> ‘red inside’; plus epenthesis, §3.4.3
<i>x^w</i>	→	<i>:w</i>	<i>ḡiḡ^w-</i> ‘big’ + -’ <i>abiḡ</i> [R] ‘at the ears’ → <i>ḡiḡiḡwabiḡ</i> ‘donkey’

- b. *ka·das*
kaT-’as
 kneel–on.ground
 ‘kneeling on the ground’

Note also the concomitant lengthening of the preceding vowel. Preceding a vowel, the segment appears as /p/ or /t/.

- (131) *k^wita*
k^wiT-(y)a
 stuck.on–CONT
 ‘stuck on’

Following Jacobsen (1996), such segments are marked by the diacritic ‘P’ or ‘T’, e.g. *kaT-* ‘kneel’, *čiP-* ‘plug, jam in’. Most of these roots are cognate with Nuuchahnulth roots with final nasals (§3.3.5). Similarly, a few roots ending in /t/ change this to // with concomitant lengthening of the preceding vowel before glottalizing suffixes: *baʔl-* ‘cold’ + *-’axs* ‘in a vessel’ > *ba’laʔxs* ‘cold water’.³⁸ These changes also occur before leniting suffixes, but without lengthening.

Glottalizing clitics in Makah have almost identical effects to glottalizing clitics in Nuuchahnulth (§3.3.2) except that no glottal stop is inserted following fricatives:

- (132) MAKAH
 a. *daʔuʔqsaʔ*
daʔuʔ-qs = ’aʔ
 accompany–in.vessel=TEMP
 ‘going along with sb in a vessel’

 NUUCHAHNULTH
 b. *naʔuʔqsʔaʔ*
naʔuʔ-qs = ’aʔ
 accompany–in.vessel=TEMP
 id.

Appearance of a glottal stop from a glottalizing clitic following a fricative in this context thus indicates that a vowel is present underlyingly that has deleted due to syncope (§3.4.3). For example, the word *daʔuʔqsʔaʔ* ‘accompany in a vessel’ in (133) adds the perfective aspect suffix *-iʔ*

to (132)a. The final /ʎ/ of the perfective suffix deletes as described in §3.3.7 leaving a /iʎa/ sequence that undergoes syncope.

- (133) MAKAH
daʎuʎsʎaʎ
daʎuʎ-s-iʎ = 'aʎ
 accompany-in.vessel-PERF=TEMP
 ‘go along sb in a vessel’

The effects of leniting suffixes are laid out in Table 11. Examples are mostly from Jacobsen (1996). In addition to the three leniting suffixes found in Nuuchahnulth (-‘iʔ ‘in the house’, -‘is ‘on the beach’, -‘ačič perfective inceptive aspect), Makah has a fourth leniting suffix, the suffix -‘u, a formative suffix that appears with two noun roots referring to kinds of berries, *cikyeš-*, *cikyeyu* ‘elderberries’; *qakwaš-*, *qakweyu* ‘salmonberries’.³⁹

Table 11. Effects of leniting suffixes in Makah

<i>s</i>	→	<i>y</i>	<i>ćus-</i> ‘dig’ + -‘is → <i>ćuyis</i> ‘hole dug on the beach’
<i>ʔ</i>	→	<i>y</i>	<i>-baʔ-</i> ‘moving about’ + -‘iʔ → <i>-beyiʔ</i> < <i>-bayiʔ</i> ‘moving about in the house’
<i>ʔ^w</i>	→	<i>w</i>	<i>-uʔ^w</i> ‘... place’ + ‘is → <i>-uwis</i> ‘place on the beach’
<i>ʔ/l</i>	→	<i>l</i>	<i>biʔ/l-</i> ‘even, level’ + ‘is → <i>bilis</i> ‘flat, level beach’
<i>š</i>	→	<i>y</i>	<i>qakwaš-</i> ‘salmonberries’ + -‘u → <i>qakwey</i> ‘salmonberries’
<i>x^w</i>	→	<i>w</i>	<i>cax^w-</i> ‘round’ + -‘is → <i>cawis</i> ‘Round-on-Beach’ (place name) ⁴⁰
<i>x^w</i>	→	<i>w</i>	<i>ʎi x^w-</i> ‘big’ + -‘ačič → <i>ʎi wačič</i> ‘to get big’
<i>P</i>	→	<i>b</i>	<i>ʎaP-</i> locative root + -‘iʔ → <i>ʎabiʔ</i> ‘right in the middle indoors’
<i>T</i>	→	<i>t</i>	<i>kaT-</i> ‘kneel’ + -‘iʔ → <i>kadiʔ</i> ‘kneeling on the floor’

Makah has also developed “mutating” clitics, which include the article =*iq*, the diminutive clitic =*išč*, and the second and third person Indicative mood clitics, e.g. =*i* third person singular Indicative. Mutating clitics show either glottalizing or leniting effects depending on the preceding segment. They have no effect on preceding fricatives, but change /p/ and /t/ to /b/ and /d/

respectively, /ʎ/ to //, and glottalize other voiceless stops, except /k^w/ and sometimes /k/, which become /w/.

- (134) a. *hukturbiq*
hukturp = iq
 bird=ART
 ‘the bird’
- b. *ʎiʎiːx^wakʎid*
ʎiʎiːx^wa-(k)ʎit = i
 big-very=INDIC.3sg
 ‘It is very big.’
- c. *bačil*
ba-čil = i
 close.teeth-PERF=INDIC.3sg
 ‘He/she/it bit him/her/it.’
- d. *ʎupáčiq*
ʎupáč = iq
 root=ART
 ‘the root’
- e. *k^waʎawic*
k^waʎak^w = ic
 small=INDIC.2sg
 ‘You (sg.) are small.’

After vowels, a glottal stop is inserted. A preceding short vowel is generally lost (135)b (§3.4.3):

- (135) a. *kuparʔ*
kup-(y)aʔ = i
 point-CONT=INDIC.3sg
 ‘He/she is pointing.’
- b. *čabaiʎiq*
čabaia = iq
 chief=ART
 ‘the chief’

3.4.3 Vowel insertion and loss

The most striking phonological differences between Makah and Nuuchahnulth have to do with the patterns of vowel insertion and loss in Makah described by Jacobsen (1971). Very briefly, these are as follows.

Epenthesis

Makah has a phonotactic constraint against a voiced or glottalized consonant (including glottal stop) in the the onset of the second syllable when the coda of the first syllable is filled. An impermissible cluster that arises during derivation is broken up by the insertion of a long copy of the first syllable vowel between the coda consonant of the first syllable and the following onset consonant, which is the voiced or glottalized segment, of the second syllable:

- (136) a. *čaqɑˈbis*
čaq–ɑˈ–bis
 bark–EPEN–collectivity.of
 ‘tree bark’
- b. *qitiˈdit*
qit–iˈ–dit
 bass–EPEN–stocked.with
 ‘Bass-Stocked (place name)’
- c. *čusuryak*
čus–uˈ–yak^w
 dig–EPEN–thing.for
 ‘shovel’
- d. *ʁixiˈcitqak*
ʁix–iˈ–citq–ak^w
 red–EPEN–colored–DUR
 ‘reddish colored’

Epenthesis can separate the consonants of a morpheme, as in (137)a, where the glottalization of the final consonant of *qil̥č-* ‘dog’ by *-ʔaxs* ‘in a vessel’ creates the banned cluster */ʁčʔ/*, or (137)b-c, where the initial clusters of the suffixes *-(k)sʔatiʔi:* [L] ‘at the door’ and *-(k)siaʔ* ‘re-

reciprocally’ are broken up when the suffixes attach to a monosyllabic base. The ‘<x>’ notation indicates that the epenthetic vowel separates the consonants of a morpheme.

- (137) a. *q̣iλi'čaxs*
q̣iλč–< *i'* >–'axs
 dog–<EPEN>–in.vessel
 ‘a dog in a vessel’
- b. *ča'sqsa'ʔatiʔi*
ča'sq–< *a'* >–(k)sʔatiʔi: [L]
 knock–<EPEN>–at.door
 ‘knocking at the door’
- c. *čuqsu'taʔ*
čuq–< *u'* >–(k)staʔ
 punch–<EPEN>–reciprocally
 ‘punching each other, boxing’

In (138), the suffix *-atča* ‘at, on a vertical surface’ attaches to the root *hi-*, and the resulting /ia/ sequence reduces to /i:/ as described for Nuuchahnulth in §3.2.3: *hi-atča* > *hi'tča*. This leaves the impermissible /tč/ cluster, which is then broken up by epenthesis: *hi'tča* > *hi'ti'ča*. (The final vowel is in turn lost by apocope. See below. The shortening of the initial vowel appears to be a more or less regular concomitant of epenthesis and may be related to the initial shortening that accompanies appended vowels, §3.4.4).

- (138) *hi'ti'č*
hi-atča
 face.located–at.vertical.surface
 ‘have one’s face against the wall’

Clusters with final voiced or glottalized segments are permitted later in the word:

- (139) a. *χi'daqbis*
χi'daq–bis
 fog–collectivity.of
 ‘fog’
- b. *wi'qis'čitqak*
wi'qis–čitq–ak^w
 dirty–colored–DUR
 ‘dirty colored’

- c. *hidatč*
hida-atča
 empty.root-at.vertical.surface
 ‘on the wall’

As will be seen below, banned clusters with final glottal stop (e.g. *wikʔot* ‘not see, perceive’) can emerge on the surface due to the operation of a later syncope rule.

Apocope

Word-final short vowels are lost under most conditions. [RepR] in (140)b indicates reduplication occurring as part of repetitive aspect formation (§6.5.4):

- (140) a. *haʔub*
haʔuba
 food
 ‘food’
- b. *q^wi·q^wi·dičča^q*
q^widičča-q-(y)a [RepR]
 Makah-BFR-REP
 ‘speaking Makah’
- c. *či·ʔa^qat*
či-’a^qatu
 pull-move.down.PERF
 ‘pull sth down’
- d. *bačič*
ba-čič = ’i
 close.teeth-PERF=IMPER.2sg
 ‘Bite him/her/it!’
- e. *ča·ʔwq^wič*
ča·ʔwq^wič = i
 drunk=INDIC.3sg
 ‘He/she is drunk.’

A related rule concerns the length of long vowels in word-final position. Regular long vowels are shortened and optionally lost (141)a; persistently long vowels are merely shortened (141)b:

- (141) a. *hitaçu* or *hitac̣*
hita-çu
 empty.root-in.container
 ‘in a container’
- b. *ʔicux^wadi*
ʔicux^wadi:
 person
 ‘person, Indian’

This shortening is only quantitative, that is, the basic tense quality of the vowel is unchanged. For example, a long /i/ shortened in final position is always pronounced [i], never [ɪ]. In very careful citation speech, shortening is sometimes hardly evident. It is not clear whether accented vowels shorten.⁴¹ Pending further research, words like *quɬu* ‘slave’ will be written with long vowels.

Makah has no underlying diphthongs. Due to apocope, however, they can arise on the surface. The loss of a short vowel from a word-final vowel-glide-vowel sequence (e.g. /... *awa#*/) leaves a diphthong. Vowel-loss after /y/ leaves a diphthong with a [ʏ] offglide; vowel-loss after /w/ leaves a diphthong with a [w̥] offglide. The following examples show long and short /a/ before /y/ and /w/.

- (142) a. *cikyey* [tsɪk^hye^y]
cikyeyu
 elderberry
 ‘elderberry’
- b. *takya^y* [tɪk^hya:^y]
takya^yyu
 elder.brother.of.male
 ‘elder brother or senior-line male cousin of a male’
- c. *qataw* [qɪtɪ^w]
qatawa
 beaver
 ‘beaver’
- d. *da^ʔta^w* [da:^ʔta:^w]⁴²
da^ʔta^wi
 awesome.sight
 ‘(a) strange, awesome sight’

Syncope

V?V sequences in which both vowels are short are often subject to syncope: $V_1?V_2 \rightarrow ?V_2$. The rules for syncope are complex and not yet fully understood, but the following words give some idea of their effects. See Jacobsen (1971: 15-17) for further discussion and examples.⁴³ Example (143)b shows that syncope must operate after vowel shortening (§3.1) because otherwise this vowel would surface long, being in the second syllable.

- (143) a. *ɣaʔbʔak*
ɣaʔba-ʔak^w
 stay.overnight-DUR
 ‘staying overnight’
- b. *baqʔiks*
baqi-ʔiks
 what-consume
 ‘consuming what?’

Assimilation or partial assimilation sometimes takes place whereby the second vowel takes on features of the first vowel before the first vowel deletes. (The final /p/ of the benefactive clitic in (144)c is lost before glottalizing clitics, which creates the V?V sequence in this word).

- (144) a. *čačʔes*
 [R]-ča-ʔis
 PL-water-on.beach
 ‘puddles of water here and there on the beach’
- b. *wikʔoʔ*
wik-uʔaʔ
 not-perceive.PERF
 ‘not perceive’
- c. *suk^wiʔʔus*
su-k^wiʔ = up = ʔis
 hold-PERF=BEN=IMPER.2sg/1sg
 ‘Get it for me!’

Syncope is another source for surface diphthongs. The application of this rule to a sequence like /...eyuʔi/ leaves a glide in the syllable coda: /...eyʔi/. Vowel-glide sequences in this circumstance are diphthongized, e.g.

- (145) *daʔtaʔwʔiq* [da:ʔa:ʔiʔiq^h]
daʔtaʔwi = iʔiq
 awesome.sight=ART
 ‘the awesome sight’

3.4.4 Appended vowels

Makah has converted many historically consonant-final monosyllabic free forms into vowel-final bisyllabic forms by means of an “appended” vowel, a long copy of the first syllable vowel appended to the root to create a second syllable. This effect of this historical process can be seen in comparison with cognate roots in Nuuchahnulth, which has not developed these vowels.

(146)	<u>N</u>	<u>M</u>	
	<i>čit</i>	<i>čitiʔ</i>	‘soft, easily torn’
	<i>ʔi·k^w</i>	<i>qikiʔ</i>	‘pair of brothers’
	<i>ʔič</i>	<i>ʔičiʔ</i>	‘fat (shellfish)’
	<i>k^wi·s</i>	<i>k^wisiʔ</i>	‘snow’
	<i>λuʔ</i>	<i>λuʔuʔ</i>	‘good, clean’
	<i>λac</i>	<i>λacaʔ</i>	‘fat’
	<i>λaḥ</i>	<i>λaḥaʔ</i>	‘not crying’
	<i>λuq</i>	<i>λuquʔ</i>	‘wide, broad’
	<i>maʔs</i>	<i>basaʔ</i>	‘bake (intr.) on open fire’
	<i>nuʔk</i>	<i>dukuʔ</i>	‘song’
	<i>qat</i>	<i>qataʔ</i>	‘hard, brittle’
	<i>quʔt</i>	<i>quʔuʔ</i>	‘slave’

<i>taʔ</i>	<i>taʔaʔ</i>	‘warm (in time of cold)’
<i>tič</i>	<i>tiči</i>	‘alive, well’
<i>ʔuḥ</i>	<i>ʔuḥuʔ</i>	deictic pronoun
<i>wik</i>	<i>wiki</i>	‘not, nothing’
<i>yaq^w</i>	<i>yaqaʔ</i>	‘one who, that which’

As several of the forms show (e.g. N *kʷiːs*, M *kʷisiː* or N *taʔ*, M *taʔaʔ*), original long vowels in the first syllable shorten in Makah as part of this process.⁴⁴

For evidence against the alternative analysis that the appended vowel has been dropped in Nuuchahnulth rather than added in Makah we can look to Kwakwala cognates, which agree with the short Nuuchahnulth forms rather than the appended Makah forms. (Recall from §3.3.9 that Proto-Wakashan */k/ corresponds to Southern Wakashan /č/):

(147)	<u>Kw</u>		<u>N</u>		<u>M</u>	
	<i>ʔik</i>	‘good’	<i>ʔič</i>		<i>ʔiči</i>	‘fat (shell fish)’ ⁴⁵
	<i>ʔəx</i>	‘stop crying’	<i>ʔaḥ</i>		<i>ʔaxaʔ</i>	‘not crying’

A few roots exceptionally lack the appended vowel, *ʔaq* ‘wide’, *kʷaʔ* ‘branch’. It is also absent from monosyllabic discourse particles and interjections like *ʔed* ‘emphatic particle’, *ʔiš* ‘and’, *wed* ‘hey! (calling for attention)’.

The appended vowel is present before most clitics (148)a-b, but not before = *ʔaḥ* temporal specifier, = *i* Imperative, and perhaps other glottalizing clitics (148)c-d.

(148)	a.	<i>wikiːs</i>	<i>čaːbaʔ</i>
		<i>wik-i = s</i>	<i>čaːbaʔa</i>
		not-APPEN=INDIC.1sg	rich
		‘I’m not rich.’	
	b.	<i>wikiːbits</i>	<i>čaːbaʔ</i>
		<i>wik-i = (b)it = s</i>	<i>čaːbaʔa</i>
		not-APPEN=PAST=INDIC.1sg	rich
		‘I wasn’t rich.’	

- c. *wikaλs* *ča'bat*
wik = 'aλ = s *ča'bata*
 not=TEMP=INDIC.1sg rich
 'I'm not rich now.'
- d. *wik* *waha'k*
wik = 'i *waha'k^w*
 not=IMPER.2sg go.PERF
 'Don't go!'

So far we have seen appended vowels only in connection with free roots. However, we also find them added to some underlyingly monosyllabic derivatives. Comparison with Nuuchahnulth is again revealing:

(149)	<u>N</u>	<u>M</u>
a.	<i>ča'qλ</i> <i>ča-'aqλ</i> water-inside 'water inside'	<i>čaqλa'</i> <i>ča-'aqλ-a'</i> water-inside-APPEN 'blister'
b.	<i>ʔu'kš</i> <i>ʔu-kš</i> [L] so.and.so-ask.for 'ask for it'	<i>ʔuču'</i> <i>ʔu-č</i> [L]-u' so.and.so-ask.for-APPEN id.
c.	<i>ʔu'c</i> <i>ʔu-i:c</i> so.and.so-belong.to 'belong to it'	<i>ʔucu'</i> <i>ʔu-i:c-u'</i> so.and.so-belong.to-APPEN id.
d.	<i>ʔuqs</i> <i>ʔu-qs</i> so.and.so-in.vessel 'it (is) in a vessel'	<i>ʔuqsu'</i> <i>ʔu-qs-u'</i> so.and.so-in.vessel-APPEN id.

In each case an underlyingly monosyllabic Makah derivative has been rendered bisyllabic by the addition of an appended vowel. The productivity of this process requires further research because we find other potential monosyllables (e.g. *ʔu-* + *-i:ks* 'carrying, bringing along ...') that are avoided instead by insertion of a glottal stop: *ʔuʔu'ks* 'bringing it' (with assimilation of underlying /i/ to /u/). The corresponding derivative in Nuuchahnulth is *ʔu'cs*.

4 Grammatical Sketch

This chapter provides an overview of Southern Wakashan morphology and syntax. For the most part I make no attempt to justify individual points of analysis here; cross-references are given to more detailed discussion in later chapters where appropriate.

4.1 Word classes

Makah and Nuuchahnulth have at least the following word classes. (Note that “word class” in this dissertation refers to distributionally-defined classes of unextended words, §4.2.1).

Nominals

Nouns

Numerals, quantities, and quantifiers

Pronouns and demonstratives

Verbs

Predicate modifiers

The division between the major classes of nominal and verb rests on the syntactic fact (first pointed out by Jacobsen 1979a) that nominals may occur as single-word referring phrases (RPs), the Nootkan equivalent of a noun phrase, while verbs may do so only when accompanied by the enclitic article $M = \overset{\circ}{i}q$, $N = \overset{\circ}{?}i'$ (§4.5, §7.2.21). In Makah, the classes are further distinguished by the fact that only nominals may occur with possessive enclitics like $=sis$ first singular possessive ‘my’ (cf. Jacobsen 1979a: 140). The various nominal subclasses are distinguished from each other by morphological and syntactic criteria laid out in Chapter 8. Unlike words of the other classes, predicate modifiers may not function as predicate heads (§4.3.4).

As will be evident throughout the present chapter, the degree of grammatical differentiation among word classes is quite low. Consequently, researchers have debated whether Southern Wa-

kashan languages should be analyzed as having nouns, verbs, and other word classes at all. Most (e.g. Swadesh 1933, 1939, Sapir & Swadesh 1939, Renker 1987, Nakayama 1997a) have argued that they should not be, while others (e.g. Jacobsen 1979a, Rose 1981) disagree. In this dissertation I accept the claim that the distributional differences one finds do justify word classes in Southern Wakashan. See §8.1 for discussion.

I reserve word-class terms like *noun* and *verb* for words, but the Southern Wakashan lexicon also contains many bound roots that cannot function as a word without affixation by a lexical suffix or aspectual formative. Bound roots are provisionally referred to as “bound verb roots” or “bound noun roots” (though the vast majority seem to be verb roots) based on morphosemantic parallelisms with free roots of the relevant class (§8.1).

4.2 Morphology

Makah and Nuuchahnulth are polysynthetic languages making extensive use of suffixation, including enclisis. Reduplicative prefixation, used to form plurals and express aspectual distinctions, is also important. These are the only morphological techniques, apart from a few plural infixes and some aspectually significant changes in vowel length. Reduplication and changes in vowel length are also used to create special base forms required by some affixes (§3.3.1). There is no prefixation (apart from reduplicative prefixes), compounding, or noun incorporation.⁴⁶

4.2.1 Word structure

A full word (as opposed to a particle) has the structure shown in Figure 1. The structure is simplified for expository purposes; a slightly more complex description is given in Chapter 5. All full words (e.g. nouns, verbs, etc.) have the same structure.

An unextended word is formed by a base plus zero, one, or more “lexical” suffixes (derivational suffixes with relatively concrete meanings) and zero, one, or more aspectual morphemes.

Figure 1. Word structure (simplified)

base	lexical suffixes	aspect	clitics
unextended word			
extended word			

The unextended word in (150), the verb M, N *weʔič* ‘sleeping’, contains no lexical suffixes or aspectual morphemes — it is a bare root.

- (150) *weʔič*
weʔič
 sleep
 ‘sleeping’

In (151)a, the Makah verb is composed of *weʔič*, functioning as the base, plus a lexical suffix, the locative suffix -’*aχs* ‘in a vessel’. The verb in (151)b is composed of the bound verb root *ʔackat-* ‘jump’ as base plus -’*aχs* and the perfective aspect suffix -*iλ*.

- (151) MAKAH
 a. *weʔič^oaχs*
weʔič-’aχs
 sleep–in.vessel
 ‘sleeping in a canoe’
 b. *ʔackat^oaχsiλ*
ʔackat-’aχs-iλ
 jump–in.vessel–PERF
 ‘jump into a canoe’

The base can be a root as in (151) or an already derived base, making word structure recursive.

For example, the verb from (151)a *weʔič^oaχs* ‘sleeping in a canoe’ is base to another lexical suffix, the verbalizing suffix -*uʔat* ‘perceive ... (perf.)’ in (152).

- (152) MAKAH
weʔič^oaχsʔot
weʔič-’aχs-uʔat
 sleep–in.vessel–perceive.PERF
 ‘see someone sleeping in a canoe’

The recursive nature of word structure, as well as the distribution of semantic elements among the base and suffixes, are discussed in more detail in Chapter 5.

Not indicated in Figure 1 is the fact that words may also be marked as plural or distributive by reduplication, infixation, or some combination of the two. Such plural/distributive marking is grammatically optional and subject to many formal irregularities. See §5.5.4 for examples.

Depending on its syntactic role and position in a sentence, the morphological construct of base + lexical suffixes + aspect (called the “unextended” word by Swadesh 1933, 1939) can take additional formatives known variously as “incremental suffixes” (Swadesh 1933, Sapir & Swadesh 1939), “word suffixes” (Swadesh 1939), “inflectional suffixes” (Rose 1981), or “peripheral suffixes” (Nakayama 1997a) to form an “extended” word. Such formatives express clause-level grammatical categories like tense, mood, voice, and pronominal indexes.

Though all the aforementioned authors refer to these formatives as “suffixes” of one type or another, their status as such is actually rather ambivalent. They differ from lexical and aspect suffixes on a number of phonological, morphological, and semantic points (see Chapter 7 for a summary list). Some researchers (e.g. Klokeid 1976, 1978, Jacobsen 1979a: 151, note 31, Renker 1987) have suggested that these formatives in Ditidaht and Makah are actually clitics (an analysis that extends easily to Nuuchahnulth as well).⁴⁷ This idea appears to account for a number of their syntactic properties.

The unextended word carries the lexical (dictionary) meaning of the word, while the clitics specify values for grammatical categories associated with the word in its syntactic context. As Swadesh (1933: 11) puts it for Nuuchahnulth: “From the lexical point of view, the word is the unextended unit composed of stem plus derivational and aspect suffixes. From the syntactic point of view, the word is the total phonetic unity, sometimes identical with the lexical unit, sometimes more or less extended by [enclitic] elements.” In (153), for example, Makah *we?ičal* ‘he/she/it is

sleeping’ is formed from the verb *weʔiç* ‘sleep’ plus the temporal specifier clitic = *aλ* glossed “TEMP” (explained in §4.3.2 below) and = *i*, the third person singular Indicative mood clitic.

- (153) MAKAH
weʔiçal
weʔiç = aλ = i
 sleep=TEMP=INDIC.3sg
 ‘He/she/it is sleeping.’

In general, words functioning as predicate heads in main clauses have the greatest potential for hosting clitics. The clitics occur in an ordered sequence of slots following their host (§7.5). First come clitics coding categories like the causative, passive-inverse, and tense. Next are mood and pronominal clitics indexing subjects and, in Makah, some non-subjects. As seen in (153), third person formatives in Makah have fused with mood clitics. In Nuuchahnulth, there is no marking for third person in most moods. Finally, a word may end with one or more clitics drawn from a small post-modal set that includes a morpheme expressing the plurality of a third person participant, a morpheme meaning ‘again’, and a habitual marker. See §4.3 for more on clitics and their place in the structure of the predicate.

4.2.2 Lexical suffixes

The 500 or so lexical suffixes can be divided into two main types (§5.3). The first type, nuclear suffixes (§5.4), includes nominalizing suffixes (154) and verbalizing suffixes (155):

(154) **Examples of nominalizing suffixes**

M *-ačis*, N *-ačus* ‘surface, platform for ...’

M *-iʔiʔi:*, N *-iʔa* ‘... -er’

M *-(k)sac*, N *-(c)sac* ‘container, vessel for ...’

M *-yak^w*, N *-yʔak^w* ‘thing, instrument for ...’

(155) **Examples of verbalizing suffixes**

M *-aba:ču*, N *-mačuk* ‘talking about ...’ M, N *-kuk* [R] ‘resembling ...’

M <i>-ćis</i> , N <i>-ćus</i> [L] ‘laughing at ...’	M, N <i>-pāt</i> ‘smelling like ...’
M <i>-da'k^w</i> , N <i>-na'k^w</i> ‘having ...’	M <i>-subač</i> , N <i>-simč</i> [L] ‘do ritual for ...’
M <i>-idux</i> , N <i>-nā'h</i> ‘seeking ...’	M <i>-uʔat</i> , N <i>-(y)uʔat</i> ‘perceive ... (perf.)’

The second type, restrictive suffixes (§5.5), consists mostly of suffixes indicating spatial disposition including path-orientation suffixes (156) and locative suffixes (157):

(156) **Examples of path-orientation suffixes**

M, N <i>-(.ʔ)at</i> ‘attached on’
M <i>-a'yiλ</i> , N <i>-ayi:ʔiλ</i> ‘enter a building (perf.)’
M, N <i>-k^wis-t-</i> ‘move away from (perf.)’
M <i>-bat-</i> , N <i>-mat-</i> ‘moving about’
N <i>-ni'q-</i> ‘down a slope (perf.)’

(157) **Examples of locative suffixes**

M <i>-'axs</i> , N <i>-'aħs</i> ‘in a vessel’
M, N <i>-a'sča</i> ‘on the roof’
N <i>-inkstas</i> ‘at the back of the head’
M <i>-adił</i> , N <i>-(w)inł</i> [L] ‘on the neck’
M <i>-(k)sʔatiʔi</i> , N <i>-(c)sʔatu</i> [L] ‘at the door’

At least since Sapir (1924) ellipses, i.e. the symbol “...”, have been included in the glosses of nuclear suffixes to indicate the relation of the meaning of the suffix to that of the base, that is, where the meaning of the base “fits” in the meaning of the suffix. Ellipses are not used in glosses of restrictive suffixes because they have essentially additive relations with bases that are always semantically predictable. In this dissertation nuclear ellipses are used only with glosses in the body of the text and not in morpheme-by-morpheme glosses for reasons of economy.

4.2.3 Aspect

Southern Wakashan has a basic perfective/imperfective aspectual system, with the imperfective subdivided into a set of uniplex (steady-state or single action/event) categories and a set of multiplex categories specifying repetition or iterativity. Every predicate head has some aspectual value. Aspect is normally indicated by the final morpheme of the unextended word. In (158), for example, aspect is marked by the perfective aspect suffix M, N *-šil̥*:

- (158) NUUCHAHNULTH
ciqšil̥ʔaʔqλaʔ
ciq-šil̥ = ʔaʔqλ = (m)aʔ = aʔ
 speak-PERF=INTENT=INDIC=1sg
 ‘I shall speak.’

Aspect is either specified by an aspect suffix, as in (158) and (159)a-b, an aspectually significant CV-template (159)c, or else is inherent in the meaning of the final morpheme of the word. This can be the root itself (159)d or a lexical suffix (159)e.

- (159) NUUCHAHNULTH
- a. **Imperfective (stative) aspect indicated by durative aspect suffix**
qaʔakma
qaʔ-ak^w = maʔ
 dead-DUR=INDIC
 ‘He/she/it/they are dead.’
 - b. **Imperfective (dynamic) aspect indicated by continuative aspect suffix**
casʔaλma
cas-(y)aʔ = ʔaλ = maʔ
 chase-CONT=TEMP=INDIC
 ‘He/she/it/they are chasing it.’
 - c. **Imperfective (dynamic) aspect marked by continuative CV template**
suʔaλma
su-[L] = ʔaλ = maʔ
 hold-CONT=TEMP=INDIC
 ‘He/she/it/they are holding it.’

- d. **Imperfective aspect inherent in root**
weʔičma
weʔič = ma'
 sleeping=INDIC
 'He/she/it/they are sleeping.'
- e. **Imperfective aspect inherent in lexical suffix**
či'ħati'ʔaλma
čiħat-(č)i:ʔ [L] = 'aλ = ma'
 arrow-make=TEMP=INDIC
 'He/she/it/they are making arrows.'

The formal aspect categories in Southern Wakashan, i.e. non-inherent categories marked by an aspect suffix or CV template, are as follows:

(160) **Formal aspect categories**

perfective (§6.4)

imperfective

(uniplex)

graduative (§6.5.1)

durative (§6.5.2)

continuative (§6.5.3)

(multiplex)

repetitive (§6.5.4)

iterative I & II (§6.5.5)

See Chapter 6 for discussion of the formal realizations and functions of the aspects.

The perfective suffix, which occurs in many allomorphs, has the widest distribution of any aspectual morpheme; it can occur with most roots (including nouns and other nominals, which then become verbs with typically inchoative meaning) and many lexical suffixes. The graduative occurs with perfective bases to imperfectize them. The durative and continuative aspects occur only with bound roots (§5.2.1) and a handful of lexical suffixes. Most free roots (§5.2.2) are inherently imperfective and thus need no additional imperfective marking.

mood, the default mood for conversation, is marked by its own set of pronominal clitics. (For the moment we restrict our attention to predicates containing no predicate modifiers.)

- (164) MAKAH
dudu·k^waλs
dudu·k = 'aλ = s
 sing=TEMP=INDIC.1sg
 'I am singing.'

Other moods are generally expressed by a mood clitic followed by a separate pronominal clitic. The Polar ('yes/no') Interrogative mood shown in (165), for example, is marked by the Polar Interrogative clitic $= (q)a·k$ plus a set of pronominal clitics in which the first person singular subject form is $= s$:

- (165) MAKAH
dudu·k^waλa·ks
dudu·k = 'aλ = (q)a:k = s
 sing=TEMP=POLAR=1sg
 'Am I singing?'

In non-Indicative moods, pronominal markers involving first and second persons are transparently structurally distinct from the mood clitics. For third person forms, although a more abstract analysis is theoretically possible in which the mood markers and pronominal formatives are sometimes distinct, formal complexities arise that make it more analytically convenient to assume fused mood-pronominal forms (§7.2.1).

- (166) MAKAH
dudu·k^waλa
dudu·k = 'aλ = (q)a:
 sing=TEMP=POLAR.3sg
 'Is he/she singing?'

Pronominal clitics (including the fused mood-pronominal combinations) in Makah index at least the subject and sometimes also one non-subject grammatical role. The non-subject role is often, but not necessarily, the object.

- (167) MAKAH
da'csʔaʎsi'cuɣ
da'csa = 'aʎ = si:cuɣ
 see=TEMP=INDIC.1sg/2sg
 'I [SUBJ] see you (sg.) [OBJ].'

Example (168) contains the possessive clitic = *ʔak^w*, which here indicates that the grammatical subject is the possessor of the single argument of the intransitive predicate head (S) *du'wiqsu* 'father'; the possessed S argument is syntactically an oblique. The first person possessor in (168) is hence the subject and the second person participant, the S of *du'wiqsu* '(be) father', is oblique. Significantly, the same Indicative pronominal clitic is used as in the preceding first person singular acting on second person singular transitive example (167).

- (168) MAKAH
du'wiqsa'ksi'cuɣ
du'wiqsu = ʔak^w = si:cuɣ
 father=POSS=INDIC.1sg/2sg
 'You [OBLIQUE] (sg.) are my [SUBJ] father.'

Eschewing the details, arguments can be given to show that (168) is, in fact, intransitive; that is, we are not dealing with a transitive construction like 'you (are) father (to) me'.

In Nuuchahnulth, the first word in a mood-marked predicate hosts a mood clitic followed directly by a pronominal clitic that expresses the person and number of the subject:

- (169) NUUCHAHNULTH
nunu'k^waʎaɥ
nunu'k = 'aʎ = (m)a' = aɥ
 sing=TEMP=INDIC=1sg
 'I am singing.'

Third person, however, is unmarked by a pronominal clitic — the absence of a pronominal clitic indicates third person. In some cases the mood clitic shows slight formal peculiarities when not followed by a first or second person clitic that could be said to mark third person, but third person has no clitic of its own:

- (170) NUUCHAHNULTH
nunu'k^waλma
nunu'k = 'aλ = ma'
 sing=TEMP=INDIC
 'He/she/it/they are singing.'

The Nuuchahnulth pronominal subject clitics fall into several sets of forms depending on the preceding mood clitic (§7.2.2), e.g. the Indicative mood clitic in (169) and (170) = *(m)a'* (or = *ma'* with no following pronominal clitic) is followed by a set in which first person singular is indicated by = *aḥ*.

Unlike Makah, Nuuchahnulth does not mark non-subjects in the clitic sequence under most circumstances. However, first person non-subjects are marked in imperative moods (§7.2.20), and, very rarely, in the Indicative (§7.2.4).

Southern Wakashan mood clitics express a varied set of modal, evidential, and speech-act categories. Most of these are in paradigmatic opposition, but a few may co-occur to form mood combinations (§7.2.3). Mood clitics include the Indicative illustrated above for both languages, the Purposive M, N = *'a:* 'in order that', interrogative moods used to form both yes/no and content questions, the Conditional M = *qey(u)*, N = *qu:* 'if, when; would', the Nuuchahnulth Dubitative = *qa'ča* 'perhaps', and the Subordinate M = *x*, = *qa:*, N = *qa'*, which forms *that*-clause complements of predicates of saying, thinking, etc. as well as causal ('because') clauses, and, in Makah, 'when' clauses (in conjunction with *ʔuyu* 'when'). There are also several evidential moods in both languages, including the Quotative M = *wat*, = *wa:da*, N = *we'ʔin* and inferential moods. The Makah Relative = *(q)ik*, = *(q)i* and Nuuchahnulth Definite Relative = *ʔi'tq* and Indefinite Relative = *(y)i:* moods form relative clauses. See Chapter 7 for more on the form and function of these and other mood clitics.

Predicates without mood marking are often called "absolute" or "absolutive" in the Southern Wakashan descriptive literature (e.g. Sapir 1924: 82, note 1, Rose 1981: 213, Jacobsen 1979a, 1993). It is necessary to recognize two types of absolute predicates: subject-marked absolutes and

non-subject-marked absolutes, which I henceforth refer to as “bare absolutes”. Bare absolutes occur only as same-subject juxtaposed predicates in the common sentence-building construction described in §4.5, or as complements of certain complement-taking words (§4.6.2.1). Subject-marked absolutes typically occur in narrative contexts where the mood has been previously established in the discourse by a preceding mood-marked predicate.

Pronominal subjects in subject-marked absolute predicates are marked on the first word of the predicate by a set of pronominal clitics, which, in Makah, has no form indicating third person singular, and, in Nuuchahnulth, has no form indicating third person whatsoever. Bare absolute predicates (by definition) have no subject marking. This means that a third person subject-marked absolute is overtly indistinguishable from a bare absolute. For example, in the Makah sentences in (171), compare the third person singular subject-marked absolute in (171)a with the two predicates in (171)b, the first of which is the third person singular subject-marked absolute matrix predicate *wikaλ* ‘He/she/it did, were not’, and the second, *haʔukšil* ‘eat’, a bare absolute functioning as complement to *wikaλ*.

- (171) MAKAH
- a. *haʔukšʔaλ*
 haʔuk-šil = 'aλ
 eat-PERF=TEMP
 ‘He/she/it ate.’
- b. *wikaλ* [*haʔukšil*]
 wik = 'aλ [*haʔuk-šil*]
 not=TEMP [eat-PERF]
 matrix **complement**
 ‘He/she/it didn’t eat.’

The three predicates are superficially identical with respect to subject marking. However, it is easy enough to tell them apart as long as we keep in mind the structural difference between a zero form and nothing, that is, a form where a decision between paradigmatic options has resulted in a marker that happens to be zero versus a form in which no marking can ever occur. This distinction clearly emerges when the sentences are put in first person:

- (172) MAKAH
- a. *haʔukšʔaʔsi*
haʔuk-šʔiʔ = 'aʔ = si:
 eat-PERF=TEMP=1sg
 'I ate.'
- b. *wikaʔsi* [*haʔukšʔiʔ*]
wik = 'aʔ = si: [*haʔuk-šʔiʔ*]
 not=TEMP=1sg [eat-PERF]
 'I didn't eat.'
- c. **wikaʔsi* [*haʔukšʔiʔsi*']

The subject-marked absolute predicates in (172)a-b are now marked with the first person singular clitic =*si:*. The bare absolute complement to *wikaʔsi* in (172)b remains without the subject clitic, and, as (172)c shows, the sentence becomes ungrammatical (with this meaning) if it is added. (172)c is a grammatical string, but only if it is interpreted as two successive subject-marked absolutes ('I didn't do it; I ate'), where the speaker asserts that he did eat, but didn't do something else. In this dissertation, predicates in constructed sentence examples are usually marked with Indicative mood (the unmarked mood for conversation), but examples cited from texts are frequently subject-marked absolutes. See, for example, (176)e-f, (178)b, (179)c etc. below. Presented with a subject-marked absolute out of context, Makah speakers typically "correct" it to a mood-marked predicate.

4.3.2 Tense

Sentences with no overt tense marking are, strictly speaking, non-future, that is, they are interpreted as having either past or present time reference, according to context. Non-tense-marked predicates in isolated elicitation sentences are invariably interpreted as having present time reference in Makah (unless they are perfective — see below), and I suspect in Nuuchahnulth also. In both languages, however, one frequently finds non-tense-marked predicates with past time reference in narrative discourse. Past and future tense clitics in the predicate indicate time reference

relative to that already established in the discourse. For example, the past tense clitic M = *(b)it*, N = *(m)it* is a relative past marker in that it indicates time reference prior to the discourse-established time reference rather than absolute past time reference.

- (173) NUUCHAHNULTH
nunu^kaλitsi
nunu^k = 'aλ = (m)it = si'
 sing=TEMP=PAST=1sg
 'I was, had been singing.'

It is worth pointing out here that tense and aspect are entirely distinct formal systems in Southern Wakashan. Tense is marked by clitics, while aspect is marked by suffixes, reduplication, or length changes in base vowels (§4.2.3). However, past temporal reference is strongly implied by perfective aspect, which is usually incompatible with present reference (§6.4). See, for example, the past tense translations of the sentences in (171) and (172).

The temporal specifier M, N = *'aλ* is another predicate clitic implicated in temporal reckoning. It precedes tense, mood and pronominal clitics in the clitic sequence. The temporal specifier is not a tense marker, but is used to indicate temporal sequencing of events and states. It is usually left untranslated, but can be rendered 'now, then, at that time' if necessary. The temporal specifier is grammatically optional, but is stylistically important and very frequent in discourse. See §7.3.3 for further information.

4.3.3 Other clitics

Thus far we have seen clitics expressing mood, pronominals, and tense. These belong to a larger set of clitics that may occur in the predicate. When more than one occurs on the same word in the predicate, they are strictly ordered. Although the order differs somewhat for the two languages, clitics in both may be divided into three groups based on their sequencing requirements: pre-modal clitics, mood and pronominal clitics, and post-modal clitics. Pre-modal clitics precede mood clitics. Among them we find the following (only a single allomorph of each is shown):

(174) **Selected pre-modal clitics**

Intentive Future: N = $\text{ʔa:q}\lambda$ (§7.3.2)

Causative: M, N = 'ap

Temporal Specifier ('now, then, at that time'): M, N = $\text{'a}\lambda$ (§7.3.3)

Passive-inverse: M = 'it , N = 'at (§4.4.2, §7.3.5)

Possessive: M, N = uk (§7.3.4)

Tense: including past M = (b)it , N = (m)it and hypothetical future M = 'eyik , N = 'i:k

Co-occurrence restrictions and relative ordering of these clitics are discussed at §7.5. Some of the clitics in (174) are briefly discussed elsewhere in this chapter, e.g. see §4.4.2 for the passive-inverse.

Post-modal clitics follow mood and pronominal clitics.

(175) **Selected post-modal clitics**

Third plural (optionally signals third person plural participant): M = at , N = ʔat (§7.4.1)

Habitual: M = a:k , N = $\text{ʔa:}\lambda\text{a}$ (§7.4.2)

'again': M = $\lambda\text{ʔo}$, N = $\lambda\text{a:}$ (§7.4.4)

4.3.4 Predicate modifiers

The basic predicate structure of head and clitics in the examples seen so far in this section may be expanded by the addition of one or two predicate modifiers. Predicate modifiers are a small closed-class of words like N $\text{ʔah}\text{ʔa'}$ 'then', M ʔa'di , N ʔa'ni 'really, in fact', M yuyu' , N ča'ni 'at first, for a while, temporarily', N ʔi'qhi' 'still', M hu'ʔaxi 'still, yet', M $\text{ku'wi}\lambda$, N $\text{ku'wi}\lambda\text{a}$ 'doing as directed', N $\text{wa'}\lambda$ 'now, then, thereupon', and M $\text{yur'q}^w\text{a'}$, N $\text{yur'q}^w\text{a'}$ 'likewise'. A few words from other word classes can also play this syntactic role, e.g. M $\text{ʔi'ʔi'x}^w\text{a}$, N ʔi'h^w 'big' also occurs as a predicate modifier meaning 'really, very much, to a great extent'.

- (176)
- MAKAH
- a. *dudur^kaw^lits* *yur^waw^a*
dudur^k = 'awl = (b)it = s *yur^waw^a*
sing=TEMP=PAST=INDIC.1sg likewise
‘I was singing too.’
- b. *ʔiyaḥʔi* *hur^ʔaḥ* *ti^ʔ*
ʔiyaḥa = ʔi *hur^ʔaḥi* *ti^ʔ*
at=INDIC.3sg still DEM
‘He/she/it is still here.’
- NUUCHAHNULTH
- c. *nunur^kaw^litaḥ* *yur^waw^a*
nunur^k = 'awl = (m)it = (m)a' = aḥ *yur^waw^a*
sing=TEMP=PAST=INDIC=1sg likewise
‘I was singing too.’
- d. *muc^ʔič^ʔu^ʔaw^lma* *ʔaḥ^ʔaw^a*
muc^ʔič^ʔ-u^ʔ = 'awl = ma' *ʔaḥ^ʔaw^a*
clothed-PERF=TEMP=INDIC then
‘Then they got dressed.’ (based on NA 19.41)
- e. *wik^ʔaw^law^l* *kuw^ʔita* *yuch^wwiṭim*
wik^ʔ-aw^l = 'awl *kuw^ʔita* *yuch^wwiṭim*
not-make.X.sound.PERF=TEMP do.as.directed Feint.Woman
‘Feint-Woman kept quiet as she was told.’ (NA 404.39)
- f. ...*liḥaq^ʔsi^ʔaw^l* *ʔi^ʔḥ*
liḥaq^ʔ-si^ʔ = 'awl *ʔi^ʔḥ^w*
thin-PERF=TEMP very
‘She had gotten very thin.’ (NT 190.28)

A predicate modifier can follow the predicate head, as in (176), or it can precede the head, in which case it hosts some or all of the clitics. (Post-head modifiers rarely host any clitics.)

- (177)
- MAKAH
- a. *yur^waw^aʔaw^lits* *dudur^kaw^l*
yur^waw^a = 'awl = (b)it = s *dudur^k = 'awl*
likewise=TEMP=PAST=INDIC.1sg sing=TEMP
‘I was singing too.’
- NUUCHAHNULTH
- b. *yur^waw^aʔaw^litaḥ* *nunur^kaw^l*
yur^waw^a = 'awl = (m)it = (m)a' = aḥ *nunur^k = 'awl*
likewise=TEMP=PAST=INDIC=1sg sing=TEMP
‘I was singing too.’

- c. *ʔi·hʔaλah* *ha'naʔaλ*
ʔi·h^w = 'aλ = (m)a' = ah *ha'naʔa* = 'aλ
 very=TEMP=INDIC=1sg play.lehal=TEMP

'I was playing lehal (a gambling game) in a big way.' (NA 270.18)

Clitics differ in their propensity for attaching to the initial modifier, to the head, or to both in the situation illustrated in (177). We can distinguish three main groups: second-position clitics, head clitics, and flexibly-positioned clitics. Second-position clitics, which include the tense, mood, and pronominal clitics, tend to occur only on the first word of the predicate, whether it is the head or a modifier. Head clitics, which include the passive-inverse and possessive, tend to occur on the head. Flexibly-positioned clitics like the temporal specifier M, N = 'aλ occur on either or on both. It is important to understand, however, that these patterns are tendencies rather than rigidly followed rules; speakers are allowed a considerable amount of choice in clitic placement.

Head clitics are frequently subject to second-position copying. That is, when the first word of the predicate is a modifier rather than the head, head clitics can occur only on the head (178)a, but are also commonly copied onto the predicate-initial modifier as well (178)b.

- (178) NUUCHAHNULTH
- a. *ʔahʔa'ʔaλma* *ʔaʔak^winčiʔaλat...*
ʔahʔa' = 'aλ = ma' *ʔaʔak^win-čiλ* = 'aλ = 'at
 then=TEMP=INDIC beg-PERF=TEMP=PINV
 'He was begged.' (NA 9.33)
- b. *ʔahʔa'ʔaλat* *ʔaʔak^winčiʔaλat*
ʔahʔa' = 'aλ = 'at *ʔaʔak^win-čiλ* = 'aλ = 'at
 then=TEMP=PINV beg-PERF=TEMP=PINV
 'They were begged.' (NA 67.14-15)

They do not normally occur on the initial modifier without also occurring on the head.

The predicate can be doubly modified. The two modifiers may span the head, or both may precede it. There seems to be a grammatical restriction against both modifiers following the head. The sentences in (179) demonstrate doubly modified predicates. Clitic placement remains as previously described.

- b. *hi·sk^wa:ya:ʔaλs* *pićup*
his-k^wa:ya:p-[L]= 'aλ = s *pićup*
 chop-in.pieces.CAUS.PERF-GRAD=TEMP=INDIC.1sg inner.cedar.bark
 'I am pounding up cedar bark.'
- c. *da'csʔi* *xadʔawiq* *ya'daqawiq*
da'csa = ʔi *xadʔak^w = ʔiq* *ya'daqak^w = ʔiq*
 see=INDIC.3sg woman=ART baby=ART
 a. 'The woman sees the baby.'
 b. 'The baby sees the woman.'
- d. *da'csʔi* *xadʔawiq*
da'csa = ʔi *xadʔak^w = ʔiq*
 see=INDIC.3sg woman=ART
 a. 'The woman sees him/her/it.'
 b. 'He/she/it/ sees the woman.'
- NUUCHAHNULTH
- e. *ʔiçiʔaλaḥ* *q^wayaçi·kʔi*
ʔi-çiλ = 'aλ = (m)a' = aḥ *q^wayaçi·k = ʔi'*
 shoot-PERF=TEMP=INDIC=1sg wolf=ART
 'I shot at the wolf.'
- f. *ʔiçiʔaλma* *q^wayaçi·kʔi*
ʔi-çiλ = 'aλ = ma' *q^wayaçi·k = ʔi'*
 shoot-PERF=TEMP=INDIC wolf=ART
 'He/she/they shot at the wolf.'
- g. *na'csa'λaḥ* *suwa*
na'csa = 'aλ = (m)a' = aḥ *suwa*
 see=TEMP=INDIC=1sg 2sg
 'I see you (sg).'

Ambiguities in referent/role relations like those in (180)c-d are, of course, often mitigated by context, and are further reduced by the passive-inverse voice construction, which is an important means of reference tracking (§4.4.2). The object can also be placed in a separate clause with a bare absolute transitive predicate (i.e. 'the woman sees, doing it to the baby), which tends to clarify relations.

- (181) MAKAH
da'csʔi xadʔawiq ʔukti:p ya'daqawiq
da'csa = ʔi xadʔak^w = ʔiq ʔu-(k)ti:p ya'daqak^w = ʔiq
 see=INDIC.3sg woman=ART so.and.so-do.to baby=ART
 ‘The woman sees the baby.’

We will see more examples of this strategy later in the chapter (§4.6.1.1). The sentences in (182)a-c show a few more Nuuchahnulth examples of transitive predicates.

- (182) NUUCHAHNULTH
 a. *kaʔhsa'paʔ ʔw'csma:k ʔuxw'ičit qawašsacukʔi*
kaʔh-sa'p = 'aʔ ʔw'csma = ʔak ʔuxw'ičit qawaš-(c)sac = uk = ʔi
 visible-CAUS.PERF=TEMP woman=POSS Woodpecker sberry-container=POSS=ART
 ‘Woodpecker’s wife brought out her salmonberry dish.’ (NT 50.9)
 b. *su'ʔaʔ ʔačma ci:ci'qʔanim*
su-[L] = 'aʔ ʔač-ma ciq-ʔin [RL+L] = im
 hold-CONT=TEMP wedge.up-thing speak-at.end-thing
 ‘Speak-Ends (man’s name) held a block.’ (NA 369.51)
 c. *ćaxšičaʔaʔa' yu'q^wa' k^walsic ʔi'ʔtuwʔi*
ćax^w-šičaʔ = 'aʔ = ʔa: yu'q^wa' k^walsic ʔi'ʔ^w-(š)tuwʔ = ʔi
 spear-PERF=TEMP=again likewise Kwalisits big-thing=ART
 ‘And then, once more, Kwalisits too speared the whale.’ (RW 79.8)

Southern Wakashan can be shown to follow an accusative alignment pattern: the single argument of an intransitive (S) predicate is treated grammatically like the agent-like argument of a transitive (A) predicate (cf. also Jacobsen 1993: 236). Given the relative paucity of marking of syntactic relations, this is not immediately obvious, but, as demonstrated by Rose (1981) for Nuuchahnulth and later emphasized by Emanatian (1986), a subject relation (grammatical union of S+A arguments) can be deduced from fairly subtle patterns of clausal co-reference we need not elaborate here. Similar arguments could be developed for Makah.

A core RP can be positioned before the predicate head under certain pragmatic circumstances. Fronting of RPs has no effect on placement of clitics — they remain on heads or predicate-initial modifiers as described in §4.3.4. Example (183) shows a pre-head subject:

- NUUCHAHNULTH
- c. *wáč̣iʔaλ* *ʔahʔaʔ* *ʔatḥiʔi*
wá-č̣iλ = 'aλ *ʔahʔaʔ* *ʔatḥiʔ = ʔiʔ*
 attack.as.group=TEMP then night=ART
 ‘They attacked at night.’ (NA 370.31-32)
- d. *haʔukṣ̌iʔaλ* *kuʔaʔʔi*
haʔuk-ṣ̌iλ = 'aλ *kuʔaʔ = ʔiʔ*
 eat-PERF=TEMP morning=ART
 ‘He/she/it/they ate in the morning.’
- e. *haʔinč̣iʔaλλaʔ* *kuʔaʔ*
haʔin-č̣iλ = 'aλ = λaʔ *kuʔaʔ*
 call.out-PERF=TEMP=again morning
 ‘Again he called out in the morning.’ (NT 120.26)
- f. *ʔink^wač̣iʔaλ* *maħ̣tiʔi...*
ʔink^w-'ač̣iλ = 'aλ *maħ̣tiʔ = ʔiʔ*
 fire-INCEP=TEMP house=ART
 ‘Fires were started in the house.’ (NT 156.1)
- g. ...*ʔakṣ̌iʔaλ* *ħ̣aẉiʔʔi* *taṣ̌iʔakʔi...*
ʔak-ṣ̌iλ = 'aλ *ħ̣aẉiʔ = ʔiʔ* *taṣ̌iʔ = ʔak = ʔiʔ...*
 appear-PERF=TEMP chief=ART door=POSS=ART...
- ‘The chief appeared at his door.’ (NA 50.37)
- h. ...*puʔaʔaλquʔ* *č̣aʔč̣aʔkʔi*
pu-ʔaʔ = 'aλ = quʔ [LR]-č̣aʔak = ʔiʔ
 run.enmass-CAUS.PERF=TEMP=COND PL-island=ART
 ‘... when he chased them (into the sea) from the islands’ (NA 14.19)
- i. ...*ʔahʔaʔʔaλ* *timqṣ̌iʔaλ* *tup̣aʔʔi*
ʔahʔaʔ = 'aλ *timq-ṣ̌iλ = 'aλ* *tup̣aʔ = ʔiʔ*
 then=TEMP wade-PERF=TEMP sea=ART
 ‘Then they waded into the sea.’ (NA 240.23-24)

Examples like (184)b,f-i with a locative oblique but no other locative elements in the sentence are uncommon. There must generally be some type of additional locative element in the sentence to support the locative RP. A simple strategy often resorted to in both languages is to include one or more restrictive path-orientation or locative suffixes on the predicate head, the reference of which the locative RP expands.

but I prefer to think of it simply as a locational verb. With this verb as predicate head, the locative RP is not an oblique, but an argument. A path-orientation suffix or locative suffix can occur on the verb to further specify the location.

- (186) MAKAH
- a. *ʔiyaχʔiʔ* *waʔač̣*
ʔiyaχa = ʔi = aʔ *waʔač̣*
at=INDIC.3sg=3pl Waatch
‘They are at Waatch.’
- b. *ʔiyaχaʔtχitdu* *čuyas*
ʔiyaχa-ʔaʔχ = (b)it = du: *čus-ʔas*
at-dwelling=PAST=1pl dig-on.ground
‘We lived at Dug-in-Ground (Sooes).’
- c. *ʔiyaχiʔtsaʔλke*
ʔiyaχa-ʔiʔ-sa = ʔaλ = ʔi = ke:
at-in.house-precisely=TEMP=IMPER.2sg=ADVISE
‘Be right here (in the house)!’ (HW, Deer and Wolves)

The locative verb often occurs in a bare absolute adverbial clause (§4.6.1.1):

- (187) MAKAH
- ʔač̣aʔyaʔqeʔiss* [*ʔiyaχaχ* *hidaʔqλasiq*]
ʔač̣aʔya:q-ʔe:ʔis = s [*ʔiyaχa-(x)χ* *hida-ʔaʔqλas = ʔiq*]
gather.wood-go.to=INDIC.1sg [at-while empty.root-in.woods=ART]
‘I am going to gather wood in the woods.’

Nuuchahnulth has a series of intransitive deictic verbs of which *hiʔ* ‘there, at this place’ is one of the most commonly encountered.⁴⁸ The locative RP is set in apposition to the deictic verb. The deictic may or may not contain restrictive path-orientation or locative suffixes that further specify location.

- (188) NUUCHAHNULTH
- a. *hiʔʔaλma* *maʔaquʔa*
hiʔ = ʔaλ = maʔ *maʔaquʔa*
there=TEMP=INDIC Maakua
‘They were at Maakua.’

- b. *hiyaḥsʔaλ* *č̣apacʔi*
hiṭ–'aḥs *č̣apac = ʔi*
 there–in.vessel=TEMP canoe=ART
 ‘They were in the canoe.’

These constructions certainly do not exhaust the means for expressing location in Makah and Nuuchahnulth, but at least give an idea of how this function is accomplished.

Locative and temporal modifiers are not the only oblique RP types. Agent RPs in passive-inverse clauses and possessed RPs in clauses with possessor subjects are also oblique:

- (189) NUUCHAHNULTH
- a. **Agent oblique**
 ...*λupksaʔaλatsi* *noʔwis*
λupk–saʔp = 'aλ = 'at = si *noʔwis*
 awake–CAUS.PERF=TEMP=PINV=1sg father.POSS.1sg
 ‘I was awakened by my father.’ (NT 178.22)
- b. **Oblique possessed RP**
λupkšiʔaλuksi *noʔwis*
λupk–šiλ = 'aλ = uk = si *noʔwis*
 awake–PERF=TEMP=POSS=1sg father.POSS.1sg
 ‘My father awoke.’

See §7.3.4 for the possessive subject construction and §7.3.5 for the passive-inverse.

4.4.2 The grammar and functional dynamics of subject choice

An important characteristic of the syntax (really, an interaction between syntax and discourse principles) is a strong tendency for speech-act participants (i.e. first and second persons) and highly topical third person arguments to occupy main grammatical roles, particularly subject.⁴⁹ It is not, of course, uncommon for languages to show a statistical preference for coding such participants as subjects, but Southern Wakashan stands out for how sensitive the structure of basic clauses is to reference-related requirements on subject choice. The use of two common constructions, the passive-inverse and possessor-raising constructions, is largely controlled by these concerns. Details are reserved for §7.3.4 and §7.3.5, but a preliminary Makah example will give an idea of the considerations involved.

When one argument of a transitive clause is a speech-act participant (SAP) and the other is third person, the SAP must be the subject regardless of its semantic role. If the third person argument is the P (patient-like argument), it is coded as object, and the clause is direct, i.e. non-passive-inverse.

- (190) **SAP acting on 3 P**
kudu'ksa'ʔaλits Bill
kudu'k-sa:p = 'aλ = (b)it = s Bill
 awake-CAUS.PERF=TEMP=PAST=INDIC.1sg Bill
 'I woke Bill.'

If, on the other hand, the SAP is the P, a passive-inverse construction is used (marked by the clitic M = 'it, N = 'at glossed "PINV" on the predicate head) with the SAP as subject and the third person A (agent-like argument) as an oblique (191)a. A direct construction with the third person A as subject and the SAP P as object is ungrammatical (191)b.

- (191) **3 A acting on SAP P**
 a. *kudu'ksa'ʔaλitits* Bill
kudu'k-sa:p = 'aλ = 'it = (b)it = s Bill
 awake-CAUS.PERF=TEMP=PINV=PAST=INDIC.1sg Bill
 'Bill woke me.'
 b. **kudu'ksa'ʔaλʔu* Bill *siya'*
kudu'k-sa:p = 'aλ = (b)u = i Bill *siya'*
 awake-CAUS.PERF=TEMP=PAST=INDIC.3sg Bill 1sg

See Chapter 7 for more information.

This example demonstrates the preference for having SAPs rather than third persons as subject. A similar (though not so rigidly enforced) preference exists for more topical third person referents to occupy the subject role rather than less topical third person referents. As others have noted (e.g. Jacobsen 1993: 236), this plays a major role in reference tracking in the absence of other structural means (like case marking, a gender system, etc.) that could serve this function.

4.4.3 Clause types

4.4.3.1 Verbal predicates

In many languages, it is possible to classify verbal predicates by the number and types of objects they take: intransitive (no object), transitive (one object), and ditransitive (two objects). Sometimes atransitive or ambient predicates, that is, predicates with no (semantic) arguments, are also distinguished. In Southern Wakashan, a classification with roughly these types is possible in theory, but in practice it proves difficult to assign every predicate to one or another of the types with certainty. In this section I first present a few more-or-less straightforward examples of each of the apparent verbal predicate types (intransitive, transitive, ditransitive, and atransitive), and then discuss problems that Makah and Nuuchahnulth raise for such a classification.

Intransitive predicates have a subject, but no object.

(192)

- MAKAH
- a. *kakwaʔaλwaʔdaʔ*
kakwaʔ = 'aλ = wa:da = aʔ
 lost=TEMP=QUOT.3sg=3pl
 'They were lost.' (HW, Frogs)
- b. *ʔaʔdʔaλwaʔd* *hiduʔsaʔλ*
ʔaʔdi = 'aλ = wa:da *hida-wisaʔ = 'aλ*
 in.fact=TEMP=QUOT.3sg empty.root-come.to.surface.of.water.PERF=TEMP
 'He did in fact come to the surface of the water.' (HI, Qweti and Canoe-Swallower)
- NUUCHAHNULTH
- c. *qaḥšiʔaλma* *ʔaʔtušʔi*
qaḥ-šiλ = 'aλ = maʔ *ʔaʔtuš = ʔiʔ*
 dead-PERF=TEMP=INDIC deer=ART
 'The deer died.'
- d. *hixuqšiʔaλin*
hixuq-šiλ = 'aλ = (m)aʔ = ni
 shout-PERF=TEMP=INDIC=1pl
 'We gave a shout.' (NA 159.40)

- e. *caca'pk^wapuλma* *hi'ti'cminh?i* *?a'hus?ath*
 [R]–capk^w–api [L]–uλ = ma' hił–(w)i:c [L]–minh = ?i' ?a'hus?ath
 PL–have.head.bowed–erect–PERF=INDIC there–along.edge–PL=ART Ahusaht

‘The Ahusahts standing along the edge each bowed their heads.’ (NA 449.1)

- f. *hi'nusa?a'tqath?aλ*
hina–wisa'–?a:t [IterL]–qa'th = 'aλ
 empty.root–come.to.surface.of.water.PERF–ITER–pretendedly=TEMP

‘They pretended to come to the surface at intervals.’ (NA 230.35)

Deictic verbs with locational meanings (e.g. N *hił* ‘there’, M, N *ya't* ‘yonder’) function as intransitive predicate heads. The Nuuchahnulth demonstrative *?ah* ‘here’ in (193)b is thus claimed to be in apposition to, rather than an object of, *hił* ‘there’, i.e. the sentence literally translates as ‘two dorsal fins were there: here’.⁵⁰

- (193) NUUCHAHNULTH
- a. *hił?aλ* *?ah* *?aλqimł* *čak^wa'si*
hił = 'aλ *?ah* *?aλ–qimł* *čak^wa'si*
 there=TEMP DEM two–X.many.round.objects dorsal.fin
 ‘Here were two dorsal fins of whales.’ (NT 164.20)
- b. *hi?i's?aλuk^we?icur* *ku'kuh'wisa...*
hi?i's = 'aλ = uk = (m)a' = ?icur *ku'kuh'wisa*
 there.on.ground=TEMP=POSS=INDIC=2pl hair.seal
 ‘Your hair-seals are on the ground there.’ (NT 70.27)
- c. *ya'tma'* *hu'ni'* *wa'?aλ*
ya't = ma' *hu'ni'* *wa' = 'aλ*
 yonder=INDIC drift.whale say.PERF=TEMP
 ‘“Yonder’s a drift whale,” he said.’ (NA 337.47)

Passive-inverse clauses are also believed to be intransitive.

- (194) MAKAH
qaχsa'aλit?u *bukwač*
qaχ–sa:p = 'aλ = 'it = (b)u = i *bukwač*
 dead–CAUS.PERF=TEMP=PINV=PAST=INDIC.3sg deer
 ‘Deer was killed.’

Transitive clauses have a subject and one object. Recall from §4.3.1 that Makah marks objects in the clitic sequence in some cases (first and second person and third person plural), while Nuuchahnulth does not. Object marking in Makah is dealt with in more detail in §7.2.1.

(195)

- MAKAH
- a. *da'csʔaʕ* *ʕurkʕud* *ca'ʔuwig*
da'csa = 'aʕ *ʕurkʕuda* *ca-ʔuk = 'iq*
 see=TEMP raven flow-DUR=ART
 'Raven was watching the river.' (HW, Raven and His Beak)
- b. *ʔaʕčeyatʕʔaʕitdi'cuʕ* *hi'durʕ*
ʔaʕ-čeyatʕ-ʕiʕ = 'aʕ = (b)it = di:cuʕ *hida-urʕ [L]*
 two-X.many.days-PERF=TEMP=PAST=INDIC.1pl/2sg empty.root-expect
 'We expected you for two days.'
- c. *ʔuʔuduʕsaʕ* *yakya'daqyu'ʔiq*
ʔu-iduʕ = s = aʕ *ya'daq-yu: [R+L] = 'iq*
 so.and.so-look.for=INDIC.1sg=3pl child-PL=ART
 'I am looking for the kids.'
- NUUCHAHNULTH
- d. *čaqʕiʕʔa'qʕʕhak* *hiʔi's* *q^wayači'kukʔitqak*
čaq-ʕiʕ = ʔa:qʕ = ʕa' = k *hiʔi's* *q^wayači:k = uk = ʔi'tqa = k*
 push-PERF=INTENT=INTERR=2sg there.on.ground wolf=POSS=DEF=2sg
 'Are you going to shove your wolf there away?' (NA 143.18-19)
- e. *ʔuk^wiʕʕiʔaʕ* *ʕicsačus...*
ʔu-(č)i:ʕ-ʕiʕ = 'aʕ *ʕi-(c)sačus*
 so.and.so-make=PERF=TEMP shoot-surface.for
 'They built a shooting platform.' (NA 387.34-35)
- f. *su'ʔaʕ* *ʔacsa'kum...*
su-[L] = 'aʕ *ʔacsa'kum*
 hold-CONT=TEMP potlatch.handle
 'It held a potlatch handle.' (NT 152.10)
- g. *haʔukʕiʔaʕ* *nixtin* *quʔiʕinmit...*
haʔuk-ʕiʕ = 'aʕ *nixtin* *quʔiʕin-mi't*
 eat-PERF=TEMP salmon.eggs raven-son.of
 'Raven began to eat the salmon eggs.' (NT 44.10)
- h. ...*hamupʕiʔaʕ* *núwicuʔaʕʔaʕ* *naʔaqakʔi*
hamup-ʕiʕ = 'aʕ *núwic-(y)uʔaʕ = 'aʕ* *naʔaq-ak^w = ʔi'*
 recognize-PERF=TEMP father-perceive.PERF=TEMP baby-DUR=ART
 'The baby recognized him, saw him as (his) father.' (NT 82.34)
- i. *ʔu'ʔiʕasaʕ* *suwa...*
ʔu-'iʕ [L]-'as = (m)a' = aʕ *suwa*
 so.and.so-get-go.in.order.to.PERF=INDIC=1sg 2sg
 'I came to get you.' (NT 68.30)

lations, or distinct primary object (PO) and secondary object (SO) relations. In a PO/SO system, the R argument of a ditransitive predicate is treated grammatically like the single P argument of a transitive predicate (Dryer 1986, to appear). The sentences shown in (198)-(199) might suggest a PO/SO system in Southern Wakashan, but this is probably artifactual. We have seen that, while objects are marked by clitics in Makah, they are not in Nuuchahnulth. There is one exception to this rule: as shown in (198)b, first person objects in Nuuchahnulth *are* marked in clauses in Imperative mood with second person subjects (§7.2.20).

- (198) **First person P**
 MAKAH
 a. *daʔaʔuʔaʔis*
daʔaʔuʔ = ʔaʔ = ʔis
 listen=TEMP=IMPER.2sg/1sg
 ‘Listen to me!’
- NUUCHAHNULTH
 b. *naʔaʔtaʔʔaʔis*
naʔaʔtaʔ = ʔaʔ = ʔis
 listen=TEMP=IMPER.2sg/1sg
 ‘Listen to me!’ (NA 59.37)

In an Imperative mood ditransitive clause with a first person R, the R is likewise marked by the pronominal clitic in both languages:

- (199) **First person R**
 MAKAH
 a. *hidiʔis* *katsaciq*
hida-i = ʔis *kaT-(k)sac = ʔiq*
 empty.root-give.PERF=IMPER.2sg/1sg oil-container.for=ART
 ‘Give me the oil bowl!’ (HI, Raven and Eagle)
- NUUCHAHNULTH
 b. *qaʔciʔis* *haʔumʔakʔitqak...*
qaʔci = ʔis *haʔum = ʔak = ʔiʔtqa = k*
 give.a.present=IMPER.2sg/1sg food=POSS=DEF=2sg
 ‘Give me your food!’ (NA 48.26)

The first person R in (199) is treated like first person P in (198) as in a PO/SO system, but this is simply a reflection of the general primacy in Southern Wakashan of first person over third person

4.4.3.2 *Nominal predicates*

Nominal predicate heads in Southern Wakashan occur in three construction types: class-inclusion predicates, equational constructions, and existential constructions.

Class-inclusion predicates

In Makah and Nuuchahnulth, nominals may function directly as predicate heads with no intervening copular element.⁵² They take predicate clitics exactly as verbal predicates do: there are no restrictions on the predicate clitics they may occur with. The words in (205)-(206) show Makah nouns and property words as heads of class-inclusion predicates; that is, predicates denoting a class of entities the subject is asserted to be a member of.⁵³ Example (207) shows an intransitive verbal predicate for comparison. The coding of each clause type is identical: the mood and pronominal clitics are attached directly to the predicate head in all cases. (Only the masculine singular gloss is given for the third person examples for sake of economy.)

- | | | | | | | |
|-------|-------|--|----|---|----|--|
| | MAKAH | | | | | |
| (205) | a. | <i>wikwi'ya'ks</i>
<i>wikwi'ya:k^w = s</i>
boy=INDIC.1sg
'I am a boy' | b. | <i>wikwi'ya'wic</i>
<i>wikwi'ya:k^w = ic</i>
boy=INDIC.2sg
'You (sg.) are a boy' | c. | <i>wikwi'ya'w</i>
<i>wikwi'ya:k^w = i</i>
boy=INDIC.3sg
'He is a boy' |
| (206) | a. | <i>k^wa?aks</i>
<i>k^wa?ak^w = s</i>
small=INDIC.1sg
'I am small' | b. | <i>k^wa?awic</i>
<i>k^wa?ak^w = ic</i>
small=INDIC.2sg
'You (sg.) are small' | c. | <i>k^wa?aw</i>
<i>k^wa?ak^w = i</i>
small=INDIC.3sg
'He is small' |
| (207) | a. | <i>babuyaks</i>
<i>babuyak^w = s</i>
work=INDIC.1sg
'I am working' | b. | <i>babuyawic</i>
<i>babuyak^w = ic</i>
work=INDIC.2sg
'You (sg.) are working' | c. | <i>babuyaw</i>
<i>babuyak^w = i</i>
work=INDIC.3sg
'He is working' |

Tense marking is as uniform across clause types as mood and subject marking, as shown by the past tense noun, property, and verbal predicates in (208).⁵⁴ Polar Interrogative mood is used in these examples instead of Indicative mood for sake of variety, and also to further illustrate the ability of nominal words to occur with mood and subject clitics. Only second person singular

forms are given, the possibility of nominal predicates occurring with all persons being amply demonstrated by (205) and (206). Second person singular is zero-marked with this mood in Makah (§7.2.1)

- (208) MAKAH
- a. *wikwi'ya'kita'k*
 wikwi'ya:k^w = (b)it = (q)a:k
 boy=PAST=POLAR
 ‘Were you (sg.) a boy?’
- b. *k^wa?akita'k*
 k^wa?ak^w = (b)it = (q)a:k
 small=PAST=POLAR
 ‘Were you (sg.) small?’
- c. *babuyakita'k*
 babuyak^w = (b)it = (q)a:k
 work=PAST=POLAR
 ‘Were you (sg.) working?’

The homogeneity of coding across word classes demonstrated for mood-marked predicates in (205)-(208) extends to absolute predicates as well. Examples (209)a-c show a noun, a property word, and an intransitive verb as bare absolute predicates in complements to the negative root *wiki'*.

- (209) MAKAH
- a. *wiki's* *wikwi'ya'k*
 wik-i' = s *wikwi'ya:k^w*
 not-APPEN=INDIC.1sg boy
 ‘I am not a boy.’
- b. *wiki's* *k^wa?ak*
 wik-i' = s *k^wa?ak^w*
 not-APPEN=INDIC.1sg small
 ‘I am not small.’
- c. *wiki's* *babuyak*
 wik-i' = s *babuyak^w*
 not-APPEN=INDIC.1sg work
 ‘I am not working.’

A nominal predicate head may be complex, consisting of a string of nominal words (e.g. a property + noun, a quantifier + noun, etc.). The words in a multi-word nominal predicate head are usually strictly ordered: quantifier/numeral > property > noun. Clitics must occur on the first word of the head. Example (210) shows two multi-word nominal predicates; the predicated expression in (210)a is M *ʔiʔiːxʷ ǰidiːλ* ‘big dog’ and, in (210)b, it is N *λuʔ haʔum* ‘good food’. Note the position of the predicate modifier *yʉqʷaː* ‘likewise’ following *haʔum* in (210)b; its location is evidence that the string *λuʔaʔ haʔum* is indeed a unitary predicate head, since, as described in §4.3.4, post-head predicate modifiers usually directly follow the predicate head and precede core arguments.

- (210) MAKAH
- a. [*ʔiʔiːxʷ ʔi* *ǰidiːλ*] *xʉ*
 [*ʔiʔiːxʷa = ʔi* *ǰidiːλ*] *xʉ*
 [big=INDIC.3sg dog] DEM
 ‘That is a big dog.’
- NUUCHAHNULTH
- b. [*λuʔaʔ haʔum yʉqʷaː*] *λuʔaːʂtʔi* *ʂamasʔaʔ*
 [*λuʔ = ʔaʔ haʔum yʉqʷaː*] *λuʔ-(kʷ)aːʂt = ʔi* *ʂamas = ʔaʔ*
 [good=TEMP food likewise] mussel–dried=ART sweet=TEMP
 ‘Dried mussels are also good food, and sweet.’ (NA 22.29)

Equational clauses

Within the major clause types in a language one often finds subtypes with different coding properties that vary according to the semantic or grammatical properties of the lexical items functioning in predicates (e.g. transitive and intransitive subtypes of verbal predication), or according to different functional predication types possible with expressions headed by the same word class. An important distinction of the latter sort among nominal predicates is between clauses with class-inclusion predicates (called “true nominal predicates” by Dryer [to appear]) and those with equational predicates. In a (declarative) class-inclusion clause the subject is asserted to be a member of the class of entities denoted by the predicate, e.g. *John is a teacher*. An equational

clause, on the other hand, asserts that the individual denoted by the predicate is the same as the individual denoted by the subject, i.e. the latter is equated with the former, e.g. *John is the teacher*. In English, the two types are distinguished in several ways (Lyons 1977: 471-72, Dryer [to appear]). The examples in the previous section are of the class-inclusion type, e.g. (205)a M *wikwi'ya'ks* 'I am a boy'. We see from those examples that class-inclusion clauses in Southern Wakashan have the nominal expression as the (syntactic) predicate head. Clauses with equational predicates are formed at least two ways. The first, and less preferred, way, only attested in Nuuchahnulth, is to use the same construction found in class-inclusion clauses: the entity to which the subject is equated serves as predicate head with the appropriate predicate clitics attached:

- (211) NUUCHAHNULTH
hawiłma *hił*
hawił = ma' *hił*
 chief=INDIC there
 'He is the chief there.' (based on NA 47.2)

Although the translation of (211) in the source and its discourse context make clear that it is to be taken as equational, out of context it is presumably ambiguous between class-inclusion and equational readings, i.e. out of context (211) could also mean 'He is a chief (i.e. high ranking male) there'. (The usual English gloss for *hawił*, 'chief', is misleading because it implies unique status for its referent in a group. The word actually refers to any high-ranking male, so a group can have more than one *hawił* — the class-inclusion reading is perfectly plausible, and, as we see next, is probably preferred.)

The second, and more common, construction involves pronouns interposed as copular elements. This is in fact the only possible construction if the (semantic) predicate is a personal name, place name, an RP with the article, or, in Makah, an RP with a possessive clitic, because these types of nominal expressions cannot normally function as syntactic predicate heads:⁵⁵

- (212) MAKAH
- a. *Billʔi
Bill = ^oi
Bill=INDIC.3sg
'He is Bill.'
- b. *huxtaksa'qtiʔi'ʔiḡ Bill
huxtak-sa:q-tiʔi: = ^oiḡ = ^oi Bill
know.how-CAUS.PERF-...er=ART=INDIC Bill
'Bill is the teacher.'

(The prohibition against co-occurrence of mood clitics and the article will be shown to be natural when I suggest in §4.5.1 that the article itself is a mood clitic.)

The precise form of the correct construction in Nuuchahnulth depends on the person of the subject, which is the entity on X-side of the semantic equational schema. If it is first or second person, the predicative form of the appropriate independent pronoun intervenes as predicate head, and the entity on the Y-side of the equational schema is simply syntactically apposed to it:⁵⁶

- (213) NUUCHAHNULTH
- a. ...siy'a'qaḡ ni'nispátwas
siy'a'q = (m)a' = aḡ ni'nispátwas
1sg.PRED=INDIC=1sg Niinispátwas
'I am Niinispátwas.' (NA 142.14)
- b. siy'a'qaḡ napni'tʔi
siy'a'q = (m)a' = aḡ napni't = ʔi
1sg.PRED=INDIC=1sg priest=ART
'I am the priest.'

The literal force of this construction appears to be 'I am I (who am) Niinispátwas', with the name or RP-with-article as an "appositional complement" to the predicate. This is supported by the fact that the very same construction translates as 'It is I, NAME'.

- (214) NUUCHAHNULTH
- a. siy'a'qaḡ λ'a'cmi'k
siy'a'q = (m)a' = aḡ λ'ac-mi:k^w [L]
1sg.PRED=INDIC=1sg blubber-getter.of
'It is I, Blubber-Getter.' (NA 138.44)

- b. *siyaʔaʔaʔah* *čakupukʔitqak* *ʔuxwičit*
siyaʔq = 'aʔ = (m)aʔ = aʔ *čakup = uk = ʔiʔtqa = k* *ʔuxwičit*
 1sg.PRED=TEMP=INDIC=1sg man=POSS=DEF=2sg Woodpecker
 ‘It is I, your husband Woodpecker.’ (NT 52.12)

These predicative pronoun forms otherwise appear only in subject focus constructions like (215), which suggests that equational predication is treated as a pragmatically marked discourse type.

- (215) NUUCHAHNULTH
ʔahʔaʔaʔsi *siyaʔaʔaʔ* *ciqšiʔ*
ʔahʔaʔ = 'aʔ = siʔ *siyaʔq = 'aʔ* *ciq–šiʔ*
 then=TEMP=1sg 1sg.PRED=TEMP speak–PERF
 ‘Then I myself spoke.’ (NT 64.26)

If the subject is third person, the deictic pronoun *ʔuh* ‘this one, that one, so-and-so, such-and-such’ fills the syntactic predicate head slot with the X as its subject and the Y as antecedent to *ʔuh*. The construction literally means something like ‘He is so-and-so (who is) Bill’ or ‘Bill is that one (who is) the priest’. Note in (216)c that the Y has been moved before the predicate head, while in (216)d it is the X that has been fronted.

- (216) NUUCHAHNULTH
 a. *ʔuhʔaʔ* *ʔiʔiʔsuʔiʔ...*
ʔuh = 'aʔ *ʔiʔiʔsuʔiʔ*
 so.and.so=TEMP Pitch.Woman
 ‘It was Pitch-Woman.’ (NT 92.26)
- b. *ʔuhmaʔ* Bill *napniʔti*
ʔuh = maʔ Bill *napniʔ = ʔiʔ*
 so.and.so=INDIC Bill priest=ART
 ‘Bill is the priest.’
- c. *maʔcmaʔyux^winča* *ʔuhʔaʔ*
maʔcmaʔyux^win = čaʔ *ʔuh = ʔaʔ*
 supernatural.spearsman=QUOT.ART so.and.so=TEMP
 ‘It is the supernatural spearman.’ (46.11.27)
- d. *yaʔ* *tupaʔtiʔi* *ʔuhmaʔ* *ʔeʔiʔhča*
yaʔ *tupaʔti = ʔiʔ* *ʔuh = maʔ* [R]–*ʔiʔh^w = čaʔ*
 DEM tuupati=ART so.and.so=INDIC PL–big=QUOTART
 ‘That tuupati is the big (kind) that one hears about.’ (NT 158.4)

- (218) MAKAH
- a. *bukwačal* *ʔiyaχ* *hihitaχsʔiq*
bukwač = 'aλ = [◦]i *ʔiyaχa* *hita-χsa* [R] = [◦]iq
 deer=TEMP=INDIC.3sg at empty.root-in.bushes=ART
 'There is a deer in the bushes.'
- b. *q̣iλi'čaxsal*
q̣iλč - < i' > - 'aχs = 'aλ = [◦]i
 dog-<EPEN>-in.vessel=TEMP=INDIC.3sg
 'There is a dog in a vessel.'
- NUUCHAHNULTH
- c. *q^wayači'kaλma* *hiʔi's...*
q^wayači:k = 'aλ = ma' *hiʔi's*
 wolf=TEMP=INDIC there.on.ground
 'There was a wolf on the ground.' (NA 143.16)
- d. *ʔaλqimłma* *λupaqak* *mačičł...*
ʔaλ-qimł = ma' *λupaq-ak^w* *mačičł*
 two-X.many.round.objects=INDIC heating.stone-DUR in.house
 'There were two heating-stones in the house.' (NT 202.5)
- e. *ča'wayu'sci'ʔas*
čawayu:s-(c)ci:ʔas [L]
 rainbow-at.outside.wall.of.house
 'There is a rainbow on the side of the house.' (NA 86.29)
- f. *...ʔaʔuk^waqλ'aλ* *čiša'*
ʔaʔuk - 'aqλ = 'aλ *čiša'*
 lake-inside=TEMP Tsisha
 'There is a lake under the surface at Tsisha (place name).' (NT 166.23)
- g. *ʔaλqimłasλa'* *ti'čkin* *mata's*
ʔaλ-qimł-a's = λa: *ti'čkin* *mat-a's*
 two-X.many.round.objects-on.horizontal.surface=again thunderbird fly-on.surface
 'There were again two thunderbirds perched (on a barge).' (NA 133.3)

(The translation 'perched' for *mata's* in (218)g comes from the inherent stative aspect of the locative suffix applied to the meaning of the bound verb root; the resulting stative verb literally means 'having flown onto a surface'.) Unlike other nominal predicates, existential predicates are intransitive (or ambient); they have no semantic arguments, and thus no subject reference. See §4.4.3.1 for further discussion of intransitive predicates.

Existentials in which the location is expressed by a following verb — e.g. (218)a,c-d — are in essence multi-clausal reversals of a mono-clausal construction having the locational verb as the sole predicate head and the nominal expression as its subject. (218)c-d, for instance, could be expressed equally well with such a mono-clausal sentence:

- (219) a. *hiʔi'sʔaλma* *q^wayači:k*
hiʔi's = 'aλ = ma' *q^wayači:k*
 there.on.ground=TEMP=INDIC wolf
 'A wolf was on the ground there.'
- b. *mačičʔaλ* *ʔaλqimʔ* *λupaqak*
mačičʔ = 'aλ *ʔaλ-qimʔ* *λupaq-ak^w*
 in.house=TEMP two-X.many.round.objects heating.stone-DUR
 'Two heating-stones were in the house.'

See also (193).

Nominal predicates containing restrictive path-orientation or locative suffixes are a special case. They are often atransitive existentials (in (218)b,e-g, for example). In some cases, however, they are intransitive with personal subject reference. In this use, the subject referent is asserted to have some relation with the referent of the nominal base that can be loosely referred to as possession.⁵⁷ Schematically: 'X [subject referent] has Y [referent of nominal base] at Z [location denoted by suffix(es)]'. I call this the possessive-existential (or bahuvrihi) reading. Consider the examples in (220).

- (220) a. MAKAH
q̣iλi'čaxsaλs *čapacsis*
q̣iλč- < i' > -'axs = 'aλ = s *čapac = sis*
 dog-<EPEN>-in.vessel=TEMP=INDIC.1sg canoe=POSS.1sg
 'I have a dog in my canoe.'
- b. NUUCHAHNULTH
patʔahsʔaλah
patq^w-'ahs = 'aλ = (m)a' = ah
 goods-in.vessel=TEMP=INDIC=1sg
 'I have freight in my canoe.'

- c. *quʔacʔaʕutweʔinʔaʔa* *ʔaʔaʔaʕut* *naʔsapuʔʔi*
quʔac-.*ʔaʕu(ʔ)* = *weʔin* = *ʔaʔa* *ʔaʔa-*.*ʔaʕu(ʔ)* *naʔs-*(*q*)*apuʔ* = *ʔi*
 person-on.surface=QUOT=HAB two-on.surface day-representing=ART
 ‘A day screen usually shows two people on its surface.’ (NA 159.44)
- d. *ʔaʔakʔak^waqʔnuk^waʔ*
 [R]-*ʔak^w-ʔak^w-ʔaqʔ-nuk* = *ʔaʔ*
 PL-cut.with.knife-thing.for-inside-at.hand=TEMP
 ‘Each held a knife, i.e had a knife in his hand.’ (NA 75.11)
- e. *tupaʔaʔisʔaʔqʔaʔniʔaʔ*
*tupaʔ-**ʔaʔs* = *ʔaʔqʔ* = *ʔaʔ* = *ni* = *ʔaʔ*
 tupati-in.vessel=INTENT=TEMP=1pl=again
 ‘We would take a tupati (equipment for a ritual marriage test) along in the vessel again.’ (NA 142.46)

It is often unclear whether a third person referent in a sentence with a restricted nominal predicate (i.e. a predicate containing a predicate head with a restrictive locative suffix) is to be interpreted as the subject of the predicate (triggering a possessive-existential reading) or as a locative adjunct expanding the reference of the restrictive suffix(es) (triggering a simple existential reading). This ambiguity exists in (220)c, for example. The source translates the sentence assuming the first reading, as if *naʔsapuʔʔi* ‘a day screen (a board with a painting depicting a mythological subject on it)’ were the subject of the nominal predicate *quʔacʔaʕut ʔaʔaʔaʕut* ‘(be) two people on a surface’, but it is just as likely to be a locative RP expanding the reference of *-ʔaʕu(ʔ)*, that is, an adjunct further specifying the identity of the surface the two people are on. The alternative readings are ‘a day screen has two people on it’ and ‘there are two people on a day screen’. Another ambiguous Nuuchahnulth example is shown in (221). This sentence is especially interesting because it contains two restricted nominal predicates. The first is the main complex predicate head *caqiʔctaqimʔcu maʔtmaʔs* ‘twenty tribes in a container’; the second is the relative clause *yaʔaqʔnuk* ‘that which is in the hand’, which is adjoined to the demonstrative *ʔaʔ* ‘this’

- (221) NUUCHAHNULTH
caqiʔctaqimʔcuma *maʔtmaʔs* *ʔaʔ*
caqiʔc-(*ʔ*)*taqimʔ-cu* = *maʔ* *maʔas*-<*t*> [LR] *ʔaʔ*
 twenty-X.many.groups-in.container=INDIC tribe-<PL> DEM

yaʔaqλñukqas
yaq^w-ʔaqλ-ñuk = qa' = s
 that.which-inside-at.hand=DEF=1sg

- a. 'This that I have in my hand has twenty tribes it in.'
 b. 'There are twenty tribes in this that I have in my hand.' (NA 292.10-11)

The relative clause is clearly possessive-existential: the first person pronominal clitic assures us of that. The question is whether *ʔah yaʔaqλñukqas* 'this that I have in my hand' is the subject of the main predicate (translation a) or an adjunct RP expanding the reference of the locative suffix *-ću'* 'in a container' (translation b).

4.5 Referring phrases

Referring phrases in Southern Wakashan may be divided into two types according to whether they contain a relative root like M *yaqa'*, N *yaq^w* 'one who, that which'. We first discuss simple RPs, i.e. RPs that do not contain such a root.

4.5.1 Simple RPs

There are striking similarities in the structure of simple RPs and the structure of clauses that are neatly explained by an analysis in which such RPs are, in effect, nothing but "nominalized" clauses, that is, clauses made into referring expressions; or, put more formally, referring phrases are headless relative clauses.⁵⁸ The entity denoted by a simple RP is equivalent to the subject of the corresponding non-nominalized clause. Key to this analysis is the idea that the morpheme I have glossed thus far as an article M = *ʔiq*, N = *ʔi'* is a type of relative mood marker.⁵⁹ This is supported by the fact that the article is in a relation of absolute paradigmatic exclusivity with the other mood markers (cf. (212)b above). Predicate clitics thus naturally appear in "referring clauses" just as they do in ordinary main clauses, with the exception that only the article (or, in Nuuchahnulth, its quotative counterpart = *(m)ića* = *ća'* 'the reputed, the one they speak of') may appear in the mood slot of the clitic sequence. Thus, the RPs in the a. examples below are claimed

to have the same structure and grammatical relationships among words as the clauses in the b. examples. That is, M *xadʔak^w* ‘girl’ is predicate head in both (222)a-b, M *weʔiĉ* ‘sleeping’ is predicate head in (223)a-b and *xadʔak^w* ‘girl’ is its subject, and so on.

(222) MAKAH
 a. *xadʔawiq*
xadʔak^w = ʔiq
 girl=ART
 ‘the girl’ (lit. ‘the one that is a girl’)

b. *xadʔaw*
xadʔak^w = ʔi
 girl=INDIC.3sg
 ‘She is a girl.’

(223) MAKAH
 a. *weʔiĉiq xadʔak*
weʔiĉ = ʔiq xadʔak^w
 sleep=ART girl
 ‘the sleeping girl’

b. *weʔiĉ xadʔawiq*
weʔiĉ = ʔi xadʔak^w = ʔiq
 sleep=INDIC.3sg girl=ART
 ‘The girl is sleeping.’

(224) MAKAH
 a. *qaʔqatqstʔiq*
qatq-(k)sta [LR] = ʔiq
 amputate-at.legs=ART
 ‘the one with an amputated leg’

b. *qaʔqatqstʔi*
qatq-(k)sta = ʔi
 amputate-at.legs=INDIC.3sg
 ‘He/she/it has an amputated leg.’

(225) NUUCHAHNULTH
 a. *quʔasʔi*
quʔas = ʔi
 person=ART
 ‘the person’ (lit. ‘the one that is a person’)

- b. *quʔasma*
quʔas = maʔ
 person=INDIC
 ‘He/she/it is a person.’

- (226) NUUCHAHNULTH
 a. *qaḥakʔi* *quʔas*
qaḥ-ak^w = ʔiʔ *quʔas*
 dead-DUR=ART person
 ‘the dead person’ (NT 74.19)

- b. *qaḥakma* *quʔas ʔi*
qaḥ-ak^w = maʔ *quʔas = ʔiʔ*
 dead-DUR=INDIC person=ART
 ‘The person is dead.’

- (227) NUUCHAHNULTH
 a. *k^waʔsimčʔi*
k^waʔ-simč [L] = ʔiʔ
 otter-do.ritual.for=ART
 ‘the one doing ritual for (catching) sea-otters’ (NA 48.30)

- b. *k^waʔsimčma*
k^waʔ-simč [L] = maʔ
 otter-do.ritual.for=INDIC
 ‘He is doing ritual for (catching) sea-otters’

- (228) NUUCHAHNULTH
 a. *maʔasʔaʔ ʔi* *tiʔckin*
mat-ʔas = ʔaʔ = ʔiʔ *tiʔckin*
 fly-on.ground=TEMP=ART Thunderbird
 ‘the Thunderbird that has flown down onto the ground’ (NA 136.4)

- b. *maʔasʔaʔma* *tiʔckin ʔi*
mat-ʔas = ʔaʔ = maʔ *tiʔckin = ʔiʔ*
 fly-on.ground=TEMP=INDIC Thunderbird=ART
 ‘The Thunderbird has flown down onto the ground.’

A simple RP (with the article) can include any elements (subjects, objects, obliques, adverbial clauses, complement clauses, etc.) that an ordinary clause can. As (229)i demonstrates, an RP may be preceded (or more rarely, followed) by a demonstrative. The article attaches to the first non-demonstrative word of the RP, precisely as a mood clitic attaches to the first word of the predicate in an ordinary clause.

(229)

MAKAH

- a. *ča'ča'bałasʔiq* *ʔiyaʒa'tɬ* *ti'kaʔa*
 [R]–*ča'bała*–*sa* = *ʔiq* *ʔiyaʒa* = *'atɬ* *ti'kaʔa*:
 PL–chief–precisely=ART at–dwelling DEM

‘the real chiefs living here’ (HW, Speech)

NUUCHAHNULTH

- b. *wiʔakšitʔi* *ħa'k^wa'ł*
wiʔak^w–šitʔ = (m)it = ʔi' *ħa'k^wa'ł*
 angry–PERF=PAST=ART girl

‘the girl who had gotten angry’ (NT 66.18)

- c. *mimitkukʔi* *ʔuyuq^wa* *łw'čmupuk^witqin*
mit–kuk [R] = *ʔi'* *ʔu–i'yuq–(y)a'* *łw'čmup = uk = (m)it = qa' = n*
 alike–resemble=ART so.and.so–do.to–CONT sister=POSS=PAST=DEF=1pl

‘the one who looks like our former sister’ (NT 78.24-25)

- d. *ħawiłʔi* *ʔu'c* *mu'ħinł*
ħawił = ʔi' *ʔu–i:c* *mu–a'ħu(ł)–(w)inł* [L]
 chief=ART so.and.so–belong.to burn–in.front–on.neck

‘the chief of the saw-bill (burned neck) ducks’ (NT 82.3)

- e. *ʔu'cʔi'* *qała'tik* *łihwituʔa*
ʔu–i:c = ʔi' *qała'tik^w* *łih–witu(ł)–'a'*
 so.and.so–belong.to=ART younger.brother move.pointwise–go.past.head.PERF–on.rocks

‘the younger brother of Pokes-past-Head (man’s name)’ (NA 388.19-20)

- f. *hininʔi* *ʔuyaqħmis*
hina–ni' = ʔi' *ʔuyaqħmis*
 empty.root–arrive=ART news

‘the news that has arrived’ (NT 150.40)

- g. *suse'ʔi* *q^wayačik*
sus–(y)a' = ʔi' *q^wayačik*
 swim–CONT=ART wolf

‘a swimming wolf’ (NA 143.4)

- h. *wikmiħsapʔi* *ħimtšilqu'*
wik–miħsa = 'ap = ʔi' *ħimt–šil = qu'*
 not–want.to=CAUS=ART sing.words.of.song–PERF=COND

‘the ones not wishing the words to be sung’ (NA 74.46)

- i. *ya'* *ʔayasumitʔi* *čaxčax^wa*
ya' *ʔaya–su:p = (m)it = ʔi'* *čax^w–(y)a* [RepR]
 DEM many–die.CAUS.PERF=PAST=ART spear–REP

‘the one who had speared (so) many to death’ (NA 403.1)

- j. *ʔaʔayintʔi* *haʔum* *čaʔaʔk*
 [LR]–ʔaya–nit = ʔiʔ *haʔum* [LR]–ča–ʔak^w
 PL–many–stocked.with=ART fish PL–flow–DUR

‘rivers stocked with much fish’ (NA 83.13-14)

- k. *ʔaʔayintʔi* *minaʔti* *haʔum*
 [LR]–ʔaya–nit = ʔiʔ *minaʔti* *haʔum*
 PL–many–stocked.with=ART fishing.bank fish

‘heavily-stocked fishing banks’ (NA 83.14-15)

The sentence in (230) includes an RP with the article containing another RP with the article (co-referential to the deictic pronoun root *ʔu-* ‘so-and-so’ in the verb *ʔuʔk^wiʔ* ‘doing it to so-and-so’).

- (230) NUUCHAHNULTH
hitasaʔaʔ *ʔuʔq^waʔ* [*yaʔ* *ʔiʔhʔiʔiʔiʔi*]
hita–saʔ = ʔaʔ *ʔuʔq^waʔ* [*yaʔ* *ʔiʔh–ʔiʔ* [L] = (m)it = ʔiʔ]
 empty.root–on.beach.PERF=TEMP likewise [DEM paddle–get=PAST=ART]

ʔuʔk^wiʔ [*yaʔ* *susʔiʔiʔiʔi*]
ʔu–(č)iʔ [L] [*yaʔ* *sus–ʔiʔ = (m)it = ʔiʔ*]
 so.and.so–do.to [DEM swim–PERF=PAST=ART]

‘Those who had paddled after the swimmers likewise land.’ (NA 71.24)

As a rule, however, simple RPs are less complex than main clauses; referring expressions requiring overt subject and/or object RPs are often expressed by apposed simple RPs (231), or else by a root RP containing a relative root like *yaq^w* ‘one who, that which’ (for which see §4.5.2 below).

- (231) a. [*qʔʔasʔi*] [*qahsaʔpaʔʔi*] [*ʔaʔtuʔʔi*]
 [*qʔʔas = ʔiʔ*] [*qah–saʔp = ʔaʔ = ʔiʔ*] [*ʔaʔtuʔ = ʔiʔ*]
 [person=ART] [dead–CAUS.PERF=TEMP=ART] [deer=ART]

‘The man who killed the deer.’

- b. *haʔk^waʔʔuk^wiʔi* *huʔpačasʔaqsuʔyukʔiʔuk^wiʔi*
haʔk^waʔʔ = uk = (m)it = ʔiʔ *huʔpačas.–.ʔaqsuʔ–yuk–ʔiʔ = uk = (m)it = ʔiʔ*
 girl=POSS=PAST=ART Hupachas–woman.of–born.of–PERF=POSS=PAST=ART

‘his late daughter, who was born of a Hupachas woman’ (NA 70.10-11)

The bracketing in (231)a represents one possible analysis of the structure of such examples. Other analyses are conceivable.

If the RP does not contain a nominal word (i.e. a noun, property word?, or quantifier/numeral), use of the article is obligatory. If a nominal word is present, the article is optional;

in this case, its presence or absence can have functional significance. Its function overlaps the English definite article, but, rather than indicating definiteness (i.e. identifiability or uniqueness), the Southern Wakashan article appears to indicate something closer to specificity, e.g. *qwʔasʔi* in (231)a is more accurately translated ‘the, a certain one that is a man’. The function of the article is considered in more detail in §7.2.21.

The spirit, if not the letter, of the present analysis of RP structure is anticipated by Sapir (1911a, 1924). The parallelism is somewhat obscured by the fact that, like other writers of the time (cf. Andrade 1933 on Quileute, and Boas 1947 on Kwakwala), Sapir uses the terms “nominal” and “verbal” in reference to kinds of linguistic categories that are today considered distinct; he uses these terms to refer to both lexeme categories (*noun* and *verb*) and logico-syntactic categories (*referring expression* or *noun phrase* and *predicate*). (We leave open here the question of whether Sapir himself recognized such distinctions conceptually.) Making allowance for such terminological conflation, we see the germ of the RPs-as-clauses analysis already in this early statement (Sapir 1911a: 17): “In both [Nuuchahnulth and Kwakwala] the stem is, as far as its meaning allows, indifferently verbal [i.e. able to function as predicate—MD] or nominal [i.e. able to function as a referring expression] and one or more suffixes [clitics] are required to give rise to definitely verbal [predicative] or nominal [referring] complexes; in [Nuuchahnulth] a suffixed [= *ʔi*] is often used to substantivize [i.e. make referring] a verb [i.e. predicative] form.” Likewise, in Sapir (1924: 84, note 9), he says the article is “often used as [a] nominalizing element”.

A more straightforward antecedent is found in Jacobsen (1979a, 1993), who refers to “nominalization by the Article of core clauses” (Jacobsen 1993: 256). On the same page he also claims “[The Nuuchahnulth phrase] *ʔwɔcsmeʔi* ‘the woman’ ... is formed from *ʔwɔcsma* ‘woman’ as a nominalized predicate ‘the one who is a woman’, with the identifying value that would be conferred by an English relative clause.” Referring to Makah, he (1979a: 122) says: “... [F]orms with *-ʔiq* contain undercover predications, so that, for instance, *ʔidiʔliq* is literally, or at least etymologically, ‘(the) one that is a dog.’” This is close to the present analysis, except I

ogically, ‘(the) one that is a dog.’” This is close to the present analysis, except I would omit the etymological qualification. I claim Southern Wakashan RPs contain predications synchronically, and, moreover, that all RPs (except proper names), even those without the article, are clauses; the article is simply an overt marker of the subordinate syntactic status of RPs as referring expressions.^{60, 61}

An alternative line of analysis takes RP structure to be much like that of an English NP, that is, a phrase consisting of a noun head and optional modifiers (Rose 1981: 39-45, Stonham 1999). I will forego detailed discussion or critique of “standard NP” analyses except to comment that they suffer from two main faults: 1) they fail to account for the clause-RP symmetries we have seen, and 2) they assume the noun is the head of the phrase, but I see no language-internal structural evidence that justifies this assumption (e.g. a noun need not be present, the distribution of the phrase as a whole is not equivalent to the distribution of the noun, etc.).

4.5.2 Root RPs

Simple RPs are the most common way of referring to entities. Another option, however, is to use a “root” RP, i.e. an RP containing a relative root. These RPs are also headless relative clauses, and are structurally similar to questions (§7.2.15-7.2.16). In this construction, a relative pronoun root such as M *yaqa'*, N *yaq^w* ‘one who, that which’ or M *q^wi*, N *q^wiq* ‘whoever, whatever’ is predicate head with a relative mood clitic and appropriate pronominal clitic attached. Other predicative clitics (e.g. passive-inverse, temporal specifier, tense) appear according to their normal grammatical behavior. Predicates in the phrase other than the initial relative nominal predicate are bare absolutes.

- (232) MAKAH
 a. *yaqa'aq* *wa'*
 yaq^w-a'=(q)i *wa'*
 one.who-APPEN=REL.3sg say.PERF
 ‘the one who said it.’

- b. *yaqaʼbit* *q^wisiʼ*
yaq^w-aʼ = (b)it = (q)i *q^wis-iʼ*
 one.who-APPEN=PAST=REL.3sg do.thus-APPEN
 ‘the one who did it’
- c. *yaqeʼʔitikdu* *ʔuʼwaʔuk^wit*
yaq^w-aʼ = ʼit = (q)ik = du: *ʔu-owaʔuk [L] = ʼit*
 one.who-APPEN=PINV=REL=1pl so.and.so-look.after=PINV
 ‘the ones who look after us’
- NUUCHAHNULTH
- d. *yaqqin* *čaʼkupiʼh*
yaq^w = qaʼ = n *čakup-i:h [L]*
 one.who=DEF=1pl male-PL
 ‘we (who were) men’ (NA 19.8-9)
- e. *yaqiʼs* *wik* *ʔuʼyiwaʔ*
yaq^w = (y)i: = s *wik* *ʔuyi-(w)aʔ [L]*
 one.who=INDEF=1sg not medicine-find.PERF
 ‘I who have found no medicine’ (RW 79.21)
- f. *yaqʔaʼqʔiʼk* *hiniʼswaʔsuʔ* *paʼcsaʼkumʔi*
yaq^w = ʔa:qʔ = (y)i: = k *hina-i:s-waʔsu(ʔ)* *paʼcsaʼkum = ʔiʼ*
 one.who=INTENT=INDEF=2sg empty.root-carry-move.out.PERF potlatch.handle=ART
 ‘whichever of you brings the potlatch handle out (of the crowd)’ (NA 57.35)
- g. *yaqʔaʼqʔʔitq* *qaʼhqaʼha* *maʼmaʼtiʔi*
yaq^w = ʔa:qʔ = ʔiʼtq *qaʔ-(y)a [RepR]* *ma:maʼti = ʔiʼ*
 one.who=INTENT=DEF dead-REP bird=ART
 ‘he who would be killing the birds’ (NA 13.28-29)
- h. *yaʔatukʔitq* *qaʔsaʼpat* *ʔuʼčmup*
yaq^w = ʼat = uk = ʔiʼtq *qaʔ-saʼp = ʼat* *ʔuʼčmup*
 one.who=PINV=POSS=DEF die-CAUS.PERF=PINV sister
 ‘the one by whom their sister had been killed’ (NT 78.16)
- i. *yaqiʼ* *hiʼtaʼcinʔ* *ʔaya* *ʔiʼhtup*
yaq^w = (y)i: *hita-čw-nuʔ-[IterL]* *ʔaya* *ʔiʼh^w-(š)tuʔp*
 that.which=INDEF empty.root-in.bay-PERF-ITER many big-thing
 ‘the many whales coming into the bay from time to time’ (NA 378.4)
- j. *q^wiqiʼ* *šurwisʔaʼqʔča*
q^wiq-(y)i: *šurwis = ʔa:qʔ = čaʼ*
 whatever=INDEF shoes=INTENT=QUOTART
 ‘what would later be called “shoes”’ (NA 14.30)

The relative pronoun can function as base to lexical suffixes as any nominal would.⁶²

- (233) MAKAH
- a. *yaq^wa·bidaq*
yaq^w-a'-bida [L] = (q)i
 that.which-EPEN-owe=REL.3sg
 'debt, what one owes'
- b. *yaq^wičik*
yaq^w-ič = (q)ik
 that.which-clothed.in=REL
 'your clothes'
- c. *ya·yaqwatiks*
yaq^w-wat [LR] = (q)ik = s
 one.who-friend.of=REL=1sg
 'my friend'
- NUUCHAHNULTH
- d. *yaq^wił?aλ?itq* *qu'ʔas*
yaq^w-ił = 'aλ = ?i·tq *qu'ʔas*
 one.who-in.house=TEMP=DEF person
 'the people in the house' (NA 403.25)
- e. *yaqčuq^we?itq*
yaq^w-čuq-(y)a' = ?i·tq
 that.which-in.mouth=CONT=DEF
 'that which is in one's mouth' (NA 72.10)
- f. *yaʔi'sʔaλ?itq* *q^wini'ʔi*
yaq^w-i's = 'aλ = ?i·tq *q^wini' = ?i'*
 that.which-consume=TEMP=DEF gull=ART
 'what the gulls ate' (NA 23.50)
- g. *yaq^wi'it?itq* *naʔaqpatu*
yaq^w-(č)i'it = (m)it = ?i·tq *naʔaq-patu*
 that.which-make=PAST=DEF baby-thing
 'the cradle she had made' (NT 90.31)
- h. *q^wi'ihtaqaki'č* *tanakmis*
q^wi-ihtaq-ak^w = (y)i: = č *tanakmis*
 whatever-derived.from-DUR=INDEF=QUOT mosquito
 'what mosquitoes are made of' (NT, p. 14 title)

- i. *yaʔiʔhitʔitqak* *siʔčit*
yaq^w-ʔiʔ [L] = (m)it = ʔiʔtqa = k *si-(č)it [L]*
 that.which-try.to.get=PAST=DEF=2sg 1sg-do.to
 ‘that which you were trying to get from me’ (NA 172.5-6)
- j. *yaʔq^witʔaʔʔitq* *ʔuʔaʔuk^waʔ*
yaq^w-(č)it [L] = ʔaʔ = ʔiʔtq *ʔu-ʔaʔuk = ʔaʔ*
 that.which-do.to=TEMP=DEF so.and.so=look.after=TEMP
 ‘that which they were looking after’ (NA 399.31)
- k. *yaqčhiqas*
yaq^w-čhi = qaʔ = s
 one.who-married.to=DEF=1sg
 ‘my wife’

If the entity referred to is not equivalent to the subject of the phrase-internal predication, the relative root must in fact have affixed a verbalizing lexical suffix. The default suffix for this purpose in Makah is *-(k)tip* ‘doing to, with reference to ...’ and in Nuuchahnulth is *-(č)it [L]* id., if a suffix with more specific meaning is not available. Compare the meanings of the root RPs in (234) with and without the verbalizing suffix on the relative pronoun:

- (234) NUUCHAHNULTH
- a. **Root RP with verbalizing suffix**
yaʔq^witʔitq *qaʔsaʔ* *ʔuxšitʔ*
yaq^w-(č)it [L] = (m)it = ʔiʔtq *qaʔ-saʔ* *ʔux-šitʔ*
 one.who-do.to=PAST=DEF dead-CAUS.PERF kill.from.hiding-PERF
 ‘the one he had killed from ambush’ (NT 88.7)
- b. **Root RP without verbalizing suffix**
yaqitʔitq *qaʔsaʔ* *ʔuxšitʔ*
yaq^w = (m)it = ʔiʔtq *qaʔ-saʔ* *ʔux-šitʔ*
 one.who=PAST=DEF dead-CAUS.PERF kill.from.hiding-PERF
 ‘the one who had killed him from ambush’

Root RPs can function as stand-alone referring expressions, as we have seen in all the examples so far in this section, but they are often set in apposition to simple RPs to form more complex referring structures. They generally follow apposed simple RPs, but sometimes precede them (235)b.

- (235) NUUCHAHNULTH
- a. *ʔiːčimʔi* *yaʔatqas* *ʔituqḥsat*
ʔiːčim = ʔiː *yaq^w = 'at = qa' = s* *ʔitu-q-ḥsa' = 'at*
 old.person=ART one.who=PINV=DEF=1sg itu-BFR-desire.to.eat=PINV
 ‘the old man who desired to eat my itu bird (lit. by whom I was “itu-desired”)
 (NA 14.40)
- b. *yaʔaqλimṭʔitq* *maːmaːti* *λuṭʔiː* *ʔuːqλiːtim*
yaq^w-’aqλ-(q)imṭ = ʔiːtq *maːmaːti* *λuṭ = ʔiː* *ʔuːqλiːtim*
 that.which-inside-over.a.rounded.surface=DEF bird good=ART down.feathers
 ‘the fine down that birds have right next to their bodies’ (NA 165.28-29)
- c. *haʔumʔi* *yaʔaqλʔitq*
haʔum = ʔiː *yaq^w-’aqλ = ʔiːtq*
 food=DEF that.which-inside=DEF
 ‘the inner flesh’ (NA 22.10)
- d. *kuxminʔi* *yaʔaqλṇukʔitq*
kuxmin = ʔiː *yaq^w-’aqλ-ṇuk = ʔiːtq*
 rattle=ART that.which-inside-at.hand=DEF
 ‘the rattle in his hand’ (NA 260.32-33)
- e. *ʔaḥkuː* *ʔayaqλʔi* *haʔum* *yaʔiːsʔaλqas*
ʔaḥkuː *ʔaya-aqλ = ʔiː* *haʔum* *yaq^w-’iːs = ’aλ = qa' = s*
 DEM much-inside=ART food that.which-consume=TEMP=DEF=1sg
 ‘this expensive food I am now eating’ (NA 83.33-34)

Root RPs can also appear internally to a simple RP (or vice-versa, of course). Example (236) shows root RPs as RP-internal antecedents to the deictic pronoun root *ʔu-* ‘so and so’, which is base in the derived verb *ʔuːc* ‘belong to’.

- (236) NUUCHAHNULTH
- a. [*ʔuːcʔiː* *qaʔaːtik* [*yaː* *yaq^wʔiːqin*]]
 [*ʔu-iːc = ʔiː* *qaʔaːtik* [*yaː* *yaq^w = ʔiː = qa' = n*]]
 [so.and.so-belong.to=ART younger.brother [DEM one.who-get.to.be.at=DEF=1pl]]
 ‘the younger brother of the one we had gone to’ (NA 145.45)
- b. [*ʔuːcʔiː* *ciq-iːta* [*yaː* *yayaq^winkqin*]
 [*ʔu-iːc = ʔiː* *ciq-iːta* [*yaː* *yaq^w-(č)ink^w [R] = qa' = n*]
 [so.and.so-belong.to=ART speak-...er [DEM one.who-contend.with=DEF=1pl
- ciːciːʔasa* *hitacsmaʔaqa*]]
ciq-’as-(y)a [RepR] *hita-(c)sma-ʔaqa*]]
 speak-go.to-REP empty.root-defend-PL]]
 ‘he who had been orator for those with whom we were contending in making

a marriage proposal' (NA 155.47-48)

The derived verb *ciʔas* in (236)b literally means 'go to speak', but has narrowed in reference to 'make a marriage proposal'. The context of the sentence involves two rival marriage parties contending for same girl.

In many cases, either a root RP or a simple RP are grammatically possible to refer to a particular entity (237); the parameters governing selection of one structure over the other are unknown.

- (237) NUUCHAHNULTH
- a. **Headless relative with relative root = root RP**
huptaʔaλweʔin [yaqʔiʔtq *načuʔaʔ*]
hupt-(y)aʔ = 'aλ = weʔin [yaq^w = ʔiʔtq *nač-(y)uʔaʔ*]
 hide-CONT=TEMP=QUOT [one.who=DEF see-perceive]
 'The one who had seen him was in hiding.' (NT 64.10-11)
- b. **Headless relative without relative root = "simple RP with article"**
huptaʔaλweʔin [*načuʔaʔʔi*]
hupt-(y)aʔ = 'aλ = weʔin [*nač-(y)uʔaʔ = ʔiʔ*]
 hide-CONT=TEMP=QUOT [see-perceive=ART]
 'The one who saw him was in hiding.'

The examples thus far in this section were extracted from sentences in which the root RPs function as subjects or objects. Root RPs, however, can be used independently, as main clauses in their own right, in deictic identificational utterances:⁶³

- (238) MAKAH
- a. *yaqaʔbitxaʔsiʔšk* *čiʔbaʔsup*
yaq^w-aʔ = (b)it = xaʔsiʔš = aʔk *čiP-ʔaʔs-up*
 one.who-APPEN=PAST=INFER. 1sg=HAB jam.in-in.container-CAUS.PERF
- ciʔciʔaqaʔλ*
ciʔaqaʔ-(y)a [RepR] = 'aλ
 splash-REP=TEMP
- 'I guess I was always the one jamming it into the container and splashing.' (II, Dye)
- NUUCHAHNULTH
- b. *yaʔq^wiʔʔaλitiʔčʔaʔta* *puʔx^waʔ* *ʔuyi*
yaq^w-(č)iʔ [L] = 'aλ = (m)it = (y)iʔ = č = ʔaʔta *puʔx-(y)aʔ* *ʔu-yi*
 that.which-do.to=TEMP=PAST=INDEF=QUOT=HAB blow-CONT so.and.so-at.X.time

ka'pčuksnaʒaʔaʔaʒqu *sa'ya'čapis*
kapčuk-(c)snaʒaʔ [L] = 'aʒ = qu: *saya'ča-api [L]- 'is*
 Kapchuk-perform=TEMP=COND high-in.air-on.beach

‘That is what High-Above would blow into when he was staging Kapchuk (i.e. a song and dance belonging to Kapchuk.’ (NA 161.2-3)

- c. *ya'q^wiʔaʒiʔiq* *yuʔtuʔiʔaʒ* *ʒiqʷanupʷaʒ*
yaq^w-(č)iʔ [L] = 'aʒ = ʔiʔiq *yuʔtuʔiʔaʒ* *ʒiq-ʷan-up = 'aʒ*
 that.which-do.to=TEMP=DEF Ucluelet undone-in.middle-CAUS.PERF=TEMP

‘This the Ucluelets untied.’ (NA 394.33-34)

- d. *yaʒaʒiti·č* *k^wačič* *q^wiʔi·č*
yaq^w = 'aʒ = (m)it = (y)i: = č *k^wa-čič* *q^wiʔi = (y)i: = č*
 that.which=TEMP=PAST=INDEF=QUOT break.in.two-PERF when=INDEF=QUOT

k^wacsti·ʔaʒuk *maʒiʔi*
k^wa-(c)sta'- 'iʔ = 'aʒ = uk *maʒiʔi*
 break.in.two-move.down.into.PERF-in.house=TEMP=POSS house

‘That is the one that broke in two when his house collapsed at the roof opening.’ (NA 170.28)

- e. *yaqčičiʔhʔaʒqas* *ʔaʒ* *ʔinkčičiʔaʒaʒ*
yaq^w-čičiʔh = 'aʒ = qa' = s *ʔaʒ* *ʔink^w-čiči- 'iʔ = 'aʒ = 'aʒ*
 that.which-use.as.fuel=TEMP=DEF=1sg DEM fire-at-in.house=CAUS=TEMP

suʔtiʔ
sut-(č)iʔ [L]
 2sg-do.to

‘That is what I am now burning while I have you by the fire.’ (NA 298.14-15)

- f. *ʔaʒ* *yaʒaʒqas*
ʔaʒ *yaq^w = 'aʒ = qa' = s*
 DEM one.who=TEMP=DEF=1sg

‘That is who I am.’ (NA 322.3)

4.6 Complex constructions

Complex (i.e. multiple-predicate) constructions, which we continue our discussion of in this section, are very frequent in Southern Wakashan and classifying them into a definitive set of types is far from straightforward. Rose (1981), Jacobsen (1993), and Nakayama (1997a) provide three alternative views of how to divide up the pie. I make a few comments below on differences

- c. *λ'icimʔaλhsuk* *kamitquk*
λ'ic-(q)imʔ = 'aλ = h = su'k *kamitq^w-uk*
white-over.rounded.surface=TEMP=SUBOR=2sg run-DUR
main **bare absolute**
‘You are covered with ocean spray (lit. white all over) as you run.’ (NA 141.30)

Bare absolute constructions are a favorite sentence type, and used for a wide variety of expressive purposes. One frequently finds sentences composed of two transitive predicates in which one predicate expresses something of the specific manner or type of action affecting the object while the other expresses the general relation of subject to object. The general relation is often coded by a verbalizing lexical suffix. For example, in the Nuuchahnulth examples in (240) we see the following distribution of meanings between predicates:

- | <u>Specific Manner/Type of Action</u> | <u>General Relation of Participants</u> |
|--|---|
| (240)a verb root <i>p'a-</i> ‘give a gift in a potlatch’ | verbalizing suffix <i>-ayi'</i> ‘give ... (perf.)’ |
| (240)b verbalizing suffix <i>-i:s</i> ‘carrying ...’ | verbalizing suffix <i>-(č)iʔ [L]</i> ‘doing to ...’ |
| (240)c verb <i>haʔuk</i> ‘eating’ | verbalizing suffix <i>-i's</i> ‘consuming ...’ |
| (240) | |
| a. <small>NUUCHAHNULTH</small>
<i>p'ač'iʔaλ</i> <i>tu'csa'mi'h</i> <i>ʔuyi'ʔaλ</i> <i>qicaʔ</i>
<i>p'a-č'iʔ = 'aλ</i> <i>tu'csma-i:h</i> <i>ʔu-ayi' = 'aλ</i> <i>qicaʔ</i>
give.gift.in.potlatch-PERF=TEMP woman-PL so.and.so-give.PERF=TEMP calico
main bare absolute
‘She potlatched calico to the women.’ | |
| b. <i>hini'smisʔaλeʔic</i> <i>ni'hiʔ</i> <i>haweʔ</i>
<i>hin-i:s-mi's = 'aλ = (m)a' = ʔic</i> <i>ni'h-(č)iʔ [L]</i> <i>hawiʔ</i>
empty.root-carry-move.about.beach=TEMP=INDIC=2sg 1pl-do.to chief.VOC
main bare absolute
‘You are taking us along the beach, O Chief.’ (NA 77.29) | |
| c. <i>ʔuʔi'sʔaλ</i> <i>haʔuk</i> <i>ianuħcup</i>
<i>ʔu-i's-'aλ</i> <i>haʔuk</i> <i>ianuħcup</i>
so.and.so-consume-TEMP eat worm.wood
main bare absolute
‘What she ate was worm-wood.’ (NT 68.18) | |

The semantic patterns are sometimes easier to see with literal translations, e.g.

(240)a: ‘She gave [relation] the women calico by potlatching [manner of action] it to them’

(240)d: ‘She was consuming [relation] worm-wood by eating [manner of action] it’.⁶⁴

Instrumentals, locations, and other adjunct participants can be introduced into a sentence with a bare absolute construction (241). Note that here, unlike the construction in (240), the objects of the transitive predicates in (241)b-d are not co-referential. (The locative RP in (241)e *maḥti'ʔi* ‘the house’ is not an object, but rather an oblique in construction with *hiṭaqsuʔaṣḥ* ‘while there in front (of)’.)

- (241) MAKAH
- a. *ci'qci'qaqeyuṭ* *ʔuʔuk^widuk* *ʔisi'q'ʔawiq*
ciq-(y)a [RepR] = qeyu = aṭ *ʔu-(k^w)iduk [R]* *ʔisi'q'a-ʔak^w = °iq*
speak-REP=COND.3sg=3pl so.and.so-speak.with daylight-DUR=ART
main bare absolute
- hitaʔa'ciṭ*
hita-ʔa:ciṭ
empty.root-in.sky
‘... when they are speaking with the Daylight in the sky.’ (Whaling)
- b. *hidayupwa'd* *či'buqḥwaṭ*
hida-ayup = wa:da *čibuq-ḥwaṭ [L+S]*
empty.root-catch.PERF=QUOT.3sg halibut.hook-use
main bare absolute
‘He caught it with a halibut hook.’
- NUUCHAHNULTH
- c. *ʔi'či'ʔaṭma* *ʔu'ḥwṭ* *pu'*
ʔi-čiṭ = 'aṭ = ma' *ʔu-ḥwṭ [L]* *pu'*
shoot-PERF=TEMP=INDIC so.and.so-use gun
main bare absolute
‘He shot it with a gun.’
- d. *ʔu'ḥwinkck^wi* *ʔink^wiṭ* *pu'ʔakʔi* *ʔiyaṭqiʔa...*
ʔu-ḥwink^w [L]-ck^wi' *ʔink^w-(č)i:ṭ* *pu' = ʔak = ʔi* *ʔiyaṭ-qi'-. 'a'*
so.and.so-use-having...-ed fire-make gun=POSS=ART plume-on.top-on.rocks
main bare absolute
‘Plumed-Head (man’s name) had used his gun in making fire.’ (NA 405.35-36)
- e. *hiṭaqsuʔaṣḥʔaṭṭa'* *wāpiqšiš* *maḥti'ʔi...*
hiṭ-aqsu(ṭ)-'as-(q)ḥ = 'aṭ = ṭa: *wāpiq-šiš* *maḥti' = ʔi'*
there-at.mouth-on.ground-while=TEMP=again whoop-PERF house=ART
main bare absolute
‘They whooped again in front of the house.’ (NT 88.3)

Finally, nominals can function in main predicates followed by various types of verbal absolutes.

- (242) MAKAH
- a. *ʔuʃxuʔaxaʔičke* *ciqšičʔ*
ʔuʃ-u-(x)x = 'aʔ = 'ič = ke: *ciq-šičʔ*
 someone-APPEN-while=TEMP=IMPER.2pl=ADVISE speak-PERF
main **bare absolute**
 ‘Some one of you speak!’ (HW, Louse)
- NUUCHAHNULTH
- b. *ʔanaʔaʔ* *ʔunaʔk* *nuʔyək...*
ʔana = 'aʔ = (m)aʔ = aʔ *ʔu-naʔk^w* *nuʔ-yək^w*
 only=TEMP=INDIC=1sg so.and.so-have roll.hoop-thing.for
main **bare absolute**
 ‘I alone own the hoop-game.’ (NA 165.47)
- c. *ʔayaʔma* *hinaʔšičʔ* *ʔuʔuʔnimmas...*
ʔaya = 'aʔ = maʔ *hina-at-šičʔ* *ʔuʔ-nim [R+L]-maʔs.*
 many=TEMP=INDIC empty.root-arrive-PERF woman-try.to.obtain-moving.on.ground
main **bare absolute** **bare absolute**
 ‘Many now have come seeking a wife.’ (NT 100.16)
- d. *ʔawitweʔin* *ʔaʔanak* *ʔaʔk^waʔluk*
ʔawit = (m)it = weʔin *ʔaʔa-naʔk^w* *ʔaʔk^waʔ = uk*
 chief=PAST=QUOT child-have young.girl=POSS
main **bare absolute**
 ‘There was a chief who had as child a daughter.’ (NT 14.1)

This construction is not as obviously adverbial as earlier examples in this section, but is included here for completeness.

Nakayama (1997a: 115ff) can be consulted for more examples of the meanings expressed by bare absolute constructions in Nuuchahnulth.⁶⁵ Note, however, that he defines the construction semantically⁶⁶ rather than structurally as I have, and the two definitions do not pick out exactly the same set of exemplars, e.g. I consider (243) a bare complement construction (§4.6.2.1) rather than absolute adverbial (or serialization, in his terms) because the roles of the two predicates appear not to be permutable (§4.6.2):

- (243) NUUCHAHNULTH
- qiʔs* *waʔyuʔ*
qiʔ = s *waʔ-yuʔ*
 long.time=1sg go.home-having...-ed
 ‘For a long time I stayed home.’ (Ahousesht dialect; Nakayama 1997a: 199, ex. 177; I have modified his morpheme transcriptions and glosses for consistency with those in this dissertation)

Compare (243) with (251) below.

4.6.1.2 Mood-marked adverbial clauses

In addition to the bare absolute adverbials in §4.6.1.1, Southern Wakashan can form various types of mood-marked adverbial clauses with the Purposive, Conditional, and Subordinate moods. This section shows a sampling of the possibilities. More examples can be found in the discussion of the individual moods in Chapter 7.

(244) Purpose clause

a. NUUCHAHNULTH

hatha'nahtu?ič [R+L] = 'i'č [χuša'ʔake'ʔicu'
hahaḥ-tuλ-<t> [R+L] = 'i'č [χuš-(y)a' = ʔak = 'a: = ʔicu:
 naked-PERF-<PL>=IMPER.2pl [dry-CONT=POSS=PURP=2pl

yaya'q^w?ič]...
 [R+L]-yaaq^w-ʔič]
 PL-that.which-clothed.in]

'Undress so your clothes can dry.' (NA 444.26)

Conditional clause

b. MAKAH

[hidi'qeysi's *ta'la]* *bak^wa'ʔeyiks*
[hida-i' = qey = si:s *ta'la']* *bak^wa'ʔ = 'eyik = s*
 [empty.root-give.PERF=COND=2sg/1sg money] buy=FUT=INDIC.1sg

'If you give me money, I will buy it.'

c. NUUCHAHNULTH

...caqsa'pa'hitah *su'tiʔ*
caq-sa'p = 'a:h = (m)it = (m)a' = ah *sut-(č)iʔ [L]*
 on.end-CAUS.PERF=IRR=PAST=INDIC=1sg 2sg-do.to

[q^wamiḥsimtqu's]...
[q^wa-miḥsa = (m)it = qu: = s]
 [thus-want.to=PAST=COND=1sg]

'I would have set you on end, if I had wanted to do so.' (NT 88.26)

Causal clause

d. MAKAH

q^wisi'bits [ʔu'du'λ *wiʔibaχsi]*
q^wis-i' = (b)it = s [ʔu-a'du:λ *wiʔiba = χ = si:]*
 do.thus-APPEN=PAST=INDIC.1sg [so.and.so-because.of angry=SUBOR=1sg]

'I did it because I was angry.'

- e. NUUCHAHNULTH
ʃiːwɪnʔapət *kʷalsic* [*ʔani* *qayapanačqa*]...
ʃiːwɪn = 'ap = 'at *kʷalsic* [*ʔani* *qaya'-panač* [L] = *qa'*]
 laughing.stock=CAUS=PINV Kwalisits [SUBOR drift-move.about.at.random=SUBOR]
 'Kwalisits was laughed at because he was drifting about aimlessly.' (RW 77.16-17)

4.6.2 Complement constructions

Complement clauses fill a (semantic) argument slot of a higher complement-taking (CT) predicate head. It is unclear whether complement clauses have grammatical relations with matrix predicate heads (i.e. function as subjects or objects) as well, or are simply oblique constituents of some sort. Southern Wakashan has both bare absolute and mood-marked complement clauses.

The essential structural difference between a complement construction and an adverbial construction is that, in the former construction, the roles of the two clauses are not permutable, while, in the latter construction, they are. That is, only (245)a is grammatical; the complement-taking word *wik-*, *wiki* 'not' must be the initial, subject-marked, predicate head:

- (245) MAKAH
 a. *wikałits* *hisšił*
wik = 'ał = (b)it = s *his-šił*
 not=TEMP=PAST=INDIC.1sg strike-PERF
 'I did not chop it.'
 b. **hisšʔałits* *wiki*

However, when two clauses are in an adverbial relation, either may be the initial predicate:

- (246) MAKAH
 a. *hisšʔałits* *ʔuxuwaʔ* *hisi'yaksis*
his-šił = 'ał = (b)it = s *ʔu-xwaʔ* [L+S] *his-i'-yakʷ* = sis
 strike-PERF=TEMP=PAST=INDIC.1sg so.and.so-use strike-EPEN-thing.for=POSS.1sg
 'I chopped it with my axe'
 b. *ʔuxuwaʔałits* *hisšił* *hisi'yaksis*

(Note that (246)a is the unmarked construction; the variant in (246)b adds emphasis to the identity of the instrument: 'I chopped it with my *axe*'.)

- f. *wim'a'qλeʔic* *λuyač'iλ...*
wim'a'qλ = (m)a' = ʔic *λuʔ- 'ač'iλ*
 unable=INDIC=2sg good-INCEP
 'You cannot become pretty.' (NT 94.20)

Phasal roots, e.g. M *hiyu'*, N *haw'i hawi'λ* 'finish, stop ...-ing', *ʔač'iʔ-* 'persist in ...-ing'

(249)

- MAKAH
 a. *hiyu'ʔaλs* *basketi'ʔ*
hiyu' = 'aλ = s *basket-(k^w)i:ʔ*
 stop=TEMP=INDIC.1sg *basket-make*
 'I stopped making baskets.' (KH)
- NUUCHAHNULTH
 b. *haw'i'ʔaλ* *ʔiħak* *ħu'csmeʔi*
haw'i' = 'aλ *ʔiħ = ak^w* *ħu'csma = ʔi'*
 stop=TEMP cry=DUR woman=ART
 'The woman stopped crying.' (NT 60.22)

- c. ...*ʔač'iʔa* *wawa'* *ʔani* *q^wayač'i'kmatakqa*
ʔač'iʔ-(y)a' wa' *ʔani* *q^wayač'i:k-matak = qa'*
 persist-CONT say.DUR SUBOR wolf-probably=SUBOR

'He persisted in saying it (the sound they heard) was probably wolves.' (NA 396.36)

Phasal CT morphemes can impose aspectual requirements on lower predicate heads, e.g. complements to *haw'i'* and *ʔač'iʔa* must be imperfective. Complements of other classes of CT roots are apparently aspectually independent. Note that *ʔani q^wayač'i'kmatakqa* 'that it was probably wolves' in (249)b is a mood-marked complement clause (§4.6.2.2).

Psych-cognition roots, e.g. M *huʔtak^w*, N *huħtak^w* 'know how to', M *qapa'k^w*, N *ʔapa'k^w* 'willing to', M, N *pus-* 'tired of', M *tu'x-*, N *tuh-* 'afraid to'

(250)

- MAKAH
 a. *huʔtakš'ʔaλits* *babuyak*
huʔtak^w-š'iλ = 'aλ = (b)it = s *babuyak^w*
 know.how-PERF=TEMP=PAST=INDIC.1sg work
 'I learned how to work.' (IW)
- b. *pusaks* *wiwikiyuk*
pus-ak^w = s *wik-yuk [R]*
 tired-DUR=INDIC.1sg nothing-do
 'I'm tired of doing nothing.'

- NUUCHAHNULTH
- c. *huḥtakšiʔaλ* *maːmaːtiʔi* *kʰaːk* *waː*
huḥtak^w-šiλ = ʼaλ *maːmaːti = ʔiː* *kʰaːk* *waː*
know.how-PERF=TEMP bird=ART kaak say
‘The bird had learned to say “kaak”.’ (NT 60.3)
- d. ...*ʔapaːkin* *huṭiːta...*
ʔapaːk^w = (m)aː = ni *huṭ-iːta...*
willing=INDIC=1pl dance-...er
‘We are willing to be (her) dancers.’ (NT 124.2)
- e. *čur* *pusšiʔaλaḥ* *siqaːʔap* *haʔum...*
čur *pus-šiλ = ʼaλ = (m)aː = aḥ* *siq-(y)aː = ʼap* *haʔum...*
DISC tired-PERF=TEMP=INDIC=1sg cook-CONT=CAUS food...
‘Well, I am tired of cooking food.’ (NA 83.4)
- d. *tuḥuk^waλ* *wiːneʔi* *liːḥk^waʔiːḥšiλik...*
tuḥ-uk = ʼaλ *wiːna = ʔiː* *liːḥ-k^waʔiːḥ [L]-šiλ = (y)ik*
afraid-DUR=TEMP war.party=ART paddle-pursue-PERF=IRR.FUT
‘The war party was afraid to paddle after him.’ (NA 399.12)

Temporal roots, e.g. M, N *qiː* ‘for a long time’ or derived words with suffixes like M -*čeyaṭ*, N

-*čiːṭ* ‘for ... days’, M, N -*pit* ‘... times’

- (251) МАКАН
- a. *qiːʔališ* *ciːqciːq*
qiː = ʼaλ = iš *ciq-(y)a* [RepR]
long.time=TEMP=ASSER.3sg speak-REP
‘He/she is speaking for such a long time.’
- NUUCHAHNULTH
- b. *qiːʔalitčasiš* *weʔič...*
qiː = ʼaλ = (m)it = čaːsiš *weʔič*
long.time=TEMP=PAST=INFERI.1sg sleep
‘Evidently I have been a long time sleeping.’ (NT 40.24)
- c. *muːčiːṭaλ* *hiṭ* *nučiːʔi*
muː-čiːṭ = ʼaλ *hiṭ* *nučiː = ʔiː*
four-for.X.many.days=TEMP there mountain=ART
‘He was four days on the mountain.’ (NT 102.11)

4.6.2.2 Mood-marked complements

Mood-marked complements occur in either the Subordinate or the Conditional moods with the difference between them more or less corresponding to the difference between actual (or realis) and potential (or irrealis) modalities. In Nuuchahnulth, Subordinate complements are often introduced by the subordinate modal particle *ʔani* ‘that; because’, and Conditional complements by *ʔuyi*, in origin a derived word meaning ‘at so-and-so time’ but now essentially grammaticalized (in this construction, at least) as a temporal-conditional complementizer. Makah does not have *ʔani*. It is not known whether the Makah analogue of the Nuuchahnulth temporal-conditional complementizer (*ʔuyu*) occurs with Conditional complements, but it seems likely.

(252)

Subordinate mood complements

MAKAH

- a. *kabaʔap* *xadʔawičiq* *hididuxšiyikitqa*
kabat = ‘ap *xadʔak^w* = ‘ič = ‘iq *hida-idux-šil* = ‘eyik = ‘it = qa:
 known=CAUS girl=DIM=ART empty.root-look.for-PERF=FUT=PINV=SUBOR.3sg

*takyaʔyuʔwɕ**takyaʔyu* = ‘u:c

eldest.brother=POSS.3sg

‘The girl knew that she would be sought by her brother.’ (HW)

NUUCHAHNULTH

- b. ... *ʔuqʔaʔpaʔ* *ʔuq^wiʔukqa* *čakup*
ʔuqʔaʔp = ‘aʔ *ʔuq-‘iʔ = uk = qaʔ* *čakup*
 think=TEMP urinate-in.house=POSS=SUBOR man

‘She thought that her husband was wetting himself.’ (NT 23.1)

- c. *ʔiʔqʔuk^waʔsi* *ʔanis* *suk^wiʔaʔ* *nayʔaqʔi...*
ʔiʔqʔ = uk = ‘aʔ = siʔ *ʔani* = s *su-k^wiʔ* = ‘aʔ *nayʔaq-ak^w* = ʔiʔ
 tell-DUR=TEMP=1sg SUBOR=1sg hold-PERF=TEMP child-DUR=ART

‘I told them that I accepted the child.’ (NT 132.29)

- d. *ʔuʔcaʔtaksa* *hašičiʔ* *ʔani* *haʔwiʔatuk* *ʔumʔiʔqsak*
ʔuʔcaʔtaksa *hašičiʔ-‘i:čiʔ* *ʔani* *haʔa-‘iʔ* [L] = ‘at = uk *ʔumʔiʔqsu* = ʔak
 then know-INCEP SUBOR eat-get.PERF=PINV=POSS mother=POSS

k^watyat
k^watyat
 Kwatyat

‘Now then Kwatyat found out that his mother had been swallowed.’ (NT 35.3)

(253)

Conditional mood complements

MAKAH

- a. *wi^odačs* *wiki^oqey* *λu^otu^owi^oλ*
wi^odač = s *wik-i^o = qeyu* *λu^ot-u^owi^oλ*
 afraid=INDIC.1sg not-APPEN=COND.3sg well-INCEP

‘I am afraid he won’t get well.’ (HW)

NUUCHAHNULTH

- b. *íapatšiši^oλwe^oλin* *ħa^ok^wa^oλ^oλi* *wa^ošiši^oλa^oλqu^o...*
íapat-šiši^oλ = ‘a^oλ = we^oλin *ħa^ok^wa^oλ = λi^o* *wa^ot-šiši^oλ = ‘a^oλ = qu^o:*
 think-PERF=TEMP=QUOT girl=ART go.home-PERF=TEMP=COND

‘The girl decided she would go home.’ (NT 72.13)

- c. *tu^oħuk* *λuyi* *qa^oħsa^op^oatqu^o*
tu^oħ-uk *λu-yi* *qa^oħ-sa^op = ‘at = qu^o:*
 afraid-DUR so.and.so-at.X.time dead-CAUS.PERF=PINV=COND

‘They were afraid they might be killed.’ (based on NA 371.20)

- d. *wa^oλa^oλma* *λuyi* *ku^owitapqun*
wa^o = ‘a^oλ = ma^o *λu-yi* *ku^oħ^w-‘itap = qu^o: = n*
 say=TEMP=INDIC so.and.so-at.X.time open-on.ground.CAUS.PERF=COND=1pl

ma^oλasuk *λi^oλi^oħim...*
ma^oλas = uk *λi^oλi^oħim*
 house=POSS Jack.Simpson

‘It said we should open Jack Simpson’s house.’ (NA 267.9)

5 Topics in Word Structure

5.1 Formal structure

According to a traditional morphological classification of languages,⁶⁷ Southern Wakashan is a classic example of a language family with polysynthetic word structure. Though definitions vary, a major criterion for polysynthetic status in most accounts is a high average number of morphemes per word. An important corollary is that a significant portion of these must be “lexical”, rather than grammatical in nature; that is, they should have meanings typically expressed by independent lexical items in other languages. These morphemes might include incorporated nouns and adverbs, or semantically rich affixes like locative suffixes. Such features permit polysynthetic languages to have words with complex internal structure that often correspond semantically to entire sentences in less morphologically elaborate languages.⁶⁸ True to type, words in Southern Wakashan can be internally complex with numerous morphemes and multiple hierarchic levels of structure packed into a single derivative.⁶⁹

Southern Wakashan word structure can be described by the diagram in Figure 2, a more detailed version of Figure 1 given previously in Chapter 4.⁷⁰ The major structural division falls between the unextended word (base + suffixes) and the extended word level (unextended word + clitics). Important formal differences exist between the two. The sequence of clitics has template-like organization with a fixed number of slots, flat structure, strict requirements on linear order of

Figure 2. Word structure

base	core suffixes	aspect	peripheral suffixes	aspect	clitic sequence
unextended word					
expanded unextended word					
extended word					

elements, and other templatic characteristics described in Chapter 7. In contrast, there is no limit in principle to the number of suffixes that can be added to a base, and the order of suffixes can often be changed to produce changes in meaning, as demonstrated by the following example set from Swadesh (1939: 86):

- (254) NUUCHAHNULTH
 a. *ʔuyiːsckʷi*
ʔus-ˈiːs-ckʷi
 herring–consume–remains.of
 ‘left-overs from eating herring’
 b. *ʔusckʷiʔis*
ʔus-ckʷi-q-ˈiːs
 herring–remains.of–BFR–consume
 ‘eating left-overs of herring’

This open-ended “stacking” of suffixes creates layered structure rather than flat, slot-based structure with a fixed number of affix positions. The remainder of this section describes these formal aspects of unextended word structure further. Use of clitics has been briefly described in §4.3 and is more fully covered in Chapter 7.

An unextended word is formed by a base plus (core) lexical suffixes plus aspectual morphemes. (Expanded unextended words and the core/peripheral suffix distinction are discussed below.) Words can have aspectual value with no overt aspectual formative if their final morpheme (root or lexical suffix) has inherent aspectual force. Anticipating more detailed discussion of suffix types in §5.3, we find two basic types of lexical suffix: nuclear suffixes (nominalizing, verbalizing suffixes, etc.), which determine the word class of the resultant word (§5.4), and restrictive suffixes, which merely modify the meaning of the base without necessarily altering its word class (§5.5). From these definitions we derive two principles of Southern Wakashan word formation:

- i. The category of a nuclear suffix becomes the category of the resultant word.⁷¹
- ii. Restrictive suffixes do not necessarily determine the category of the resultant word.

Consider, for example, the Makah verb *qidi·λi·ks* ‘bringing a dog’ in (255)a and the noun *qidi·λtʔit* ‘big dog’ in (255)b.

- (255)
- a. ^{MAKAH}
*qidi·λi·ks**i·k* *ʔucačičiλ* *hida·qλasiq*
qidi·λ-i:ks = i = a:k *ʔu-ca-čičiλ* *hida- 'a·qλas = iq*
 dog-bring=INDIC.3sg=HAB so.and.so-go.to-PERF empty.root-in.woods=ART
 ‘He/she always goes to the woods with a dog.’
- b. *qidi·λtʔitwa·d*
qidi·λ-(k)tʔit = wa:da
 dog-big=QUOT.3sg
 ‘They say it is a big dog.’

Based on the principles in i. and ii., the two words could be represented in tree form, as in (256)a, or by labeled bracketing, as in (256)b (V = verb, N = noun).

- (256) a.
- V

N V

qidi·λ *-i:ks*

N

N V

qidi·λ *-(k)tʔit*
- b. [[*qidi·λ*]_N *-i:ks*]_V [*qidi·λ* *-(k)tʔit*]_N

The nuclear verbalizing suffix *-i:ks* ‘bringing, carrying...’ attached to the noun *qidi·λ* ‘dog’ produces a verb, while the restrictive suffix *-(k)tʔit* ‘big; very’ attached to the same noun leaves a noun. Attaching *-(k)tʔit* to a verb would likewise leave a verb: *haʔuk-tʔit* ‘eat a lot’ (*haʔuk* ‘eat’).

The number of lexical suffixes a level of hierarchical structure may contain depends on the type of suffix. One nuclear suffix may appear per level of word structure. Examples (257) and (258) show derived words containing a single nuclear suffix; (257)a and (258)a are nouns, and (257)b and (258)b-d are verbs.

- (257) MAKAH
- a. *čattu'p*
 čat-(k)tu'p
 paint-thing
 'paint, dye'
- b. *če?i'ks*
 ča-'i'ks
 water-consume
 'drinking water'
- (258) NUUCHAHNULTH
- a. *pačak*
 pa-čak^w
 give.gift.in.potlatch-thing.for
 'potlatch gift'
- b. *hunqsimč*
 hu'ni-q-simč [L]
 drift.whale-BFR-perform.ritual.for
 'performing a ritual for (bringing in) drift-whales'
- c. *na'yaqi't*
 na'yaq-(č)i:t
 baby-make
 'delivering (lit. making) a baby'
- d. *šimšyu'*
 šimš-yu'
 boil-having.been
 'boiled'

Addition of another nuclear suffix creates a new level of structure. Any number of nuclear suffixes may be so added, each creating a new word which may then serve as base for further derivation. This is essentially a restatement of Swadesh's (1939: 85) generalization that "[when] a series of [nuclear] suffixes are added to a [base], each successive suffix makes a new [word] which serves as the underlying [base] for the next suffix." The following rewrite rule captures this generalization:

$$(259) \quad \text{Word}_\alpha \rightarrow \text{Base} + \text{Nuc}_\alpha$$

(259) states that a word of category alpha (i.e. noun, verb, etc.) consists of a base of any category plus a nuclear suffix of category alpha (i.e. nominalizing, verbalizing, etc.). This rule is recursive; successive applications of it can add any number of nuclear suffixes, although more than three is rare in a given word. Multiple suffixes of the same category can be added in succession, or, as more frequently occurs, the category can change with each suffix.

The phrases and sentences in (260) and (261) each contain derived words with multiple nuclear suffixes. The word in question is repeated below the example's translation with labeled bracketing to show its constituent structure; buffer consonants (§5.2.2) and indications of CV template associations are omitted from the bracketed representations to facilitate readability. (Vroot = bound verb root, Nroot = bound noun root).

- (260) ^{MAKAH}
- a. *č'attupi'yikbe'qλxa's*
č'at-(k)tu'p-(k^w)i:t [L+S]-'ik-be:qλ = xa:s
 paint-thing-make-expert.at-want.to=INFER.3sg
 'Apparently she wants to be an expert at dyeing straw.'
- [[[[[č'at]_{V root}-(k)tu'p_N]_N-(k^w)i:t_V]_V-'ik_N]_N-be:qλ_V]_V
- verb: 'want to be an expert at dyeing straw'
- b. *wi'kaλs* *č'e?i'ksyaksis*
wik-(w)aλ [L]=s *č'a-'i'ks-yak^w=sis*
 not-find=INDIC.1sg water-consume-thing=POSS.1sg
 'I can't find my cup.'
- [[[č'a]_{Nroot}-'i'ks_V]_V-yak^w_N]_N
- noun: 'thing for consuming water'

The Nuuchahnulth verbalizing suffix *-(c)smaʔaqa* in (261)a actually consists of the verbalizing suffix *-(c)sma* 'defending ...' plus the restrictive plural suffix *-ʔaqa* (§5.5.4), but the combination may be treated as a single nuclear suffix for our purposes, since it is now more or less lexicalized to mean 'fighting over, competing in...' (as in *ciq-smaʔaqa* 'competing in oratory', *haw'a-csmaʔaqa* 'fighting to eat', etc.).

(261) NUUCHAHNULTH

- a. *ʔaḥ nuʔk ʔačaksmaʔaqaʔak*
ʔaḥ nuʔk ʔa-čak^w-(c)smaʔaqa-ʔak^w
 DEM song give.gift.in.potlatch-thing.for-fight.over-thing.for
 ‘this gift-scramble song’ (NA 57.27)

[[[[*ʔa*]_{V root}-*čak^w*]_N-(c)*smaʔaqa*]_V-*ʔak^w*]_N]

noun: ‘thing for (when) fighting over potlatch gifts’

- b. *ʔunaʔksiλaʔ naʔyaqiʔsimčʔak...*
ʔu-naʔk^w=siʔ=λa: *naʔyaq-(č)iʔsimč* [L]-*ʔak^w*
 so.and.so-have=1sg=also baby-make-do.ritual.for-thing.for
 ‘I also have a ritual for delivering babies.’ (NT 190.3)

[[[[*naʔyaq*]_{N root}-(č)*iʔ*]_V-*simč*]_V-*ʔak^w*]_N]

noun: ‘thing (i.e. ritual) for delivering babies’

- c. ...*wiʔcaʔkaʔhitqas*
wiʔcaʔk = ʔaḥ = (m)it = qaʔ = s
 hesitant=IRR=PAST=SUBOR=1sg

λimšyaʔisitaʔiλ *siʔhiʔ...*
λimš-yuʔ-q-ʔiʔs-iʔta-q-ʔiλ [L] *siʔh^w-(č)iʔ* [L]
 boil-having.been-BFR-consume-one.who-BFR-invite.PERF 2pl-do.to

‘... for I would have been hesitant about inviting you to come and eat boiled food.’
 (NT 198.25-26)

[[[[[[*λimš*]_{V root}-*yuʔ*]_V-*ʔiʔs*]_V-*iʔta*]_N-*ʔiλ*]_V]

verb: ‘invite sb to be an eater of boiled food’

Rule (259) builds left-branching words with each suffix on its own level of constituent structure. This is the minimum amount of structure necessary to account for what we may call (following Fortescue 1980 on West Greenlandic) the “global scope rule” evident in Southern Wakashan: a nuclear suffix is structurally and semantically superordinate to everything to its left within the word. As Fortescue (1980) argues for West Greenlandic, however, this simple branching structure will almost certainly need to be augmented to account for the many subregularities evident in the co-occurrence patterns of various suffixes with one another.

The largest classes of restrictive suffixes are the classes of path-orientation (§5.5.1) and locative suffixes (§5.5.2). (262) and (263) show examples of path (262)a, (263)a and locative suffixes (262)b-c, (263)b-d occurring singly in derived words.

- (262) MAKAH
- a. *ʔapxayilwa'd*
 ʔapx-a'yil = wa:da
 fly-move.into.building.PERF=QUOT.3sg
 ‘It flew into the house.’
- b. *xayaqʕasalaʔ*
 xaya-'a'qʕas = 'aʕ = °aʔ
 far-in.woods=TEMP=3pl
 ‘They were deep in the woods.’
- c. *wi'wiksta'la'skub*
 wik-(k)sta [LR] = 'aʕ = °a:škub
 not-at.legs=TEMP=MIR.3sg
 ‘Oh, he doesn't have pants on!’
- (263) NUUCHAHNULTH
- a. *hinusaʕa'*
 hina-wisa' = ʕa:
 empty.root-come.to.surface.of.water.PERF=again
 ‘Again he came to surface.’ (NT 84.13)
- b. *muhuʔ*
 mu-a'hu(ʔ)
 burn-in.front
 ‘Burned-Front’ (place name)
- c. *huʔapaʕin*
 huʔ-apa [L] = 'aʕ = (m)a' = ni
 dance-up.in.air=TEMP=INDIC=1pl
 ‘We were (clouds), dancing above.’ (NA 146.33)
- d. *čw'čiš'iaʕ*
 ču-ačiš' = 'aʕ
 face.down-on.ocean=TEMP
 ‘It lay face-downward on the water.’ (NT 154.8)

Unlike nuclear suffixes, multiple restrictive path-orientation and locative suffixes may occur on a single level of hierarchical structure. When more than one occurs on the same level, they are or-

dered according to the following hierarchy: path > locative site > locative locale. That is, if a path suffix is present, it comes first, followed by any locative site suffixes, followed by any locative locale suffixes. (The structural distinction between site and locale suffixes is discussed in §5.5.2; there are only four locale suffixes: M - 'a', N - 'a'ʔa 'on the rocks', M, N - 'as 'on the ground', M, N - 'iʔ 'in the house', M, N - 'is 'on the beach'.) Sequences of more than three restrictive suffixes have not been observed. Only one path and one locale suffix may occur per sequence. Ordering principles governing multiple site suffixes are discussed in Davidson (1999). See also Rose (1981: 336). The following examples show several Nuuchahnulth nouns with restrictive sequences.

(264)

NUUCHAHNULTH

a. *ħačatak ... ʔuħuʔas...**ħačatak ʔu-a'ħu'(ʔ)-a's...*

all board-in.front-on.horizontal.surface...

'Each had a board in front of him (on his canoe).' (NT 82.6)

[ʔu_{N root}-a'ħu'(ʔ)_{site}-a's_{site}]_N

restricted noun: 'board in front of one on a surface'

b. *ħicxmatapiʔakλak**ħicx-mat-api [L]-q-'akλi = ʔak*

spread.cloth-moving.about-up.in.air-at.rear=POSS

*tupkaʔi**tupk-(.ʔ)aʔ = ʔi*

black-on.fabric=ART

*ħita'kλiʔi**ħita-'akλi = ʔi*

empty.root-at.rear=ART

'Their black blankets flapped about their hips.' (based on NA 75.9-10)

[ħicx_{N root}-mat_{path}-api_{site}-'akλi_{site}]_N

restricted noun: 'spread cloth flapping about at one's rear'

c. *ʔucačiʔaλin**ʔu-ca-čil = 'aλ = (m)a' = ni*

so.and.so-go.to-PERF=TEMP=INDIC=1pl

*ma'ča's**ma-ača-'as*

house-at.vertical.surface-on.ground

'We went to House-at-Cliff (place name).'

[*ma*_N-*ałca*_{site}-*'as*_{locale}]_N

restricted noun: 'house at a vertical surface on the ground'

An important feature of restrictive sequences is that the entire sequence carries a single aspectual value. This is, in fact, one reason for analyzing the series of suffixes as being on the same level. Aspect is normally indicated by the last morpheme in an unextended word, whether by an aspect suffix, or by the aspectual value inherent in a word-final lexical suffix or root. In a word-final restrictive sequence, however, a path suffix can determine the aspectual value of the word, even though it may precede a locative suffix in the sequence that otherwise has a different value, e.g. the verbs in (265) and (266) are perfective because of the path suffix M, N *-k^wis-t-* 'move out, away (perf.)' despite the presence of the following imperfective locative site suffixes *-cu* 'in a container; in a bay' and *-'ahs* 'in a vessel'.

- (265) MAKAH
susk^wisća'λward
sus-k^wis-cu = 'aλ = wa:da
 swim-move.out.PERF-in.bay=TEMP=QUOT.3sg
 'He/she swam out of the bay.'

- (266) NUUCHAHNULTH
tuxk^wist'ahs?aλ
tux-k^wist-'ahs = 'aλ
 jump-move.out.PERF-in.vessel=TEMP
 'She jumped out of the canoe.' (based on NT 84.21)

Any number of nuclear suffixes and restrictive sequences may co-occur in a derived word. For example, the Nuuchahulth verb *?aλqimti'csaias* 'carry two round objects out of the woods' in (267) consists of the numeral root *?aλ-* 'two' plus the nuclear nominalizing suffix *-qimł* '... many round objects', forming the noun *?aλqimł* 'two round objects'. This in turn serves as base for the nuclear verbalizing suffix *-i:cs* 'bringing, carrying ...', forming the verb *?aλqimti'cs* 'carrying two round objects'. The word is then capped off by the restrictive sequence *-at-'as* 'move out of the woods on the ground', which, incidentally, is another example of a path suffix determining aspect despite a following locative suffix.

- (267) NUUCHAHNULTH
ʔaλqimti'csatʔaλqu' *titi'čaqyu*
ʔaλ-qimt-i:cs-at-'as = 'aλ = qu: *titi'čaqyu*
 two-X.many.round.objects-carry-move.out.of.woods.PERF-on.ground=TEMP=COND Titichakyo

ʔa'tuš
ʔa'tuš
 deer

‘Titichakyo would bring two deer out of the woods.’ (based on NT 86.13-14)

[[[[ʔaλ]_{NUM}-qim_N]_N-i:cs_V]_V-at_{path}-'as_{locale}]_V

verb: ‘carry two round objects out of the woods’

The lexical suffixes we have seen so far in this section are core lexical suffixes, which attach either to bound roots, to free roots, or to bases with suffixes. Another, much smaller, group of suffixes called peripheral suffixes attach only to bases that can also occur as words, i.e. free roots or bases with suffixes, not to bound roots.⁷² The nuclear verbalizing suffix M *-beyaql -be:ql*, N *-maʔi:ql* ‘want to ...’ is a peripheral suffix (the peripheral/core distinction cross-cuts the nuclear/restrictive distinction). As (268) shows, peripheral suffixes have their own aspectual value, or they can be followed by an aspect suffix, which can vary independently of the core unextended word’s aspect:

- (268) NUUCHAHNULTH
- a. *hitachinλmaʔi:qstuʔaλ* *ʔu'k'wił* *wa'ki'taʔuq...*
hita-çhi-nuλ-maʔi:qst-uλ = 'aλ *ʔu-(č)ił [L]* *wa'ki'taʔuq*
 empty.root-married.to-PERF-want.to-PERF=TEMP so.and.so-do.to Purple.Woman
 ‘He wanted to marry Purple-Woman’ (NA 410.52)
- b. *hitachimaʔi:qsuʔaλ*
hita-çhi-maʔi:qst-uλ = 'aλ
 empty.root-married.to-want.to-PERF=TEMP
 ‘He wanted to have her as wife.’

Addition of a peripheral suffix forms what we will call an “expanded unextended word”.

5.2 Roots

5.2.1 Bound roots

Roots make up about three-fourths of the underived lexicon, the rest consisting of suffixes and a few particles. Roughly half are bound roots, that is, roots that cannot function as words without a (core) lexical or aspect suffix. Bound roots are written with a hyphen when cited: M *qaḫ-*, N *qaḫ-* ‘dead’, M, N *ča-* ‘water’, M *xa-*, N *ha-* ‘complete, sufficient’, M *laʔwaq-*, N *his-* ‘blood, bleed’, M, N *tiq^w-* ‘sit’. Most correspond semantically to English verbs and adjectives, and most are monosyllabic, although there are disyllabic roots (e.g. M *liʔdaq-* ‘foggy’, N *ʔamaq-* ‘have sexual intercourse with’), and even a few trisyllabic members of the category (e.g. M *ʔayisaḫ-* ‘trick, deceive’).⁷³ The suffixes that a bound root occurs with to form derived words are dependent on the combinatory possibilities of that root and the communicative need of the moment. The following are a sample of the possibilities for M *tiq^w-* ‘sit’ and N *his-* ‘blood, bleed’.

Derived Makah words formed from *tiq^w-* with lexical suffixes

(nouns)

tiq^wačis ‘chair’ (*-ačis* ‘surface for ...’)

tiq^wwił ‘living room’ (*-uł^w* ‘place for ...’, *-ił* ‘in the house’)

(verbs with restrictive suffixes)

tiqiʔwadiqs ‘sitting alone in a canoe’ (*-wadi* ‘in the middle’, *-qs* ‘in a vessel’, epenthetic /i/))

tiqsiʔatiʔi ‘sitting at the door (*-(k)sʔatiʔi*)’ (with epenthetic /i/)

tiq^waʔs ‘sitting on a horizontal surface (*-aʔs*)’

tiq^wičit ‘sitting in water, a puddle (*-čita*)’ (with epenthetic /i/)

tiq^waʔsč ‘sitting on the roof (*-aʔsč*)’

Nuuchahnulth verbs formed from *his-* with aspect suffixes

Perfective *hisšil* ‘start bleeding, bleed’

Caus. Perf. *hissa'p* 'cause to bleed'

Continuative *hisa'* 'bleeding'

Derived Nuuchahnulth words formed from *his-* with lexical suffixes

(nouns)

hismis 'blood' (*-mis* 'collectivity of ...')

hi'ssit 'blood-colored, blood-laced liquid' (*-(c)sit*. [L] '... liquid')

(nouns with restrictive suffixes)

hihisčink 'blood on the calves of the legs (*-čink* [R])'

hihiyaqλwi 'blood under the fingernails' (*-'aqλ* 'inside', *-wi* [R] 'at nails, claws')

hisci'ł 'blood along the edge of a linear object (*-ci'ł*)'

hihi'shuk 'blood on the hands (*-huk* [R+L])'

hihi'ssut 'blood in the eyes, bloody-eyed (*-(c)su(ł)* [R+L])'

(verbs)

hisnaq 'fond of drinking (*-naq*) blood'

hisimyuλ 'get covered with blood' (*-(q)imyu:λ*, perf. of *-(q)imł* 'over a rounded surface')

hiyi's 'drink one's blood' (*-'i's* 'consuming ...')

An especially common bound root that deserves separate mention is M *hita-* *hida-*, N *hita-* *hina-* *hin-*, glossed "empty root" in examples. This root allows lexical suffixes to be used without a contentful base. Instead of N *łayak^wał* 'many absent' (< *łaya* 'many' + path-orientation suffix (§5.5.1) *-k^wał* 'absent'), M, N *qi·k^wał* 'absent for a long time' (< *qi* 'long time' + *-k^wał*), M, N *łuk^wał* 'so-and-so (is) absent' (< *łu-* + *-k^wał*), or some other derivative, the empty root can be used to form simple M, N *hitak^wał* 'absent'.

The empty root is limited to occurrence with verbalizing and restrictive path-orientation and locative suffixes, but fairly liberal with its selection of suffixes within these classes:

Empty root with verbalizing suffixes

(verbs)

M *hi·durɫ*, N *hi·nuɫ* ‘waiting for’ (M *-uɫ*, N *-uɫ* [L])M *hitacɣ*, N *hitacɣi* ‘married to’ (M *-cɣi*, N *-cɣi*)M *hitadak*, N *hitanak* ‘have’ (M *-da·kʷ*, N *-na·kʷ*)M *hi·dač*, N *hi·nač* ‘ask for’ (M, N *-č* [L])N *hina·ɣin* ‘deprive of’ (*-a·ɣin*)M *hididux* ‘look for, search for’ (*-idux*)M *hidi·*, N *hini·* ‘give’ (M, N *-i·*)M *hita·ʔap*, N *hitaʔap* ‘buy’ (M *-ʔa·ʔap*, N *-ʔa·ʔap*)**Empty root with path-orientation or locative suffixes**N *hi·nak^winʔiɫ* ‘(at) the head of the bed’ (*-ak^win*, *-iɫ*)M *hitaksaqɭ* ‘under one’s clothing’ (*-(k)saqɭ*)M *hitaʔa·ciɫ*, N *hina·yiɫ* ‘(in) the sky’ (M *-ʔa·ciɫ*, N *-a·yiɫ*)N *hi·ni·ɭa* ‘underneath, (at) the bottom, underneath part’ (*-i·ɭa*)M *hitaksitti·s*, N *hitacsuɥtis* ‘come out of the woods onto the beach’ (M *-(k)sitti*, N *-(c)suɥta*,
M, N *-is*)

The general rule for selection of the allomorphs is *hita-* occurs with consonant-initial and glottalizing/leniting suffixes while M *hida-*, N *hina-* occurs with vowel-initial suffixes. The Nuuchahnulth *hin-* allomorph occurs with either. Exceptions to the rule are not difficult to find though, e.g. M *hi·dač*, N *hi·nač* ‘ask for’ above.

5.2.2 Free roots

A root that can be used as an (unextended) word (e.g. M *qaʔawac*, N *qaʔuc* ‘pack-basket’) is called a free root. Most free roots are nouns. Other salient word classes among the free roots in-

clude the numerals (except ‘one’, which is a bound root), and some property words expressing dimensional and evaluative concepts like ‘big’, ‘wide’, ‘fat’, ‘thick’, ‘good’, and ‘bad’.⁷⁴

5.2.2.1 Combining forms and the buffer consonant

By definition, bound roots must occur with some suffix or suffixes to be used as a word. Although free roots may appear independently as words, they can, and often do, combine with suffixes as well. When they do so, they frequently undergo changes in form; many have special combining allomorphs when they combine with suffixes. These are reduced forms with shortened vowels, truncation of final segments, loss of formative suffixes and sometimes other changes relative to free forms, e.g. the Nuuchahnulth noun root *quʔ* ‘slave’ has a combining form with a shortened vowel, *quʔ-*. A given free root may have no combining form, or it may have several. If a root has a combining form or forms, these are cited preceding the free form, following Sapir & Swadesh’s citation practice in their (1939: 243-316) vocabulary list, e.g. N *quʔ-*, *quʔ* ‘slave’, M *babic-*, *baʔbiʔqsu* ‘elder sibling’. To conserve space, only the observed form, whether it is a free form or a combining form, is normally shown in morpheme-by-morpheme analyses and glosses.

- (269) a. **Free form of root**
- | | |
|------------|------------------|
| <i>quʔ</i> | <i>baʔbiʔqs</i> |
| <i>quʔ</i> | <i>baʔbiʔqsu</i> |
| slave | elder.sibling |
| ‘slave’ | ‘elder sibling’ |
- b. **Combining form of root**
- | | |
|---|------------------------------------|
| <i>quʔʔaʔsuʔaʔ</i> | <i>babaʔbicdukub</i> |
| <i>quʔ-</i> ‘ <i>aʔs</i> -(y) <i>uʔaʔ</i> | <i>babic-duk</i> [R+L]- <i>uba</i> |
| slave-in.vessel-perceive | elder.sibling-at.hands-thing |
| ‘see a slave in a vessel’ (NT 188.30) | ‘thumb’ |

If the final segment of a combining form or the free form of a free root is a vowel or, in Nuuchahnulth, a coda nasal, the voiceless uvular stop /q/ may intervene as a buffer consonant when the root functions as base, e.g. N *ʔixʷatin-q-inak* ‘perform an eagle dance’ (eagle-q-imitate.in.dance). Derived bases ending in vowels or coda nasals are also sometimes followed by

a buffer consonant: N *hurʔ-api-q-inak* ‘perform a dance representing the quivering of (heated) air’ (dance-up.in.air-q-imitate.in.dance). (However, bound roots (§5.2.1) as bases are never separated from suffixes by the buffer consonant.) A few exceptions have been noted thus far: the free Nuuchahnulth noun roots *minme:ks* ‘bank note’ and *ħartix* ‘root of a certain kind’ are listed by Sapir & Swadesh (1939: 265, 300) as occurring with /q/ even though they end in consonants.

The original function of the buffer consonant was perhaps to preserve the formal integrity of words in derivation by preventing fusion through vowel contraction or other phonological processes when additional suffixes are added. If so, it still serves this function today — as a rule, vowel-initial and glottalizing/leniting suffixes (§§3.3.2-3.3.3, §3.4.2) condition its appearance with appropriate bases. It is now partly morphologically conditioned, however, since it sometimes appears before consonant-initial suffixes, where no fusion would occur in any case, as in N *yašma-q-paʔ* ‘fur-seal season’ (hunt.fur.seal-q-season.of), M *ʔatkseʔi-q-čič* ‘using wood as fuel’ (wood-q-use.as.fuel). If a morpheme ever occurs with the buffer consonant in derivation, this is indicated by Sapir and Swadesh in its citation form, e.g. N *čixʷatin(-q-)* ‘eagle’, N, M *-api(-q-)* [L] ‘up in the air, erect’. Note, however, that some vowel- and nasal-final free roots do not seem to occur with the buffer consonant (e.g. N *iana* ‘child’), which is why its occurrence must be noted for the roots and suffixes it has been recorded with.

5.2.2.2 Free root types

The majority of free roots belong to one of two morphological types, simple roots and composite roots.⁷⁵

Simple roots

Simple roots include M, N *weʔič* ‘(to) sleep’, M *čukudabi*; N *čukna(-q-)* ‘wren’, and M, N *χupač* ‘root’. A subtype consists of roots that contain one or more frozen lexical suffixes. For example, the Makah noun *qataʔaxs* ‘chamber pot’ contains the locative suffix -ʔaxs ‘in a ves-

sel’ on the otherwise unattested element *qat-*. Similarly, the Nuuchahnulth verb *ʔučaḥs* ‘taking a share of what one’s neighbor has got in hunting, fishing’ has the locative suffix *-’aḥs* ‘in a vessel’ on the initial cranberry element *ʔuc-*.

The initial cranberry element in a such a root is no longer used productively, but comparison with related languages sometimes gives hints about their original meanings. For example, the Nuuchahnulth verb *ʔič’api* ‘lifted up’, which consists of initial *ʔič’a-* plus *-api* [L] ‘up in the air; erect’, may (etymologically) contain a root PW **ʔik*, still attested in Kwakwala: *ʔik* ‘above’ (from Boas 1947: 224 with regularized orthography). Correspondences between Makah and Nuuchahnulth forms are often enlightening in this regard. Makah *huktup* ‘bird’ is composed of the nominalizing suffix *-(k)tup* ‘... thing, ... species’ plus cranberry element *hu-*, the original meaning of which is suggested by Nuuchahnulth *hu-* ‘flying in a flock’. Similarly, the Makah place name *tukw’dit*, glossed ‘sea lion’ in the Makah Traditional Cultural Property Study (Makah Cultural and Research Center 1989: 2), refers to Ringbolt Rock, a sea rock located off Tatoosh Island. It can be morphologically analyzed as *tuk-* + *u* epenthetic + *-dit* ‘stocked with ...’. The regular Makah word for ‘sea lion’ is *hakwa’diš*, but Nuuchahnulth *tuk-* ‘sea lion’ explains the traditional gloss. Jacobsen (1979c: 776-77) cites other examples in which the initial element in a cranberry root in one of the languages is a productive root in the other, e.g. the Makah noun *λata’wač’ak^w* ‘(a) paddle’ consists of the nominalizing suffix *-č’ak^w* ‘thing for ...’ on the cranberry element *λata’wa-* or, minus the epenthetic vowel, *λatwa-*, which is transparently related to Nuuchahnulth *λatw’a-* ‘paddling steadily’.

There is also a small category of irregular simple roots, which consists of roots with irregular combining forms, that is, combining forms that are not derivable from their free forms by any of the normal means (such as vowel shortening), e.g. M *qilč-*, *qidi’λ*, N *ʔilč-*, *ʔini’λ* ‘dog’, M, N *čapx^{w-}*, *čakup* ‘male, husband’.

Composite roots

Composite roots consist of an initial radical element plus a semantically empty formative suffix that “completes” it and allows it to appear as an independent word. Following Sapir & Swadesh (1939), full citation form for a root in this category lists the initial radical element first along with indication of its co-occurrence with the buffer consonant *-q-*, if applicable. This is followed by the free form of the root, i.e. the root with its formative suffix:

(270) M, N *ʁuč-*, M *ʁuča'ba*, N *ʁučim* ‘large mussel sp.’ (suffix M - *'a'ba*, N - *'im*)

M, N *pic-*, *picup* ‘inner cedar bark’ (suffix M, N - *'up*)

M *qič-*, *qiči'da*, N *qič-*, *qičin* ‘louse’ (suffix M - *i'da*, N - *in*)

M *sax-*, *saxa'ʔap*, N *sah-*, *sahas* ‘picking cedar bark’ (suffix M - *'ap*, N - *as*)

N *tačku-q-*, *tačkumc* ‘sardines’ (suffix N - *ma'c*)

M *waʔaq-*, *waʔaqap* ‘perch sp.’ (suffix M - *ap*)

Some formative suffixes occur with many roots (e.g. M -*i'da*, N -*in* in *qiči'da*, *qičin* above, M -*a'bac*, N -*ma'c*), while others are cranberry suffixes, appearing with a single root (e.g. N -*a'k* in *yaħa'k* ‘salmon weir’). When combined with ordinary lexical suffixes, these roots sometimes appear with their formative suffix and sometimes without it (see below).

Kin terms are a special class of composite roots. The free form of most kin terms ends with the kin suffix M, N -(.)*i'qsu*, e.g. M, N *ʔa'si'qsu* ‘niece, nephew’, M *ʔukwe'ʔiqsu* ‘step-parent, step-child’. Combining forms feature several changes relative to free forms: long vowels are generally shortened, the kin suffix is dropped, and a formative element *-c* is added, a rare case of material being added in a combining form. The combining forms of the above cited roots are M, N *ʔa'sic-*, M *ʔukwac-*. Words with Makah *ʔukwac-*, *ʔukwe'ʔiqsu* ‘step-parent, step-child’ are shown in (271).

- (271) MAKAH
- a. **free form of kin term**
ʔukweʔiqsʊsis
ʔukweʔiqsʊ = sis
 step.parent=POSS.1sg
 ‘my step-parent’
- b. **combining form of kin term**
ʔukwacdakits
ʔukwac-daʔk^w = (b)it = s
 step.parent-have=PAST=INDIC.1sg
 ‘I had a step-parent’

Note that Makah appended vowels (§3.4.4) are treated as formative suffixes for purposes of lexical representation: *quʔ-*, *quʔuʔ* ‘slave’, *wik-*, *wikiʔ* ‘not, nothing’.

5.2.2.3 Use of combining forms

Although a free root may have a combining form, it may or may not appear in this form with a given lexical suffix. At this point there appears to be no general rule that will predict which form, free or combining, a root will take with different suffixes. As Rose (1981: 288) observes: “The morphology of base-affix linking is complex and idiosyncratic.” Some suffixes occur only with the free forms of roots, others only with combining forms. Some occur with the free forms of some roots and the combining forms of others. Still others can occur with either the free form or the combining form of the same root. In this case there may be a difference in meaning between the derivative based on the free form and the derivative based on the combining form. As the following Nuuchahnulth examples with the composite roots M, N *ʔuʔ-*, M *ʔuʔaʔba*, N *ʔuʔim* ‘large mussel sp.’ and M *tuʔ-*, *tuʔuʔida*, N *tuʔ-*, *tuʔiti* ‘head’ show, the derivative based on the free form (i.e. the root with its formative suffix) has the more compositional meaning, while the derivative based on the combining form (i.e. the initial radical element alone) has a more specialized, idiosyncratic meaning.

(272) NUUCHAHNULTH

a. **Derivative based on free form of root***ʔučimck^{wi}**ʔučim-ck^{wi}*

mussel-remains.of

‘discarded mussel shell’ (< ‘remains of a mussel’)

b. **Derivative based on combining form of root***ʔučck^{wi}**ʔuč-ck^{wi}*

mussel-remains.of

‘mussel shell for use in making a knife’ (Swadesh 1933: 62)

(273) NUUCHAHNULTH

a. **Derivative based on free form of root***ʔuħčitick^{wi}**ʔuħčiti-ck^{wi}*

head-remains.of

‘remains of a head (of a baby that had died in the womb)’ (NT 192.4)

b. **Derivative based on combining form of root***ʔuħck^{wi}**ʔuħ^w-ck^{wi}*

head-remains.of

‘severed head’ (NA 378.17, 441.9, etc.)

Perhaps more frequently there is no discernable difference in meaning between the two:

(274) NUUCHAHNULTH

a. **Derivative based on free form of root***hax^winmacapuł**hax^winmac-(q)apuł*

wren-impersonate

‘impersonate a wren’

b. **Derivative based on combining form of root***hax^witqapuł**hax^wit-q-(q)apuł*

wren-BFR-impersonate

‘impersonate a wren’ (Swadesh 1933: 62)

A few further examples of differences in meaning between the free forms and combining forms of roots can be found in §6.4, ex. (334).

5.3 Classification of suffixes

The 500 or so suffixes can be grouped into a number of categories on the basis of common semantic features and shared grammatical behavior. The broadest classification divides them into three groups.

1. Formative suffixes, e.g. M *-i:da*, N *-in*, M *-ćida*, N *-ćiti*
2. Aspect suffixes, e.g. M, N *-ak^w -uk* durative imperfective, M, N *-šič* perfective
3. Lexical suffixes, e.g. N *-mít* ‘son of ...’, M *-eyax*, N *-iyaqḥ* [R] ‘singing ... song’

Formative suffixes are semantically empty suffixes that create the free forms of composite free roots. Most formative suffixes are used with noun roots. For example, the Nuuchahnulth noun roots *ćix^wat-* ‘eagle’ and *ʔayux^wa-* ‘cod-fish decoy’ appear as words with the formative suffix *-in*: *ćix^watin*, *ʔayux^win*. There are at least two dozen of these formative suffixes. They are discussed in more detail above in §5.2.2.

The dozen or so aspect suffixes make up part of the aspect system, a central grammatical category in Southern Wakashan. Aspect is described in Chapter 6.

By far the majority of suffixes are lexical suffixes. Lexical suffixes are a Northwest Coast areal phenomenon that also appears in Salish languages, and Quileute.⁷⁶ They earned this name because they have meanings more typical cross-linguistically of open-class lexical morphemes than closed-class grammatical morphemes. They express a wide range of concepts, and researchers on languages that have them have proposed various semantic classification schemes. Boas (1947: 236-7) expresses reservations about classifications of this sort on the grounds they impose categories of the researchers’ languages on the languages of study, but concludes in the end that they are harmless and descriptively useful as long as it is clear that they make no claim to represent native classifications.

His worries about imposition of external categories on the object language are clearly well-founded, and even today this is a common pitfall of comparative semantic research. Lucy (1994: 624) describes such research as follows:

Lexical items are grouped together [in analyses of this sort] and analyzed as a coherent set not because speakers of those languages group them together in a set as revealed, for example, by common grammatical treatment, but because the analyst so groups them. And meanings are assigned not on the basis of close examination of actual usage, but on the basis of rough functional equivalence with forms in our own language. Thus an external framework is imposed on the language in place of a framework deriving from its native logic.

Conclusions from these studies are likely to reveal more about the external framework than about the language under analysis.

Fortunately, we need not content ourselves with a classification of lexical suffixes in Southern Wakashan that is descriptively useful, but ultimately of little value in understanding how the languages works. We can make use of language internal criteria, both semantic and formal, to classify the suffixes following “native logic”. Given the importance of the suffixes in the grammar, this is, in fact, an essential task. As we know, however, “all grammars leak”, so there is no reason to expect every suffix to fit neatly into our classification scheme, whether its logic is native or external. By and large, suffixes do fall fairly clearly into one category or another, but a few belong to more than one category, and we are left with the inevitable residue of suffixes that are difficult to classify.

Use of language internal criteria can be demonstrated by considering the status of two ostensibly similar Nuuchahnulth suffixes, *-č̣i* ‘at, in ...’ and *-č̣u* ‘in a container’. At first glance, one might think to group these together as “locative” suffixes. However, closer study of their semantic relationship with bases and their effect on the grammatical category of the resultant word shows that, according to Nootkan logic, they actually belong to different categories. Consider (275), which shows each suffix with the simple noun root *qaʔuɕ* ‘pack-basket’ as base.

- (275) a. *qaʔuˈcč̣i*
qaʔuˈc-č̣i
 pack.basket-in
 ‘in a pack-basket’
 *‘pack-basket (that is) in sth’
- b. *qaʔuˈcč̣u*
qaʔuˈc-č̣u
 pack.basket-in.container
 ‘pack-basket (that is) in a container’
 *‘in a pack-basket’

The addition of the suffix *-č̣i* ‘in ...’ to the noun in (275)a changes the word class of the resultant word to a locational verb: noun *qaʔuˈc* ‘pack-basket’ → verb *qaʔuˈcč̣i* ‘in a pack-basket’, e.g.

- (276) NUUCHAHNULTH
qaʔuˈcč̣aʔma *haʔumʔi*
qaʔuˈc-č̣i = ʔaʔ = maʔ *haʔum = ʔiʔ*
 pack.basket-in=TEMP=INDIC food=ART
 ‘The food is in a pack-basket.’

The base, which is here only a noun root, provides more precise specification of the meaning of the suffix — it fills out or completes its meaning just as the object NP does for the English preposition.

The word in (275)b demonstrates an entirely different grammatical relationship between suffix and base. Unlike *-č̣i*, the suffix *-č̣u* ‘in a container’ does not determine the class of the resultant word, which remains a noun; it adds information about the base and limits or restricts its denotation, much as an adjective or relative clause limits the denotation of an English noun: the word’s potential referent is not only a pack-basket, but a pack-basket that is in a container. The noun *qaʔuˈcč̣u* ‘pack-basket in a container’ functions like any other noun. Example (277) shows it as nominal predicate head in a main clause:

- (277) NUUCHAHNULTH
qaʔuˈcč̣aʔma *niˈsaˈkʔi*
qaʔuˈc-č̣u = ʔaʔ = maʔ *niˈsaˈkʔ = ʔiʔ*
 pack.basket-in.container=TEMP=INDIC sack=ART
 a. ‘There is a pack-basket in the sack.’
 b. ‘The sack has a pack-basket in it.’
 c. ‘He/she/they have a pack-basket in the sack.’

The source of the multiple meanings is described in §4.4.3.2. If the predicate is atransitive (§4.4.3.1), the clause has the existential reading in (277)a, and the RP *niˈsaˈkʔi* ‘the sack’ is a

locative oblique expanding the reference of *-ću'*. If the subject is personal, the sentence can mean either (277)b or (277)c depending on the subject reference: if *ni'sa'kʔi* is interpreted as the subject, (277)b is the appropriate translation; if it is interpreted as an oblique locative, (277)c is the appropriate translation. The word might also occur as predicate head in a referring phrase (RP):

- (278) NUUCHAHNULTH
wi·kaλṣ̌iʔaλah [L]–ṣ̌iλ = 'aλ = (m)a' = aḥ [ni'sa'kʔi qaʔwcc̣u]
 not–find–PERF=TEMP=INDIC=1sg [ni'sa'kʷ = ʔi qaʔwc–ću']
 [sack=ART pack.basket–in.container]
 referring phrase
 'I could not find [the sack with a pack-basket in it].'

This use is related to the possessive-existential meaning in (277)b. The RP literally means something like 'the sack having a pack-basket in it'.

I refer to suffixes of the *-ći* type as nuclear suffixes. Suffixes like *-ću'* are restrictive suffixes.⁷⁷ The essential difference between the nuclear and restrictive types is that a nuclear suffix determines the class of the resultant word, while a restrictive suffix simply modifies the meaning of its base without fundamentally altering its semantic category or word class. This can be also expressed in terms of headedness: a nuclear suffix becomes the head of the resultant word, while the base remains the head when a restrictive suffix is added.⁷⁸ There are also the morphological differences between the two types described in §5.1.

The Nuuchahnulth examples in (279) (from Swadesh 1948b: 62) provide further illustration of the nuclear/restrictive distinction. Compare the word class and denotation of the words in (279)a and (279)c with that of the word in (279)b.

- (279) NUUCHAHNULTH
 a. **Undersived**
ćapacma
ćapac = ma'
 canoe=INDIC
 'It is a canoe.'
 noun: *ćapac* 'canoe'

b. **Word with nuclear suffix**

č̣apacuʔaʔma
č̣apac-(y)uʔaʔ = ma'
 canoe-perceive.PERF=INDIC

‘He sees a canoe.’

verb: *č̣apacuʔaʔ* ‘see a canoe’

c. **Word with restrictive suffix**

č̣apacaqma
č̣apac-(q)aq = ma'
 canoe-big=INDIC

‘It is a large canoe.’

noun: *č̣apacaq* ‘large canoe’

The underived word in (279)a, *č̣apac* ‘canoe’, and the derived word with the restrictive suffix in (279)c, *č̣apacaq* ‘large canoe’, are both nouns and refer to the same entity: addition of the restrictive suffix *-(q)aq* ‘very; big’ (this time a degree suffix rather than a locative suffix) has not changed the word class or reference of the resultant word. Addition of the verbalizing suffix *-(y)uʔaʔ* ‘perceive ... (perf.)’ in (279)b, on the other hand, changes the category from noun to verb, and fundamentally alters the relation of subject to predicate.

Boas’s (1947: 237) objection to this classification scheme runs as follows. (The original quote is rather oddly phrased. I have taken the liberty of including Nakayama’s 1997a: 49 clarificatory emendations in brackets):

We cannot accept the classification of “formative” suffixes in two groups: “governing” and “restrictive” suffixes which are not based on internal evidence, but rather on our European classifications ... For instance [the morphological complex] “to see a canoe” which [includes a lexical suffix expressing the notion of “to see” that] would fall under the heading of “governing suffixes” may as well be conceived as “to perform an action relating to a canoe by seeing” in which case [the lexical suffix expressing] “to see” would be a restrictive element ... It is impossible to decide how these combinations may be felt by native speakers. Formally the governing and restrictive groups are identical.

His point concerning Eurocentric approaches to grammar is well taken, as I have said. In this case though, *contra* Boas, the nuclear/restriction distinction is not a product of “European classifications”. The distinction is real and fundamental to Nuuchahnulth word formation. We see better

why his charge is unwarranted if we break it down into three subparts and address them individually. Each makes a slightly differently claim:

1. There is no language internal evidence for the distinction;
2. There is no formal evidence of the distinction;
3. Classifications of individual suffixes as governing [nuclear] or restrictive are artifacts of translation, as purportedly shown by the ‘see a canoe’ example.

All three of these points can be shown to be false.

The first and second claims are contradicted by patterns like those I presented above, which show systematic differences in the grammatical and semantic relationships between the two types of suffixes and their bases. These are certainly language internal and formal (since determination of word class is based on distributional evidence) — nuclear suffixes have the power to determine the class of the resultant word, while restrictive suffixes normally do not. Chapter 8 discusses the criteria for defining word classes.

As for the third claim, Boas fails to show that the distinction is an artifact of translation because the revised translation of ‘see a canoe’ he proposes to demonstrate this is nothing more than a convoluted restatement of the original translation. His revision still contains a verb phrase, namely ‘to perform an action relating to ... by seeing’. Hence, the suffix with this translation would still produce a verb rather than a noun, which is precisely what is predicted. Further, the fact that ‘see’ is restrictive in the new translation is irrelevant since it does not modify the right word. If the suffix were restrictive in the present sense, it would modify the base ‘canoe’ and produce a noun denoting something about a canoe that sees or is seen. Instead, the phrase ‘by seeing’ is an adverbial phrase that modifies the participle construction ‘relating to ...’, which itself modifies the word ‘action’ in the verb phrase ‘perform an action’. As Swadesh (1948b: 62) himself points out:

Boas says that ‘to see a canoe’ ... may as well be conceived as ‘to perform an action relating to a canoe by seeing.’ But, since the stem alone means ‘canoe,’ this translation includes for the meaning of the suffix ‘by seeing to perform an action relating to’ — which leaves the problem exactly as before ... It is no mere trick of English translation but an inescapable fact that the relation of subject and stem remains the same in [(279)a and (279)c] but is radically changed in [(279)b].

Ironically, Boas’ pessimism about gaining insight into native classification leads him to a wholly translation-based descriptive categorization of suffixes in Kwakwala that is not so far from the structurally-based scheme adopted for Southern Wakashan in this dissertation (see especially Boas 1947: 237-46). He divides Kwakwala suffixes into 19 categories (some of which contain only one or two suffixes) with labels like “general locatives”, “special locatives”, “nominal suffixes”, “verbal suffixes”, etc. Based on examples of suffixes he offers from various categories, it seems likely that at least the locative suffixes and nominal/verbal suffixes (and perhaps suffixes of the other classes) fall into behaviorally distinguishable super categories comparable to the Southern Wakashan restrictive and nuclear classes.

I present a provisional summary classification of the various Southern Wakashan nuclear and restrictive subcategories below. Complete suffix lists can be found in Appendix A. For the most part these categories have distinct formal properties, which provides some justification for claiming they are reflective of native classification. However, the semantic subdivision of restrictive locative suffixes in Appendix A (after Rose 1981: 359-61) is simply a convenience to show the reader the range of meanings expressed by them and is not based on language-internal or formal criteria.

The proposed classification is not intended as a Procrustean scheme into which all suffixes must neatly fit. Some fall into more than one category. For example, a handful of suffixes are sometimes used as restrictive locative suffixes and other times as nuclear verbalizing suffixes (e.g. N *-ciʔ* ‘(restrictive) on the edge; (nuclear verbalizing) on the ... edge’). These are generally listed only once in Appendix A, under the category that seems most characteristic.

Nuclear suffixes §5.4

- Verbalizing suffixes §5.4.1 (e.g. N, M - *'iλ* [L] ‘get, go for, invite ... (perf.)’)
- Nominalizing suffixes §5.4.2 (e.g. N, M - *'aqsup* ‘woman of ... tribe’)
- Quantifier suffixes §5.4.3 (e.g. N, M - *'i'q^w* ‘... score’)
- Temporal suffixes §5.4.4 (e.g. N - *yi*, M - *yu* ‘at ... time’)

Restrictive suffixes §5.5

- Path-orientation suffixes §5.5.1 (e.g. N - *ʔa'ʔatu*, M - *'aḡatu* ‘move down (perf.)’)
- Locative suffixes §5.5.2 (e.g. N, M - *(q)u(ḡ)* ‘on the face’)
- Degree suffixes §5.5.3 (e.g. N - *ckin*, M - *ckida* ‘slightly’)
- Plural formations (including suffixes, infixes, and reduplication) §5.5.4

There are also a number of miscellaneous restrictive suffixes and a few miscellaneous or difficult to classify general suffixes listed in Appendix A.

5.4 Nuclear suffixes

5.4.1 Verbalizing suffixes

Verbalizing suffixes fall into roughly two groups, one creating verbs expressing actions or activities undertaken by their S/A argument, and the other creating verbs expressing a state, quality, or condition, defined, as Swadesh (1933: 65) says, “with the aid of the underlying [base]”. We refer to these types as verbalizing “action” and verbalizing “state” suffixes, respectively.⁷⁹

Verbalizing action suffixes generally denote more abstract or superordinate types of actions than verb roots. For instance, some verbalizing action suffixes denote a generalized type of action like ‘consume’, whereas verb roots in the same semantic domain express a specific subtype of that action like ‘eat’ and ‘drink’. Consider these Nuuchahnulth examples:

(280)	NUUCHAHNULTH Suffix – action hypernym -’i’s ‘consuming ...’	Root – action hyponym <i>hawá-</i> ‘eat’ <i>naq-</i> ‘drink’
	-(y)uʔaʔ ‘perceive ... (perf.)’	<i>nač-</i> ‘look, see’ <i>naʔa’</i> ‘hear, understand, perceive’
	-ca- ‘go to ...’	<i>yac-</i> ‘walk, step, go’ <i>kamitq^w</i> - ‘run’ <i>mat-</i> ‘fly’ <i>sus-</i> ‘swim’
	-a’ta ‘directing action, blows at ...’	<i>his-</i> ‘hit with beating instrument’ <i>ʔupk-</i> ‘hit with beak, peck’ <i>ʔaph-</i> ‘slam broad object against’ <i>cuq^w</i> - ‘punch’ <i>cux^w</i> - ‘stab’

Eating and drinking are kinds of consuming, or, put differently, specific manners of action that effect the more general action of consuming. In the same way, seeing and hearing are ways of perceiving, and hitting, slapping, pecking, punching, etc. are all ways of directing blows. Even in cases where translations do not make the contrast apparent, there are usually subtle differences in usage between roots and suffixes with similar meanings, e.g. the free verb root N *nunu’k*, M *dudu’k* ‘singing’ denotes the activity of singing per se, while the suffix N *-iyaqḥ*, M *-eyaḥ* [R] ‘singing ... song’ denotes the performance of a particular song denoted by the base. See §4.6.1.1 for examples of how these general-action verbalizing suffixes are used in conjunction with manner roots in discourse.

Despite the tendency of verbalizing action suffixes to denote more generalized types of action, there is also a set of verbalizing suffixes with surprisingly specific meanings relating to ritual or ceremonial activities, e.g. N *-’ayimč* ‘doing ritual for ... weather’, N *-ʔarmač* [L] ‘signifying, auguring, casting a spell for ...’, N *-simč*, M *-subač* [L] ‘doing ritual for ...’, N *-cawinyuk* [L] ‘doing (esp. give a potlatch) on account of, in honor of ...’, N *-’intł*, M *-’iditł* [L] ‘giving a feast of ...’, N *-si’ḥʔi:* ‘go to ... on a gift visit’, N *-tu’ḥta* [L] ‘giving a potlatch or ceremony in honor of ...’. Sapir (1912, reprint 1949: 99-100, 1916, reprint 1949: 444) famously cites the exis-

tence of such suffixes as evidence for the importance and antiquity of these ritual activities, particularly those having to do with the potlatch, in Nootkan culture.

Examples of verbalizing action suffixes

(281) N -(č)i:ʔ [sometimes L], M -(kʷ)i:ʔ [sometimes L+S] ‘making ...’

NUUCHAHNULTH

a. *čiʔhatiʔšišiʔaʔʔaʔ*

čihət-(č)i:ʔ [L]-šiš = ʔaʔ = ʔaʔ:

arrow-make-PERF=TEMP=again

‘They again start making arrows.’ (NA 15.43)

b. *ʔuʔhʷinkckʷi*

ʔinkʷiʔ

puʔakʔi

ʔiyaʔqiʔa...

ʔu-hʷinkʷ [L]-ckʷiʔ

ʔinkʷ-(č)i:ʔ

puʔ = ʔak = ʔiʔ

ʔiyaʔ-qiʔ-ʔaʔ

so.and.so-use-having...-ed

fire-make

gun=POSS=ART

plume-on.top-on.rocks

‘Plumed-Head (man’s name) had used his gun in making fire.’ (NA 405.35-36)

c. *kʷisiʔyisaʔaʔ*

maʔhʷiqiʔšišičip...

kʷis-ciʔ-isaʔaʔ

maʔhʷi-q-(č)i:ʔ [L]-šiš-čip

different-on.the.X.edge-on.beach.CAUS.PERF

house-BFR-make-PERF-BEN

‘He took her to the other end of the beach and built her a house.’ (NA 161.8)

MAKAH

d. *ʔaxaʔʔaʔxšʔaʔ*

ʔaʔuʔ

čixatiʔ

ʔax-(y)a [RepR]-šiš = ʔaʔ

ʔaʔuʔ

čixat-(kʷ)i:ʔ

adze-REP-PERF=TEMP

again

arrow-make

‘He began adzing again, making arrows.’ (MP, Qweti and his Mother)

e. *ʔaʔdakʷiʔčʔi*

ʔadaʔkʷ-(kʷ)i:ʔ [L+S] = čʔi

fire-make=GoIMPER.2sg

‘You go build a fire!’ (HI)

f. *kakwaʔšʔaʔ*

basketiʔiq

kakwaʔ-šiš = ʔaʔ

basket-(kʷ)i:ʔ = ʔiq

lost-PERF=TEMP

basket-make=ART

‘The (skill of) basket-making is lost now.’ (KH)

(282) N - ʔayimč [L] ‘presaging, forecasting, doing ritual for ... weather’

NUUCHAHNULTH

a. *ʔuʔpʔayimč*

ʔup-ʔayimč [L]

calm-presage.X.weather

‘presaging calm weather’

- f. *tup̄a'yix̄a'λitward*
tup̄aṭ-'i'x̄a = 'aλ = (b)it = wa:da
 salt.water-die.from=TEMP=PAST=QUOT.3sg
 'He drowned (in salt water).'

Verbalizing state suffixes cover a wide range of notions, including mental states, attitudes, and proclivities of the subject (N *-awiṭ*, M *-uṭ* [L] 'expecting ...', N *-maʔi:qλ*, M *-beyaql* 'wanting to ...', N *-naḥi* [L] 'ready, intending to ...', N *-sim*, M *-suba* 'needing ...', N *-ḥsa'*, M *-ḥsa'* 'desiring to eat ...'), physical characteristics (N *-ḥtin*, M *-ḥtida* 'made of ...', N, M *-kuk* [R] 'resembling ...', N *-p̄uqs* 'smelling of ...', N *-yuk* 'wrapped in ..., covered over with ...'), and others that are less easily categorized (N *-cḥi*, M *-cxi* 'married to ...', N *-(č)ṭa'*, M *-(k)ṭa'* 'having ... as name', N *-na'k^w*, M *-da'k^w* 'having ...').⁸⁰

Examples of verbalizing state suffixes

- (284) N *-ataḥ*, M *-a:taḥ -ataḥ* [L] (also [R], [R+L] in Makah) 'lying in wait for, trying to get; [R] 'ready to, about to ...'

NUUCHAHNULTH

- a. ...*čucuckataḥšiʔaλ* *λisaṭʔi* ...
čuck-ataḥ [R]-*šiλ* = 'aλ *λisaṭ* = *ʔi* ...
 tip.over-ready.to-PERF=TEMP blanket=ART...
 'The (pile of) blankets became wobbly.' (NA 302.33-34)
- b. *ʔi'čap̄aλ* *his̄yākukʔi* *hihisataḥʔaλ*
ʔi'čap̄i = 'ap = 'aλ *his̄-yak^w* = uk = *ʔi* *his-ataḥ* [R] = 'aλ
 lifted.up-CAUS=TEMP strike-thing.for=POSS=ART strike-ready.to=TEMP
 'He raised his axe, ready to strike.' (NA 401.35)
- c. *haši'čiʔaλ* *či'či'ṭataḥʔi* *ṭuk^wa'ʔaṭh...*
hašiṭ-'ač*iλ* = 'aλ *či'ṭ-ataḥ* [R] = *ʔi* *ṭuk^wa'ʔaṭh*
 have.news.of-INCEP=TEMP escape-ready.to=ART Tukwa
 'The Tukwa man who was preparing to escape heard that ...' (NA 406.50)

MAKAH

- d. *huhuxšiλataḥkuw* *šučasiq*
hux-šiλ-ataḥ [R]-*kuk* = *ʔi* *šučas* = *ʔi*
 fall.over-PERF-about.to-look.like=INDIC.3sg tree=ART
 'The tree looks like it's about to fall over.'

- e. *kikiłatqar̥tax̥aʔš*
k̥iłat-q-a:tax̥ [R] = x̥aʔš
 fur.seal-BFR-try.to.get=INFER.3pl

‘I guess they’re after fur seal’

- f. *waw̥ʔaqar̥tax̥uw̥is*
waʔaq-a:tax̥ [R]-uʔ^w-is
 perch-try.to.get-place-on.beach

‘Beach-place-for-catching-Perch (place name)’

(285) N -*çhi*, M -*çxi* ‘married to ...’

NUUCHAHNULTH

- a. *hitach̥inuʔaλ* *tušaʔkʔi* *čw̥č̥kçhinλ*
hita-çhi-nuλ = ʔaλ *tušaʔk = ʔi* *čw̥č̥k-çhi-nuλ*
 empty.root-married.to-PERF=TEMP rascal=ART both-married.to-PERF

maʔahʔi
maʔah = ʔi
 pair.of.sisters=ART

‘The rascal then became her husband, became the husband of both sisters.’ (NT 84.1)

- b. ...*masçimçhinλ*...
masçim-çhi-nuλ
 commoner-married.to-PERF

‘She had married a commoner.’ (NT 132.26)

- c. ...*ʔani çišaʔaqsupçhiqa*...
ʔani çišaʔ-ʔaqsup-çhi = qaʔ
 SUBOR Tsishaa-woman.of-married.to=SUBOR

‘... because he was married to a Tsishaa woman’ (NA 387.17)

MAKAH

- d. *wikiʔbeyaql̥s* *tiʔ* *ʔuc̥x̥idiλ* *kaʔšçuʔuʔiq*
wik-iʔ-beyaql̥ = s *tiʔ* *ʔu-c̥xi-diλ* *kaʔšçuʔuʔ = ʔiq*
 not-EPEN-want.to=INDIC.1sg DEM so.and.so-married.to-PERF hair.seal=ART

‘I don’t want to marry these seals.’

- e. *λax̥^wac̥x̥idiʔyiks*
λax̥^wa-c̥xi-diλ = ʔeyik = s
 ten-married.to-PERF=FUT=INDIC.1sg

‘I will marry ten!’

- f. *hidiʔaʕit* *ʔaʕiʔtq^waʕ* *katsaʕiq*
hida-iʔ = 'aʕ = 'it *ʔaʕiʔtq^waʕ* *kaT-sac = 'iq*
 empty.root-give=TEMP=PINV black.bear oil-container.for=ART

yaqcxiq
yaq^w-cxi = (q)i
 one.who-married.to=REL.3sg

‘Bear was given the oil bowl by his wife.’ (HW, Raven and Bear)

(286) N, M *-i:c* ‘belonging to ...’

NUUCHAHNULTH

- a. *ʔiʔhturpiʔcuk^waʕ* *ʔaʕku* *ʔapʔakʔi*
ʔiʔh^w-(ʕ)turp-i:c = uk = (m)aʔ = aʕ *ʔaʕku* *ʔam-ʔak^w = ʔiʔ*
 big-thing-belong.to=POSS=INDIC=1sg DEM sing.tama.song-thing.for=ART

‘This tama song of mine belonged to a whale.’ (NT 154.17)

- b. *ʔuk^wiʔcaʕ*
ʔuk^wa-i:c = (m)aʔ = aʕ
 oneself-belong.to=INDIC=1sg

‘It is my own’ (NA 172.9)

- c. *wikiʔcma* *tupaʔti...*
wik-i:c = maʔ *tupaʔti*
 not-belong.to=INDIC tupati

‘No one owns the tupati (ritual prerogative).’ (NA 69.28-29)

MAKAH

- d. *babaʔdiqiʔciksʕʔaʕdu* *haʔub*
ba-baʔ-di-q-i:c-ʔiʔks-ʕiʕ = 'aʕ = du: *haʔuba*
 dwelling-moving.about-on.water-BFR-belong.to-consume-PERF=TEMP=1pl food

‘Now we eat whiteman’s food.’ (KH)

- e. *ʔucuʔaps* Maria
ʔu-i:c-uʔ = 'ap = s Maria
 so.and.so-belong.to-APPEN=CAUS=INDIC.1sg Maria

‘I’m saving it for Maria.’

- f. *yaʔdaqiʔc* *kataʔyak*
yaʔdaq-i:c *kaT-aʔ-yak^w*
 baby-belong.to oil-on.external.surface-thing.for

‘baby oil’

(287) N -*č̣i*, M -*č̣i* ‘at; in ...’; N [LR] ‘attached to ...’

NUUCHAHNULTH

- a. *hawī·λ* *ʔi·htuʔʔi* *č̣apacčiqs...*
hawī-λ *ʔi·h^w-(š)tuʔʔ = ʔi·* *č̣apac-č̣i-qs*
 stop-PERF big-thing=ART canoe-in-in.vessel

‘The whale stopped in the canoe.’ (NT 142.35)

- b. *paʔʔiʔaλ* *haʔwi·haλʔi* *č̣itapi·hč̣i...*
paʔq^w-iλ [L] = *ʔaλ* *haʔwiʔaλ = ʔi·* *č̣it.-(q)imʔ-i:h-č̣i*
 goods-get.PERF=TEMP young.man.PL=ART woven-over.round.surface-PL-in

‘Men went to get the cargo in the woven bags.’ (NA 161.41)

- c. *maλis* *ʔu·ʔuk^wis* *ʔitč̣maptʔi...*
maλ-ʔis *ʔu-č̣i* [LR]-ʔis *ʔitč̣-mapt = ʔi·*
 tied-on.beach so.and.so-attached.to-on.beach dog-tree=ART

‘It was tied on the beach to a willow tree.’ (NA 23.44)

- d. MAKAH
dačʔoʔits *ʔuč̣i·č̣akt* *tupaʔiq* *suʔsuk*
dač-uʔaʔ = (b)it = s *ʔu-č̣i-a·č̣akt* *tupaʔ = ʔiq* *su-uk*
 look-perceive=PAST=INDIC.1sg so.and.so-at-on.ocean salt.water=ART swim-DUR

‘I saw it swimming around in the ocean.’

- e. *tuč̣č̣ʔetxwaʔd*
tuč̣-č̣i-ʔatx = wa:da
 woman-at-dwelling=QUOT.3sg

‘I hear he’s living with his wife’s people.’

5.4.2 Nominalizing suffixes

Nominalizing suffixes denote superordinate classes of things like N *-(š)tuʔʔ*, M *-(k)tuʔʔ* ‘... species, genus, class, ... type of creature, object’ and N *-mapt*, M *-bap* ‘... plant, tree, bush; M ... material’. The base specifies which particular subclass of the superordinate suffix category the resultant derived noun denotes, e.g. M *cikyešbap* ‘elderberry bush’ (*cikyeš-* ‘elderberry’). There are nominalizing suffixes denoting classes of persons (N, M *-ʔaqsup* ‘woman of ... tribe’, N, M *-(q)aʔs* ‘daughter of ...’, N, M *-ʔaqλ* ‘expert at ...’), objects and instruments for various purposes (N *-htaʔ*, M *-xtaʔ* ‘... instrument’, N *-(c)sac*, M *-(k)sac* ‘container for ...’, N *-ačus*, M *-ačis* ‘surface for ...’), and other miscellaneous notions.

Nakayama (1997a: 45-46) points out a clear semantic contrast between the generic, superordinate classes of entities expressed by nominalizing suffixes and the more specific entities expressed by noun roots, e.g. next to N *-(š)tu'p*, M *-(k)tu'p* ‘... species, type of thing’ we find noun roots like N *na'híáč*, M *daḡa'íač* ‘mallard duck’ and N *miʔa't*, M *biq'a't* ‘sockeye salmon (name when in lake)’.

An important and commonly used subclass of nominalizing suffixes are the enumerative suffixes, which attach only to quantity/quantifier bases like N *ʔaya*, M *ʔakyi·q* ‘many’ and numerals. These are similar to numeral classifiers in languages like Chinese in that they index certain physical or configurational properties of quantified entities, e.g. N *ʔaλqimł*, M *ʔaλqapł* ‘two roundish or chunky objects’, N *ʔaλpi'ł*, M *ʔaλa'p'a'yił* ‘two long, broad objects’, N *ʔaλ'ciq*, M *ʔaλa'ciq* ‘two long, thin objects’. Although they can be used independently as nouns, classified quantifier words are generally used to modify a noun denoting an entity of the appropriate type, e.g. N *ʔaλpi'ł nitup* ‘two beams’. Not all enumerative suffixes are nominalizing suffixes. For example, the suffixes N *-qʔičh*, M *-qičx* ‘for ... many years’ and N *-čiv'ł*, M *-čeyal'ł* ‘for ... many days’ are nuclear temporal suffixes (for which see §5.4.4).

Examples of nominalizing suffixes

(288) N *-(š)tu'p*, M *-(k)tu'p* ‘... species, type of creature, being, thing’

NUCHAHNULTH

- | | | | | | |
|----|--|----|---|----|---|
| a. | <i>ʔi'htu'p</i>
<i>ʔi'h^w-(š)tu'p</i>
big-thing
‘whale’ | b. | <i>k^wistu'p</i>
<i>k^wis-(š)tu'p</i>
different-thing
‘supernatural being’ | c. | <i>saštup</i>
<i>sa-(š)tu'p</i>
crawl-thing
‘animal’ |
|----|--|----|---|----|---|

MAKAH

- | | | | | | |
|----|---|----|---|----|--|
| a. | <i>čidaḡtu'p</i>
<i>čidaḡ-(k)tu'p</i>
low.tide-thing
‘small, black chiton sp.’ | b. | <i>k^wistu'p</i>
<i>k^wis-(k)tu'p</i>
different-thing
‘supernatural being’ | c. | <i>ḡiktu'p</i>
<i>ḡi-(k)tu'p</i>
crawl-thing
‘animal’ |
|----|---|----|---|----|--|

(289) N *-(c)syi*, M *-(k)siʔi* ‘medicine for ...’

NUUCHAHNULTH

- | | | | | | |
|----|--|----|---|----|---|
| a. | <i>ʔayaxsyi</i>
<i>ʔayax^w-(c)syi</i>
move.quickly–medicine
‘medicine for fleet
running’ | b. | <i>našsyi</i>
<i>naš.-(c)syi</i>
strong–medicine
‘strength medicine’ | c. | <i>wiʔaksyi</i>
<i>wiʔak^w-(c)syi</i>
invulnerable–medicine
‘medicine for being in-
vulnerable’ |
|----|--|----|---|----|---|

MAKAH

- | | | | | | |
|----|--|----|---|----|--|
| a. | <i>puxsiʔi</i>
<i>pux-(k)siʔi</i>
inflate–medicine.for
‘baking powder, yeast’ | b. | <i>qiwišaqsiʔi</i>
<i>qiwišaq-(k)siʔi</i>
healed.up–medicine.for
‘medicine for wounds’ | c. | <i>wasaqsiʔi</i>
<i>wasaq-(k)siʔi</i>
cough–medicine.for
‘cough medicine’ |
|----|--|----|---|----|--|

(290) N, M *-(.ʔ)uʔ^w* ‘... place, place of ...’

NUUCHAHNULTH

- | | | | | | |
|----|---|----|---|----|--|
| a. | <i>ćaxuwaʔa</i>
<i>ćax^w-uʔ^w-’aʔa</i>
spear–place–on.rocks
‘place for spearing’ | b. | <i>husuʔ</i>
<i>hus-uʔ^w</i>
salt.water–place
‘Salt-water-Place
(place name)’ | c. | <i>kuʔquʔ</i>
<i>kuʔq-uʔ^w</i>
stalk–place
‘hunting ground’ |
|----|---|----|---|----|--|

MAKAH

- | | | | | | |
|----|--|----|---|----|--|
| a. | <i>bakoʔwas</i>
<i>bak^w-uʔ^w-’as</i>
buy–place–on.ground
‘store’ | b. | <i>haʔwaʔuwiʔ</i>
<i>haʔwa-.ʔuʔ^w-’iʔ</i>
eat–place–in.house
‘dining room’ | c. | <i>iwʔdʔaxuʔ</i>
<i>iwʔdʔax-uʔ^w</i>
cattail–place
‘Cattail-Place (place name)’ |
|----|--|----|---|----|--|

5.4.3 Quantifier suffixes

There are also a few quantifier suffixes. These are semi-productive at best. Most are non-productive. The suffix N *-ma* ‘... in quantity, degree’ occurs in a few words like N *q^wama* ‘thus many’ (*q^wa*- ‘thus, such’ + *-ma*) and N *ʔiqma* ‘the same number’ (*ʔiq* ‘same’ + *-ma*). The suffix N, M *-iʔ^w -i:q^w* ‘... many score’ attaches to numeral roots, and a few non-numeral quantifier bases: N, M *ʔaʔiʔq* ‘forty’ (< *ʔaʔa* ‘two’ + *-iʔ^w*), N *hayuq* ‘ten score’ (*hayu* ‘ten’ + *-iʔ^w*), N *q^wamiq* ‘thus many score’ (*q^wa*- ‘thus, such’ + *-ma* ‘... in quantity’ + *-iʔ^w*), M *ʔakyiʔq* ‘many’ (*ʔaya* ‘many’ + *-iʔ^w*, with velar increment). N *-im* [L] ‘... many at a time’ probably belongs in this class as well, but is not well attested at present.

5.4.4 Temporal suffixes

Finally, there are a few nuclear temporal suffixes. These include several enumerative suffixes (e.g. N *-čir̥t*, M *-čeyat̥* ‘for ... many days’, N *-p̥inq* ‘... many times around’, N, M *-p̥it* ‘... many times’, N *-q̥ič̥h*, M *-q̥ič̥x̥* ‘for ... many years’), which, like enumerative nominalizing suffixes, occur only with quantifier or numeral bases: N *ʔaλčir̥t*, M *ʔaλčeyat̥* ‘two days’ (*ʔaλ-* ‘two’ + *-čir̥t*, *-čeyat̥*), N *ʔušp̥it* ‘sometimes’ (*ʔuš* ‘something, someone’ + *-p̥it*). There is also a suffix meaning ‘at ... time’, which occurs in several allomorphs: N *ʔuyi*, M *ʔuyu* ‘at so-and-so time, when’ (*ʔu-* ‘so-and-so’ + *-yi*, *-yu*), N *ʔaḥʔaʔiya* ‘at that time’ (*ʔaḥʔa* ‘then’ + *-(y)iya*), N *ʔupiya* ‘in calm weather’ (*ʔup-* ‘calm weather’ + *-(y)iya*).

5.5 Restrictive suffixes

Restrictive suffixes are divided into five classes. The first two, path-orientation and locative suffixes, account for the majority of the restrictive suffixes and together form a significant subclass, the spatial disposition class, concerned with the expression of motion and location. They frequently occur in sequences of path-orientation suffix + one or more locative suffixes. See (264) above, and (291)-(292) below, for instance (§5.1). These sequences allow very precise localization of situations and participants, a capability necessitated by the languages’ almost obsessive insistence on expression of spatial orientation and location.

5.5.1 Path-orientation suffixes

Path-orientation suffixes express various notions of physical orientation and spatial relation, particularly the motion or location of an entity with respect to a certain path. As will be seen in examples below, path-orientation suffixes normally attach to the clausal predicate head, expressing the physical orientation or path of motion of its subject. The manner of motion, if expressed, is usually the base to which the path suffix attaches, e.g. (292).

There are two path subclasses based on inherent aspectual value. The first is the perfective directional class, which expresses motion in a particular direction. This involves suffixes like N, M *-k^wist-* ‘move away (perf.)’, N *-waḥsu(ʔ)*, M *-waḥsɪʔ* ‘N move out, M move out of mouth (perf.)’, N *-ʔaʔatu*, M *-ʔaʔatu* ‘move down, off (perf.)’, and N *-(c)staʔ*, M *-(k)staʔ* ‘move down into (perf.)’, e.g.

(291) N, M *-k^wis-t-* ‘move away (perf.)’ (must be followed by locative suffix)

- NUUCHAHNULTH
- a. *hitak^wistaʔaλweʔin* *witak^wistaʔaλ*
hita-k^wist-ʔaʔa = ʔaλ = weʔin *wita-k^wist-ʔaʔa = ʔaλ*
 empty.root-move.away.PERF-on.rocks=TEMP=QUOT attack-move.away.PRF-on.rocks=TEMP
 ‘They started out from their ambush among the rocks.’ (NA 350.26-27)
- b. *yakk^wistaḥsminḥʔaλ*
yak-k^wist-ʔaḥs-minḥ = ʔaλ
 in.view-move.away.PERF-in.vessel-PL=TEMP
 ‘They all showed themselves from in the canoe.’ (NA 241.34)
- c. *hičk^wisaḥapaλ*
hič-k^wis-saḥap = ʔaλ
 illuminate-move.away.PERF-on.beach.CAUS.PERF=TEMP
 ‘They startled them (the birds) off the beach with light.’ (NA 13.32)
- MAKAH
- d. *ʔackatk^wisčaʔl* *waʔidiq*
ʔackat-k^wis-čaʔ = ʔaλ = ʔi *waʔit = ʔiq*
 jump-move.out.PERF-in.container=TEMP=INDIC.3sg frog=ART
- yałčičubitqey*
yał-čiči-čaʔ = (b)it = qeyu
 where-at-in.container=PAST=COND.3sg
 ‘The frog jumped out of the container he was in.’ (RC, Frog)

(292) N *-ʔaʔatu*, M *-ʔaʔatu* ‘move down, off (perf.)’

- NUUCHAHNULTH
- a. *čitk^wʔaʔaʔasʔaλ*
čitk-ʔaʔaʔatu-ʔas = ʔaλ
 roll-move.down.PERF-on.ground=TEMP
 ‘It rolled downhill.’ (based on NA 370.2)

- b. *hitacswi* *ʔinkʔi* *ʔiːkʷinkʔi*
hita-(c)swi *ʔinkʷ = ʔi* *ʔiːkʷ-(č)inkʷ = ʔi*
 empty.root-go.through.PERF fire=ART pair.of.brothers-together=ART
 ‘The brothers went through the fire together.’ (NA 129.24)

MAKAH

- c. *hitakswi ʔal*
hita-(k)swi = ʔaλ = ʔi
 empty.root-go.through.PERF=TEMP=INDIC.3sg
 ‘He/she/it went through.’

(294) N *-(c)swi*, M *-(k)swi* ‘through’ (with bases other than verbs or *hita-*)

NUUCHAHNULTH

- a. *kuḥswi ʔakwe ʔin* *nitup...*
kuḥʷ-(c)swi = ʔak = we ʔin *nitup*
 hollow-through=POSS=QUOT beam
 ‘They say their beams have holes through them.’ (NT 168.22)
- b. ...*λikswi ʔaλ* *ʔaḥ*
λik-(c)swi = ʔaλ *ʔaḥ*
 hands.located-through=TEMP DEM
 ‘His hand stuck through (the wrapping) here.’ (NT 164.7)

MAKAH

- c. *kuḥsuwi ʔ*
kuḥ- < uʷ > -(k)swi = ʔi
 hole-<EPEN>-through=INDIC.3sg
 ‘It has a hole through it.’

Some path suffixes occur obligatorily with a following locative suffix. These are indicated by a final hyphen, e.g. *-kʷis-t-* above.

The examples in (295) and (296) show two suffixes expressing notions of physical orientation and spatial relation other than path, N *-sʔu:č* *-(y)u:č*, M *-yu:č* [L] ‘exposed, extending out, in view’ and N, M *-(.?)at* ‘attached on’.

(295) N *-sʔu:č* *-(y)u:č*, M *-yu:č* [L] ‘exposed, extending out, in view’

NUUCHAHNULTH

- a. ...*hu ʔaksʔu:čičim*
hu ʔakʷ-sʔu:č [L] = *i ʔim*
 early-exposed=FUTIMPER.2pl
 ‘Be up (i.e. out of bed) early!’ (NT 180.9)

- b. ...*na'λksy'u'čiči'ʔaλλa'* *λ'itinkʔi* *ya'* *qu'ʔasʔisʔi*
naλk-sy'u:č [L]-iλ = 'aλ = λa: *λ'itink^w = ʔi'* *ya'* *qu'ʔas = ʔis = ʔi'*
 feet.located-exposed-PERF=TEMP=again cape=ART DEM person=DIM=ART

‘The little person again put his foot out of the cape (enfolding him).’ (NT 90.20)

- MAKAH
 c. *qi'y'u'čaλitsi'cuχ* *hidʔaw*
qi'-yu:č [L] = 'aλ = (b)it = si:cuχ *hida- 'awi*
 long.time-exposed=TEMP=PAST=INDIC.1sg/2sg empty.root-wait.for

‘I was awake a long time waiting for you.’

(296) N, M *-(.ʔ)ał* ‘attached on’

- NUUCHAHNULTH
 a. *susučaqimłatuk* *čimun* *čawa'k* *qu'ʔas*
 [R]-*suča-qimł-(.ʔ)ał = uk* *čimun* *čawa-ʔak^w* *qu'ʔas*
 PL-five-X.many.round.objects-attached=POSS halibut.hook one-DUR person

‘Each person’s (halibut) line has five hooks on it.’ (NA 21.48)

- b. *ʔu'ʔałʔaλ* *maλał* *λuk^wi'tʔi*
ʔu-(.ʔ)ał = 'aλ *maλ-(.ʔ)ał* *λuk^wi't = ʔi'*
 so.and.so-attached=TEMP tie-attached stout=ART

ʔaλyaqañuł...

ʔaλ-yu'-q-a'ñu(ł)

twist-having.been-BFR-along.length

‘A stout cedar-branch rope was tied on to it.’ (NA 13.9)

5.5.2 Locative suffixes

The locative class includes well over 100 suffixes expressing location. Like path-orientation suffixes, locative suffixes attach to bases of all classes. They usually express the location of the referent of their morphological base, or its subject, if it is a predicate head. Locative suffixes belong to two formally and semantically distinct subclasses, the locale class and the site class. There are four locale suffixes:⁸¹

(297) **Locale suffixes**

- N - *'a'ʔa*, M - *'a'* ‘on the rocks; N in the fire’
 N, M - *'as* ‘on the ground, outside the house, in the village’
 N, M - *'ił* ‘in the house, on the floor’
 N, M - *'is* ‘on the beach’.

They are formally distinguished from site suffixes by three main criteria:

1. All four have suppletive portmanteau perfective aspect allomorphs, e.g. N - 'u'λ, perfective of - 'a'ʔa 'on the rocks', N -('i)piλ, M -paλ, perfective of - 'it' 'in the house'. Site suffixes do not have suppletive perfective forms unless they contain one of the locale suffixes as an etymological component, e.g. the site suffix N -a'yi't' 'on a raised platform in the house; in the sky', which is probably a fossilized combination of -a's 'on a horizontal surface' and - 'it' 'in the house', has the perfective form -a'yipiλ.
2. Locale suffixes are in paradigmatic opposition; unlike site suffixes, locale suffixes do not co-occur.
3. Locale suffixes always occur last if they appear in sequences of multiple spatial suffixes unless they are lexicalized as part of the base.

There are also semantic differences between locale and site suffixes. Locale suffixes divide the world into four broad zones or spheres of activity in which events and objects can be situated (297). They express the equivalent of Talmy's (2000) "locale" semantic category, which, in his words, "pertains to the type of area or physical setting in which an event takes place". He cites cognate Kwakwala suffixes as examples of this category. Example (298) shows three Nuuchahnulth words with N - 'a'ʔa, M - 'a'.

(298) N - 'a'ʔa, M - 'a' 'on the rocks; N in the fire'

- NUUCHAHNULTH
- a. *ciʔaʔaʔaλuk* *λaqmis...*
ci- 'a'ʔa = 'aλ = uk *λaqmis*
 pour-in.fire=TEMP=POSS oil
 'One's oil is poured on the fire.' (NA 167.12)
 - b. *kic'a'ʔa* *λatmapt...*
kic- 'a'ʔa *λatmapt*
 stick-in.fire yew
 'A yew log was put on the fire.' (NA 172.16-17)

- c. *mətʔaʔamaʔaʔta*
mət.–'aʔa = *maʔ* = *ʔaʔta*
 cold–on.rocks=INDIC=HAB

'It is always cold on the rocks.' (NA 80.21)

Site suffixes express location relative to body parts, objects in nature, man-made objects like containers and house parts, and also to more abstract geometric notions like 'behind'.

- (299) N -(w)*inʔ*, M -*adiʔ* [L] 'on the neck'

NUUCHAHNULTH

- a. *hiʔninim*
hina–(w)*inʔ* [L]–*im*
 empty.root–on.neck–thing
 'necklace'
- b. *ʔuʔcahtaksa ʔapkwʔinawiʔat* *čʔastimčmit...*
ʔuʔcahtaksa ʔapkw–(w)*inawiʔ* [L] = 'at *čʔastimč*–*miʔt*
 at.once hug–on.neck.PERF=PINV mink–son.of
 'At once it hugged Mink about the neck.' (NT 82.35)
- c. *taʔqʔinawiʔat*
taʔq–(w)*inawiʔ* [L] = 'at
 squeeze–on.neck.PERF=PINV
 'They were strangled.' (NA 359.3)
- d. *hiʔdadʔaʔ* *iaʔadubaʔuc*
hida–*adiʔ* [L] = 'aʔ *ia*–*adiʔ*–*uba* = 'u:c
 empty.root–on.neck.PERF=TEMP object.on.line–on.neck–thing=POSS.3sg
 'She put her necklace around her (own) neck.' (HW, Sky Man)

- (300) N -*naʔqi*, M -*daʔqi* 'up on a height'

NUUCHAHNULTH

- a. *muʔčiʔnaʔqi* *hiʔnaʔqi* *ʔeʔiʔiʔi* *nuʔcyur*
mu–*čiʔ*–*naʔqi* *hiʔ*–*naʔqi* [R]–*ʔiʔiʔiʔi* = *ʔiʔ* *nuʔ*–*yuʔ* [L]
 four–X.many.days–on.height there–on.height PL–big=ART mountain–PL
 'Four days he stayed on the high mountains.' (NA 49.2)
- b. *hininqanuʔaʔ* *waʔyiʔi...*
hina–*naʔqi*–*nuʔ* = 'aʔ *waʔyiʔi* = *ʔiʔ*
 empty.root–on.height–PERF=TEMP Wayi=ART
 'They climbed the hill at Wayi (place name).' (NA 337.17-18)

- c. ...*yacn'aqinuλ* *ʔuʔuq^wacqi*
 ...*yac-n'aqi-nuλ* [LR]-*ʔuq-ac-qi'*
 ...step-on.height-PERF PL-urinate-container.for-on.top
 'He climbed up Bladders-on-Top (place name).' (NA 147.44)

(301) N *-(c)sʔatu.*, M *-(k)sʔatiʔi'* [L] 'at the door'

- NUUCHAHNULTH
 a. *n'a'csa'λhak* *yaʔ* *íaš'i'ʔi* *ʔa'qsʔatuʔi*
n'a'csa = 'aλ = ha' = k *yaʔ* *íaš'i' = ʔi'* *ʔaq-(c)sʔatu.* [L] = *ʔi'*
 see=TEMP=INTERR=2sg yonder door=ART wide-at.door=ART
 'Did you see the wide doorway there?' (NT 154.1)
- b. *hi'ʔsʔataλqu* *č'a'ni* *íaš'i'ʔi*
hiʔ-(c)sʔatu. [L] = *'aλ = qu:* *č'a'ni* *íaš'i' = ʔi'*
 there-at.door=TEMP=COND for.a.while door=ART
 'He would stay for a while at the door.' (NA 81.7)
- c. *ʔuʔi'csʔatuʔasni* *hi'ʔsʔatuʔasʔi...*
ʔu-ʔi'-(c)sʔatu. [L]-*'as = ni'* *hiʔ-(c)sʔatu.* [L]-*'as = ʔi'*
 so.and.so-get.to.be.at.PERF-at.door-on.ground=1pl there-at.door-on.ground=ART
 'We reached the door.' (NA 143.11-12)

The property word *ʔa'qsʔatu* 'wide (door)' in (301)a is an example of a secondary, classificatory function in both Nuuchahnulth and Makah performed by locative suffixes. In this use, a locative suffix attaches to a predicate head to index or classify its overt or implied subject, e.g. the locale suffix *-a'ʔa* 'on the rocks' attached to N *miʔ-* 'smooth' in (302) forms N *miʔa'ʔa* 'smooth (said of a rock)', which is predicated of the noun N *muksyi* 'rock'.

- (302) NUUCHAHNULTH
miʔe'ʔeʔi *muksyi*
miʔ.-'a'ʔa = ʔi' *muksyi*
 smooth-on.rocks=ART rock
 'the smooth rock' (NT 94.27)

The classificatory use contrasts with the more usual locative function, in which the suffix specifies the location of the subject rather than its type. The regular locative function of 'on the rocks' is, in fact, also shown in the very sentence from which the RP in (302) was drawn. Attached to the main predicate head, the suffix (in its suppletive perfective form) specifies the location of the

subject (Pitch-Woman); the classificatory reading is obviously nonsensical here: she is not asserted to be a supine rock.

- (303) NUUCHAHNULTH
n̄iλu'λ *ʔiʔišsuʔiʔ* *miʔe'ʔeʔi* *m̄uksȳi*
n̄iλ- 'u'λ *ʔiʔišsuʔiʔ* *miʔ.- 'a'ʔa = ʔi'* *m̄uksȳi*
 supine-on.rocks.PERF Pitch.Woman smooth-on.rocks=ART rock
 'Pitch-Woman lay down on her back on the smooth rock.' (NT 94. 26-27)

(304) shows two more Nuuchahnulth examples of classificatory locatives.

- (304) NUUCHAHNULTH
 a. *λ̄uʔa'ʔa* *m̄uksȳi*
λ̄uq- 'a'ʔa *m̄uksȳi*
 broad-on.rocks rock
 'broad stone' (NT 94.39-40)
 b. *λ̄aqmis* *ma'ʔaksit*
λ̄aqmis *ma'ʔak^w-(c)sit*
 oil whale-on.surface.of.liquid
 'whale oil' (NA 298.23)

Use of classificatory locatives appears to be always grammatically optional, although it may be stylistically preferred in certain contexts. That is, one could probably say simply *miʔakʔi m̄uksȳi* 'smooth rock' (with the durative aspect suffix on *miʔ.-*).

It is not known how many locative suffixes have this classificatory function, but there are almost certainly more than those represented in (304). Jacobsen (1996: 12) records two Makah examples of classificatory locatives: *ʔaqas* 'wide (of a road)', *ʔaqaxs* 'wide (of canoe, house)'. It is likely that the Nuuchahnulth cognates (*- 'as* and *- 'ahs*) allow classificatory use as well..

5.5.3 Degree suffixes

There are a half dozen or so restrictive degree suffixes, all of which appear to be peripheral suffixes. These are N *-(q)aq -aqaq* [often S+S], M *-(k)ʔit* 'very, big', N, M *-a:pi* [LR+S] 'too much, too ...', N *-ckin*, M *-ckida* 'slightly', N *-(q)h̄ti* 'excessively', N, M *-sa -sasa* [usually L or L+S] 'precisely, very, too, really, just', and N *-i:na -i:ana* 'slightly'.

(305) N *-ckin*, M *-ckida* ‘slightly, a little’ (often occurs with the diminutive = *?is* in N)

NUUCHAHNULTH

- | | | | | | |
|----|--|----|--|----|---|
| a. | <i>hupi·čilckin?is</i>
<i>hupi·čil-ckin-?is</i>
help-PERF-slightly-DIM
‘help out a bit’ | b. | <i>?i·hckin</i>
<i>?i·h^w-ckin</i>
big-slightly
‘a little bigger’ | c. | <i>qi·ckin</i>
<i>qi·-ckin</i>
long.time-slightly
‘a little while’ |
|----|--|----|--|----|---|

MAKAH

- | | | | | | |
|----|--|----|--|----|--|
| a. | <i>ha?ukšilckid</i>
<i>ha?uk-šil-ckida</i>
eat-PERF-slightly
‘eat a little bit’ | b. | <i>ko?uɬckid</i>
<i>ko?uɬ-ckida</i>
further.away-slightly
‘a short distance away’ | c. | <i>te?iɬckid</i>
<i>te?iɬ-ckida</i>
sick-slightly
‘a little sick’ |
|----|--|----|--|----|--|

(306) N, M *-sa -sasa* [often L or L+S] ‘precisely, really, very, just, too’

NUUCHAHNULTH

- | | | | | | |
|----|--|----|--|----|---|
| a. | <i>hi·ɬsasa</i>
<i>hiɬ-sasa</i> [L]
there-precisely
‘right at that place’ | b. | <i>?ayasa</i>
<i>?aya-sa</i>
many-too
‘too big’ | c. | <i>ha·wi·sa</i>
<i>hawi·-sa</i> [L]
finish-precisely
‘stop altogether’ |
|----|--|----|--|----|---|

MAKAH

- | | | | | | |
|----|--|----|---|----|--|
| a. | <i>?i?i·x^was</i>
<i>?i?i·x^wa-sa</i>
big-too
‘too big’ | b. | <i>qaɬa·tks</i>
<i>qaɬa·tk^w-sa</i> [L]
younger.brother-precisely
‘youngest brother’ | c. | <i>yu·buɬs</i>
<i>yubuɬ-sa</i> [L]
unable-precisely
‘absolutely unable’ |
|----|--|----|---|----|--|

5.5.4 Plural formations

Plural formation is one of the most irregular processes in Wakashan. This section summarizes six ways of forming plurals attested in Nuuchahnulth and Makah. Although the kind of plural semantics carried by the different formations varies (the collective plurality of N *-minh*, M *-badax*, simple plurality, distributive plurality), all are simply glossed “PL”. The meanings of some, particularly reduplication, depend on the word class and morphological composition of the base.

(307) **Plural formations**

1. Peripheral plural suffix N *-minh*, M *-badax*
2. Core plural suffixes
3. Plural infixes

4. Core plural suffixes with plural infixes
5. Reduplication
6. Irregular

Peripheral plural suffix

The peripheral plural suffix N *-minh*, M *-badaḡ*, the only fully productive plural marker, attaches with equal ease to verbs and nominals. It generally indicates a collectivity. Rose (1981: 240-47) has an enlightening discussion of the use of this suffix. Examples (308)a-b show it on a predicate head of a main clause, and (308)c-f show it in an RP.

- (308) NUUCHAHNULTH
- a. *ʔapiˈsminhʔaλat*
ʔap-i:s-minh = 'aλ = 'at
 carry.on.shoulders-carry-PL=TEMP=PINV
 ‘They were carried on (people’s) shoulders.’ (NA 11.5)
 - b. *ʔaʔaʔaλqimʔhtimiyitminhʔaˈqλeʔicu*
 [R]-ʔaλ-qimʔ-(q)hta [R]-maʔ-it-minh = ʔaˈqλ = (m)aʔ = ʔicu:
 PL-two-X.many.round.objects-on.feet-move.about-in.house-PL=INTENT=INDIC=.2pl
 ‘The bunch of you will each carry two (dollars) on your feet’ (NA 67.32-33)
 - c. *ʔamashuʔtminhʔatʔi*
ʔam-ashuʔ(ʔ)-minh = 'at = ʔi
 locative.root-at.chest-PL=PINV=ART
 ‘their chests’ (NA 71.18)
 - d. *ʔaˈmaminh*
ʔaˈma-minh
 loon-PL
 ‘loons’ (NT 17.3)
 - e. MAKAH
dadeˈʔiqsuˈbadaḡ
dadeˈʔiqsu-badaḡ
 grandparent-PL
 ‘grandparents’
 - f. *ʔaλasub ʔaˈxukbadaḡ*
ʔaλasuba ʔaˈxuk-badaḡ
 eight man-PL
 ‘(a group of) eight men’

Core plural suffixes

There are three core plural suffixes, all of which are in complementary distribution. The suffix N *-aqa* - 'aqa -ʔaqa, M [L?] *-a'qa* - 'a'qa, translated by Sapir & Swadesh (1939: 319) as 'severally ... -ing' in Nuuchahnulth, attaches to a limited number of bound verb roots denoting actions.

- (309) NUUCHAHNULTH
ci'q- 'chant' *ci'ʔaqa*
ci'ʔ- 'escape' *ci'ʔʔaqa*
pisat- 'play, move' *pisataqa*
- MAKAH
du- 'sing' *duʔa'qa* or *du'ʔa'qa?*
ha'wa- 'eat' *ha'wa'qa*
hurʔ- 'dance' *hurʔa'qa*

The suffix N *-yu'* [R+L or L], M [R+L] *-yu*, also translated by Sapir & Swadesh (1939: 324) as 'severally ... -ing', attaches to several bound verb roots. These mostly denote vocal activity such as speaking, shouting, singing, etc., but Sapir & Swadesh (1939: 239) also cite N *na'na'čyu* 'severally looking'. It occurs with the [L] template in Nuuchahnulth and the [R+L] template in Makah with a few noun roots.

- (310) NUUCHAHNULTH
ciq- 'speak' *cici'qyu*
huh- 'shout' *huhuhyu*
cih- 'ghost' *ci'hyu'*
nuč- 'mountain' *nu'čyu'*
- MAKAH
ciq- 'speak' *ciqci'qyu*
xi'x^w- 'laugh' *xi'xi'xyu*
qix- 'cry' *qiqi'xyu*
ya'daq- 'baby' *yakya'daqyu* (plus velar increment)

The final core plural suffix, N *-i:h* [sometimes L], M *-ix*, attaches to bases ending in restrictive locative suffixes with final /h/ (which is lost preceding it), and, in Nuuchahnulth, also to a few roots denoting humans (311)c. The class of suffixes with which *-i:h*, *-ix* occurs seems to be co-extensive with the class described in §3.3.7 that loses final /h/ before certain suffixes, but further research is necessary on this point.

- (311) NUUCHAHNULTH
ħuquʔ ‘wearing a mask’
kʷikʷinxsuʔ ‘eyes sealed shut with gum’
čakup ‘man, male’
- MAKAH
ħisuʔ ‘white-faced, ghost’
ciχapʔ ‘sour roundish object’
χuʔapʔ ‘slimy roundish object’
- ħuquʰ*
kʷikʷinxsuʰ
čakupiʰ
- ħisaʷwiχ*
ciχapiχ ‘crab apples’
χuʔapiχ ‘sole (fish sp.)’

Plural infixes

There are four plural infixes. The first, N, M *-t-*, is associated with various CV templates. In Nuuchahnulth it occurs at least with the [L], [R], [R+L], and [LR] templates, and, in Makah, it is attested with the [R+L], and [LR] templates. The infix is inserted after the first vowel of the templatically specified base.

- (312) NUUCHAHNULTH
haʔum ‘fish, food’
naʔaqaq ‘infant’
hičcaqλ ‘torch’
ʔasma ‘high-born child’
piš- ‘bad’
maʔas ‘tribe’
- MAKAH
baʔas ‘house’
qʷačat ‘pretty’
baʔas id.
teʔit ‘sick’
wiʔis ‘bad, dirty’
- [L] *haʔʔum*
[L] *naʔʔaqaq*
[R] *hihičcaqλ*
[R+L] *ʔatʔasma*
[R+L] *piʔpiš*
[LR] *maʔtmaʔs* (< *maʔtmaʔas*)
- [R+L] *batbaʔas* (Jacobsen 1997a: 18)
[R+L] *qʷatqʷačat*
[LR] *baʔtbʔas* (Jacobsen 1997a: 18)
[LR] *taʔteʔ* (Jacobsen 1997a: 18)
[LR] *witiʔwiʔis* (plus epenthetic /iʔ/)⁸²

The second plural infix, N *-Vj-*, M *-aʔy-* [L], is inserted after the first consonant of the base. The initial vowel of the Nuuchahnulth form is a short copy of the original initial base vowel. In some cases, an original /i/ base vowel shifts to /aʔ/ (lengthened by the [L] CV template) following the infix, e.g. N *wičit* ‘poor marksman’, *wiʔačit*, M *hitiʔda* ‘blanket’, *haʔyaʔtiʔda*.

- (313) NUUCHAHNULTH
čaʔxuk ‘swift vehicle; traveling swiftly’
čušuk ‘new’
čapac ‘canoe’
kʷisaʔh ‘another, a different tribe’
hiqʷit ‘sitting in the house’
wičit ‘poor marksman’
- čaʔaʔxuk*
čuʔuʔšuk
čəʔaʔpac
kʷiʔiʔsaʔh
hiʔiʔqʷit
wiʔaʔčit

MAKAH	
<i>čapac</i> ‘canoe’	<i>ča’ya’pac</i>
<i>hiti’da</i> ‘blanket’	<i>ha’ya’ti’da</i> (Jacobsen 1997a: 18)
<i>tuččaqsuba</i> ‘sister of a male’	<i>ta’yu’ččaqsuba</i> (Jacobsen 1997a: 19)
<i>łicux^wadi’</i> ‘person, Indian’	<i>ła’yi’cux^wadi’</i>

The third plural infix is N, M *-t-* [R]. It is inserted after the reduplicated vowel.

- (314) NUUCHAHNULTH
- | | |
|--|---------------------------------|
| <i>muq^watłič</i> ‘clothed in a phosphorescent robe’ | <i>mutłmuq^watłič</i> |
| <i>ti’č</i> ‘alive, well’ | <i>titi’č</i> |
- MAKAH
- | | |
|---|--------------------------------------|
| <i>kuḡ^wat</i> ‘a hole on it’ | <i>kułkuḡ^wat</i> |
| <i>wi’b</i> ‘not recognize’ | <i>wi’łwi’b</i> ‘not recognize them’ |

The final plural infix, N, M *-ʔa-* [R], is inserted after the reduplicated vowel. The meaning of this infix can be described as “comitative plural”: it not only indicates plurality, but also that the members of the plural set are together as companions, housemates, relatives, etc. In Nuuchahnulth it has been found with the relative pronoun root *yaq^w* ‘one who’, *yaʔa’yaq* ‘companions, ones who accompany’ (315), and derivatives of this root formed with lexical suffixes having meanings appropriate to the comitative sense, e.g. *-(q)ḥỵu’* ‘related to ...’ *yaqḥỵu’* ‘relative’, *yaʔa’yaqḥỵu’* ‘relatives’.

- (315) NUUCHAHNULTH
- | | |
|--|--|
| <i>łi’ʔiʔaλinλa’</i> | <i>yaʔa’yaqitqin</i> |
| <i>łi’ʔiʔ = ’aλ = (m)a’ = ni = λa:</i> | <i>yaq^w-<ʔa’> [R] = (m)it = qa’ = n</i> |
| feast=TEMP=INDIC=1pl=again | one.who-<PL>=PAST=DEF=1pl |
- ‘We gave another feast to those that had accompanied us.’ (NA 140.22)

It is also attested in Makah in the plural of *baččiba* ‘commoner’, *baʔa’baččiba* ‘commoners’, cited by Jacobsen (1997a: 18). The original meaning of this word, ‘those dwelling along with’, accounts for the use of the comitative plural. In the days of communal housing, only men with rank and wealth, i.e. *ča’ča’baía* ‘chiefs’, owned houses. Lower ranking relatives or associates, “commoners”, lived “along with” a wealthier relative in his house.

Core plural suffixes with infixes

Core plural suffixes sometimes co-occur with plural infixes.

- (316) N *-i:h* with infix *-t-* [L]
maquʔ ‘blind’ *maʔtquʔ*
tumisut ‘charcoal on the face’ *tuʔtmisuʔ*
- M *-yu* [R+L] with infix *-t-*
xada- ‘woman’ *xatxaʔdačyu*

The Makah form is slightly irregular in that the plural suffix appears as *-čyu* rather than *-yu*.

Reduplication

In our discussion of affix-associated CV templates (§3.3.1) we noted that these have no semantic force in most cases. However, several of the reduplicative templates listed in §3.3.1, ex. (42) above are used to form plurals independent of any affix. We also find types of reduplication in plural marking that do not occur as affix-associated templates, full reduplication (symbolized here as [FR]) and full reduplication with lengthening of the original initial vowel (symbolized [FR+L]). Full reduplication appears to occur only with a few selected monosyllabic roots. Other than this, it is unclear what principles, if any, govern the association of plural templates with bases. Reduplication of nouns tends to indicate simple plurality, while reduplication of both nouns with locative suffixes and other word classes tends to indicate distributive. Makah forms are cited from Jacobsen (1997a).

- (317) [FR] NUUCHAHNULTH
kuh ‘hollow; hole’ *kuhkuh*
ʔuq ‘wide’ *ʔuqʔuq*
nuʔk ‘song’ *nuʔknuʔk*
qʔiq relative pronoun root *qʔiqqʔiq*
- [FR+L] NUUCHAHNULTH
ʔuh ‘so-and-so’ *ʔuhʔuh*
ʔut ‘good’ *ʔutʔut*
- [R] NUUCHAHNULTH
ʔanaʔ ‘thus in size’ *ʔeʔinʔ* (< *ʔaʔinʔ* < *ʔaʔanaʔ*)
ʔayaqs ‘much in one’s canoe’ *ʔaʔayaqs*
ʔiʔčim ‘old person’ *ʔeʔiʔčim* ‘old people’ (< *ʔaʔiʔčim* < *ʔiʔiʔčim*)
ʔaʔuʔ ‘another’ *ʔaʔaʔuʔ* (< *ʔaʔaʔuʔ*, §3.3.4)
ma:maʔti ‘bird’ *maʔmaʔmti*
maʔawa: ‘deliver’ *maʔmaʔawaʔ*
quʔʔas ‘person, Indian, man’ *quqʔaʔs* (< *ququʔas*)
ta:yi ‘older brother’ *taʔtaʔyi*

MAKAH

<i>ʔaʔsiʔqsu</i> ‘nephew’	<i>ʔaʔaʔsiʔqu</i>
<i>čaʔbaʔa</i> ‘chief’	<i>čaʔčaʔbaʔa</i>
<i>kuxaʔsca</i> ‘hole in the roof’	<i>kukuxasca</i>
<i>ʕuʕyas</i> ‘dry ground’	<i>ʕuʕuʕyas</i>
<i>luʔlapi:</i> ‘hand’	<i>luʔluʔlapi:</i>
<i>iʔiq^wiʔ</i> ‘sit in the house’	<i>iʔiʔiq^wiʔ</i>

[R+L] NUUCHAHNULTH

<i>nupqimʔayi:</i> ‘give one round object’	<i>nunupqimʔayi</i>
<i>nunwiʔqsu</i> ‘father’	<i>nununwiʔqsu</i>
<i>quʔiʔhta</i> ‘tough-nosed’	<i>ququʔiʔhta</i>
<i>sahas</i> ‘pick cedar bark’	<i>sasaʔhas</i>

MAKAH

<i>takyaʔyu</i> ‘older brother’	<i>tataʔyaʔyu</i>
---------------------------------	-------------------

[LR] NUUCHAHNULTH

<i>čaʔak</i> ‘river, stream’	<i>čaʔčaʔk</i> (< <i>čaʔčaʔak</i>)
<i>čaʔak</i> ‘island’	<i>čaʔčaʔk</i> (< <i>čaʔčaʔak</i>)
<i>ʕatwi:</i> ‘ceremonial paddler’	<i>ʕaʔʕatwi</i>
<i>maʔti:</i> ‘house’	<i>maʔmaʔti</i>
<i>mučʔiʔ</i> ‘covered with fabric in the house’	<i>muʔmučʔiʔ</i>
<i>saya:</i> ‘far off’	<i>saʔsi:</i> (< <i>saʔsaya</i>)

Plural reduplication can co-occur with reduplication induced by affix-associated CV templates producing doubly reduplicated words. Note also the presence of *-minh* (collective plural) in the Nuuchahnulth word, which nicely illustrates the interaction of collective and distributive meanings.

(318) a. NUUCHAHNULTH

ʔaʔaʔaʕqimʔhtimiyiʔminhʔaʔqʕeʔicu:[R]–*ʔaʕ–qimʔ–(q)hta* [R]–*maʔ–iʔ–minh* = *ʔa:qʕ = (m)aʔ = ʔicu:*

PL–two–X.many.round.objects–on.feet–moving.about–in.house–PL=INTENT=INDIC=2pl

‘The bunch of you shall each move about the house with two dollars on your feet.’

(NA 67.32-33)

b. MAKAH

ʔuʔuʔuwaʔida[R]–*ʔu–wat* [LR]–*ʔida*

PL–so.and.so–friend.of–treated as

‘friends’

The Nuuchahnulth word is first reduplicated to meet the templatic requirements of *-(q)hta* [R] ‘on the feet’ and then re-reduplicated to indicate distributive plurality: *ʔaʔaʔaʕ....* The Makah

word is reduplicated according to the requirements of *-wat* [LR] ‘friend of ...’ and re-reduplicated to indicate simple plural.

Irregular

In addition to the five plural formations just discussed, there are various irregular plurals. For example the plural of N, M *weʔič* ‘sleeping’ is N, M *huʔič*. Nuuchahnulth also has the pair *ʔux-* ‘topple over’ *hux-* ‘several things fall’. Most other irregular plurals involve various irregular reduplication types. In both languages the plural of N *quʔ*, M *quʔur* ‘slave’ is N, M *qaquʔ*. Jacobsen (1997a: 17-19) lists other examples of irregular plural reduplication in Makah, e.g. *ʔabeʔiqsu* ‘mother’ *ʔaʔabiʔqsu*, *qaʔaʔtk* ‘younger brother’ *qaʔqaʔtk*, *qidiʔλ* ‘dog’ *qilixiqilix*.

5.6 Special suffixes

In addition to the lexical suffixes already discussed, each language also has a couple dozen “special suffixes”, as Swadesh (1933) refers to them, that are not discussed in this dissertation. These are non-productive suffixes with dimensional or adjective-like meanings that occur with a limited number of bases, e.g.

Dimensional special suffixes

N, M [L]/ *-aʔ* ‘at ... distance’ in N *ʔanaʔ*, M *ʔaʔdaʔ* ‘thus close, at this distance’

N, M *-aʔča* ‘at ... height’ in N, M *ʔawaʔča* ‘low down, close to the ground’, N *sayaʔča*, M *ɣayaʔča* ‘high up’

N *-hʷ*, M *-xʷ* ‘... in size’ in N *ʔanaʔh*, M *ʔaduʔx* ‘thus big’

Adjective-like special suffixes

M *-baʔsaqʔλ* [L] ‘... friendly, tame’ in *ʔuʔbaʔsaqʔλ* ‘friendly, tame’ and *wiʔbaʔsaqʔλ* ‘unfriendly, hostile’

N, M *-ca-* [L] ‘... bold’ (with durative aspect *-ʔakʷ*) in N *ʔaʔcaʔk*, M *ɣaʔcaʔak* ‘bold, unafraid, fearless’ and N *wiʔcaʔk*, M *wiʔcaʔak* ‘timid, hesitant’

M *-čá'da* ‘... brightness (of light)’ in *ḡá'čá'd* ‘bright light’ and *wi'čá'd* ‘dim light’

M *-táp-at* ‘... lucky (esp. in love)’ in *ḡatápát* ‘lucky in love’ and *witápát* ‘unlucky’

A complete catalog of these morphemes must await future research.

5.7 Etymological relations between lexical suffixes and roots

Lexical suffixes are at least very rare cross-linguistically and clearly very different semantically than affixes in familiar languages.⁸³ Despite their root-like meanings, very few show any phonological relationship to a root from which one might hypothesize they are historically derived. Swadesh (1939: 79) points out two lexical suffixes with both obvious phonological and semantic similarity to an extant root: the path suffix N *-mat-*, M *-bat-* ‘moving about’ with root N *mat-* ‘move’, M *batat-* ‘(large object) tremble, shake’, and the verbalizing suffix N, M *-wa'(t)* ‘say ...’ with root N, M *wa'* ‘say’. We might also compare the root N *ʔi'qḡ-* ‘tell, narrate’ (probably reduced from earlier **ʔiyaqḡ-*) to the verbalizing suffix N *-iyaqḡ* [R] ‘sing ... song’, or, in Kyuquot dialect, ‘tell ... story’ (Rose 1981: 356). A final example involves the primitive root element N, M *wi-* that occurs as a component of various roots expressing negative concepts, e.g. N *wik*, M *wiki'* ‘not’, N *wi'ya*, M *wi'ya* ‘never’, M *wi'ba* ‘not know, recognize a person’, N *wi'ak^w* ‘invulnerable, unafraid’, N, M *wi'-q-* ‘angry, unpleasant; stormy, bad (weather)’, and many others.⁸⁴ This element evidently occurs as a suffix in a single Nuuchahnulth derivative, *suwi'yak* ‘instrument for not holding, nothing to hold’ (< *su-* ‘hold’ + *-wi'* + *-yak^w* ‘... instrument’) (Swadesh 1933: 154). These root/suffix pairs exhaust readily detectable examples. More typical is the situation shown in (319): roots with semantically similar suffixes are not phonologically related to them:

(319) Root	Lexical Suffix	
N <i>pápi'</i> , M <i>pípi'ʔi'</i> ‘ear’	N <i>-'imt</i> , M <i>-'abit</i>	‘at the ear’
N <i>qasi'</i> , M <i>qali'ʔi'</i> ‘eye’	N <i>-(c)su(t)</i> , M <i>-(k)sit</i>	‘at, in the eye’

N <i>hūçiti</i> , M <i>hūxw'cida</i>	'head'	N <i>-ayuk</i> , M <i>-eyuk</i>	'at the head, hair'
		N <i>-(w)i:k^w</i>	'on the head'
		N <i>-(c)sinyuk</i>	'on the head'
		N <i>-wihta</i>	'at the head'

Many body parts are not even coded by roots. If they must be referred to, the corresponding body-part locative suffix is affixed to a dummy root, either the empty root N *hita- hina- hin-*, M *hita- hida-* or the general locative root N *ʔam-*, M *ʔaP- ʔab-* e.g.

- (320) N *ʔaʔamas* '(on) the cheeks' (*-as* [R] 'at the cheeks')
- M *ʔaʔabadaqit* '(at) the midriff' (*-adaqit* [R] 'at the midriff')
- N *hinaksut* '(at) the mouth, lips' (*-aksu(ʔ)* 'at the mouth, lips')
- M *hitaquʔ* '(at) the face' (*-(q)u(ʔ)* 'at the face')

5.8 Specialization

Derived words vary widely in spontaneity of composition and degree of lexicalization. Speakers are capable of using the principles of derivation we have discussed in this chapter to spontaneously produce and interpret new words, but many derived words must be considered elements of the permanent mental lexicon, that is, words that are learned as units by speakers during the course of language acquisition and not derived anew for each use. The clearest indication of this is specialization of meaning. Derived words frequently have meanings more specific than the meanings of their component parts would suggest. Examples are legion. The Nuuchahnulth word *ʔi'htuʔ* (*ʔi'h^w* 'big' + *-(š)tuʔ* '... species') literally means 'big sort, species of thing' but now denotes only 'whale'. The literal force of the component morphemes ('big' and '... species') has been lost, as shown by the fact that one can say 'big whale' by modifying the derived word with one of its own components: *ʔi'h ʔi'htuʔ* 'a big whale' (NA 149.47). Similarly, N *ciʔas* (*ciq-* 'speak' + *-as* 'go in order to ...') literally means 'go in order to speak', but it is now specialized

to refer to a formal marriage party made up of the groom's relatives going to the prospective bride's people to discuss the proposal in certain ritualized ways. Derived words with specialized meanings are commonly used for names of flora and fauna, tools, ceremonies, personal names, and place names, e.g.

- (321) NUUCHAHNULTH
- a. *λatmapt*
λan-mapt
 wedge-plant
 'yew wood' (lit. 'wedge plant')
 - b. *ćisspuʔis*
ćis-(c)spu(ʔ)-'is
 strung.out-between.legs-on.beach
 'Rope-between-Legs (name of ceremonial contest)'
 - c. *λihwituʔa*
λih-witu(ʔ)-'a'
 move.pointwise-move.past.head.PERF-on.rocks
 'Pokes-past-head-on-Rocks (man's name)'
 - d. *tiqwʔis*
ti-qu:-'is
 stone-at.point.of.land-on.beach
 'Stone-on-Point (place name)'
- MAKAH
- e. *λixapix*
λix-(q)apʔ-ix
 red-over.a.rounded.surface-PL
 'red snapper'
 - f. *tupksit*
tupk-(k)sit [L]
 black-on.surface.of.water
 'Black-Water (place name)'

Sometimes both the specialized and literal meanings of a word are available. The root N, M *ća-* means '(to) flow', but with the durative aspect it is also used for 'river, stream, creek'. The two senses are even used together in the same phrase at NA 165.43: *ćaʔakʔi ćaʔak* 'the flowing creek' (*-ʔak^w* durative).

No one has dealt with the subject of specialization in Southern Wakashan in full detail, but further discussion and Nuuchahnulth examples can be found in Swadesh (1933: 54-58, 1939: 95-98) and Rose (1981: 289-91).

6 Aspect

6.1 Introduction

Aspect and aspectual distinctions are pervasive in Southern Wakashan. Most words have, or are at least eligible for, aspect marking of one sort or another, including some that, from a non-Southern-Wakashan point of view, might not seem likely candidates for aspectual modification. It is not uncommon to find words corresponding semantically to English nouns, adverbs, and temporal expressions marked for aspect along with those corresponding to English verbs and adjectives. Even lexical elements that are not formally marked for aspect almost always have some inherent aspectual value that must be reckoned with in determining their meaning, and, hence, their behavior in various morphological and syntactic contexts.⁸⁵

Aspect is indicated by the final morpheme of the unextended word.⁸⁶ This may be an aspect suffix (322)a, or else aspect is inherent in the meaning of the final morpheme, whether it is a lexical suffix (322)b or free root (322)c.

- (322) a. MAKAH/NUUCHAHNULTH
Perfective aspect suffix
čaqšičiλ
čaq-šičiλ
 push-PERF
 ‘push’
- b. **Perfective aspect inherent in meaning of lexical suffix**
če’ičiλ
ča-’ičiλ [L]
 water-get.PERF
 ‘get water’
- c. **Perfective aspect inherent in meaning of root**
waha’k
waha’k^w
 go.PERF
 ‘go’

Aspect in Southern Wakashan may thus be considered a type of completing element (cf. Swadesh 1931: 13, note 1). In the morphological terminology of this dissertation, aspect creates an unextended word; a word is complete when it has an aspectual value (either inherently, or by means of a lexical or aspect suffix). Formal expression of aspect is considered in more detail in §6.3.

6.2 The character of aspect in Southern Wakashan

At least from Sapir (1924), researchers on Southern Wakashan have recognized a basic two-way semantic aspectual distinction. As we will see below, I claim with Rose (1981) that the distinction is between imperfective and perfective aspect, but the two categories were originally labeled “durative” and “momentaneous” by Sapir and Swadesh in Nuuchahnulth. This analysis is explicitly stated in places,⁸⁷ but, even where not claimed outright in their works, it is often implied.⁸⁸

Swadesh & Swadesh (1933: 199) give a representative characterization of the meanings of the durative and momentaneous categories (as originally conceived) in Ditidaht.⁸⁹

The durative expresses a continued existence, state, or activity; thus duratives are translatable by English nouns, adjectives, and verbs expressing states and continued activities. The momentaneous expresses momentary occurrences, including transitions into states and states of activity (these are generally translated “to start doing ...”).

They evidently see the aspectual distinction as deriving from the duration of the situation itself: a situation that lasts a relatively long time (“a continued existence, state, or activity”) is expressed by the durative, and, conversely, a situation that lasts a very short time (a “momentary occurrence”) is expressed by the momentaneous. An aspectual distinction of this type is a situation-type distinction, because it involves some feature of the intrinsic temporal structure of the situation as represented by the semantics of the language. Different situation-type aspects correspond to different semantic situation types.

A problem arises immediately with a situation-type definition of the two aspects based on duration: the “momentaneous” is not limited to expressing momentary situations. It does express

situations that are truly instantaneous, as the suffix M, N *-šiλ* in (323)a does, but it can just as easily refer to a situation that might last minutes (323)b or days (323)c.

- (323) NUUCHAHNULTH
- a. *łiλqšiλaλma*
łiλq-šiλ = 'aλ = ma'
 explode-?=TEMP=INDIC
 'It exploded.'
- b. *či'sšiλaλma* *yaqçiqas*
či's-šiλ = 'aλ = ma' *yaq^w-çhi = (q)a' = s*
 sweep-?=TEMP=INDIC one.who-married.to=DEF=1sg
 'My wife swept (the floor) clean.' (based on NA 231.35-36)
- c. *wałšiλaλsi*
wał.-šiλ = 'aλ = si'
 go.home-?=TEMP=1sg
 'I went home.' (NT 150.16; context: the speaker travels home to the west coast of Vancouver Island from Vancouver after visiting various tribes to invite them to his daughter's puberty potlatch)

It is difficult to see how the duration of the situations could be the primary factor in the choice of aspect in these examples.

On the contrary, the point of using *-šiλ* in (323) is not to express some intrinsic characteristic of the situations (like momentary duration), but to present a particular view of them relative to other situations in the flow of discourse, whatever their intrinsic structure might be. This is “extrinsic” or viewpoint (Smith 1996) aspect, a “temporal restriction on what is asserted” (Klein 1995: 690).⁹⁰ Here the basic distinction is between perfective and imperfective aspects. Following the spirit (though not necessarily the letter) of Klein’s (1995) “time-relational” analysis of aspect, the difference between perfective and imperfective can be thought of as a difference in the scope of assertion relative to internal situation boundaries. As I interpret this with respect to Southern Wakashan, viewpoint aspect does not express durativity or lack thereof (as situation-type aspect would), but rather, by selection of one (viewpoint) aspect over another, a speaker elects to include or exclude any phases or boundaries that *already exist* in the meaning of a base. For example, in

(323)c, by choosing *-šil*, which we now reinterpret as a perfective suffix, the speaker includes all phases of the situation in his assertion, and thus in effect presents it as a completed whole relative to other situations in the discourse context. The following Nuuchahnulth text excerpt (from Text 39) shows example (323)c *in situ*, with its immediately preceding and following sentences.

- NUUCHAHNULTH
- 39.22.27 *waʔ ʔani wəqʔuʔaʔqʔ* *čʷčk quʔxuʔmišʔaʔh*
waʔ ʔani wəqʔuʔ = ʔaʔqʔ *čʷčk quʔxuʔmišʔaʔh*
 say.PERF SUBOR respond.to.invitation.PERF=INTENT all Kohomishath
 ‘They said that all the Kohomishath would come (in response in my invitation).’
- 39.23.1 *waʔšilʔaʔsi*
waʔ. -šil = ʔaʔ = siʔ
 go.home-PERF=TEMP=1sg
 ‘I went home.’
- 39.23.2 *hinasiʔsi* *hinkuʔasnit*
hina-as-iʔ = siʔ *hinkuʔas-nit*
 empty.root-arrive-PERF=1sg dog.salmon-stocked.with
 ‘I arrived at Stocked-with-Dog-salmon (place name).’

The three situations are presented as temporally sequenced, independent, and completed events, like beads on a string:

[event 1] ‘they said’ [event 2] ‘I went home’ [event 3] ‘I arrived’

On the other hand, when an imperfective aspect is applied to *waʔ.-*, all internal situation boundaries are *not* included in the assertion, allowing the situation of going home to be interpreted as ongoing and overlapping another situation. Example (324) has *waʔ.-* with the graduable imperfective aspect (§6.5.1), an aspect used for secondary imperfectivization (i.e. to imperfectivize an already perfective form), as a bare absolute predicate head following the inherently imperfective *tiʔč* ‘alive’. Because, as imperfectives, neither (*waʔšil* or *tiʔč*) has its situation boundaries included in the assertion, they can be construed as simultaneous.

- (324) NUUCHAHNULTH
ti'čuk^waḥ *wa'ššil* ... *ʔi'tuʔi* *ya'*
ti'č = uk = (m)a' = aḥ *wał-šil*–[L+S] *ʔi'tu = ʔi'* *ya'*
 alive=POSS=INDIC=1sg go.home–PERF–GRAD iitu=ART DEM
 ‘That iitu bird of mine was alive as I returned home.’ (NA 14.35-36)

The two situations of the bird being alive and the speaker traveling home are clearly to be taken as temporally overlapping: ‘... was alive *as I returned home*’. For another example, see (359)b.

Comrie (1976: 16-17) argues against equating perfectivity with short duration or momentaneous occurrence in part by citing examples from several languages that show perfective verbs in construction with temporal expressions that imply duration like ‘for an hour’ and ‘for ten years’, e.g. Ancient Greek *ebasileuse* (perfective past) *déka étē* ‘he ruled ten years’. A similar argument can be made in Southern Wakashan, with the difference that the temporal expressions themselves take the perfective marking; they are complement-taking words that serve as matrix predicate heads for the temporally modified complement clauses (§4.6.2.1), e.g. *qi'* ‘(do) [COMP] for a long time’ and *mu'čit'* ‘(do) [COMP] for four days’. The perfective suffix with these expressions indicates the completion of the time period denoted by the matrix.

- (325) MAKAH
 a. *ʔaλčeyałšʔaλitdi:cux* *hi'duł*
ʔaλ-čeyał-šil = 'aλ = (b)it = di:cux *hida-uł* [L]
 two–X.many.days–PERF=TEMP=PAST=INDIC.1pl/2sg empty.root–expect
 ‘We expected you for two days.’
- NUUCHAHNULTH
 b. *qi'čilma* *hu'yał* *qu'ʔasʔi*
qi'-čil = ma' *hu'yał* *qu'ʔas = ʔi'*
 long.time–PERF=INDIC dance person=ART
 ‘The man danced for a long time (and is no longer).’
- c. *mu'čit'šilweʔin* *hati's* *qu'ʔasʔi*
mu'-čit'-šil = we'ʔin *hati's* *qu'ʔas = ʔi'*
 four–X.many.days–PERF=QUOT bathe person=ART
 ‘The man completed four days of bathing.’ (NT 62.33)

6.3 Formal expression of aspect

Before discussing the functions of each aspectual morpheme in more detail in §§6.4-6.5, a summary of how the different aspects are marked is in order (Table 12). Perfective aspect is inherent in the meaning of some free roots and lexical suffixes, e.g. M, N *waha·k^w* ‘go (perf.)’, M, N - *iλ* [L] ‘get ... (perf.)’, M -(*k*)*siłta*, N -(*c*)*sułta* ‘come out of the woods (perf.)’. If it is not inherent,

Table 12. Summary of (non-inherent) aspect marking

Aspect	Formal Realization	Basic Functions
Perfective (§6.4)	- <i>š</i> <i>iλ</i> plus other allomorphs (also perfective inceptive - <i>ač</i> <i>iλ</i> , etc.)	perfective events, processes, and changes of state
Imperfective (§6.5)		
(uniplex categories)		
Graduative (§6.5.1)	[L+S] CV template	secondary imperfectivization
Durative (§6.5.2)	- <i>ak^w</i> - <i>uk</i>	stative intransitive; manner of motion
Continuative (§6.5.3)	-(<i>y</i>) <i>a</i> ’, or, rarely, the [L] CV template	dynamic imperfective situations
(multiplex categories)		
Repetitive (§6.5.4)	reduplication with -(<i>y</i>) <i>a</i>	events repeated at regular intervals
Iterative (§6.5.5)		events repeated at irregular intervals
Iterative I	reduplication with - <i>š</i>	
Iterative II	altered perfective suffix with changes to vowel length of the base	

perfective aspect is marked by the M, N suffix -*š**iλ*, which has many allomorphs (Table 13). A handful of free roots and lexical suffixes (e.g. M *ʔiʔi·x^wa*, N *ʔi·h^w* ‘big’, N *ʔa·q* ‘long’) take the “inceptive” suffix - *ač**iλ* instead: *ʔa·qač**iλ* ‘become long’. However, other roots and lexical suf-

fixes, particularly those with final vowels or (in Nuuchahnulth) coda nasals (§2.3), are marked for perfective aspect by another suffix, M *-eyačičiλ* or *-iwiλ*, N *-i:čičiλ*, traditionally known in the literature as the inceptive: M *dučičiwiλ* ‘turn into a mountain’ (*dučiči* ‘mountain’), N *qičaničičiλ* ‘become a louse’ (*qičičin* ‘louse’).

Perfective aspect is essentially marked by a single suffix (the inceptive suffixes notwithstanding), but imperfective aspect is indicated in a variety of ways. Most free roots and lexical suffixes are inherently imperfective and require no special imperfective marking: M *qičičida*, N *qičičin* ‘louse’, M, N *-’as* ‘on the ground’, M *-idux*, N *-na’ḥ* ‘seeking ...’. If a word is already perfective, it can be imperfectivized by the graduative, indicated by the [L+S] CV template (see example (324)).⁹¹ The durative suffix *-ak^w -uk* added to a bound root indicates a stative intransitive imperfective aspect: N *ninkak^w* ‘wrapped around’ (*nink-* ‘twist, wrap around’); it also occurs with many bound roots denoting manner of motion: M *xi’?uk* ‘crawling’ (*xi-* ‘crawl’). The continuative suffix *-(y)a’* or, occasionally, the [L] CV template, with a bound root indicates dynamic imperfective aspect: verb N *ninka’* ‘getting wrapped around’, verb M, N *čaqqa’* ‘pushing’ (*čaq-* ‘push, shove’).

In addition to the graduative, durative, and continuative imperfective aspects, which can be called “uniplex” imperfective aspects, there are two multiplex aspectual formations, the repetitive and the iterative. These imply various types of iteration of events versus the essentially steady-state meanings of the uniplex aspects. The repetitive, which expresses events repeated at regular and generally narrow-spaced intervals, is formed by a special reduplication type plus the suffix *-(y)a*. As we will see below, the repetitive has expanded its function somewhat beyond this in Makah to cover semantic space expressed by the continuative in Nuuchahnulth. The iterative, which expresses irregular iteration, is formed in two ways, one involving reduplication, and the other involving changes to the perfective form of the base.

- (327) MAKAH
- a. *kiλšʔaλʔu*
kiλ-šʔiλ = 'aλ = (b)u = ʔi
 shattered-PERF=TEMP=PAST=INDIC.3sg
 'It shattered, broke to pieces (intr).'
- b. *tuqšʔaλʔu*
tuq-šʔiλ = 'aλ = (b)u = ʔi
 melted-PERF=TEMP=PAST=INDIC.3sg
 'It melted (intr).'
- c. *hitaćitadʔaλʔu*
hita-ćita-diλ = 'aλ = (b)u = ʔi
 empty.root-in.water-PERF=TEMP=PAST=INDIC.3sg
 'He/she/it went into the water.'
 lit. '... got to be in the water.'

The construction in (327)c, which has the perfective suffix added to a base ending in a restrictive locative suffix, is a common way of indicating motion in Southern Wakashan. Or, phrased in a less English-centric fashion, we might say what is expressed as motion (with 'go' or 'come') in English is often not expressed as motion in Southern Wakashan, but as simple change of location ('get to be at X'). This can also be seen with the nuclear verbalizing suffix M, N -*ći* 'at ...', which means 'get to be at ...' (usually glossed as 'go to ...') when it is followed by the perfective suffix.

- (328) NUUCHAHNULTH
- | | | |
|-----------------------------|-------------------------|--------------------|
| <i>ʔaḥʔaʔaλweʔin</i> | <i>ʔuććinuʔaλ</i> | <i>yaʔiʔi...</i> |
| <i>ʔaḥʔaʔ = 'aλ = weʔin</i> | <i>ʔuć-ći-nuλ = 'aλ</i> | <i>yaʔiʔ = ʔiʔ</i> |
| then=TEMP=QUOT | woman-at-PERF=TEMP | Yai=ART |

'Then the Yai (a type of supernatural creature) went to his (own) wife.' (NT 72.17)

With processual bases the perfective expresses either inception of the process or (less commonly) its occurrence for an unspecified duration. This last usage is an especially clear indication of the perfective value of the suffix. It is often the case that text examples can be translated either way with little difference to the overall meaning of the passage.

- (329) NUUCHAHNULTH
kamitqšičiλ *šintħtin...*
kamitq^w-šičiλ *šint-ħtin*
 run-PERF mucus-made.of
 ‘Mucus-Made started running.’ (NT 98.23)
 or ‘ran (for some duration)’; see also (323)b-c

The perfective is most commonly used in discourse to narrate a series of completed past events. Occasionally, however, it occurs in an otherwise present context. Perfectivity in Southern Wakashan is by nature incompatible with present time reference: since the speaker, by choosing the perfective, includes all situation boundaries in the assertion, and thereby asserts its completeness, this leaves little room for the situation to be interpreted as ongoing at the time of speaking. In a present tense context, a (non-tense marked) word in the perfective is interpreted as immediate past:

- (330) NUUCHAHNULTH
šičiħšičiλaħ
šičiħ-šičiλ = (m)a' = aħ
 escape-PERF=INDIC=1sg
 ‘I have (just) run away.’ (NA 255.49)

Boas (1947: 289) describes a Kwakwala suffix *-xʔid* that he refers to as “recent past”. Significantly, there is another Kwakwala suffix with the same form *-xʔid*, which is cognate to Southern Wakashan *-šičiλ*, that he calls “momentaneous and inchoative” (Boas 1947: 290-91). This alleged homophony between “recent past” and “momentaneous” morphemes may point to a similar situation in that language.

Perfective marking has become tied up with causative marking. When the perfective suffix is not present (with no explicit aspect marking, or with the continuative, repetitive, etc.) causative is expressed by the clitic M, N = *'ap*. With the perfective suffix, however, it is normally expressed by a causative perfective portmanteau suffix. The words in (331) are the causative perfective counterparts to the words in (326) and (327).

- (331) MAKAH
- a. *ʔackatsaʔaʔits*
ʔackat-sa:p = 'aʔ = (b)it = s
 jump-CAUS.PERF=TEMP=PAST=INDIC.1sg
 'I made him/her/it jump.'
- b. *kiʔsaʔaʔits*
kiʔ-sa:p = 'aʔ = (b)it = s
 shattered-CAUS.PERF=TEMP=PAST=INDIC.1sg
 'I shattered it.'
- c. *hitaʕitaduʔaʔits*
hita-ʕita-du:p = 'aʔ = (b)it = s
 empty-in.water-CAUS.PERF=TEMP=PAST=INDIC.1sg
 'I put him/her/it in the water.'

The perfective suffix has a number of allomorphs, each with a corresponding causative perfective form; Table 13 shows the perfective allomorphs in Nuuchahnulth. The distribution of the allomorphs is at least partially predictable based on a) the morphological class of the final morpheme of the base, and b) the final segments of the base. However, a complete statement of their distribution awaits further research.

Table 13. Perfective allomorphs in Nuuchahnulth

	1a	1b	1c
Perfective	-š <i>i</i> ʔ	-č <i>i</i> ʔ	- <i>k</i> ^w <i>i</i> ʔ
Caus. Perf.	- <i>sa</i> ' <i>p</i> , - <i>sa</i> ' <i>q</i> -	- <i>ya</i> ' <i>p</i> , - <i>ya</i> ' <i>q</i> -	- <i>ya</i> ' <i>p</i> , - <i>ya</i> ' <i>q</i> -
	2a	2b	3
Perfective	- <i>i</i> ʔ	- <i>u</i> ʔ	- <i>nu</i> ʔ
Caus. Perf.	- <i>ip</i> ~ - <i>iya</i> <i>p</i>	- <i>up</i>	- <i>nup</i>
	4	5	6
Perfective	- <i>u</i> ' <i>ʔ</i> , - <i>awi</i> ʔ	- <i>stu</i> ʔ	- <i>'u</i> ' <i>ʔ</i>
Caus. Perf.	- <i>u</i> ' <i>p</i> , - <i>awu</i> <i>p</i>	- <i>stup</i>	- <i>'u</i> ' <i>p</i>
	7	8	9
Perfective	- <i>'i</i> ' <i>ʔ</i>	-(<i>'i</i>) <i>pi</i> ʔ	-(<i>'i</i>) <i>sa</i> ʔ
Caus. Perf.	- <i>'i</i> ' <i>ta</i> <i>p</i>	-(<i>'i</i>) <i>pitap</i>	-(<i>'i</i>) <i>sa</i> ʔ <i>ap</i>

Makah has similar allomorphs, e.g. N 1a -š*i*ʔ -*sa*'*p*, M -š*i*ʔ -*sa*'*p*, N 2b -*u*ʔ -*up*, M -*i*ʔ -*u*'*p*, and N 8 -(*'i*)*pi*ʔ -(*'i*)*pitap*, M -*pa*ʔ -*patap*, etc.

In addition to the suffix in Table 13, perfectivity can be marked by two other suffixes, M, N -‘*ačičiλ*’ (causative M -‘*a:ya:p?*’, N -‘*a’yap*’) and M -*eyačičiλ*, N -*i:čičiλ* (causative M -*a:ya:p*, N -*i:yap*), the latter of which is referred to by Sapir & Swadesh (1939: 320) as “inceptive”. Makah also has -*i:wīλ* (causative -*i:wī:ya:p*). In this dissertation, these suffixes are referred as “perfective inceptive” or simply “inceptive” suffixes to distinguish them terminologically from the regular perfective suffix. The impression of inceptivity seems to arise because they attach to stative bases, and an inchoative/inceptive reading is the regular result when a perfective morpheme attaches to a stative base.

The suffix -‘*ačičiλ*’ occurs with only a few roots and suffixes, apparently all property words or nouns, e.g. in Nuuchahnulth *ʔapa:s* ‘small’, *ʔi·hʷ* ‘big’, *λuʔ* ‘good’, *piš-* ‘bad’, *taʔ* ‘warm’, *ti·č* ‘alive, well’, *y’aq* ‘long’, (nominalizing suffix) -*paʔ* ‘season of ...’:

- (332) NUUCHAHNULTH
- a. *λuyačičiλ*
λuʔ-‘ačičiλ
 good-INCEP
 ‘She got well.’ (NT 68.18)
- b. *ta’yačičiʔaλ* *weʔičuλ* *čwčk...*
taʔ-‘ačičiλ = ‘aλ *weʔič-uλ* *čwčk*
 warm-INCEP=TEMP sleep-PERF both
 ‘Both of them got warm and fell asleep.’ (NA 444.36)
- c. *haʔumpi’čičiλweʔin*
haʔum-paʔ-‘ačičiλ = weʔin
 food-season.of-INCEP=QUOT
 ‘It became time for the run of salmon.’ (lit. ‘Food came into season’) (NT 52.8)

The suffix M -*eyačičiλ*, N -*i:čičiλ* generally attaches to words ending with final coda nasals (333)a (in Nuuchahnulth) or final vowels (333)b, but some morphemes with other final consonants take the inceptive as well (333)c.

- (333) NUUCHAHNULTH
- a. *nuʔtamiʔčiʔaʔin*
nuʔtim-i:čiʔil = ʔaʔ = (m)aʔ = ni
 nuthlim-INCEP=TEMP=INDIC=1pl
 ‘We turned into nuthlim (a type of supernatural creature).’ (based on NA 123.15)
- b. *ʔawiʔčiʔaʔ* *haʔwitaʔʔisʔi* *ʔumʔiʔqsak*
ʔawa-i:čiʔil = ʔaʔ *haʔwitaʔ = ʔis = ʔiʔ* *ʔumʔiʔqsu = ʔak*
 near-INCEP=TEMP young.man=DIM=ART mother=POSS
 ‘The little fellow approached (lit. became near) his mother.’ (NT 16.3-4)
- c. *wikiʔčiʔil* *hitačink*
wik-i:čiʔil *hita-(č)ink*
 not-INCEP empty.root-together.in.competition
 ‘They stopped fighting.’ (NA 392.38)

Inceptive suffixes do not occur directly with bound roots, but N *-i:čiʔil* can be added to their continuative form (if they have one), which is marked by the suffix *-(y)aʔ* (§6.5.3), e.g. N *ćickaʔ* ‘pounding’, continuative of *ćick-* ‘pound’, inceptive *ćickiʔčiʔil* ‘begin pounding’. Based on the morphophonemic processes we have seen so far, *ćickiʔčiʔil* could in theory derive either from the form *ćick-i:čiʔil* or the form *ćick-aʔ-i:čiʔil*, but forms like *ćiyiʔčiʔil* ‘begin cutting’ at NT 40.16 seem to assure the presence of the continuative; *ći-i:čiʔil* would surface as *ćiʔčiʔil*.

The perfective inceptive occurs in addition to the perfective (not at the same time) with certain Nuuchahnulth roots to mark change of state or inception of a process, while the perfective has a specialized meaning, e.g.

- (334) NUUCHAHNULTH
- | | |
|--|---|
| <p>a. Perfective inceptive
 <i>ʔayiʔčiʔil</i>
 <i>ʔaya-i:čiʔil</i>
 many-INCEP
 ‘come to be many’</p> | <p>Perfective
 <i>ʔayačil</i>
 <i>ʔaya-čil</i>
 many-PERF
 ‘give away, handle, bet many’</p> |
| <p>b. <i>ʔwɛsmiʔčiʔil</i>
 <i>ʔwɛsma-i:čiʔil</i>
 woman-INCEP
 ‘grow up (said of a woman)’</p> | <p><i>ʔučšil</i>
 <i>ʔuč-šil</i>
 woman-PERF
 ‘give a woman in ransom’</p> |

- | | | |
|----|---|---|
| c. | <i>quʔi·čičiλ</i>
<i>quʔas-</i> ‘ <i>ačičiλ</i>
person–INCEP
‘grow up (said of a man)’ | <i>quʔacšičiλ</i>
<i>quʔac-šičiλ</i>
person–PERF
‘do sth brave’ (lit. ‘act like a person’) |
|----|---|---|

Note with reference to our discussion in §5.2.2.3 that the derivatives in (334)b-c based on the free form of the root (N *tučsma* ‘woman’ < *tuč-* + *-sma* [L] free formative suffix, N *quʔas* ‘person’) have the more compositional meaning, while the derivatives based on the combining forms have specialized meanings.

6.5 Imperfective

6.5.1 Gradulative

The gradulative, formed by application of the [L+S] CV template,⁹² is used to make secondary imperfectives, that is, to imperfectivize an already perfective base. The perfectivity of the base may be inherent in its meaning (335) or may be due to the presence of perfective or inceptive suffixes (336).

- (335) **Inherently perfective base**
 NUUCHAHNULTH
- | | | |
|----|---|--|
| a. | <i>huʔiʔiʔaλsi</i>
<i>huʔ-i:ʔiλ = 'aλ = si'</i>
dance–move.into.house.PERF=TEMP=1sg | <i>ʔaḥʔa'</i>
<i>ʔaḥʔa'</i>
then |
|----|---|--|
- ‘Then I danced into the house.’ (NA 86.8)
- Inherently perfective base with gradulative**
 NUUCHAHNULTH
- | | |
|----|--|
| b. | <i>huʔiʔiλ</i>
<i>huʔ-i:ʔiλ-[L+S]</i>
dance–move.into.house.PERF– GRAD |
|----|--|
- ‘(as) they danced into the house’ (NT 88.11)

- (336) **Base with perfective suffix**
 MAKAH
 a. *hitaćidiłitid*
hita-ću'-dił = (b)it = id
 empty.root-in.container-PERF=PAST=INDIC.1pl
 ‘We entered the bay.’
- NUUCHAHNULTH
 b. *hitaćinłni* *hu'ćuqłis*
hita-ću'-nuł = ni' *hu'ćuqłis*
 empty.root-in.container-PERF=1pl Uchucklesit.Bay
 ‘We entered Uchucklesit Bay.’ (NA 146.6)
- Base with perfective suffix and gradutive**
 MAKAH
 c. *hi'taćidiłitid*
hita-ću'-dił-[L+S] = (b)it = id
 empty.root-in.container-PERF-GRAD=PAST=INDIC.1pl
 ‘We were entering the bay.’
- NUUCHAHNULTH
 d. *hi'taćinł*
hita-ću'-nuł-[L+S]
 empty.root-in.container-PERF- GRAD
 ‘They were entering the bay.’ (NA 410.12)

In combination with the Nuuchahnulth intensive future clitic = *?a:qł* (§7.3.2) the gradutive has a conative (‘try to’) sense:

- (337) NUUCHAHNULTH
 a. *hi'tacswi?a'qł*
hita-(c)swi'-[L+S] = ?a:qł
 empty.root-move.through.PERF- GRAD=INTENT
 ‘try to go through’
- b. *qa'hsap?a'qł*
qaħ-sa'p-[L+S] = ?a:qł
 dead-CAUS.PERF- GRAD=INTENT
 ‘try to kill’

The gradutive also occurs with the irrealis clitic (N = *'a:ħ*, M = *'ux?*) with a conative sense (§7.3.6).

Although the graduative typically expresses an imperfective process, it sometimes seems neutral with respect to viewpoint and merely indicates that the process in question is taking place slowly or gradually. This is probably its original function, in fact. The viewpoint component of the aspect system as a whole seems to be an addition to, or modification of, an earlier, purely Aktionsart-based system. One apparent clue is a group of roots that do not have a simple perfective, but only occur with the graduative. Most denote situations that cannot come about instantaneously, e.g. M *burʔšil*, N *murʔšil* ‘high tide’, N *turpšil* ‘evening’.

6.5.2 Durative

The durative aspect suffix M, N *-ak^w -uk* (*-ʔak^w -ʔuk* after vowels) only occurs with bound roots (§5.2.1) and a handful of suffixes. The distribution of the allomorphs is unpredictable, but each root or suffix may only occur with one of the two. The durative has two basic uses:

a) It expresses an intransitive imperfective state:

(338)

a. ^{MAKAH}
ʔixuw
ʔix-uk = i
 red-DUR=INDIC.3sg

‘It is red.’

b. *pusakaʔid*
pus-ak^w = aʔ = id
 tired-DUR=TEMP=INDIC.1pl

‘We are tired.’

c. ^{NUUCHAHNULTH}
qaʔakma *ʔayeʔi* *ʔiʔtwp*
qaʔ-ak^w = maʔ *ʔaya = ʔiʔ* *ʔiʔ^w-(š)twp*
 dead-DUR=INDIC many=ART big-thing

‘The many whales are dead.’ (based on NA 378.4)

d. *ʔaktak*
ʔakt-ak^w
 gnaw-DUR

‘gnawed’

b) It is commonly used with manner-of-motion roots to indicate an imperfective process. The

first vowel of the root is often lengthened in this usage:

- (339) MAKAH
- a. *ʔaːpχukal* *huktuːbiq*
 ʔapχ-uk = ʔaλ = ʔi *huktuːp = ʔiq*
 fly-DUR=TEMP=INDIC.3sg bird=ART
 ‘The bird is flying.’
- b. *xiːʔukal* *ʔiːʔiʔiːʔiq*
 xi-ʔuk = ʔaλ = ʔi *ʔiːʔiʔiː = ʔiq*
 crawl-DUR=TEMP=INDIC.3sg snake=ART
 ‘The snake is crawling.’
- NUUCHAHNULTH
- c. *kamitquk*
 kamitq^w-uk
 run-DUR
 ‘He was running.’ (NA 255.48)
- d. *huʔak*
 hu-ʔak^w
 fly.in.flock-DUR
 ‘(birds) are flying in a flock’

In Makah this “motive durative” pattern is so regular the durative can even add a motion sense to roots that do not otherwise denote motion:

- (340) MAKAH
- ʔaːptuk^wal*
 ʔapt.-uk = ʔaλ = ʔi
 hidden-DUR=TEMP=INDIC.3sg
 ‘He/she/it is sneaking around.’

A similar example in Nuuchahnulth:

- (341) NUUCHAHNULTH
- naːčuksɪ*
 nač-uk = siː
 look-DUR=1sg
 ‘I went around looking for him’ (NT 138.21)

A few other apparent process roots also take the durative, e.g.

- (342)
- MAKAH
- a. *q̇ixak*
q̇ix-ak^w
 cry-DUR
 ‘crying’
- NUUCHAHNULTH
- b. *ʔaʔwq^wak*
ʔaʔwq-ak^w
 play.with.spouse-DUR
 ‘to play with one’s spouse’
- c. *čiqak*
čiq-ak^w
 inflict.harm-DUR
 ‘inflicting bodily harm’
- d. *ʔihak*
ʔih-ak^w
 cry-DUR
 ‘crying’
- e. *qiʔa·qak*
qiʔa·q-ak^w
 fish.for.halibut-DUR
 ‘fishing for halibut’

6.5.3 Continuative

The continuative,⁹³ which occurs only with bound roots and a small number of suffixes (§6.7), is marked by the suffix *-(y)a'* (343)a-c, or, in the case of a few vowel-final monosyllabic roots, by lengthening the root vowel (343)c-d.

- (343)
- MAKAH
- a. *ʔu·xuwaʔ* *ʔupku·yaksic* *čaqɑ'*
ʔu-xwaʔ [L+S] = 'i *ʔupk-u'-yak^w* = sic *čaq-(y)ɑ'*
 so.and.so-use=IMPER.2sg peck-EPEN-thing.for=POSS.2sg push-CONT
 ‘Use your beak pushing it!’ (HI, Qweti and Raven)
- NUUCHAHNULTH
- b. *hawir·ʔaʔweʔin* *čiya'* *tu'csmeʔi*
hawir = 'aʔ = weʔin *či-(y)ɑ'* *tu'csma = ʔi'*
 finish=TEMP=QUOT cut-CONT woman=ART
 ‘The woman finished cutting it up.’ (NT 62.25)

- c. *ći'qa'ʔaʎah*
ći'q-(y)a' = 'aʎ = (m)a' = ah
 chant-CONT=TEMP=INDIC=1sg
 'I am chanting.'
- d. *ħačatiyuqʎ* *ma'* *susa'*
ħačat-iyuqʎ *ma-[L]* *sus-(y)a'*
 all-in.mouth hold.in.the.teeth-CONT swim-CONT
 'He had them both in his mouth, holding them in his teeth while swimming.'
 (from NA 378.16)
- e. *su'ʔaʎweʔin* *ʔakʔakukʔi...*
su-[L] = 'aʎ = we'ʔin *ʔak^w-ʔak^w = uk = ʔi'*
 hold-CONT=TEMP=QUOT cut.with.knife-thing.for=POSS=ART
 'She held her knife.' (NT 78.30)

Rose (1981: 263) and Nakayama (1997a: 27) both analyze the continuative as indicating that “a dynamic situation ... is enduring through time” (Rose 1981: 263). This definition is adequate as long as “dynamic” is defined along the lines suggested by Comrie (1976: 13): “[Dynamic situations] require a continual input of energy if they are not to come to an end”. That is, there need be no activity or change per se, but some energy or force must be exerted to maintain the situation. A crucial set of examples shows that activity and change are not required to license the continuative. Along with dynamic process roots like M, N *ći-* ‘cut’ and M, N *ći'q-* ‘chant’, the continuative also regularly occurs with roots denoting attachment, adhesion, holding, etc: M, N *k'u'* ‘hooked’, N *ćupqa'* ‘stuck in, planted’, M *k'wita'*, N *k'wina'* ‘stuck on’, M *ʎapa'*, N *ʎama'* ‘two-pronged object clamped on (e.g. clothespin on line)’, M *baʎa'*, N *maʎa'* ‘tied’, M *ba'*, N *ma'* ‘holding in teeth’, M *qapa'*, N *qama'* ‘lassoed, snared, entangled’, N *sinka'* ‘spear, arrow sticking in target’, M, N *su'* ‘holding in hand’.

- (344) NUUCHAHNULTH
k'wina'ʔaʎateʔic *yaʔsʔatu* *ti'ʔupʔi*
k'win-(y)a' = 'aʎ = 'at = (m)a' = ʔic *yaʔ-(c)sʔatu. [L]* *ti'ʔup = ʔi'*
 stuck.on-CONT=TEMP=PINV=INDIC=2sg yonder-at.door devil.fish=ART

‘You will be held by (lit. stuck on to by) the devil-fish there at the door.’ (NT 170.31)

These examples are hard to explain away as exceptional given the consistency of the pattern, yet none of the situations they denote can be described as action or change. Any of them *could* undergo change of some sort, e.g. something can suddenly become unstuck from a surface, or ropes can gradually loosen around a bundle, but change is not intrinsic to their nature as it is with a situation like that denoted by *či-* ‘cut’. But neither are they inherently stable — some application of force, external or internal, is necessary for the maintenance of the expressed configuration. Application of force seems to be the core meaning of this use of the continuative.

In Nuuchahnulth, when the continuative occurs with stative roots it expresses imperfective inception: *tuq^wa’* ‘melting’ (*tuq-*), *cika’* ‘becoming aslant, overbalanced’ (*cik-*), *łisa’* ‘whitening, dawning’ (*łis-* ‘white, bright’).

- (345) NUUCHAHNULTH
tu^wmapi *łi’qłi’* *łisa’łal*
tum–api [L] *łi’qłi’* *łis–(y)a’ = ‘al*
 dark–in.air still bright–CONT=TEMP

‘It was still a bit dark as it dawned.’ (NA 157.8)

In this use, the continuative appears to overlap the graduative (§6.5.1). It is not known whether a root like *tuq-* ‘melted’ also occurs with the graduative (added to its perfective form), and, if so, how this form is different in meaning from the continuative, i.e. do we find *tuqšil* ‘melting’ along with *tuq^wa’* ‘melting’?

In their list of Nuuchahnulth “primary stems” (1939: 243-316), Sapir and Swadesh record most bound verb roots as occurring with the continuative, e.g. *čuq^wa’* ‘to punch’, *čuḡ^wa’* ‘to tickle’, *tux^wa’* ‘to jump’. In Makah, the continuative is generally disallowed with such roots, the repetitive (§6.5.4) being preferred instead as the basic imperfective aspect. In this language, the continuative appears restricted to situations that are truly continuous, involving little internal structure and no distinguishable phases. Some light is shed on this by HW’s response when queried about *čuq^wa’* ‘punching’. Initially, she disallowed the formation. When asked what the word would have to mean if it *were* used,⁹⁴ she said (paraphrasing), “You’d have to be like Popeye af-

ter he ate spinach”, referring to an almost superhuman continuous blur of punches. After further reflection she decided the word might be possible to describe the action in a boxing match, although the repetitive *čūqu'čū'q* would still be preferred.

6.5.4 Repetitive

The repetitive generally applies only to roots and is formed by the suffix *-(y)a* plus repetitive reduplication (symbolized [RepR]), which involves full reduplication of monosyllabic roots with both the reduplicative vowel and the original first syllable vowel long (346)a,d.⁹⁵ If the root ends in a vowel, /*λ*/ is inserted in the coda of the reduplicative syllable (346)b,e. Polysyllabic roots have initial CV reduplication with both vowels lengthened (346)c,f. Due to the apocope rule described in §3.4.3, the final vowel of the repetitive suffix in Makah is not evident in surface forms if it is word final.

- (346)
- MAKAH
- a. *čit'čit'*
čit-(y)a [RepR]
 saw-REP
 ‘sawing’
- b. *k^wi'λk^wi'y*
k^wi-(y)a [RepR]
 sharpen-REP
 ‘sharpening, grinding, filing’
- c. *ʔa'ʔa'ckat*
ʔackat-(y)a [RepR]
 jump-REP
 ‘jumping’
- NUUCHAHNULTH
- d. *qa'tqqa'tq^wa*
qatq^w-(y)a [RepR]
 behead-REP
 ‘behead one after another’

- e. *ti·λti·ya*
ti-(y)a [RepR]
 wipe-REP
 ‘wipe repeatedly’
- f. *hi·hi·xuq^wa*
hixuq-(y)a [RepR]
 shout-REP
 ‘shout repeatedly’

Several Makah roots ending in /x/ do not show the regular vowel lengthening: *čaxčaxa* ‘dripping’ (*čax-* ‘drip’), *čuxčux^wa* ‘tickling’ (*čux-* ‘tickle’).

Monosyllabic roots in Makah with initial voiced or ejective consonants (including glottal stop) are subject to the epenthesis rule described in §3.4.3. As usual, insertion of the long epenthetic vowel induces shortening of the initial long vowel.

- (347) MAKAH
- a. *baλa'ba'y*
ba- < a' > -(y)a [RepR]
 close.teeth-⟨EPEN⟩-REP
 ‘biting down repeatedly’
- b. *λupku'λupk*
λupk- < u' > -(y)a [RepR]
 peck-⟨EPEN⟩-REP
 ‘pecking’
- c. *ʔaʔa'ʔaʔ*
ʔaʔ- < a' > -(y)a [RepR]
 vomit-⟨EPEN⟩-REP
 ‘vomiting repeatedly’

A few roots irregularly insert /c/ in the coda of the reduplicative syllable. This irregularity is not limited to monosyllabic vowel-final roots. (The Makah root *λa-* is not attested with this meaning outside this formation.)

- (348) MAKAH
- a. *λa'cλa'y*
λa-(y)a [RepR]
 hew-REP
 ‘hewing stone’

- NUUCHAHNULTH
- b. *łi'cłi'ya*
łi-(y)a [RepR]
 shoot-REP
 'shoot repeatedly'
- c. *k'w'ck'w'xa*
k'w'ix-(y)a [RepR]
 suck-REP
 'suckling'
- d. *ha'cħw'ta* (< *ha'cħa'w'ta*)
ħaw'it-(y)a [RepR]
 wealthy-REP
 'perform a wealth display'

The repetitive has relatively uncomplicated semantics. It expresses a series of regularly spaced iterations of an event. Unlike an iterative series (§6.5.5), the series of iterations expressed by the repetitive typically takes place over a relatively short space of time and requires an agentive subject. In a pattern apparently first noticed by Rose (1981: 278), the repetitive participates in a type of split intransitivity: stative intransitive roots are transitive in the repetitive, while dynamic intransitive roots remain intransitive. (349) shows several Nuuchahnulth examples.

(349)	stative root:	<i>kił-</i> 'shattered'	→	<i>ki'łki'ła</i> 'shatter one after another'
		<i>qaħ-</i> 'dead'	→	<i>qa'ħqa'ħa</i> 'kill one after another'
		<i>nink-</i> 'wrapped'	→	<i>ninkninka</i> 'wrap (tr.) repeatedly'
	dynamic root:	<i>ta'x-</i> 'spit'	→	<i>ta'xta'xa</i> 'spit repeatedly' *'cause ...'
		<i>tux-</i> 'jump'	→	<i>tuxtu'x'a</i> 'jumping' *'cause ...'
		<i>ciq-</i> 'speak'	→	<i>ci'qci'qa</i> 'speaking' *'cause ...'

One area that requires further research is the difference in meaning between the continuative and repetitive aspects with roots like M, N *či-* 'cut'. In isolation, of course, there is a difference in translation: with the continuative (M *čikya'*, N *čiya'*) this root is translated 'cutting' and with the repetitive form (M *čiłi'čiy*, N *či'łčiy*), 'cutting repeatedly'. In context it is not so clear what the distinction is. For example, in Makah, 'she is cutting (the) fish' is equally well expressed

by either. I examined this issue with speaker HW at some length but was unable to pin down a difference, although she seemed to feel that there was one.

6.5.5 Iterative

The iterative is formed in two ways, which I will refer to as iterative I and iterative II. In some cases, iterative I and II appear to contrast semantically, but in most other cases, they do not. As an initial approximation, both can be translated as ‘do X at intervals’. I first describe the formation of iterative I and II (§§6.5.5.1-6.5.5.2), and then compare their functions (§6.5.5.3).

6.5.5.1 Formation of iterative I

Iterative I involves the suffix *-š* (*-č* after vowels except *-k* after */u/* in Nuuchahnulth) plus a unique iterative I CV template, symbolized [IterR]: full reduplication of a monosyllabic root plus insertion of */λ/* in the coda of the reduplicative syllable if the root ends in a vowel (350)a,c-e.⁹⁶ In a few cases */λ/* is inserted even with consonant-final roots in Nuuchahnulth. Polysyllabic roots have only the first consonant and vowel reduplicated (350)b,f:

- (350)
- MAKAH
- a. *hihitš*
hit-š [IterR]
 remember-ITER
 ‘remember every now and again’
- b. *čičibuqš*
čibuq-š [IterR]
 halibut.hook-ITER
 ‘fishing with a halibut hook’
- NUUCHAHNULTH
- c. *mitxmitxš*
mitx^w-š [IterR]
 turn-ITER
 ‘turn at intervals’

- d. *č̣iλč̣ič̣*
č̣i-č̣ [IterR]
 cut-ITER
 ‘cut at intervals’
- e. *suλsuʔk*
su-k [IterR]
 hold-ITER
 ‘pick up at intervals’
- f. *ʔwʔwč̣aqš*
ʔwč̣aq-š [IterR]
 trap.with.deadfall-ITER
 ‘trap with a deadfall’

In Makah, epenthesis applies as normal with roots beginning with voiced or ejective consonants (including glottal stop).

- (351) MAKAH
- a. *biλiʔbiλš*
biλ- < iʔ > -š [IterR]
 rain-<EPEN>-ITER
 ‘raining intermittently’
- b. *ʔaptaʔaptš*
ʔapt- < aʔ > -š [IterR]
 hidden-EPEN-ITER
 ‘hiding at intervals, playing hide-and-peek’

Iterative I normally applies only to roots, not to derived bases. There are a few exceptions in Nuuchahnulth, e.g. *hiλhistaqš* ‘come from at intervals’, from *his-* ‘there’ + *-taq* ‘come from’. Derived bases always seem to have /λ/ inserted in the coda of the reduplicated syllable.

There are some complexities with regard to vowel length. Often, length is unchanged in either the reduplicated syllable or the original first syllable. Sometimes, however, one finds the original first syllable lengthened (e.g. M *kʷaλkʷaʔč̣* ‘back up at intervals; lobster’ < *kʷa-* ‘move backwards’, N *suλsuʔk* ‘take up at intervals’ in (350)c), or both vowels lengthened (e.g. M *č̣aʔč̣aʔuqš* ‘gaffing fish’ < **č̣aʔuq-* not attested outside this formation, N *naʔsqnaʔsqš* < *nasq-* ‘beat time with sticks’ at NA 398.14). Rose (1981: 277) analyzes forms in Kyuquot dialect like

na'sqna'sqš with both vowels lengthened as composed of the iterative plus the graduative, and says that they contrast semantically with the forms lacking the long vowels. She writes that the iterative “denotes sporadic occurrence of an event” (p. 271), while the so-called “graduative iterative” “indicates that the iterativity is more intense, frequent, or progressive” (p. 277). I have been unable to evaluate this claim for the Tseshaht corpus because forms with both vowels lengthened are exceedingly rare, only two have turned up so far, and the translations are not precise enough for comparison with other forms. Makah iteratives with one or two long vowels do not seem to have contrasting forms with short vowels.

6.5.5.2 Formation of iterative II

The formation of iterative II is based on the perfective (or perfective inceptive) form of a word. We first consider iterative II formation in Nuuchahnulth. Two operations are involved:

1. Change the final /*λ*/ of the perfective suffix to /*ʔ*/.
2. Lengthen the first two vowels and the last vowel (normally the vowel of the perfective suffix) of the resulting word and shorten all other vowels. In disyllabic bases both vowels are lengthened. In trisyllabic bases it is optional whether the second vowel is long or short (Sapir & Swadesh 1939: 239).

For example,

(352)	NUUCHAHNULTH		Iterative II
	Perfective		
a.	<i>čʷsiλ</i>		<i>čʷsiʔ</i>
	<i>ču-a's-iλ</i>		<i>ču-a's-iλ-[IterL]</i>
	face.down-on.horizontal.surface-PERF		face.down-on.horizontal.surface-PERF-ITER
	‘lie face down on a surface’		‘lie face down on a surface at intervals’
b.	<i>ʔapi·csuλ</i>		<i>ʔapicsuʔ</i>
	<i>ʔap-i:cs-uλ</i>		<i>ʔap-i:cs-uλ-[IterL]</i>
	carry.on.shoulder-carry-PERF		carry.on.shoulder-carry-PERF-ITER
	‘carry on shoulders’		‘carry on shoulders at intervals’

- | | | |
|----|--|--|
| c. | <i>hisak^wisačištuλ</i>
<i>hisa-k^wis-ačišť-uλ</i>
there-move.away-on.ocean-PERF
‘come up there out of the sea’ | <i>hi'sa'k^wisačišť</i>
<i>hisa-k^wis-ačišť-uλ-[IterL]</i>
there-move.away-on.ocean-PERF-ITER
‘come up there out of the sea at intervals’ |
|----|--|--|

Recall that syllables with coda nasals count as long (§2.3). This means that an iterative II form with a coda nasal in the final syllable requires no additional lengthening there.

- | | | |
|-------|---|--|
| (353) | NUUCHAHNULTH
Perfective
<i>hupwa'kλinλ</i>
<i>hup-wi-'akλi-nuλ</i>
round.object-move.out-at.rear-PERF
‘round object comes out the rear’ | Iterative II
<i>hupwakλinť</i>
<i>hup-wi-'akλi-nuλ-[IterL]</i>
round.object-move.out-at.rear-PERF-ITER
‘round object comes out the rear at intervals’ |
|-------|---|--|

Some lexical suffixes are inherently perfective and thus do not occur with the perfective suffix. Bases ending in these suffixes form the iterative II in one of two ways. Some simply add the allomorph of the perfective suffix they would take if the suffix were not inherently perfective and apply the regular iterative II length changes:

- | | | |
|-------|---|--|
| (354) | NUUCHAHNULTH
Inherently perfective suffix
a. <i>kamitqwi'ʔas</i>
<i>kamitq^w-wi:ʔas</i>
run-go.outside.PERF
‘run outside’ | Inherently perfective suffix with perfective suffix
<i>ka'mi'tqwiʔasčičť</i>
<i>kamitq^w-wi:ʔas-čičť-[IterL]</i>
run-go.outside.PERF-PERF-ITER
‘run outside at intervals’ |
| | b. <i>hitacsuhta</i>
<i>hita-suhta</i>
empty.root-come.out.of.woods.PERF
‘come out of the woods’ | <i>hi'ta'csuhtintť</i>
<i>hita-suhta-nuλ-[IterL]</i>
empty.root-come.out.of.woods.PERF-PERF-ITER
‘come out of the woods at intervals’ |

Others add the suffix *-'ať* and apply iterative II lengthening to the resulting base.

- | | | |
|-------|--|--|
| (355) | NUUCHAHNULTH
Inherently perfective suffix
<i>ʔayayi'</i>
<i>ʔaya-ayi'</i>
many-give.PERF
‘give many’ | Inherently perfective suffix with Iterative II suffix
<i>ʔaya'yi'ʔať</i>
<i>ʔaya-ayi:'ať [IterL]</i>
many-give.PERF-ITER
‘give many at intervals’ |
|-------|--|--|

The common restrictive path suffix *-ʔatu* ‘move off, down; [L] sink, esp. into water (perf.)’ has a suppletive iterative form (*-ʔať*) that is apparently related to this iterative II suffix:

- (356) NUUCHAHNULTH
hupʔatu *hupʔaʔ*
hup-ʔatu [L] *hup-ʔaʔ* [IterL]
 round.object-sink.PERF round.object-sink.ITER
 ‘round object sinks into water’ ‘round object sinks into water at intervals’

The iterative II formation is not well attested in Makah, though it is known to exist from a few forms that have turned up. For example, in one text we find

- (357) MAKAH
ʔaːdiːdaʁaːλwaːd *kʷisčičiːsiʔ* *šučas*
ʔaːdiːdaʁi = ˈaλ = waːda *kʷis-čiči-aːs-iλ-*[Iter] *šučas*
 just=TEMP=QUOT.3sg different-at-on.horizontal.surface-PERF-ITER tree
 ‘He (Eagle) just kept landing in one tree after another.’ (HW, Raven and his Beak)

The iterative II form here, *kʷisčičiːsiʔ* ‘get to be on a different one at intervals’ is formed by simply changing the final /λ/ of the perfective suffix to /ʔ/, mirroring step one of the Nuuchahnulth formation as described above. More thorough description must await further examples.

6.5.5.3 Comparison of functions

Given the current dearth of Makah iterative II examples, we must confine our semantic comparison of the iterative I and II formations to Nuuchahnulth. In most cases, iterative I and iterative II are in complementary distribution: iterative I applies to bare roots and iterative II applies to derived words, with no apparent difference in meaning. Both formations express an irregularly spaced (or at least not necessarily regularly spaced) series of repetitions of an action or event.

- (358) NUUCHAHNULTH
 a. **Iterative I**
ʔaːqinʰak *čičičiʃ*
ʔaːqin-ʰaː-k *čiči-ʃ* [IterR]
 why-INTERR-2sg sidewise-ITER
 ‘Why do you keep dodging to one side (during our spearing contest)?’ (NT 27.9)
- b. **Iterative II**
ʔaːyaːyiʔaːʔaːλatma
ʔaya-ayiː-ˈaʔ [IterL]-ˈaλ-ˈat-maː
 many-give.PERF-ITER-TEMP-PINV-INDIC
 ‘He was given a lot each time (in the potlatch).’ (based on NA 222.7)

Some translate Nuuchahnulth iteratives out of context as ‘every now and then’ or ‘once in a while’ (cf. Rose 1981: 271-74, Nakayama 1997a: 28), e.g. *ćaxćaxš* ‘spearing every now and then’ (< *ćax*^w- ‘(to) spear’ + iterative I). These translations might imply that the repetitions must be temporally distant from one another, perhaps days or weeks apart, and that the series as whole occurs over a considerable length of time, but no such restrictions exist: *ćaxćaxš* can denote a series of events that lasts only a few minutes. The temporally extended sense may be more typical though; in fact, iteratives sometimes have a habitual connotation, as shown by their tendency to lexicalize as deverbal nouns (§8.2.1), e.g. *ći’ći’wahsuł* ‘bureau (of drawers), lit. gets pulled out at intervals’ < *ći* ‘pull’ + *-wahsu(ł)* ‘move out’ + iterative II.⁹⁷

Exceptions have been recorded to the generalization that iterative I and iterative II are merely formal alternates. For example, Sapir (1924: 87, note 37) notes for the root *łupk-* *łimk-* ‘awake’ that the iterative II form (which he calls the “durative iterative”) *łupkšiči’ł* ‘to be waking up time and again’ contrasts with the iterative I form (which he calls the “momentaneous iterative”) *łupkłupkš* or *łimkłimkš* ‘to keep waking up by fits and starts’. More investigation is necessary to see how general the possibility for such contrasts is, but, at this point, it appears limited.

6.6 Aspect combinations

In addition to the simple aspects we have discussed, Makah and Nuuchahnulth allow the formation of various two- and three-aspect combinations. The main purpose of such combinations is to imperfectivize perfectives or, conversely, to perfectivize imperfectives.

We have already seen examples of the first case in §6.5.1: the graduative is added to a base ending with the perfective or perfective inceptive suffixes to imperfectivize it:

- (359) **PERF-GRAD**
 MAKAH
 a. *wi’šabu’?aλs*
 wiš.-(q)apł-u:p-[L+S]=’aλ=s
 flat-over.a.rounded.surface-CAUS.PERF-GRAD=TEMP=INDIC.1sg
 ‘I am deflating it (a sealskin float).’

NUUCHAHNULTH

- b. *hi·ninginλʔa·qλ'aλni*
hina-ñ'a·qi-nuλ-[L+S] = ʔa:qλ = 'aλ = ni'
 empty.root-on.a.height-PERF-GRAD=INTENT=TEMP=1pl

'We are trying to get up to the top.' (NA 142.30)

INCEP-GRAD

NUUCHAHNULTH

- c. *nunu·k^waλma yaʔ mə·k^waʔi·hʔi λa·wičiʔaλ*
nunu·k = 'aλ = ma' yaʔ mə·k^waʔi·h = ʔi' λawa'-i:čiλ-[L+S]
 sing=TEMP=INDIC yonder rescue.party=ART near-INCEP-GRAD

'There was the rescue party singing as they approached.' (NA 238.50-51)

In the second case, the perfective or perfective inceptive suffix is added to an imperfective base to perfectivize it, usually resulting in an inchoative/ingressive meaning. Note that the repetitive suffix is lost before the perfective suffix (360)c-d.

(360)

CONT-INCEP

NUUCHAHNULTH

- a. *ʔu·šʔaλqu' ʔu·csa'mi·h ʔaʔi·čiλ čičiša...*
ʔu·š = 'aλ = qu' ʔu·csma-i:h ʔaʔ-(y)a'-i:čiλ čičiša
 some=TEMP=COND woman-PL vomit-CONT-INCEP loathing

'Some women would vomit from loathing.' (NA 72.19)

ITER-PERF

NUUCHAHNULTH

- b. *suλsu·kš'iʔaλ ʔaħʔa' ...wa'čmin...*
su-š [IterR]-š'iλ ʔaħʔa' wa'čmin
 hold-ITER-PERF then policeman

'Then the policemen started taking them.' (NT 208.9)

REP-PERF

MAKAH

- c. *ʔa'dʔaλ čaχčaχšʔaλ katur*
ʔa'di = 'aλ čaχ-(y)a [RepR]-š'iλ = 'aλ kaT-uk
 in.fact=TEMP drip-REP-PERF=TEMP oil-DUR

'Sure enough, oil began to drip.' (HI, Raven and Bear)

NUUCHAHNULTH

- d. *cuc-cucš'iλ*
cuc-(y)a [RepR]-š'iλ
 scratch.at.itch-REP-PERF

'One starts scratching.' (NT 206.21)

Three-aspect combinations are formed by the perfective added to the graduative imperfective to re-perfectivize it. The exact semantics of this construction require further investigation, e.g. how is *λawwičičiλšičiλ* ‘approach’ in (361)b different from simple *λawwičičiλ* ‘approach’?

- (361) **INCEP-GRAD-PERF**
 NUUCHAHNULTH
- a. ...*ʔaʔiyəpšičiλʔaʔqλ* *haʔum*
ʔaʔa–‘i:ʔap–[L+S]–šičiλ = ʔa:qλ *haʔum*
 many–CAUS.INCEP– GRAD–PERF=INTENT fish
 ‘He started trying to make the fish numerous.’ (NT 118.35)
- b. *λawwičičiλšičiλaλ*
λawa–i:čičiλ–[L+S]–šičiλ = ‘aλ
 near–INCEP–GRAD–PERF=TEMP
 ‘They approached.’ (NA 440.29)
- PERF-GRAD-PERF**
 MAKAH
- c. *bačičiλšičiλ* *čičičiq*
ba–čičiλ–[L+S]–šičiλ = ‘aλ = ‘i *čičic = ‘iq*
 close.teeth–PERF–GRAD–PERF=TEMP=INDIC.3sg butter.clam=ART
 ‘The clam is beginning to close down.’
- NUUCHAHNULTH
- d. *qaʔhšičiλšičiλaλ* *ħaʔk^waʔλʔi*
qaʔh–šičiλ–[L+S]–šičiλ = ‘aλ *ħaʔk^waʔλ = ʔi*
 dead–PERF–GRAD–PERF=TEMP girl=ART
 ‘The girl was (close to) dying.’ (NT 78.4)
- e. *miʔtxšičiλšičiλ*
miʔtx^w–šičiλ–[L+S]–šičiλ
 turn–PERF–GRAD–PERF
 ‘to start making a circuit, turn’ (Sapir & Swadesh 1939: 241)

In theory, one can make a four-aspect combination by adding the inceptive to the continuative, followed by the graduative and then by the perfective. For example, Sapir & Swadesh (1939: 241) give Nuuchahnulth *miʔtx^wičičiλšičiλ* ‘to start starting to turn about’ (which they label “Pre-inceptive”), but there are no other clear cases. Given the rather forced translation, one can perhaps see why.

(362) **CONT-INCEP-GRAD-PERF**

NUUCHAHNULTH

*mi·tx^wičičiλšičiλ**mitx^w-(y)a'-i:čičiλ-[L+S]-šičiλ*

turn-CONT-INCEP-GRAD-PERF

'to start starting to turn about' (Sapir & Swadesh 1939: 241)

6.7 Aspect and lexical suffixes

Bases with lexical suffixes have less potential for aspectual modification than bare roots because lexical suffixes typically have some aspectual force of their own. I note the basic patterns of lexical suffix/aspectual co-occurrence in this section for the sake of completeness, but a comprehensive suffix-by-suffix survey is a task for the future.

Let us first consider the potential for co-occurrence of lexical suffixes with the simple aspects discussed above. The perfective is probably the most common aspect in terms of text frequency, and also has the greatest privilege of occurrence with lexical suffixes. Several of the Nuuchahnulth perfective allomorphs listed in Table 13 and their Makah analogues occur only with suffixes, or roots lexicalized with those suffixes.

Most lexical suffixes do not occur with the durative and continuative. There are, however, a handful of exceptions, perhaps relics from an earlier period of more productive co-occurrence. It seems unlikely that the aspect suffixes make much semantic contribution in these combinations today; they now have almost the character of formative suffixes.

The following list of Nuuchahnulth suffixes that occur with the durative or continuative may not be complete, but contains the majority of the clear examples.

Examples of Nuuchahnulth suffixes that occur with the durative

Nominalizing suffixes:

-ḥta-, *-ḥta'k^w* '... many flexible receptacles full'*-(š)taq-*, *-(š)taqak^w* '... many units'

Verbalizing suffixes:

-(w)aqsa-, -(w)aqsak^w ‘in ... generation, layer’

-činaq-, -činaqak^w [L] ‘talking about ...’

-yih̄taq-, -yih̄taqak^w ‘derived from, originating from ...’

Restrictive path-orientation suffix:

-h̄ta-, -h̄ta^w ‘apart, divided off; out to sea’

Examples of Nuuchahnulth suffixes that occur with the continuative

Verbalizing suffixes:

-ca'q-, -ca'qa [L] ‘busied with getting, cooking, eating ... food’

-ca:q-, -ca:qa ‘paying attention to ...’

-cuq-, -cuq^wa ‘in ... hand’

-cāt-, -cātā [LR] ‘give attention to, do only ...’

-ci:q-, -ci:qa ‘unable to find ...’

-č̄iyuq-, -č̄iyuq^wa ‘dealing with ...; attacking, trying to capture ...’

-i'yuq-, -i'yuq^wa ‘doing to ...’

-mitaq-, -mitaqa [L] ‘telling about ...’

-pał-, -pałā [R] ‘... on each side; several ... -ing at once’

-pāł-, -pāłā ‘looking on admiringly at ...’

-(š̄)tu:q-, -(š̄)tu:q^wa [L] ‘going through ... formalities’

-ti:ʔił-, -ti:ʔiłā [sometimes L] ‘pretending to (be) ...’

Restrictive locative suffixes:

-'apu(ł)-, -'apułā [L] ‘underneath, on the bottom’

-cimu(ł)-, -cimułā ‘on the ceiling’

-cīt.-, -cīta ‘in the water, water hole’

-cuq-, cuq^wa ‘in the mouth’

-p̄iq-, *-p̄iqa* ‘at the summit’

Other suffixes simply end in /a/; these may contain the continuative as an etymological component, e.g. *-č̄i:qa* [R+L] ‘dragging ... along, impeded by ...’, *-hta* ‘doing to ...’, *-naqa* [L] ‘using ... as bait’, *-p̄iqa* [R] ‘on the knee’, *-tuṛta* [L] ‘giving a potlatch, ceremony for ...’.

Makah cognates of the suffixes in the above lists also occur with the durative or continuative suffixes (e.g. M *-x̄ta’k^w* ‘... many flexible receptacles full’, M *-’aputa* [L] ‘underneath’), but it is not known if the aspect suffix is separable from the lexical suffix as in Nuuchahnulth or now simply fused with it.

When any of the above Nuuchahnulth suffixes is the final lexical suffix in a base, it must be followed by either the appropriate aspect suffix, as in (363)a, or else the perfective. The aspect suffix does not appear otherwise because a following lexical suffix normally takes aspectual precedence (363)b:

- (363) NUUCHAHNULTH
- a. *ʔaλhta’k*
ʔaλ-hta-ʔak^w
 two-X.many.sackfuls-DUR
 ‘two sackfuls’
- b. *ʔaλhtaḥa*
ʔaλ-hta-ḥa’
 two-X.many.sackfuls-buy.PERF
 ‘buy two sackfuls’

Bases with lexical suffixes rarely occur in the repetitive aspect. Those that do are generally specialized in some way, and hence have some independence from their component morphemes in the lexicon. For example, in §5.8 I mentioned N *ciʔas* ‘woo’ as an example of a derivative with a specialized meaning. This is also one of the few derived words that occurs with the repetitive: *ci’ci’ʔasa* ‘continually engaging in marriage talk’ at NA 142.49, 145.30, 276.46, etc.

Another possibility of occurrence with the repetitive in Nuuchahnulth, and perhaps in Makah as well, rests on the fact that derived or underived nominal bases denoting an exchangeable com-

modity can occur with a non-durative aspect to form a verb meaning ‘give away X commodity’, e.g. N *ta'na'* ‘money, dollars’ in the perfective (*ta'na'qšičiλ*) means ‘give away money’, N *tuč-* ‘woman’ in the perfective (*tučšičiλ*) means ‘give a woman in ransom’. Derived bases donating a commodity may thus occur in the repetitive with similar semantic force:

- (364) NUUCHAHNULTH
ʔa'ʔa'λqimłta
ʔaλ-qimł-(y)a [RepR]
 two-X.many.round.objects-REP
 ‘give away two dollars repeatedly’ (lit. ‘give away two round objects ’)

Most lexical suffixes have inherent aspectual value. The majority are imperfective, but some verbalizing and restrictive path-orientation suffixes are perfective, e.g. perfective verbalizing suffixes N *-a:ħin* ‘deprive of ... (perf.)’ and M, N *-'iλ* [L] ‘get, go for, invite ... (perf.)’; perfective path-orientation suffixes M *-a'yiλ*, N *-ayi:ʔiλ* ‘enter the house (perf.)’, M *-(k)sta'*, N *-(c)sta'* ‘move down into (perf.)’. As noted in §5.5.1, certain path-orientation suffixes are (stative) imperfective with some bases and perfective with others, e.g. M *-(k)swi'*, N *-(c)swi'* ‘move through (perf.); extending through’.

7 Clitics

7.1 Introduction

An important feature of Southern Wakashan syntax is the presence of clitics in the predicate expressing grammatical categories like voice, tense, mood, among others. In Chapter 5, we described lexical suffixes in some detail. There are a number of phonological, morphological, and semantic differences between the two morpheme types. These are as follows:⁹⁸

(365) **Phonological differences between suffixes and clitics**

- Labialized velar and uvular consonants alternate with their homorganic non-labialized counterparts before clitics just as they do before word boundaries (§3.2.2).
- Clitics are never associated with CV templates (§3.3.1).
- Glottalizing clitics do not affect fricatives (§3.3.2).
- Long vowels in the second syllable of a word do not contract over a glottal stop inserted by a glottalizing clitic (§3.3.4).
- Sequences of vowels that do not normally reduce over a glottal stop do reduce with glottal stops inserted by glottalizing clitics (3.3.4).

(366) **Morphological differences between suffixes and clitics**

- Clitics may be added only to complete words, that is, words that are capable of independent use in a sentence, while most suffixes are core suffixes that attach to both bound and free bases. Thus, the Makah Indicative mood clitic = *ʔi* may be directly added to the free verb root *weʔiç* ‘sleeping’:

weʔiç
weʔiç=ʔi
 sleep=INDIC.3sg
 ‘He/she/it is sleeping.’

A bound root like $\acute{q}^w\text{abaq-}$ ‘yellow, green’, on the other hand, must first take some suffix before the Indicative clitic can be added:

$\acute{q}^w\text{abaqaw}$
 $\acute{q}^w\text{abaq-ak}^w = \acute{i}$
 yellow-DUR=INDIC.3sg
 ‘It is yellow.’

$*\acute{q}^w\text{abaq}$
 $\acute{q}^w\text{abaq} = \acute{i}$

- Closely related to this is the fact that clitics never occur with the combining forms of free roots or suffixes (§5.2.2.1), only with free forms.
- In the overall structure of the word, suffixes appear closer to the root than clitics; clitics never precede suffixes in a word.
- Clitics must occur in a fixed order relative to each other, while (nuclear) suffixes may often occur in different orders to express different meanings.
- Clitics attach without formal or semantic irregularity to almost any word in the language according to its syntactic function (see below). Suffixes are collocationally more restricted, and can have idiosyncratic semantic effects or enter into lexicalized combinations with bases.

Finally, there is an obvious difference in denotation between lexical suffixes and clitics. As we have seen, suffixes often have semantic content akin to that of independent lexical items, or even phrases, in English, e.g. M $-(k^w)\acute{i}\acute{t}$ [L+S] ‘making ...’, $-idux$ ‘looking for ...’, $-adit$ [L] ‘on the neck’. The meanings of clitics (e.g. tense, mood) are much more abstract by comparison, and clearly mark them as belonging to the grammatical, rather than the lexical level, of the language.

Before turning to more detailed discussion of individual clitics, let us remind ourselves of their general character. Syntactically, clitics are most associated with the predicate, which was defined in §4.3 as an obligatory predicate head (normally a single word, but sometimes a complex of property + noun, numeral + noun, etc.) and one or two optional predicate modifiers. Based on

their typical positions in this predicate structure, three types of clitics can be distinguished (§4.3.4): 1) second-position clitics, which attach to the first word of the predicate, whether head or modifier, 2) head clitics, which attach at least to the head, and 3) flexibly-positioned clitics. The Nuuchahnulth sentence in (367) shows exemplars of each category. The second-position tense, mood, and pronominal subject clitics are hosted by the initial predicate modifier; the passive-inverse and possessive head clitics are hosted by the predicate head *č'i:tsa'p* 'cause to escape, run away'; and the flexibly-positioned temporal specifier = 'aλ is hosted by both.

- (367) NUUCHAHNULTH
ʔaħʔa'ʔaλitaħ *č'i:tsa'paλatuk*
ʔaħʔa' = 'aλ = (m)it = (m)a' = aħ *č'i:tsa'p = 'aλ = 'at = uk*
 then=TEMP=PAST=INDIC=1sg escape-CAUS.PERF=TEMP=PINV=POSS
 'Then someone caused my (slave) to run away.' (NT 162.40)

However, rightward copying of second-position clitics is sometimes possible and leftward copying of head clitics is common. In (368)a, the subject clitic has been copied from the initial modifier onto the following head, and in (368)b, the passive-inverse has been copied onto the initial modifier from the following head:

- (368) NUUCHAHNULTH
 a. *ʔaħʔa'ʔaλsi* *ma'kuksi* *qu't...*
ʔaħʔa' = 'aλ = si' *mak^w-uk = si'* *qu't*
 then=TEMP=1sg buy-DUR=1sg slave
 'Then I bought a slave.' (NT 138.19)
 b. *ýu'q^wa'ʔatλa'* *ʔaħač'iʔat*
ýu'q^wa' = 'at = λa: *ʔaħa-č'iλ = 'at*
 likewise=PINV=again turn.away-PERF=PINV
 'He was likewise turned away from again.' (NT 82.27)

Another situation in which head clitics are copied leftward involves the passive-inverse, which is often copied from the head of a lower bare absolute complement head onto the head of the higher matrix predicate (§4.6.2.1):

- (369) NUUCHAHNULTH
*wik*at *hin*?atš*i*?at...
wik = 'at *hin*-?at-š*i*λ = 'at
 not=PINV empty.root-aware.of-PERF=PINV
 'He was not noticed.' (NA 408.2-3)

It has been suggested by some (e.g. Klokeid 1976, Renker 1987) that clitics in Ditidaht and Makah (and, by extension, Nuuchahnulth) form a second-position AUX constituent. I find examples like (367)-(369) to be evidence against this analysis, since the clitics do not appear to form a single block or constituent in sentence structure, nor do they all automatically attach to the first word of the predicate (or sentence).

7.2 Mood and pronominal clitics

We begin with description of the mood and pronominal clitics due to their importance in the grammatical system. The basic principles underlying their use have been described in §4.3.1.

7.2.1 Makah mood-pronominal forms

Jacobsen (1973) contains the first description of Makah moods and pronouns. My analysis generally agrees with his, but does differ in certain respects. Some differences are merely terminological, e.g. I have renamed his “nominal” mood the “Relative”. In other places, as he notes, alternative analyses of forms are possible given the raw data. My choice of an analytical alternative for Makah has sometimes been influenced by study of the Nuuchahnulth material (and vice-versa). For instance, one can analyze one particular Makah variant of the third person plural clitic as either =*t* or =*at* (see the section “Third person subject” below). Based on the Nuuchahnulth cognate =?at (§7.4.1), I have analyzed the form as =*at*. This also brings the form into line with two other variants of the clitic in Makah which are uncontroversially =*a't* and =*°at*. On the other hand, Jacobsen selects the =*t* option (Jacobsen 1973: 5, et passim), presumably on the sound principle that, everything else being equal, one should only posit segments for which one has di-

rect evidence. For me, the Nuuchahnulth form and the other Makah forms tip the scales for =*aʔ*. This allows us to straightforwardly reconstruct a third plural allomorph for Proto-Nootkan *=(ʔ)*aʔ* (assuming the Ditidaht data is not contradictory) without having to account for an errant Makah reflex that lacks the vowel. Nonetheless, there is one instance in which it does seem we must posit an =*ʔ* allomorph in Makah (§7.4.2).

Combinations of first and second person

We begin our presentation of Makah pronominal clitics with forms expressing combinations of first and second persons, shown in Table 14.

Table 14. Makah pronominals - combinations of first and second person

Subjects	Non-subjects			
	2sg	2pl	1sg	1pl
1sg	= <i>si:cux</i>	= <i>so:wacux</i>		
1pl	= <i>di:cux</i>	= <i>do:wacux</i>		
2sg			= <i>ʔicis(a:)</i> = <i>si:s</i>	= <i>ʔicdi:s(a:)</i> = <i>di:s</i>
2pl			= <i>ʔicso:wasač(a:)</i> = <i>so:wasač</i>	= <i>ʔicdo:wasač(a:)</i> = <i>do:wasač</i>

Rows represent subjects, and columns represent non-subjects. (I say “non-subject” rather than “object” because, as mentioned in §4.3.1, obliques are sometimes indexed by these forms as well as objects.) Further morphological segmentation is possible in the table, but I have chosen to leave the forms unanalyzed in this dissertation for simplicity. Jacobsen (1973: 6-8) can be consulted for suggestions concerning further analytic possibilities.

The four forms at the top left of the table express first person subject with second person non-subject. These forms occur by themselves as Indicative mood forms as well as with clitics expressing other moods, or with no mood clitic (in absolute predicates). The bottom right of the table shows the eight forms expressing second person subject with first person non-subject. The upper form in each cell occurs by itself as the Indicative mood form. (The longer forms appear

preceding the responsive post-modal clitic =š*i*: (§7.4.3.) The lower form occurs elsewhere, i.e. with mood clitics or in absolute predicates.

First and second person subject, intransitive or with third person non-subject

Table 15 shows pronominal clitics expressing first and second person intransitive subjects. The same forms convey first or second person subjects with third person non-subjects. Some forms

Table 15. Makah pronominals - first and second person intransitive subjects

	Set 1	Set 2a	Set 2b	Set 2c
1sg	= <i>s(i)</i>	= <i>si</i> :	= <i>s</i>	
pl	= <i>(i)d</i>	= <i>du</i> :	= <i>d</i>	= <i>du</i> :
2sg	= <i>ic</i>	= <i>su</i> :		= \emptyset
pl	= <i>ica</i> :	= <i>sa</i> :		

have longer shapes when followed by certain post-modal clitics, especially the habitual =*a:k* (§7.4.2) and the responsive =š*i*: (§7.4.3), e.g. the Set 2 second plural form is =*so:wač* when followed by =*a:k*: =*so'wača'k* 'you (pl.) always ...'. Presentation of these longer variants is mostly reserved for later sections to avoid cluttering the table with alternate forms. We can note here, however, that the first person singular Set 1 form is =*si* when followed by the habitual and responsive, otherwise it is =*s*. The first person plural Set 1 form is =*d* unless it follows a consonant and is not in turn followed by a vowel, in which case it is =*id*.

The forms are divided into four sets according to the shape they take following different mood clitics, although no person/number combination shows four distinct variant forms: first singular and plural and second singular have three variants each; second person plural has only two. Some individual variants for any given person/number combination are obviously shared between sets, but the sets differ as to which particular variant they show, e.g. Set 2a and Set 2c show the same first plural variant (= *du*:), but for second singular, it is Set 2a and Set 2b that are identical (= *su*:).

Turning now to the distribution of the sets by mood, Set 1 occurs by itself to express Indicative mood. It probably also follows the Purposive clitic = 'a:, but this mood is not fully attested (§7.2.5). Set 2a occurs in absolute predicates and with the Subordinate mood and the various evidential moods (Quotative, Inferential, etc.). Set 2b occurs only with the Conditional mood = qey(u) (§7.2.6). Set 2c occurs with the Relative mood and the two Interrogative moods. (These mood-pronominal set combinations are repeated in Table 16.)

Third person plural non-subjects can be indicated by the third plural clitic = a:t̥ (§7.4.1) following the first singular and plural and second singular forms in Table 15 (for second plural with third plural see below). This third plural marking is apparently limited to human and perhaps higher animate non-subjects. When followed by = a:t̥, the non-Indicative sets (Sets 2a-c) reduce to a single set of forms equivalent to Set 2a. That is, non-Indicative first singular is always = si: with = a:t̥, second singular is = su:, etc. This formal syncretism suggests that originally there were only two sets, Indicative and non-Indicative (modern Set 2a). The longer variants these forms show with other post-modal clitics point to the same conclusion.

The = a:t̥ plural clitic cannot follow the second person plural clitic. Jacobsen (1973: 5-6) plausibly relates this expressive gap to potential loss of semantic contrast, e.g. adding third plural = a:t̥ to Set 1 (Indicative) second plural = ica: would produce * = ica:t̥ on the surface — the same form that expresses Indicative second *singular* subject and third plural non-subject. He (1973: 6) also describes several “work around” strategies, the simplest of which is to ignore the plurality of the non-subject.

Third person subject, intransitive or with third person non-subject

Third person singular Indicative intransitive subjects are expressed by the clitic = i. As with first and second persons, the same clitic is used with third person non-subjects. Third plural intransitive subjects (or, again, third plural subjects with third non-subjects) add a short-vowel variant of the third plural suffix, = a:t̥, to produce = i:t̥. Third plural non-subjects cannot be indicated with a

third person subject. If the plurality of a third person P argument must be expressed (often, of course, it is simply unexpressed), a passive is used, which allows it to be coded as subject.

There is no third person singular non-Indicative clitic: third person singular non-Indicative subject is either zero or indicated by a variant shape of the mood clitic; these are listed below. Third person plural non-Indicative is expressed by yet another variant of the third plural clitic, = *ʔat*. The restriction against marking a third person plural non-subject with a third plural subject also applies to non-Indicative forms.

Throughout the preceding discussion readers may have noted the lack of any forms with third person subjects and first or second person non-subjects. This is explained by the hierarchical pattern of subject choice described in §4.4.2 and §7.3.5; propositions with a third person A and first or second person P are expressed by a passive-inverse construction with the first or second P coded as subject.

Mood clitics

The mood clitics are listed in Table 16.⁹⁹ A couple have variant forms in past tense that are explained in the relevant sections below. The shapes that appear with first and second person pronominals are listed separately from the one indicating third person, if they differ. The Content Interrogative clitic has three forms. The first occurs with first and second person singular intransitive subject pronominals; the second occurs with all other first and second person pronominals; the third is the third person form. Hyphens in the representation of a clitic indicate possible etymological boundaries between modal formatives. The third column of the table indicates the pronominal set from Table 15 that accompanies the clitic.

Paradigms for most common and fully attested moods in Makah are laid out in the tables following the mood table.

Table 16. Makah mood clitics

Mood	Clitic	Set
Indicative	Indicative pronominals	1
Purposive	= 'a:	1?
Quotative	1, 2 = wa:t, 3 = wa:da	2a
Subordinate	1, 2 = x̄, 3 = qa:	2a
Inferential	= x̄-a:...-š̄	2a
Mirative	= °a:...-š̄-kub	2a
Conditional	1, 2 = qey, 3 = qeyu	2b
Relative	1, 2 = (q)ik, 3 = (q)i	2c
Content Int.	1sg(/3sg), 2sg(/3sg) = (q)i:k, other 1, 2 = (q)ik, 3 = (q)a:ł	2c
Polar Int.	1, 2 = (q)a:k, 3 = (q)a:	2c

Indicative

Subjects	Non-subjects			
	2sg	2pl	1sg	1pl
1sg	= si:cux̄	= so:wacux̄		
1pl	= di:cux̄	= do:wacux̄		
2sg			= °icis(a:)	= °icdi:s(a:)
2pl			= °ico:wasač̄	= °icdo:wasač̄

Subjects	Non-subjects	
	(3sg)	3pl
1sg	= s(i)	= sa:ł
1pl	= (i)d	= da:ł
2sg	= °ic	= °ica:ł
2pl	= °ica:	
3sg	= °i	
3pl	= °ił	

Quotative

Non-subjects				
Subjects	2sg	2pl	1sg	1pl
1sg	= <i>wa:tsi:cux</i>	= <i>wa:tso:wacux</i>		
1pl	= <i>wa:tdi:cux</i>	= <i>wa:tdo:wacux</i>		
2sg			= <i>wa:tsi:s</i>	= <i>wa:tdi:s</i>
2pl			= <i>wa:tso:wasač</i>	= <i>wa:tdo:wasač</i>

Non-subjects		
Subjects	(3sg)	3pl
1sg	= <i>wa:tsi:</i>	= <i>wa:tsi:ʔ</i>
1pl	= <i>wa:tdu:</i>	= <i>wa:tdu:ʔ</i>
2sg	= <i>wa:tsu:</i>	= <i>wa:tsu:ʔ</i>
2pl	= <i>wa:tsa:</i>	
3sg	= <i>wa:da</i>	
3pl	= <i>wa:daʔ</i>	

Subordinate

Non-subjects				
Subjects	2sg	2pl	1sg	1pl
1sg	= <i>ɣsi:cux</i>	= <i>ɣso:wacux</i>		
1pl	= <i>ɣdi:cux</i>	= <i>ɣdo:wacux</i>		
2sg			= <i>ɣsi:s</i>	= <i>ɣdi:s</i>
2pl			= <i>ɣso:wasač</i>	= <i>ɣdo:wasač</i>

Non-subjects		
Subjects	(3sg)	3pl
1sg	= <i>ɣsi:</i>	= <i>ɣsi:ʔ</i>
1pl	= <i>ɣdu:</i>	= <i>ɣdu:ʔ</i>
2sg	= <i>ɣsu:</i>	= <i>ɣsu:ʔ</i>
2pl	= <i>ɣsa:</i>	
3sg	= <i>qa:</i>	
3pl	= <i>qa:ʔ</i>	

Conditional

		Non-subjects		
Subjects	2sg	2pl	1sg	1pl
1sg	= <i>qeysi:cux</i>	= <i>qeyso:wacux</i>		
1pl	= <i>qeydi:cux</i>	= <i>qeydo:wacux</i>		
2sg			= <i>qeysi:s</i>	= <i>qeydi:s</i>
2pl			= <i>qeyso:wasač</i>	= <i>qeydo:wasač</i>

Non-subjects		
Subjects	(3sg)	3pl
1sg	= <i>qeys</i>	= <i>qeysi:t</i>
1pl	= <i>qeyd</i>	= <i>qeydu:t</i>
2sg	= <i>qeysu:</i>	= <i>qeysu:t</i>
2pl	= <i>qeysa:</i>	
3sg	= <i>qeyu</i>	
3pl	= <i>qeyu:t</i>	

Relative

		Non-subjects		
Subjects	2sg	2pl	1sg	1pl
1sg	= <i>(q)iksi:cux</i>	= <i>(q)ikso:wacux</i>		
1pl	= <i>(q)ikdi:cux</i>	= <i>(q)ikdo:wacux</i>		
2sg			= <i>(q)iksi:s</i>	= <i>(q)ikdi:s</i>
2pl			= <i>(q)ikso:wasač</i>	= <i>(q)ikdo:wasač</i>

Non-subjects		
Subjects	(3sg)	3pl
1sg	= <i>(q)iks</i>	= <i>(q)iksi:t</i>
1pl	= <i>(q)ikdu:</i>	= <i>(q)ikdu:t</i>
2sg	= <i>(q)ik</i>	= <i>(q)iksu:t</i>
2pl	= <i>(q)iksa:</i>	
3sg	= <i>(q)i</i>	
3pl	= <i>(q)a:t</i>	

Content Interrogative

Non-subjects				
Subjects	2sg	2pl	1sg	1pl
1sg	= (q)iksi:cux	= (q)ikso:wacux		
1pl	= (q)ikdi:cux	= (q)ikdo:wacux		
2sg			= (q)iksi:s	= (q)ikdi:s
2pl			= (q)ikso:wasač	= (q)ikdo:wasač

Non-subjects		
Subjects	(3sg)	3pl
1sg	= (q)i:ks	= (q)iksi:t
1pl	= (q)ikdu:	= (q)ikdu:t
2sg	= (q)i:k	= (q)iksu:t
2pl	= (q)iksa:	
3sg	= (q)a:t	
3pl	= (q)a:ti:t	

Polar Interrogative

Non-subjects				
Subjects	2sg	2pl	1sg	1pl
1sg	= (q)a:ksi:cux	= (q)a:kso:wacux		
1pl	= (q)a:kdi:cux	= (q)a:kdo:wacux		
2sg			= (q)a:ksi:s	= (q)a:kdi:s
2pl			= (q)a:kso:wasač	= (q)a:kdo:wasač

Non-subjects		
Subjects	(3sg)	3pl
1sg	= (q)a:ks	= (q)a:ksi:t
1pl	= (q)a:kdu:	= (q)a:kdu:t
2sg	= (q)a:k	= (q)a:ksu:t
2pl	= (q)a:kso:	
3sg	= (q)a:	
3pl	= (q)a:ti:t	

7.2.2 Nuuchahnulth mood-pronominal forms

Earlier descriptions of Tseshaht Nuuchahnulth mood and pronominal subject forms are found in Sapir (1924), Swadesh (1933: 16-17), Swadesh (1939: 82), Sapir & Swadesh (1939: 242-43), Swadesh (1948a), and Haas (1969).¹⁰⁰ The analysis contained herein is along the lines suggested by Sapir (1924), although the Indicative paradigm listed by Sapir (1924: 82, note 1) does not segment the modal formative from the pronominal endings.

Nuuchahnulth presents fewer complications than Makah with regard to mood and pronominal marking. To begin with, in most moods Nuuchahnulth pronominal clitics index only subjects. Second, there is less variation in the shapes of mood clitics and in the pronominal subject clitics. Third, in the present analysis, third person is unmarked (except, occasionally, by an irregularity in the form of the mood clitic when it is not followed by a first or second person clitic). A third person plural subject or object can optionally be marked with the third plural clitic = *?aʔ* (§7.4.1).

Nuuchahnulth subject clitics fall into four sets based on the mood clitics they occur with (Table 17). (These four sets are not to be taken as etymologically equivalent to the four Makah sets in Table 15, although, many of the individual formatives are undoubtedly at least partially cognate.) Set 1 occurs with the Indicative and Purposive clitics. Set 2a occurs in absolute predicates and with the Quotative. Set 2b occurs with most of the other mood clitics: Interrogative,

Table 17. Nuuchahnulth pronominal subject sets

	Set 1	Set 2a	Set 2b	Set 2c
1sg	= <i>aʔ</i>	= <i>si'</i>	= <i>s^c</i>	= <i>sa'</i>
pl	= <i>ni</i>	= <i>ni'</i>	= <i>n</i>	= <i>na</i>
2sg	= <i>?ic</i>	= <i>su^ak^a</i>	= <i>k</i>	= <i>ka'</i>
pl	= <i>?icu:</i>	= <i>su:^b</i>	= <i>su:</i>	= <i>su:(wa)</i>

^a-*cuk* following Quotative

^b-*cu'* following Quotative

^c-*si* with Inferential I

Conditional, Subordinate, Definite and Indefinite Relative, and Inferential I. Set 2c occurs with the Inferential II and Dubitative moods. The Assertive apparently mixes Set 1 and Set 2 forms.

The Nuuchahnulth mood clitics are listed in Table 18. Hyphens indicate a few probable boundaries between etymologically distinct modal formatives. I have mostly retained the mood names as given in Sapir & Swadesh (1939: 242) except their “Relative” mood has been renamed “Definite Relative”. The Inferential I and Assertive moods, not included by them, have been added based on my study of the texts.¹⁰¹ Their names are my own invention. My “Assertive” mood corresponds to Rose (1981) and Nakayama’s (1997a) “indicative” in Kyuquot and Ahousaht dialects. See §7.2.19. One of Sapir and Swadesh’s moods, the Relative Dubitative, has

Table 18. Nuuchahnulth mood clitics

Mood	Clitic	Set
Indicative ^a	= (m)a', = ma'	1
Purposive ^a	= 'a:, = 'e:-ʔit	1
Quotative ^b	= weʔin, = weʔi	2a
Subordinate ^c	= qa', = ʔi't-qa, = ʔi't-q	2b
	= h ^d	2a
Inferential I	= ča'...-š	2b
Conditional	= qu:	2b
Definite Rel. ^e	= qa', = ʔi't-qa, = ʔi't-q	2b
Indefinite Rel.	= (y)i:	2b
Interrogative	= ha'	2b
Inferential II ^f	= ča'...-ʔa-š, = c...-ʔa-š, = č...-ʔa-š	2c
Dubitative ^f	= qa'-ča, = qa'-c, = qa'-č	2c
Assertive	= ʔi'-š	1, 2

^aSecond form when no pronominal follows, i.e. third person

^bSecond form with 1sg

^cSecond form with 2sg, third with 2pl

^dSee text

^eSecond form with 2sg, third with 2pl or no pronominal

^fSecond form with 1sg and 2pl, third with 2sg

been judged a mood combination rather than a simplex mood and so does not appear in the table.

See §7.2.3 and §7.2.14 below for details.

Complete Nuuchahnulth non-Imperative mood-pronominal paradigms are shown in Table 19 (based on Sapir & Swadesh 1939: 242).

Table 19. Nuuchahnulth non-Imperative mood-pronominal paradigms

	Absolute	Indicative	Purposive	Quotative	Subordinate
1sg	= <i>si'</i>	= <i>(m)a'ḥ</i>	= <i>'a:ḥ(sa)</i>	= <i>we'ʔisi</i>	= <i>qa's</i>
pl	= <i>ni'</i>	= <i>(m)in</i>	= <i>'a:ni</i>	= <i>we'ʔinni</i>	= <i>qin</i>
2sg	= <i>su'k</i>	= <i>(m)e'ʔic</i>	= <i>'e:ʔic(a)</i>	= <i>we'ʔincuk</i>	= <i>ʔi'tqak</i>
pl	= <i>su:</i>	= <i>(m)e'ʔicu:</i>	= <i>'e:ʔicu'</i>	= <i>we'ʔincu:</i>	= <i>ʔi'tqsu:</i>
3	= \emptyset	= <i>ma'</i>	= <i>'e:ʔit(a)</i>	= <i>we'ʔin</i>	= <i>qa'</i>
	Inferential I	Conditional	Definite	Indefinite	Interrogative
1sg	= <i>ča'siš</i>	= <i>qu:s</i>	= <i>qa's</i>	= <i>(y)i:s</i>	= <i>ḥa's</i>
pl	= <i>činš</i>	= <i>qun</i>	= <i>qin</i>	= <i>(y)in</i>	= <i>ḥin</i>
2sg	= <i>ča'kš</i>	= <i>qu:k</i>	= <i>ʔi'tqak</i>	= <i>(y)i:k</i>	= <i>ḥa'k</i>
pl	= <i>ča'su:š</i>	= <i>qu:su:</i>	= <i>ʔi'tqsu:</i>	= <i>(y)i:su:</i>	= <i>ḥa'su:</i>
3	= <i>ča'š</i>	= <i>qu:</i>	= <i>ʔi'tq</i>	= <i>(y)i:</i>	= <i>ḥa'</i>
	Inferential II	Dubitative	Assertive		
1sg	= <i>(c)sa'ʔaš</i>	= <i>qa'cša</i>	= <i>si'š</i>		
pl	= <i>ča'naʔaš</i>	= <i>qa'čin</i>	= <i>niš</i>		
2sg	= <i>čka'ʔaš</i>	= <i>qa'čka</i>	= <i>ʔick</i>		
pl	= <i>csu:(wa)ʔaš</i>	= <i>qa'csu:(wa)</i>	= <i>ʔicu:š</i>		
3	= <i>ča'ʔaš</i>	= <i>qa'ča</i>	= <i>ʔi'š</i>		

7.2.3 Mood combinations and other modal formatives

The mood clitics are mutually exclusive with one exception in Nuuchahnulth: the Quotative can combine with some of the other moods. It co-occurs at least with the Conditional, the Subordinate, the Inferential II, and the Dubitative. The Conditional and Subordinate precede the Quotative, while the two evidential moods, the Inferential II and Dubitative, follow it, e.g.

COND=QUOT: = *qu:we'ʔin* (but occasionally QUOT=COND, = *we'ʔinqu:*)

SUBOR=QUOT: = *ḥwe'ʔin*

QUOT=DUB: = *we'ʔinqača*

QUOT=INFERII: = *we'ʔinčaʔaš*

Examples of these Quotative combinations will be given below in the sections on the relevant non-Quotative moods.

Several other modal formatives are in use in Makah and Nuuchahnulth, but these never occur without the presence a mood clitic from Table 18.¹⁰² These additional formatives are as follows:

M = *(o:)wis*, N = *(w)u:s* dubitative, precedes at least the M, N Indicative, N Subordinate, M Relative, N Indefinite Relative, N Inferential II, and N Dubitative. Other combinations may be possible. The dubitative expresses the possibility that an event might occur or doubt as to whether it will occur.

M = *pi:t* evidential, occurs with the Indicative.¹⁰³

N = *č* quotative/evidential, occurs with the Conditional, Interrogative, Indefinite Relative, and perhaps Subordinate. It is inserted between the mood clitic and the pronominal clitic, e.g. the second person singular quotative Indefinite Relative is *=(y)i: = č = k*. This formative is probably also an etymological component of the Inferential I & II and Dubitative mood clitics.

N = *?a'* follows the Interrogative to form negative biased questions: 'Is he? (of course not)' (Swadesh 1939: 83).

N = *go:* follows the Subordinate (rarely) and Inferential II (commonly) to express unanticipated result: 'as it turned out'.

See below for examples of these formatives in use.

7.2.4 Indicative

The Indicative is the unmarked mood for assertion in conversation.

- (370) MAKAH
 a. *ʔapɣaʔaqλiʔtadiyiksi:cux*
ʔapɣ-a-ʔaqλ-iʔta-diλ = ʔeyik = si:cux
 fly-EPEN-inside-in.nose-PERF=FUT=INDIC.1sg/2sg
 'I will fly up your nose! (said Wren)' (Elk and Wren)

- b. *sitxi'yu'ʔawic* *yaq^wičik*
sitx-i'-yu' = ʔak^w = ic *yaq^w-ič = (q)ik*
 tear-EPEN-having.been...-ed=POSS=INDIC.2sg that.which-clothed.in=REL
 'Your dress is torn.' (II and RC)

- c. *iitʔal* *wałšil* *łukšwd*
iit-ał = 'ał = i *wał-šil* *łukšwda*
 wet-on.external.surface=TEMP=INDIC.3sg go.home-PERF raven
 'Raven went home wet.' (Qweti and Raven)

(371)

NUUCHAHNULTH

- a. *ʔapsčikma* *ya'yił* *we'ʔitq* *ħawiłʔi*
ʔam-sčik^w-ma' *yał- ił* *wa' = ʔitq* *ħawił = ʔi'*
 right.in.center-going.along=INDIC there-in.house say=DEF chief=ART

'The chief's words are true.' (NA 77.38-39; said in a potlatch speech)
 lit. 'What the chief is saying is going along the right way there.'

- b. *hisa'čilith*
hisa-a'-čil = (m)it = (m)a' = aħ
 there-go.out.to.sea-PERF=PAST=INDIC=1sg
 'I went out to sea there.' (NT 74.28; said in conversation)

- c. *ʔačya'meʔic* *wa'ʔałweʔin* *qu'ʔasʔi*
ʔačya'p = (m)a' = ʔic *wa' = 'ał = we'ʔin* *qu'ʔas = ʔi'*
 gather.wood=INDIC=2sg say=TEMP=QUOT person=ART
 '“You are after wood,” said the man.' (NT 64.12-13)

- d. *ʔałamin* *łatwi'*
ʔała = (m)a' = ni *łatwi'*
 two=INDIC=1pl paddler

'There were two of us crewmen.' (NA 281.1)

- e. *ču* *ħawi'ʔałeʔicu'* *wa'ʔałatni* *quq^wa'sʔi*
ču *ħawi'-ł = 'ał = (m)a' = ʔicu:* *wa' = 'ał = 'at = ni'* *[R]-qu'ʔas = ʔi'*
 DISC finish-PERF=TEMP=INDIC=2pl say=TEMP=PINV=1pl PL-person=ART
 '“Well, you are finished,” the people told us.' (NT 180.8)

Following are a few examples of the Indicative with the dubitative formative introduced in

§7.2.3, = (o')wis in Makah and = (w)u:s in Nuuchahnulth.

(372)

MAKAH

- a. *ye'yiłsa'po'wisic* *qat'ar^wksic*
ye'yił-sa:p = (o')wis = ic *qat'ar^w = sic*
 hurt-PERF.CAUS=DUB=INDIC.2sg younger.brother=POSS.2sg

'You might hurt your brother.'

- b. *qaḫšilo'wiss* *ti'*
qaḫ-šil = (o:)wis = s *ti'*
 dead-PERF=DUB=INDIC.1sg DEM

‘I might die here!’ (HS, Qweti Looks for a Wife)

(373)

NUUCHAHNULTH

- a. ...*qaḫšilu'se?ic* *wiki'tsapčipwsaḥ*
qaḫ-šil = (w)u:s = (m)a' = ?ic *wiki't-sa'p-čip = (w)u:s = (m)a' = aḥ*
 dead-PERF=DUB=INDIC=2sg not.exist-CAUS.PERF-BEN=DUB=INDIC=1sg

ča?ak

ča-?ak^w

water-DUR

‘You might die – I might cause your water (supply) to disappear.’ (NT 72.7)

- b. ...*wi'kitsaku'sin* *tuhck^{wi}...*
wiki't-sa [L+S] = ?ak = (w)u:s = (m)a' = ni *tuh-ck^{wi}*
 none-precisely=POSS=DUB=INDIC=1pl head-remains.of

‘We might have no heads at all (even having killed a man).’ (NA 441.9)

- c. *wasnawu'se?ic*
wasna = (w)u:s = (m)a' = ?ic
 unwilling=DUB=INDIC=2sg

‘You might be unwilling.’ (NT 94.4)

- d. ...*qaḫsa'patu'sma* *nuwi...*
qaḫ-sa'p = 'at = (w)u:s = ma' *nuwi*
 dead-CAUS.PERF=PINV=DUB=INDIC father.POSS.2

‘Your father might be killed.’ (NA 357.50-51)

Objects in Nuuchahnulth are not normally marked in the clitic sequence. One exception is found with Imperative moods, which I discuss at §7.2.20. In the ceremonial language of speeches, one also occasionally finds forms for second person singular subject acting on first person singular object that occur only with the Indicative, *=(m)a' = ?icas*, transparently formed from the regular second singular plus *-as*:

(374)

NUUCHAHNULTH

- a. *?i'ča'paḫa'le?icas*
?i'ča'pi = 'ap = 'aḫ = (m)a' = ?icas
 lifted.up=CAUS=TEMP=INDIC=2sg/1sg

‘You have lifted me up.’ (NA 76.33)

- b. *tučħa'meɽicas* *ɽuwɨ'*
tuč-ħa'-(m)a' = ɽicas *ɽu-wɨ'*
 woman-buy.PERF=INDIC=2sg/1sg so.and.so-first
 'You took in marriage from me first.' (NA 136.34)
- c. *ɽu'sħa'ɽaɽaɽeɽicas*
ɽu's-ħa' = 'ap = 'aɽ = (m)a' = ɽic = as
 something-troubled.by-CAUS=TEMP=INDIC=2sg/1sg
 'You are making me suffer.' (NA 449.43)

This is obviously reminiscent of the regular Makah Indicative second singular on first singular form. Approximate Makah counterparts of (374)a and (374)b would be (375)a and (375)b, respectively.

- (375) MAKAH
- a. *hi'dapa'ħubicis*
hida-api [L] = 'aɽ = 'ap = 'icis
 empty.root-in.air=TEMP=CAUS=INDIC.2sg/1sg
 'You are holding me up.'
- b. *ɽaɽa'bɽucis* *ɽuxu'* *tučħa'*
ɽaɽa'b = (b)u = 'icis *ɽux-u'* *tuč-ħa'*
 first=PAST=INDIC.2sg/1sg so.and.so-APPEN woman-buy
 'You took in marriage from me first.'

7.2.5 Purposive

A Purposive adverbial clause expresses the reason or purpose for the action denoted by the main clause.

- (376) NUUCHAHNULTH
- a. *hinatsapiħa'* *ħaɽu'qu'* *ɽinwāt*
hina-at-sa'p = 'i' = ħa: *ħaɽu' = qu:* *ɽinwāt*
 empty.root-arrive-CAUS.PERF=IMPER.2sg=again another-COND war.canoe
- [*mu'ciqšip'e'ɽit* *ɽinwāt*]
 [*mu'-ciq-ših = 'e:ɽit* *ɽinwāt*]
 [four-X.many.long.objects-PERF=PURP war.canoe]
- 'Have another war-canoe come, so that there are four.' (NT 148.19-20)

- b. *hičmačičšiči* [čiči?ani]...
hič-ma-(č)i:č-šič = 'ič [čiči = 'a: = ni]
 illuminate-thing-make-PERF=IMPER.2pl [cut-PERF=PURP=1pl]
 'Make torches so we may cut them (sea lions) up.' (NA 74.4)

The Purposive is not fully attested in Makah, but has been noted in the following passage (by speaker KH):

- (377) MAKAH
wike?ic haky'aqawił
wik = 'a: = ic haky'aqawił
 not=PURP=2sg forget.PERF
 'It's so you don't forget.' (KH)

Its formation is apparently similar to the Purposive in Nuuchahnulth: clitic = 'a: plus Set 1 (Indicative) pronominals.

7.2.6 Quotative

The Quotative indicates that a statement is based on hearsay evidence rather than the direct experience of the speaker. The person reference cross-references the person of the subject, not the speaker.

- (378) MAKAH
 a. *?iyaxa'txitwa'd hupačakt*
?iyaxa- 'atx = (b)it = wa:da hup-ačakt
 at-residing=PAST=QUOT.3sg round.object-on.ocean
 'They say she lived at Round-thing-on-Ocean (Tatoosh Island)' (HS, Sea Gull)
- b. *da?a?ałwa'dał wa'qitbadaç*
da?a' = 'ał = wa:da = ał wa'qit-badaç
 hear=TEMP=QUOT.3sg=3pl frog-PL
 '(It is said) they heard frogs (croaking).' (HW, Frogs)
- (379) NUUCHAHNULTH
 a. *?ah?a?ałwe?in kaḥši?ał k^watya't*
?ah?a' = 'ał = we?in kaḥ-šič = 'ał k^watya't
 then=TEMP=QUOT burst-PERF=TEMP Kwatyat
 'They say that Kwatyat then burst.' (NT 40.10)

- b. *hu'yaʔpa'qλweʔisi*
hu'yaʔ = ʔa:qλ = we'ʔi = si'
 dance=INTENT=QUOT=1sg
 'It is said I am to dance.' (NT 122.34)

As mentioned in §7.2.3, The Nuuchahnulth Quotative may co-occur with the Conditional §7.2.11, Subordinate §7.2.7, Inferential I §7.2.9, Inferential II §7.2.17, and Dubitative §7.2.18 moods.

7.2.7 Subordinate

The Subordinate is used most often in realis complement clauses following predicates of perceiving, saying, thinking, and feeling. In Nuuchahnulth, such clauses are frequently preceded by the subordinating particle *ʔani*.

- (380) MAKAH
- a. *ba'qi'daxa'λu'k* *kabaʔap* [*ʔiyaʔaqa* *ʔu'* *cu'widiq*]
ba'qi'daxi = 'aλ = 'u:k *kabat = 'ap* [*ʔiyaʔa = qa:* *ʔu'* *cu'wit = 'iq*]
 how=TEMP=PAST.INTERR.2sg known=CAUS [at=SUBOR.3sg DEM silver.salmon=ART]
 'How did you know that the salmon was there?' (HW, Raven and his Beak)
- NUUCHAHNULTH
- b. *načʔaʔpaλweʔin* *ha'kʷa'λʔi* [*ʔayaqa* *ši'λuk*]
nač-(y)uʔaʔ = 'aλ = we'ʔin *ha'kʷa'λ = ʔi'* [*ʔaya = qa'* *šiλ-uk*]
 see-perceive.PERF=TEMP=QUOT girl=ART [many=SUBOR move-DUR]
 'The girl saw that many were moving (changing residence)' (NT 62.3)
- c. *wa'ʔaλweʔin* [*ʔani* *či'čiλʔa'qλqa* *čistu'pukʔi*]...
wa' = 'aλ = we'ʔin [*ʔani* *či'-čiλ = ʔa:qλ = qa'* *čis-(š)tu'p = uk = ʔi'*]...
 say=TEMP=QUOT [SUBOR pull-PERF=INTENT=SUBOR strung.out-thing=POSS=ART]..
 'He told him that he would pull on the rope.' (NT 64.1-2)
- d. ...*kamatsapaλ* [*ʔuʔukqa* *ta'tna*]
kamat-sa'p = 'aλ [*ʔuʔ = uk = qa'* *ta'na- <t>*] [L]
 known-CAUS.PERF=TEMP [so.and.so=POSS=SUBOR child-<PL>]
 'She knew that it was her own children.' (NT 54.34)

Subordinate-mood clauses are frequently used as adverbial clauses with a causal sense.

- (381) MAKAH
- a. *iiqʔaλ* *λu'kšu'd* [*kabaʔapqa* *haʔukʷe'ʔisqa*]
iiqʷ-paλ = 'aλ *λu'kšu'da* [*kabat = 'ap = qa:* *haʔuk- 'e:ʔis = qa:*]
 sit-in.house.PERF=TEMP raven [known=CAUS=SUBOR.3sg eat-going.to=SUBOR.3sg]

ʔakwatiːd *ʔuʔuːks* *cuːwit*]
ʔakwatiːda *ʔu-ˈiːks* *cuːwit*]
 eagle so.and.so-consume silver.salmon]

‘Raven sat down because he knew that Eagle was going to eat silver salmon.’ (HW, Raven and his Beak)

- NUUCHAHNULTH
 b. *hayaːʔakaʔsi* *waːqhuːsi* *waː*
hayaː-ʔak^w = ˈaʔ = siː *waː-qh = (w)uːs = (y)iː* *waː*
 not.know-DUR-TEMP-1sg say-while-DUB-INDEF say

[*wikiːpqin* *haʔum*]
 [*wik-iːp = qaː = n* *haʔum*]
 [not-obtain.PERF=SUBOR=1pl fish]

‘I did not know what he meant by what he said, because we had not got any fish.’
 (NT 180.16-17)

- c. ...*tuːhʂiʔaʔsi* [*ʔanis* *hutʔatatqas*]
tuːh-ʂiʔ = ˈaʔ = siː [*ʔani = s* *hutʔatu = ˈat = qaː = s*]
 afraid-PERF=TEMP=1sg [SUBOR=1sg jealous=PINV=SUBOR=1sg]

‘I was afraid because someone was jealous of me.’ (NT 164.1)

Subordinate clauses in Makah can also be used as temporal adverbial clauses denoting situations coincident with the action of the main clause. In this use it is accompanied by *ʔuyu* ‘when’.

- (382) MAKAH
tičiːqa *ʔuy* Harold
tič-iː = qaː *ʔu-yu* Harold
 alive-APPEN=SUBOR.3sg so.and.so-at.X.time Harold

čaːttupiːʔaʔs *čaːttupiːʔ*
čat-(k)tuːp-(k^w)iːʔ [L+S] = ˈaʔ = s *čat-(k)tuːp-(k^w)iːʔ [L+S]*
 paint-thing-make=TEMP=INDIC.1sg paint-thing-make

‘When Harold was alive, I dyed straw, dyed straw.’ (II, Dye on Face)

Makah has a quotative subordinate formation = *χčaː*.

- (383) MAKAH
ʔacaːχčaː *biːlaːč* *haʔuk^waʔitqey*
ʔac-aː = χčaː *biːlaːč* *haʔuk = ˈaʔ = ˈit = qeyu*
 fat-APPEN=QUOT.SUBOR.3sg skate eat=TEMP=PINV=COND.3sg

‘(Raven wanted Skate) because he heard Skate was fat when eaten.’ (HW, Raven and Skate)

There is an alternate form of the Subordinate clitic in Nuuchahnulth, =*h*. This has been observed in examples with second person and third person subjects. This alternate is followed by Set 2a pronominal subject clitics, hence one finds =*h* = *suʔk* ‘that, because you (sg.)’ for second singular. It is not yet known in what circumstances =*h* is chosen over the regular Subordinate clitic.

- (384) NUUCHAHNULTH
- a. ...*ʔanik* *haʔuksaphʃuk* *niʔwa* *haʔumʔakʔitqak*
 ʔani = k *haʔuk-saʔp = h = suʔk* *niʔwa* *haʔum = ʔak = ʔiʔtqa = k*
 SUBOR=2sg eat-CAUS.PERF=SUBOR=2sg 1pl food=POSS=DEF=2sg
- ‘... for you have given us your food to eat.’ (NA 332.17-18)
- b. *čiʔqakʔanitweʔin* *kʔitanuʔs* *ʔuʔktaqat*
 čiʔq-akʔ = ʔat = (m)it = weʔin *kʔitanuʔs* *ʔu-(š)taqa = ʔat*
 inflict.harm-DUR=PINV=PAST=QUOT furseal so.and.so-punish.for=PINV
- ʔanič* *ʔayasuʔmithweʔin* *qaʔsaʔp* *quʔas*
 ʔani = č *ʔaya-suʔp = (m)it = h = weʔin* *qaʔ-saʔp* *quʔas*
 SUBOR= QUOT many-die.CAUS.PERF=PAST=SUBOR=QUOT dead-CAUS.PERF person
- yašmaqʔiʔa...*
yašma-q-ʔiʔa
 hunt.furseal-BFR-die.of
- ‘They say that they did harm to the fur seals because they killed many people in sealing.’ (NA 25.31-32)

As (384)b shows, the =*h* Subordinate may co-occur with the Quotative. It also co-occurs with the dubitative formative =(w)*uʔs* (§7.2.3):

- (385) NUUCHAHNULTH
- ...*wikaqʔlanukʔi* *puʔ* *wikiʔtapi* *ʔuʔnuʔλ*
 wik-ʔaqʔ-lanuk = ʔiʔ *puʔ* *wikiʔt = ʔap = ʔiʔ* *ʔu-aʔnuʔλ*
 not-inside-at.hand=IMPER.2sg gun not.exist=CAUS=IMPER.2sg so.and.so-because.of
- ʔanik* *ʔitkʔhinʔatuʔshʃuk* *kʔapʃiʔat*
 ʔani = k *ʔitk-ʔhin = ʔat = (w)uʔs = h = suʔk* *kʔap-ʃiʔ = ʔat*
 SUBOR=2sg jerk-deprive.of.PERF=PINV=DUB=SUBOR=2sg rob-PERF=PINV
- ‘Don’t have guns in your hands; see that there are none, because they might jerk them away.’ (NA 447.6-7)

7.2.8 Inferential (Makah)

The Inferential indicates statements made based on inference or supposition.

- (386) *weʔičaλxaš*
weʔič = 'aλ = xaš
 eat–PERF=TEMP=INFER.3sg
 ‘I guess he/she/it is sleeping.’

The Inferential also has a special past form: = *χučaʔa...š*:

- (387) *dabaʔχučaʔaʔš*
dabaʔ = χučaʔaʔš
 have.party=PAST.INFER.3pl
 ‘I guess they were having a party.’

Jacobsen (1973: 19) records that the regular past tense clitic = (*b*)*it* may precede the non-past inferential shown in (386). The semantic difference between this and the past inferential in (387), if any, is unknown.

7.2.9 Inferential I (Nuuchahnulth)

The Inferential I mood is to be compared to the other two Nuuchahnulth non-quotative evidential moods below, the Inferential II (§7.2.17) and the Dubitative (§7.2.18). The first Inferential does not question the actuality of the event itself as strongly as the Dubitative, but often denotes that some aspect of it (cause, duration, etc.) has been inferred by the speaker rather than being definitely known. In (388)a, for example, it is not the sleeping that is in doubt, but its duration. In (388)b, it simply indicates that the event has been learned about after the fact through its effects, rather than being witnessed directly.

- (388) a. *qiʔaλitčasiš* *weʔič waʔaλ kʷatyaʔ*
qiʔ = 'aλ = (m)it = časiš *weʔič waʔ = 'aλ kʷatyaʔ*
 long.time=TEMP=PAST=INFERI.1sg sleep say=TEMP Kwatyat
 ‘‘Evidently I have been a long time sleeping,’’ said Kwatyat.’ (NT 40.24)

- b. *hi'y λuyačičasusš wa'ʔaλaḥ ciqšičiλ...*
hi'y λuł- 'ačič = ča'su:sš wa' = 'aλ = (m)a' = aḥ ciq-šičiλ
 DISC good-INCEP=INFERL.2pl say=TEMP=INDIC=1sg speak-PERF
 “‘Ah,’ I said, ‘I see you have done something good’” (NT 198.25)

7.2.10 Mirative (Makah)

Jacobsen (1973: 19) describes the function of this mood, which he calls the “realizational”, as “indicating that the speaker has only belatedly perceived, learned, or realized a fact ...”. It also seems that the fact is generally surprising or unexpected in some way, which makes this mood a marker of mirativity, as this is described by DeLancey (1997).

- (389) *ʔuxwʔašʔkub* Arly.
ʔux-w' = 'a:šʔkub Arly
 so.and.so-APPEN=MIR.3sg Arly
 ‘Oh! It’s Arly!’ (KH)

7.2.11 Conditional

Clauses in the Conditional mood have several uses.

a) Protasis (condition or ‘if’ clause) of a conditional sentence:

- (390) MAKAH
 [*wiki'qeyisi's* *čakya'*] *k^wišk^wišiči'wiλo'wiss*
 [*wik-i' = qey = si:s* *ča-k-ya'*] *k^wišk^wišiči:-i:wiλ = (o:)wis = s*
 [not-APPEN=COND=2sg/1sg water-INCR-give.PERF] bluejay-INCEP=DUB=INDIC.1sg
 ‘If you don’t give me water, I might turn into a bluejay.’ (MP, Qweti and his Mother)

- (391) NUUCHAHNULTH
 [*wi'sik^waʔʔaλatqu* *q^wama' ʔathi'*]
 [*wi-si:k^w- 'aʔ [IterL] = 'aλ = 'at = qu:* *q^wama' ʔaḥi'*]
 [incomplete-do-ITER=TEMP=PINV=COND as.many.as night]

ʔwššičaλat...
ʔwš-siča = 'aλ = 'at...
 sth-happen.PERF=TEMP=PINV

‘If one does not carry things out to completion every night, something bad happens to one.’ (NT 110.16)

- b. ...čuh^hi·č^hiλ ʔinkʔi· [ʔatqu· ʔi·hʔaλ ti·cqa·]
 čuh^h-i:č^hiλ ʔink^w=ʔi· [ʔat=qu: ʔi·h^w=ʔaλ ti·cq-(y)a·]
 extinguished-INCEP fire=ART [though=COND big=TEMP flame-CONT]

‘The fire went out even though it had been flaming fiercely.’ (NT 100.5-6)

b) Counterfactuality

- (395) NUUCHAHNULTH
 waʔaλweʔin k^watyart ʔaqisqu·s ḥačuʔaʔ...
 waʔ=ʔaλ=weʔin k^watyart ʔaqi-s=qu:=s ḥač-(y)uʔaʔ
 say=TEMP=QUOT Kwatyat what-do=COND=1sg see-perceive.PERF

‘Kwatyat said, “How could I have seen him?”’ (NT 30.10)

c) Habitual action or situation

- (396) MAKAH
 hix^waʔcʔakalic waʔaλqey
 hix^waʔcʔak^w=ʔaλ=ʔic waʔ=ʔaλ=qeyu
 crazy=TEMP=INDIC.2sg say=TEMP=COND.3sg
 “‘You’re crazy!’ he would (always) say.’ (II, ANA)

- (397) NUUCHAHNULTH
 čačahwāqλiʔʔaλukqu·s ʔah hicaʔkukqas
 [R]-čahwā-ʔaqλ-ʔiʔ=ʔaλ=uk=qu:=s ʔah hicaʔk^w=uk=qas
 PL-litter-inside-in.house=TEMP=POSS=COND=1sg DEM bed=POSS=DEF=1sg

 ʔi·caʔuk
 ʔi·caʔuk
 mouse

‘I used to have mice with litters here under my bed.’ (NA 76.1-2)

d) Conditional-mood clauses also function as the complements of certain predicates, especially irrealis complements.

- (398) MAKAH
 a. wiʔdačs [wikiʔqey λuʔuwiλ]
 wiʔdač=s [wik-iʔ=qeyu λuʔ-uwiλ]
 afraid=INDIC.1sg [not-APPEN=COND.3sg good-INCEP]

‘I am afraid she will not get well.’ (HI, Bible)

- b. ...yubutqaʔ [ʔaʔdiʔdaχqeyuʔ ti· ʔiyaχ]
 yubut=qas=aʔ [ʔaʔdiʔdaχ=qeyu=aʔ ti· ʔiyaχa]
 unable=SUBOR.3sg=3pl [just=COND.3sg=3pl DEM at]

‘(I thought) they can’t just *be* here (they must be here for a purpose).’ (II, ANA)

- (399) NUUCHAHNULTH
- a. *íapatšišiʔaλweʔin* *ha·k^wa·λʔi* [*wašišiʔaλqu·*]
íapat–šišiλ = 'aλ = weʔin *ha·k^wa·λ = ʔi·* [*waš–šišiλ = 'aλ = qu:*]
 think–PERF=TEMP=QUOT girl=ART [go.home–PERF=TEMP=COND]
 ‘The girl decided to go home.’ (NT 72.13)
- b. *wimá·qλma* *ti·čqu·...*
wimá·qλ = ma· *ti·č = qu:*
 unable.to=INDIC alive=COND
 ‘He could not live.’ (NA 396.10)

e) In Makah, the Conditional also has an optative use in conjunction with the habitual post-modal clitic = *a:k*:

- (400) MAKAH
- a. *čabułqeyysi·k* *haʔuk*
čabuł = qey = si: = a:k *haʔuk*
 able=COND=1sg=HAB eat
 ‘I wish I could eat.’
- b. *dupxtaʔakqeyysi·k*
dupxta· = ʔak^w = qey = si: = a:k
 die.instantly.upon.being.struck=POSS=COND=1sg=HAB
 ‘May mine (my prey) die instantly upon being struck!’ (said in a ritual prayer)

Jacobsen (1973: 11) notes a related formation he calls the “counterfactual”, which involves the Conditional plus the formative *-ča:*, as in *łicux^wadi·qeyča·si·k* ‘I wish I were an Indian’. Speakers I checked with recognized the form, but felt it was archaic and suggested the simple Conditional instead: *łicux^wadi·qeyysi·k*. This may be a result of attrition of more recondite forms in a language death situation. (In Nuuchahnulth, wishes have been observed in the Subordinate mood with the irrealis future clitic N = (y)ik: *kimsšišiʔatikqas* ‘may I be bitten, i.e. let my bait be taken!’ at NT 108.8 *kimsšišiλ* ‘bite on bait’; see also (394)a.)

f) The Conditional may also be used as an indefinite or non-specific article in RPs, replacing the regular article clitic:

- (401) MAKAH
 a. *ʔusubas* *ʔaʔaʃqey*
ʔu-suba = s *ʔaʔaʃ = qeyu*
 so.and.so-need=INDIC.1sg bag=COND.3sg
 ‘I need a bag.’ (HI, Qweti and Canoe-Swallower’)
- NUUCHAHNULTH
 b. ... *ʔuħaʃhʃiʔaʃči* *ħuʔaʔaquʔ* *ħuksyi...*
ʔu-ħaʃh-ʃiʃ = ʔaʃ = či *ħuq-ʔaʔa = qu:* *ħuksyi*
 so.and.so-look.for-PERF=TEMP=GoIMPER.2sg broad-on.rocks=COND stone
 ‘Go find a broad stone!’ (NT 94.14-15)

The Conditional may co-occur with the Quotative mood clitic in Nuuchahnulth. Normally, the Conditional precedes the Quotative:

- (402) NUUCHAHNULTH
ʔaʃqimʔapʔaʃqurweʔin *qičimmit* *ʔaʔtuš*
ʔaʃ-qimʔ-aʔaʃ = ʔaʃ = qu: = weʔin *qičim-miʔ* *ʔaʔtuš*
 two-X.many.round.objects-on.back=TEMP=COND=QUOT louse-son.of deer

hitaħtas
hita-ħt-ʔas
 empty.root-move.out.of.woods.PERF-on.ground

‘Louse would always bring two deer out of the woods on his back.’ (NT 84.35-36)

In Nuuchahnulth, Conditional clauses that are part of a sentence with multiple mood-marked clauses can be marked as hearsay by the quotative formative = č. For example, the sentence in (403) is a conditional sentence with two finite clauses, an if-clause (the protasis) and a then-clause (the apodosis). The protasis *sipturp ʔuqʃħnukʷaʃatquč* ‘if one is holding a stick’ has the Conditional clitic in combination with = č.

- (403) NUUCHAHNULTH
 ... *ʔuʔutyakħweʔin* *tuħuk* *čihʔaʔ* [*sipturp*
ʔu-ityak [LR+S] = ħ = weʔin *tuħ-uk* *čihʔaʔ* [*sim-(š)turp*
 so.and.so-fear=SUBOR=QUOT afraid-DUR ghost [pole-thing

ʔuqʃħnukʷaʃatquč
ʔu-ʔaqʃ-ħnuk = ʔaʃ = ʔaʃ = at = qu: = č
 so.and.so-inside-at.hand=TEMP=PINV=COND=QUOT]

‘... for it is said ghosts are afraid if one is holding a stick.’ (NT 184.32)

<i>hwcsmeʔi</i>	<i>ʔintmisʔi</i>	<i>[yaqʔatuʔitq</i>
<i>hwcsma = ʔiʔ</i>	<i>ʔint-mis = ʔiʔ</i>	<i>[yaq^w-ʔatu = ʔiʔtq</i>
woman=ART	snot-collectivity.of=ART	[that.which-come.off.PERF=DEF

ʔintʔatu]
ʔint-ʔatu]
 snot-come.off.PERF]

‘The woman blew her nose while she was crying and threw the mucus that had come out down on the beach.’ (NT 90.7-8)

The referent of the relative clause in (406), *yaqʔatuʔitq* ‘(the nasal mucus) that had come down’, is implied by *ʔintʔataλ* ‘blew her nose’ (lit. ‘had nasal mucus come off’) and therefore known to exist.

(407) *ʔix^watwiʔis* *ʔukʔaʔakni*
ʔix^wat-wi:ʔis *ʔu-(ʔ)ʔaʔ = ʔak = niʔ*
 eagle-in.bow so.and.so-have.as.name=POSS=1pl

[yaq^wiʔqqaʔhʔin]
[yaq^w-(y)i:q-qaʔh = qaʔ = n]
 [that.which-travel.in-pretendedly=DEF=1pl]

‘Our imaginary canoe was called Eagle-Bow.’ (NA 81.5)

The fact that the speaker’s club in (407) has an imaginary canoe is established by the preceding sentence in the text: ‘They refer to them as “thus many in a crew” because the clubs are pretend- edly in canoes’.

A Definite Relative clitic hosted by a verbal predicate with a non-relative root forms a tempo- ral adverbial clause:

(408) *maʔkuk^waʔ* *ʔinwaʔ* *[λuʔk^watqnaʔaʔλqas]*
maʔk^w-uk = (m)aʔ = aʔ *ʔinwaʔ* *[λuk^wat-q-naʔi [L] = ʔaʔ = qaʔ = s]*
 buy-DUR=INDIC=1sg whaling.canoe [give.Wolf.Ritual-BFR-ready.to=TEMP=DEF=1sg]

‘When about to give the Wolf Ritual, I bought a whaling canoe.’ (NA 57.1)

7.2.14 Indefinite Relative (Nuuchahnulth)

This mood forms relative clauses in which the referent or the referent’s identity is new or uniden- tifiable. Example (409) takes place on a canoe trip through Barkley Sound (in Tseshaht territory).

- (409) ...*ʔuħmaʔ* *yaqiʔ* *ʔuktaʔ* *hiʔkʷis...*
ʔuħ = maʔ *yaqʷ = (y)i:* *ʔu-(č)taʔ* *hiʔkʷis*
 so.and.so=INDIC that.which=INDEF so.and.so-have.as.name Hikwis

‘It is the place they call Hikwis.’ (NA 409.4)

The speaker is pointing out landmarks to his nephew who has been away for many years as a slave among the Quinaults. Several sentences earlier we are explicitly told of the nephew’s ignorance of the area: ‘He [the addressee of (409)] did not know where they were going as they returned home, because he had become a slave when he was still small.’

Although the subject of the relative clause in (410) is grammatically first person, the possessive clitic signals that the subject is the possessor of the S argument (§7.3.4), the grandfather, who is thus the referent whose status is at issue. This is the first mention of him in the text and the relative clause occurs with the Indefinite Relative.

- (410) *ʔuħita* *ʔiʔh* *ʔuʔštaqyu* *yaqʷkʷitiʔs*
ʔuħ = (m)it = a *ʔiʔhʷ* *ʔuʔš-(š)taqyu* *yaqʷ = uk = (m)it = (y)i: = s*
 so.and.so=PAST=INDIC big sth-having.power.from one.who=POSS=PAST=INDEF=1sg

naniʔqsu *naʔyaqiʔtmaʔuk*
naniʔqsu *naʔyaq-(č)i:ʔt-maʔuk* [L]
 grandparent baby-make-one.skilled.at

‘My former grandfather was a great maternity doctor.’ (NT 190.4-5)

The identity of the referent in (411) is unidentifiable to both speaker and addressee because the event referred to has not yet occurred.

- (411) *ħaʔyuqumʔiʔhʔaʔqλeʔic* *čaʔkupeʔh*
ħayu-qimʔt-ʔi:ħ [L] = *ʔaʔqλ = (m)aʔ = ʔic* *čakup-i:ħ* [L]
 ten-X.many.round.objects-earn=INTENT=INDIC=2sg men-PL.VOC

yaqʔaʔqλiʔk *hiniʔswaħsuʔ* *pačsaʔkumʔi*
yaqʷ = ʔaʔqλ = (y)i: = k *hin-i:s-waħsu(ʔ)* *pačsaʔkum = ʔiʔ*
 one.who=INTENT=INDEF=2sg empty.root-carry-go.out.PERF potlatch.handle=ART

yaqiʔk *našuk*
yaqʷ = (y)i: = k *naš-uk*
 one.who=INDEF=2sg strong-DUR

‘You men, whichever strong one among you brings the potlatch handle out (of the crowd) will win ten dollars.’ (NA 57.34-35)

It is important to emphasize that it need not be the referent of the relative clause that is new, but only its identity. In (412), the first person referent is obviously already a discourse participant, but his identity as a Kyuquot is emphasized by the Indefinite Relative.

- (412) *ʔu.špataλaħ* *yaqi's* *qa'yuk^watħ*
ʔu.š-pat-(y)a' = 'aλ = (m)a' = aħ *yaq^w = (y)i: = s* *qa'yuk^watħ*
 sth-look.on.admiringly-CONT=TEMP=INDIC=1sg one.who=INDEF=1sg Kyuquot
 'I who am a Kyuquot look on admiringly.' (NT 174.13)

The Indefinite Relative frequently occurs with the dubitative formative $= (w)u:s$ to form various types of irrealis relative clauses. The vowel of the Indefinite appears short instead of long in this construction, which undoubtedly indicates some degree of grammaticalization in the combination of these formatives, though I do not find it necessary to consider it an entirely separate mood as Sapir & Swadesh (1939: 242) do.

- a) The dubitative Indefinite Relative is used in indirect questions after predicates expressing lack of knowledge or understanding:

- (413) a. *haya'ʔakat* *q^wi'yi'ħawu'si*
haya'-ʔak^w = 'at *q^wi-yi'ħa = (w)u:s = (y)i:*
 not.know-DUR=PINV whatever-die.of.PERF=DUB=INDEF
 'It was not known what he died of.' (NT 14.3-4)

- b. *hayimħi-čičiλ* *q^wa'wu'si* *tīč...*
hayimħi-i:čičiλ *q^wa' = (w)u:s = (y)i:* *tīč*
 not.know-INCEP whether=DUB=INDEF alive
 'He did not know whether he was alive.' (NT 102.21-22)

- b) It can be used in indirect questions with the verb *ʔaʔartu* 'ask (a question)', a root that naturally implies lack of knowledge on the part of its subject (the questioner):

- (414) a. *ʔaʔartu'ʔatweʔin* *q^wa'wu'si* *wikýu'* *ħačuʔat*
ʔaʔartu: = 'at = we'ʔin *q^wa' = (w)u:s = (y)i:* *wik-yu'* *ħač-(y)uʔat*
 ask=PINV=QUOT whether=DUB=INDEF not-having...-ed see-perceive.PERF
 'He was asked whether he had not yet seen him.' (NT 30.9)

- b. *ʔayupitšičiλweʔin* *k^watya't* *ʔaʔartu* *yaquku'si*
ʔaya-pit-šičiλ-we'ʔin *k^watya't* *ʔaʔartu:* *yaq^w = uk = (w)u:s = (y)i:*
 many-X.many.times-PERF=QUOT Kwatyat ask one.who=POSS=DUB=INDEF

ñuwì·qsu
ñuwì·qsu
 father

‘Many times did Kwatyat ask them who their father was.’ (NT 40.3-4)

- c) It can also be used in any general relative clause expressing doubt, uncertainty, or lack of knowledge.

(415) ...*wa·ha·kñahi·çi·ʔaλ* *hiłu·si* *maʔas* *ʔiʔišsuʔił*
waha·k^w–ñahi [L]–i:çiλ = 'aλ *hił = (w)u:s = (y)i:* *maʔas* *ʔiʔišsuʔił*
 go–ready.to–INCEP=TEMP where=DUB=INDEF dwelling Pitch.Woman

‘He made ready to go where Pitch Woman might be living.’ (NT 92.12)

See Rose (1981: 226-29) for a more detailed account of the Indefinite in Kyuquot dialect, where its functions have expanded somewhat so that it appears as a general indefinite mood in non-relative as well as relative clauses.

7.2.15 Content and Polar Interrogatives (Makah)

Makah has a mood for forming content questions and another for polar (‘yes/no’) questions.¹⁰⁴ The Content Interrogative attaches to an interrogative word like *ʔačaq* ‘who’ or *wa·sa* ‘where’, which functions as predicate head. The word may be underived, consisting of an interrogative root alone (all the interrogative roots are free roots) (416), or derived, consisting of the interrogative root plus lexical suffixes (417).

(416) a. *ʔačaq·ał* *dudu·k*
ʔačaq = (q)ał *dudu·k*
 who=CONTENT.3sg sing

‘Who is singing?’

b. *wa·saqikdu*
wa·sa = (q)ik = du:
 where=CONTENT=1pl

‘Where are we?’

c. *baqiq·ał* *ti·*
baqiq = (q)ał *ti·*
 what=CONTENT.3sg DEM

‘What is this?’

- d. *wa'scu'watak^wi:k* *čata'yak*
wa'scu'wat = uk = (q)i:k *čat-a'-yak^w*
 which=POSS=CONTENT write-EPEN-thing.for
 'Which pencil is yours?'
- (417) a. *ʔa'ya'čaquqłaq^aʔi'ʔ*
ʔačaq- <a'y> [L]-(q)uqł^a = (q)a:ʔ = i:ʔ
 who-<PL>-have.as.name=CONTENT.3sg=3pl
 'What are their names?' (KH)
- b. *ba'qičake'ʔisaλi:k*
baqi-čak [L+S]- 'e:ʔis = 'aλ = (q)i:k
 what-cook-going.to=TEMP=CONTENT
 'What are you going to cook?'
- c. *wa'sʔatx^aʔ*
wa'sa- 'atx = (q)a:ʔ
 where-residing=CONTENT.3sg
 'Where does he live?'

The Polar Interrogative attaches to the first word of a predicate that does not contain an interrogative root to form a yes/no question.

- (418) a. *ʔa'diqa:k* *kabatsa:p*
ʔa'di = (q)a:k *katat-sa:p*
 in.fact=POLAR known-CAUS.PERF
 'Do you really know?'
- b. *λułw^aqa*
λuł-u' = (q)a:
 good-APPEN=POLAR.3sg
 'Is it good?'

Both the Content and Polar Interrogatives have an irregular second person past tense form = 'u:k, i.e. past interrogative second singular = 'u:k = ∅, second plural = 'u:k = sa:

- (419) *ba'qiḡwa'łax^aλu:k* *hita'tup*
baqi-ḡwa:ʔ [L+S] = 'aλ = 'u:k *hita- 'atu = up*
 what-use=TEMP=PAST.INTERR empty.root-come.off-CAUS.PERF
 'What did you use to get it (the dye) off?' (IW, ANA)

7.2.16 Interrogative (Nuuchahnulth)

The Interrogative mood in Nuuchahnulth is used in forming both content questions and yes/no questions. In content questions it attaches to an interrogative functioning as predicate head. As in Makah, the interrogative may be underived (420) or derived (421).

- (420) a. *wa'siḥa* Tom *wa'ʔatsi*
wa'si=ḥa' Tom *wa' = 'at = si'*
 where=INTERR Tom say=PINV=1sg
 ‘‘Where is Tom?’’ he asked me.’ (NT 144.27)
- b. ...*ʔačaqʔa:qλḥasu'* *ʔucačičiλ* *ča'ʔaqu'ʔa*
ʔačaq = ʔa:qλ = ḥa' = su: *ʔu-ca-čičiλ* *ča'ʔaqu:ʔa*
 who=INTENT=INTERR=2pl so.and.so-go.to-PERF Flow.Point
 ‘Who (of you) will go to Flow-Point?’ (NA 395.18-19)
- c. *ʔa'qinḥak* *čičixšičiλ*
ʔa'qin-ḥa' = k *čičix-šičiλ*
 why=INTERR=2sg go.to.one.side-PERF
 ‘Why do you turn to one side?’ (NT 27.5)
- (421) a. *wa'scačičiʔaλḥa*
wa's-ca-čičiλ = 'aλ = ḥa'
 where-go.to-PERF=TEMP=INTERR
 ‘Where has he gone?’ (NA 448.38)
- b. *ʔaqi'sʔa:qλḥa* *haʔuk hi'ʔ* *ʔayeʔi* *qu'ʔas...*
ʔaqi- 'i's = ʔa:qλ = ḥa' *haʔuk hi'ʔ* *ʔaya = ʔi'* *qu'ʔas*
 what-consume=INTENT=INTERR eat there.in.house many=ART person
 ‘What are the many people here going to eat?’ (NT 154.23-24)
- c. *ʔa'qi'sitaʔiʔaḥas*
ʔaqi- 'i's-i'ta-q- 'iλ [L] = 'at = ḥa' = s
 what-consume-one.who-BFR-invite.PERF=PINV=INTERR=1sg
 ‘With what am I to be feasted?’ (NT 44.18)
 lit. ‘What am I invited to be a consumer of?’
- d. *ʔaʔaqu'ḥak* *ʔa'tušm'e't*
ʔaqi-wa [R] = ḥa' = k *ʔa'tuš-mi't*
 what-say=INTERR=2sg deer-son.of.VOC
 ‘What did you say, Deer?’ (NT 20.4-5)

- e. *ʔanayuʔaʔiʔhak*
ʔana-(y)uʔaʔ=(m)it=ħaʔ=k
 how.many-perceive.PERF=PAST=INTERR=2sg
 ‘How many have you seen?’ (Swadesh 1933: 109)

When in a non-interrogative predicate, it indicates a yes/no question:

- (422) a. *hiʔninqanuʔaʔħin* *waʔ*
hina-ħaʔqi-nuʔ-[L+S]=ʔaʔ=ħaʔ=n *waʔ*
 empty.root-up.on.a.height-PERF-GRAD=TEMP=INTERR=1pl DISC
 ‘Aren’t we climbing up?’ (NA 142.28)
- b. *naʔaʔaʔħasur*
naʔaʔ=ʔaʔ=ħaʔ=su:
 hear=TEMP=INTERR=2pl
 ‘Do you hear now?’ (NT 180.33)
- c. *ʔaʔniħak* *ħiʔiʔaʔ* *ʔurkʷiʔ* *ħayuʔmin*
ʔaʔni-ħaʔ=k *ħi-ħiʔ=ʔaʔ* *ʔu-(ħ)iʔ [L]* *ħayuʔmin*
 really-INTERR=2sg shoot-PERF=TEMP so.and.so-do.to panther
 ‘Have you really shot a panther?’
- d. *wikħaʔs* *ħeʔiʔsħiʔaʔ...*
wik=ħaʔ=s *ħa-ʔiʔs-ħiʔ=ʔaʔ*
 not=INTERR=1sg completely-consume-PERF=TEMP
 ‘Have I not eaten everything?’ (NA 83.15)

Note that inclusion of the discourse particle *waʔ* (obviously related to the verb *waʔ* ‘say, tell’) indicates a positively biased question, i.e. a question expecting an affirmative answer (422)a. Negative bias can be indicated by the formative =*ʔaʔ* following the Interrogative (Swadesh 1939: 83). Unfortunately, this construction is not attested in the corpus.

The Interrogative can co-occur with the quotative formative *ħ*:

- (423) *wikħaʔħ* *ʔukħaʔaʔ* *ħuwı* *saʔyaʔħapis*
wik=ħaʔ=ħ *ʔu-(ħ)ħaʔ=ʔaʔ* *ħuwı* *saʔyaʔħapis*
 not=INTERR=QUOT so.and.so-have.as.name-TEMP father.POSS.2 High.Above
 ‘Don’t they say your father is named High-Above?’ (based on NA 63.13-14)

7.2.17 Inferential II (Nuuchahnulth)

The semantic differences between the Inferential I and II moods are as yet unclear. In (424) the Inferential II denotes discovery of the situation of the predicate. Evidential force arises from the fact that the occurrence of the event is discovered on the basis of later evidence.

- (424) *ču hačaqšičaλsaʔaš...*
ču ha-ču-q-šičaλ = 'aλ = (c)saʔaš
 DISC completely-having...-ed-BFR-PERF=TEMP=INFERII.1sg
 ‘Well, I seem to have completed (my ritual).’ (NT 112.16)

However, the Inferential I clitic can also have this sense.

One formal difference between the two clitics is that the Inferential II is frequently accompanied by *q^waʔ* ‘(be) thus, so’ (425) or the enclitic =*qoʔ* (which may be a reduction of *q^waʔ*, since these two never co-occur in this construction), while the Inferential I only rarely is.

- (425) a. *hinʔičaλčaʔaš* *q^waʔ*
hin-i:ʔičaλ-[L+S] = 'aλ = čaʔaš *q^waʔ*
 empty.root-move.into.house.PERF-GRAD=TEMP=INFERII thus

hi·stiʔičaλ *kuh^wanimʔi*
hist-i:ʔičaλ-[L+S] = 'aλ *kuh^w-wana-im = ʔi·*
 there-move.into.house.PERF-GRAD=TEMP opening-in.middle-thing=ART
 ‘It turned out that they were entering by the side entrance.’ (NT 152.12)
- b. *huptsaʔaλatukweʔinčaʔašqoʔ*
hupt-saʔaλ = 'aλ = at = uk = weʔin = čaʔaš = qoʔ
 hidden-CAUS.PERF=TEM=PINV=POSS=QUOT=INFERII=thus
 ‘It seems that it had been hidden.’ (NA 405.22)

The addition of *q^waʔ* or =*qoʔ* focuses on the unexpectedness of the results and gives the Inferential II the flavor of a mirative (Delancey 1997). Note also the co-occurrence with the Quotative in (425)b.

7.2.18 Dubitative (Nuuchahnulth)

This mood (not to be confused with the dubitative formative =*(w)u:s*, §7.2.3) acknowledges the possibility of a non-future event or situation. Speculation about future events is made by =*(w)u:s*.

- (426) a. *n'a:csa'λqač'a* *hi't* *hawi'tʔi*
n'a:csa = 'aλ = qa'č'a *hi't- 'i't* *hawi't = ʔi'*
 see=TEMP=DUB there-in.house chief=ART

'I think the chief here (Tyee Bob) now sees it.' (NA 77.20-21)

- b. *wa'ʔaλqu'weʔin* *ciqš'iλ* *tuk^wa'ʔath* *wi'naqač'a*
wa' = 'aλ = qu: = we'ʔin *ciq-š'iλ* *tuk^wa'ʔath* *wi'na = qa'č'a*
 say=TEMP=COND=QUOT speak-PERF Tukwa war.party=DUB

hintš'iλ
hina-at-š'iλ
 empty.root-arrive-PERF

'The Tukwa would say, "Perhaps a war party is coming."' (NA 389.37-38)

- c. *hahaqč'immitweʔinqač'a* *hinusa*
hahaqč'im = (m)it = we'ʔin = qa'č'a *hina-wisa'*
 slightly=PAST=QUOT=DUB empty.root-come.to.consciousness.PERF

'He must have revived a bit.' (NA 397.40)

The Dubitative co-occurs with the Quotative, which it follows (see also (426)c):

- (427) *ʔa'ʔayasá'puʔaλitweʔinqač'a* *qu'ʔas...*
ʔaya-a'sá-a:pi [LR+S]-uλ = 'aλ = (m)it = we'ʔin = qa'č'a *qu'ʔas*
 many-on.roof-too-PERF=TEMP=PAST=QUOT=DUB person

'Evidently too many people got onto it (the roof).' (NA 170.28-29)

7.2.19 Assertive

The Assertive is essentially a conversational mood, which accounts for its infrequency in the Nuuchahnulth texts. Rose's (1981: 224, 225) description of this mood in Kyuquot dialect (where it is called the "indicative", see below) applies to its use in Tseshaht as well:

The indicative mood is used for statements of fact validated by experience, observation, general cultural knowledge, or wise authority ... It is also used to indicate that the *act* of assertion is as communicatively as important as its content. This can be because the sentence is an important announcement [or] a statement contrary to the listener's opinion ...

The Assertive occurs most commonly in the texts precisely where this description would lead us to predict, in contexts like that of Text 44, in which Tom gives his grandson (Alex Thomas) advice about life:

- (428) NUUCHAHNULTH
ʔahʔeʔiʔkʔick *hupiʔaʔat...*
ʔahʔaʔ = ʔiʔk = ʔick *hupiʔ = ʔaʔ = ʔat*
 then=FUT=ASSER.2sg help=TEMP=PINV
 ‘Then they will help you.’ (NT 192.22)

Another example from direct address:

- (429) NUUCHAHNULTH
ʔaʔniʔicuʔš *čimčiʔ*
ʔaʔni = ʔicuʔš *čama–čiʔ*
 truly=ASSER.2sg proper–PERF
 ‘You fellows certainly hit it lucky’ (NA 140.25)

The Assertive is obligatory with the contrastive particle *ʔata*:

- (430) NUUCHAHNULTH
niʔ *ʔataʔiʔš* *ʔayuqumʔaʔuʔiʔʔaʔʔaʔ*
niʔ *ʔata = siʔš* *ʔayu–qimʔ–aʔuʔ(ʔ)– ʔiʔ = ʔaʔ = ʔaʔ*
 DISC CNTR–ASSER.1sg ten–X.many.round.objects–in.front–in.house=TEMP=again

ʔaʔiqs *ʔaʔaʔkuk* *ʔaʔʔuyi*
ʔaʔ–(w)iqs *ʔaʔš–kuk* [R] *ʔaʔʔuyi*
 flat–at.lid bone–resemble now

‘See, in spite of that, I now again have before me ten boxes of biscuits.’ (NA 87.12-13)

Rose (1981) and Nakayama (1997a) refer to this mood in Kyuquot and Ahousaht dialects as the “indicative” mood. Dialects north of Barkley Sound (which include Kyuquot and Ahousaht) do not have the $=(m)aʔ$ Indicative mood described for Tseshaht in §7.2.4. The $=ʔiʔš$ formative in these dialects has apparently been named “indicative” because both it and the Tseshaht Indicative are found predominately in conversation, but this analogy is misleading because, as both Rose (1981: 224) and Nakayama (1997a: 31) point out, $=ʔiʔš$ is highly marked pragmatically

even in these dialects and so is not strictly comparable to the Tseshaht Indicative, which is unmarked.

The Assertive occurs in Makah as well. It is not fully attested, but seems to involve =iš added to Indicative endings, thus first person singular =siš, first person plural =diš, third person singular, =iš, etc. Its semantic force seems to involve emphatic assertion:

- (431) MAKAH
- a. *qiʔaλsiš* *ciʔciʔ*
qiʔ = 'aλ = s = iš *ciʔ-(y)a* [RepR]
long.time=TEMP=INDIC.1sg=ASSER speak-REP
 'I've been speaking for such a long time.'
- b. *λuʔuʔiš*
λuʔ-uʔ = iʔ = iš
good-APPEN=INDIC.3sg=ASSER
 'It's so good!'

As in Nuuchahnulth, it occurs in Makah (after the Indicative) with the contrastive particle *ʔatu*, e.g. *ʔatʔuciš* 'but you (sg.) ...' (Jacobsen 1973: 18).

7.2.20 Imperative moods

Makah has two Imperative moods. The simple Imperative is shown in Table 20. (For morphological analysis of the forms see Jacobsen 1973: 19-20.)

Table 20. Makah Simple Imperative

		Non-subjects		
Subjects	(3sg)	3pl	1sg	1pl
2sg	= 'i	= 'aʔ	= 'is	= 'idi:cux
2pl	= 'ič		= 'isač	= 'ido:wacux

- (432) MAKAH
- a. *bačʔaλ*
ba-čʔiλ = 'aλ = 'i
bite.down-PERF=TEMP=IMPER.2sg
 'Bite her now!' (HI, Qweti and Basket-Woman)

- b. *bak^waʔaʔpičke*
bak^w-ʔaʔa:p = ʔič = ke:
 buy-buy=IMPER.2pl=ADVISE
 ‘You folks buy it!’

The clitic = *ke:* in (432)b follows imperative forms to lessen the force of a command to advice or polite suggestion.

First person hortatives are formed by preceding the second person acting on first person plural imperative clitics with the causative clitic = *ʔap*. For comparison, non-hortative imperatives with first plural object are shown in (433). Example (433)a shows a regular (non-hortative) second person singular acting on first person plural imperative; (433)b shows second person plural acting on first person plural:

- (433) MAKAH
 a. *čaqšʔaλidi:cux*
čaq-šič = ʔaλ = ʔidi:cux
 push-PERF=TEMP=IMPER.2sg/1pl
 ‘Push us! (said to one person)’
 b. *čaqšʔaλido:wacux*
čaq-šič = ʔaλ = ʔido:wacux
 push-PERF=TEMP=IMPER.2pl/1pl
 ‘Push us! (said to more than one person)’

Example (434) shows the above with the causative clitic, which takes the shape = *ʔup* after the temporal specifier. These are now first person hortatives:

- (434) MAKAH
 a. *čaqšʔaλʔudi:cux*
čaq-šič = ʔaλ = ʔup = ʔidi:cux
 push-PERF=TEMP=CAUS=IMPER.2sg/1pl
 ‘Let’s push it! (said to one person)’
 b. *čaqšʔaλʔudo:wacux*
čaq-šič = ʔaλ = ʔap = ʔido:wacux
 push-PERF=TEMP=CAUS=IMPER.2pl/1pl
 ‘Let’s push it! (said to more than one person)’

The phonological alternations producing these forms are regular but perhaps deserve spelling out.

The clitic sequence underlying (434)a is = *ʔaλ = ʔup = ʔidi:cux*. Glottalization rules produce

= 'aλ'uʔidi'cuχ, where the temporal specifier has been glottalized, and the causative /p/ is dropped before the glottalizing imperative. Next, the resulting /uʔi/ sequence is dealt with by assimilating the second vowel to the first, which is then syncopated to produce the surface form:
= 'aλ'ʔudi'cuχ.

The second Makah imperative mood is a “directional” imperative (‘go and ...!’), formed by =č*i* preceding the Simple Imperative clitics:

- (435) MAKAH
čucutkiλčʔi
ču-tk^w [R+S]-iλ = či = 'i
 wash-at.hands-PERF=GoIMPER=IMPER.2sg
 ‘Go wash your hands!’

There are four Imperative moods in Nuuchahnulth. Table 21 shows two, the Present Imperative and Future Imperative paradigms (Sapir & Swadesh 1939: 242). First person singular and plural objects have distinct forms. The columns marked “3 obj” are really just intransitive forms that also serve to mark third person objects.

Table 21. Nuuchahnulth Present and Future Imperative paradigms

Present Imperative			Future Imperative		
(3 obj)	1sg obj	1pl obj	(3 obj)	1sg obj	1pl obj
2sg = 'i·	= 'i·s	= 'in	= 'i-m	= 'i·s-im	= 'i·n-im
2pl = 'i·č	= 'i·čas	= 'i·čin	= 'i·č-im	= 'i·čas-im	= 'i·čan-im
1pl = 'in			= 'i·n-im		

The Present Imperative indicates the action in question is to be undertaken immediately.

- (436) NUUCHAHNULTH
 a. *ʔayaviʔis* *qa'ci·* *ya'qsimčqas* *hawet*
ʔaya-ayi· = 'i·s *qa'ci·* *yaq^w-simč [L] = qa' = s* *hawit*
 many-give.PERF=IMPER.2sg/1sg give.gift that.which-do.ritual.for=DEF=1sg chief.VOC
 ‘Present me with many of what I’m doing ritual for, O Chief!’ (NA 48.28)

- b. *čaqwa'sʔapaλi*
čaq-wa's = 'ap = 'aλ = 'i'
 push-go.outside.PERF=CAUS=TEMP=IMPER..2sg
 'Shove it outside!' (NA 65.32-33)
- c. *čimpiʔaλič*
čama-piλ = 'aλ = 'i'
 ready-in.house.PERF=TEMP=IMPER.2pl
 'You folks get ready in the house!' (based on NT 176.8)

The first person plural subject (hortative) form is the same as the second singular on first person plural form, so

- (437) NUUCHAHNULTH
wik'in *λičiλ*
wik = 'in *λi-čičiλ*
 not=IMPER.2sg/1pl shoot-PERF
 =IMPER.1pl

could theoretically mean 'Don't shoot us' or 'Let's not shoot him/her/it/them'. Its hortative use can be directed at either a single addressee ('Let's (the two of us) do such and such') or at more than one addressee ('Let's (the bunch of us) do such and such'). Not indicated on the table is the fact that the second plural on first plural form (= *'ič'in*) can also be used as a hortative specifically directed at more than one addressee, e.g. *wikič'in λičiλ* 'Let's (the bunch of us) not shoot him/her/it/them' (also, of course, 'Don't you folks shoot us?').

- (438) NUUCHAHNULTH
wikič'in *λičiλ*
wik = 'ič'in *λi-čičiλ*
 not=IMPER.2pl/1pl shoot-PERF
 =IMPER.1pl

The Future Imperative, formed by adding *-im* to the Present Imperative, indicates that the action need not be undertaken immediately, but may be performed at some future time.

- (439) NUUCHAHNULTH
 a. *ča'na'λičim* *ʔinksʔiqnitšiʔaλ*
ča'ni = 'aλ = 'ičim *ʔink^w-syi-q-nit-šiλ = 'aλ*
 for.a.while=TEMP=FUT.IMPER.2pl fire-medicine.for-BFR-stocked.with-PERF=TEMP

ʔami·λikʔi...
ʔami·λik = ʔi·
 tomorrow=ART

‘Spend a while tomorrow getting stocked up with firewood.’ (NA 235.31)

- b. *ʔahʔaʔaλim* *hinatšiʔaλ*
ʔahʔaʔaʔa = ʔaλ = ʔim *hin-at-šiλ = ʔaλ*
 then-TEMP-FUT.IMPER.2sg empty.root-arrive-PERF-TEMP

ħasi·ki·kqu·k *maʔmakuʔi...*
ħa-si:k^w = ʔi:k = qu:k [RL]-mak^w-uʔ^w = ʔi·
 completely-do-FUT=COND=2sg PL-buy-place.for=ART

‘Then come here when you have finished (searching) the stores.’ (NT 146.21-22)

Nuuchahnulth also has directional imperatives that mean ‘come and ...!’ or ‘go and ...!’.

These are laid out in Table 22 (Sapir & Swadesh 1939: 243).

Table 22. Nuuchahnulth Directional Imperative paradigms

‘Come’ Imperative			‘Go’ Imperative		
(3 obj)	1sg obj	1pl obj	(3 obj)	1sg obj	1pl obj
2sg = <i>ʔi·k</i>	= <i>ʔi·s-ak</i>	= <i>ʔi·n-ak</i>	= <i>či·</i>		
2pl = <i>ʔi·č-ak</i>	= <i>ʔi·čas-ak</i>	= <i>ʔi·čin-k</i>	= <i>ča·su,</i>		
			= <i>csu:</i>		
1pl = <i>ʔi·n-ak</i>					

(440)

NUUCHAHNULTH
 ‘Come’ Imperative

- a. *ħaʔuk^wik*
ħaʔuk = ʔi·k
 eat=ComeIMPER.2sg
 ‘Come and eat!’ (NA 148.51)

- b. *weʔičuʔaλisak*
weʔič-up = ʔaλ = ʔi·sak
 sleep-CAUS.PERF=TEMP=ComeIMPER.2sg/1sg
 ‘Come and put me to sleep!’ (NT 21.1)

‘Go’ Imperative

- c. *ʔaʔaʔu·či*
ʔaʔaʔu = či·
 ask=GoIMPER.2sg
 ‘Go ask him!’ (NT 42.9)

- d. *hati'scsu*
hati's = csu:
 bathe=GoIMPER.2pl
 'You (boys) go and bathe!' (NT 62.6)

Finally, a structural note. As we have seen, the pronominal marking in the clitic sequence usually expresses the person and number (in first and second person) of the subject. In Imperative moods, however, first person objects are indexed with a pronominal clitic. In bare absolute complement constructions the mood and pronominal clitics occur on the matrix predicate (§4.6.2.1). This means the first person object of a transitive bare absolute complement predicate is actually marked on the matrix predicate instead of the complement in an Imperative mood.

- (441) NUUCHAHNULTH
wiki's *ʒita'k...*
wik = 'i's *ʒita'k*
 not=IMPER.2sg/1sg disbelieve
 'Don't disbelieve me.' (NA 369.44)

The same pattern applies in Makah.

- (442) MAKAH
wikaʔiske *du'baʔiksčičiʔ*
wik = 'aʔ = 'is = ke: *du'ba- 'i'ks-čičiʔ*
 not=TEMP=IMPER.2sg/1sg=ADVISE all-consume-PERF
 'Don't eat all of me!' (HW, Deer and Wolves)

7.2.21 The articles

The article M = *iq*, N = *ʔi'* (and its evidential-quotative counterpart N = *(m)ič'a ~ = č'a'*) normally attaches to the first non-demonstrative word of the RP.¹⁰⁵ It has multiple functions. The most basic is simply to mark referring phrases as such. It occurs optionally with RPs containing a noun or quantifier, but obligatorily with RPs that do not contain a word from one of these classes. In cases where it is optional, its appearance seems to be conditioned by some functional parameter akin to definiteness. Sapir (1924: 84, note 9) calls = *ʔi'* a "suffixed definite article, often used as nominalizing element", Swadesh (1948: 109) calls it a "definite suffix", and Rose (1981: 250-

53) describes it as a definite and particularizing marker. Jacobsen (1973: 21) says the Makah article “indicates a certain definiteness of reference”. It is true that RPs whose referents are definite (in the sense of identifiable) and particular (specific and referential) almost always have an article, sometimes in concert with the preceding demonstrative particle, *ya'* in Nuuchahnulth¹⁰⁶ or *ti'* ‘this’, *xu'* ‘that’ and related forms in Makah.¹⁰⁷ For example, the referents of N *qu'ʔasʔi* ‘the man’ in (443)a and N *ya' qu'ʔasʔi* ‘the man’ in (443)b are introduced in preceding sentences of their respective texts (Text 13 and Text 76) and are thus identifiable and particular.

- (443) NUUCHAHNULTH
- a. *ʔi'hwe'ʔin qu'ʔasʔi*
ʔi'h^w=we'ʔin qu'ʔas=ʔi'
 big=QUOT person=ART
 ‘The man was big.’ (NT 64.9)
- b. *wikaʔ ši'ʔuk ya' qu'ʔasʔi...*
wik='aʔ siʔ-uk ya' qu'ʔas=ʔi'
 not=TEMP change.residence-DUR DEM person=ART
 ‘The man did not move.’ (NA 379.19)

However, definiteness and particularity cannot be the whole story, as shown by the two RPs in example (444), which is the first sentence of Text 16.

- (444) NUUCHAHNULTH
- ʔuna'kwe'ʔin ha'k^wa'ʔ qu'ʔasʔi*
ʔu-na'k^w=we'ʔin ha'k^wa'ʔ qu'ʔas=ʔi'
 so.and.so-have=QUOT girl person=ART
 ‘A certain man had a daughter.’ (NT 68.22)

This sentence introduces the referents of both RPs into the text for the first time, which means they ostensibly have the same identifiability status (unidentifiable), and both are particular, yet the subject RP has an article and the object RP does not.

In general, RPs that depart from the narrow identifiable-and-particular type in (443) (e.g. RPs with unidentifiable referents, non-referential expressions, generic RPs, etc.), show complex patterns of article use that are not well understood and that may not be reducible to a single general principle. Consider the RPs in (445). These sentences come from a passage in which the speaker

is describing his attempt to build a big house, a project which first requires finding appropriately large cedar logs. Sentence (445)a occurs two paragraphs before (445)b.

- (445) NUUCHAHNULTH
- a. *ʔuṅaḥʔaλsi* *λuk^wiṭʔi* *ḥumi's*
ʔu-ṅaḥ = 'aλ = si' *λuk^wiṭ = ʔi'* *ḥumi's*
 so.and.so-look.for=TEMP=1sg large.in.girth=ART cedar
 'I looked for stout cedar logs.' (NT 138.31)
- b. ...*q^wiṭiqas* *ʔuṅiṭaλ* *λuṭ* *ḥumi's*
q^wiṭi = qa' = s *ʔu-iṅiṭ = 'aλ* *λuṭ* *ḥumi's*
 when=DEF=1sg so.and.so-obtain=TEMP good cedar
 '... when I found good cedars.' (NT 140.19)

The pattern of the article use in these sentences is further evidence against the definiteness-and-particularity hypothesis in its simplest form. Neither of the referents is identifiable, and the object RP in (445)a, *λuk^wiṭʔi ḥumi's* 'stout cedar logs', which has the article, is non-referential — the speaker is looking for any objects that satisfy the intension of the RP rather than some specific subset of stout cedar logs. In fact, that may be exactly the point: the article in (445)a may indicate that the speaker is looking for "the whole set" in the sense that any member of the set of cedar logs that are stout will do, while the lack of article in (445)b indicates he did not find the entire set of good cedars, just some non-specific subset.

It is probably the case that the article is sensitive to discourse-pragmatic factors like topicality and communicative importance in addition to — or instead of — definiteness or particularity/specificity strictly defined. Other criteria, as yet undiscovered, may also be relevant. As Rose (1981) suggests, it may be necessary to take into account other elements that are present in an RP, and if so, their categories. Further study of how the article is used in discourse is the only sure way of making progress on these questions.

Makah also has a series of possessive clitics, shown in Table 23, that attach to the first word of RPs containing a noun to indicate possessor.

- (447) MAKAH
- a. *ʔiq^witičal* *wikwi'ya'wiq* *da'ʔšiλ* *wa'qidiq*
ʔiq^w- 'it = ʔič = 'aλ = ʔi *wikwi'ya:k^w = ʔiq* *da'ʔ-šiλ* *wa'qit = ʔiq*
 sit-in.house=DIM=TEMP=INDIC.3sg boy=ART watch-PERF frog=ART
 'The little boy is sitting on the floor watching the frog.' (RC, Frog Story)
- b. *ʔu'ba'ćus* *q^wiyuq^wiks* *k^wa'awišć*
ʔu-aba:ću = s *q^wiyu = (q)ik = s* *k^wa'ak^w = ʔišć*
 so.and.so-talk.about=INDIC.1sg when=REL=1sg small=DIM
 'I'm talking about when I was really small.' (IW)
- c. *ʔapxabiʔi'sičwa'd* *λ'a'λ'a'wa'diq*
ʔapx-a-biʔi:s = ʔič = wa:da *λ'a'λ'a'wa:t = ʔiq*
 fly-EPEN-moving.about.on.ground=DIM=QUOT.3sg butterfly=ART
 'The little butterfly was flying about.'
- d. *hi'daqłal* *wikwi'ya'wičiq*
hi'daqł = 'aλ = ʔi *wikwi'ya:k^w = ʔič = ʔiq*
 amazed=TEMP=INDIC.3sg boy=DIM=ART
 'The little boy is amazed.' (RC, Frog Story)
- (448) NUUCHAHNULTH
- a. *ʔaλćiqʔisuk* *ći'hati*
ʔaλ-ćiq = ʔis = uk *ći'hati*
 two-X.many.long.objects=DIM=POSS arrow
 'He had two little arrows.' (NA 14.19-20)
- b. *ćw'ćki'csʔaλ* *ʔa'tneʔisukʔi* *ħa'k^wa'λʔi ...*
ćw'ćk-i:cs = 'aλ *ʔa'na- <t> [L] = ʔis = uk = ʔi* *ħa'k^wa'λ = ʔi*
 all-carry=TEMP child-<PL>=DIM=POSS=ART girl=ART
 'The girl took along both her little children.' (NT 72.1)

Predicate diminutives may modify the object as well as the subject. Consider (449), which shows a Nuuchahnulth example of an object-modifying diminutive on the main predicate head.

- (449) NUUCHAHNULTH
- ńupħtañahʔi'ća'qλah*
ńup-ħta-ñah = ʔis = 'a:qλ = (m)a' = ah
 one-X.many.sackfuls-see=DIM=INTENT=INDIC=1sg
 'I am going to look for one small sack.' (NA 83.41)

See also (450)c.

Occurrence in the main predicate clitic sequence or occurrence in the RP-level sequence are not mutually exclusive options. Example (450)a has the diminutive in both the main predicate and

the subject RP, and (450)b-c show sentences with every word affixed by the diminutive (except the proper name *ʔimtsiʔat* ‘Mentioned-by-Name’), even the predicate modifier *sačink* ‘always’:

- (450) NUUCHAHNULTH
- a. *huʔičʔiçaλqurweʔin* *íaʔneʔisʔi...*
huʔič-ʔis = ʔaλ = qu: = weʔin *íaña-<t> [L] = ʔis = ʔiʔ*
 sleep.PL-DIM=TEMP=COND=QUOT child-<PL>=DIM=ART
 ‘The little children would be asleep.’ (NT 54.28)
- b. *čawaʔkʔiçaλqurweʔin* *sačinkʔis* *ʔihakʔis*
čawa-ʔak^w = ʔis = ʔaλ = qu: = weʔin *sačink = ʔis* *ʔih-ak^w = ʔis*
 one-DUR=DIM=TEMP=COND=QUOT always=DIM cry-DUR=DIM
- ʔiniʔλʔisʔi*
ʔiniʔλ = ʔis = ʔiʔ
 dog=DIM=ART
 ‘Now there was one little dog who was always crying.’ (NT 54.29)
- c. *waʔscačičiʔiçaλha* *ʔimtsiʔat* *ʔukteʔisʔi*
waʔs-ca-čiči = ʔis = ʔaλ = haʔ *ʔimt-šiči = ʔat* *ʔu-(k)ʔaʔ = ʔis = ʔiʔ*
 where-go.to-PERF=DIM=TEMP=INTERR mention.name=PINV so.and.so-named=DIM=ART
- ciʔik^waqʔis* *qaḥsaʔpʔičaʔni*
ciq-ʔik^w-(q)aq = ʔis *qaḥ-saʔp = ʔis = ʔa: = ni*
 speak-fond.of-very=DIM dead-CAUS.PERF=DIM=PURP=1pl
 ‘Where has the little talkative one named Mentioned-by-Name gone, so that we might kill him?’ (NA 448.7-8)

In addition to small physical stature, the diminutive may index the low social rank of a participant (451) (not reflected in Sapir and Swadesh’s translation).

- (451) NUUCHAHNULTH
- ʔaʔaquʔiʔiʔhak* *kamuʔ* *waʔaλweʔinλaʔ*
ʔaqi-wa [R] = ʔis = haʔ = k *kamuʔ* *waʔ = ʔaλ = weʔin = λa:*
 what-say=DIM=INTERR=2sg young.chap say=TEMP=QUOT=again
 ‘“What is it that you are saying, young fellow?” they said to Deer again.’ (NT 20.1-2)

The following Makah example occurred at the same point in a Makah version of the story:

- (452) MAKAH
- ʔuxwʔiçaλaʔk* *waʔaλit* *bukwač*
ʔux-wʔ = ič = ʔaλ = (q)a:k *waʔ = ʔaλ = it* *bukwač*
 so.and.so-APPEN=DIM=TEMP=POLAR say=TEMP=PINV deer
 ‘“Is that you?” they said to Deer.’ (HW, Deer and Wolves)

Discussing the text later, the speaker indicated that inclusion of the diminutive in the greeting has the force of an insult — such a greeting would normally only be given to a child or slave.

The diminutive can also indicate that a situational element other than a participant is small or less than expected. Example (453) shows the diminutive used to indicate that the group size of a plural argument is few.

- (453) NUUCHAHNULTH
- | | | |
|------------------|---|--------------------------|
| <i>ʔatquʔ</i> | <i>ʔaʔisteʔis</i> | <i>hitasaʔ</i> |
| <i>ʔat = qu:</i> | <i>ʔaʔa-ista = ʔis</i> | <i>hita-saʔ</i> |
| though= COND | two-in.canoe.as.crew=DIM | empty.root-on.beach.PERF |
| | | |
| <i>čaʔpuk</i> | <i>hiniʔswisčis</i> | <i>haʔukʔap</i> |
| <i>čap-uk</i> | <i>hin-i:s-wisč-ʔis</i> | <i>haʔuk = ʔap</i> |
| canoe.party-DUR | empty.root-carry-move.up.bank.PERF-on.beach | eat=CAUS |
- ‘Even though the canoe party consisted of a small two, (I) would take them up the beach and feed them.’ (NT 196.36)

Certain roots in Nuuchahnulth that denote the lower end of a scale (e.g. *ʔanaʔʔis* ‘small’ denotes the lower end of the property SIZE) obligatorily take the diminutive. Compare, for example, the pairs of roots in Table 24.

Table 24. Scalar roots with the diminutive

size	<i>ʔiʔhʔ</i> ‘big’	<i>ʔanaʔʔis</i> ‘small’
weight	<i>kʔatyiʔk</i> ‘heavy’	<i>kʔatyiʔkʔis</i> ‘light’
texture	<i>qat</i> ‘hard’	<i>čitʔis</i> ‘soft’
quantity	<i>ʔaya</i> ‘many’	<i>kaʔaʔ-... = ʔis^a</i> ‘few’
distance	<i>sayaʔ</i> ‘far off’	<i>ʔaneʔʔis</i> ‘close by’
time	<i>qiʔ</i> ‘long time’	<i>kʔaʔč-... = ʔis^a</i> ‘short time’

^a This root is bound and must have a suffix before the diminutive. See (454)

Derived words based on these roots also have the diminutive:

- (454) NUUCHAHNULTH
- a. *ʔeʔinħačʔis*
ʔanaħ^w-(w)ač [LR] = *ʔis*
 small-at.margin.of.water=DIM
 ‘a small margin from the surface of the water to the gunwale of the canoe’
- b. *kamiʔiħʔis*
kama-i:ʔiħ = *ʔis*
 few-move.into.house.PERF=DIM
 ‘few enter the house’
- c. *kamisteʔis*
kama-ista = *ʔis*
 few-in.canoe.as.crew=DIM
 ‘few crew members in a canoe’
- d. *kačnaʔkʔis*
kač-naʔk^w = *ʔis*
 short.time-have=DIM
 ‘have sth for a short time’

Roots that denote the upper limit of a scale like *ʔiʔ^w* ‘big’ can occur with the diminutive as well, but with these roots it expresses qualified or partial possession of the property, e.g. *ʔiʔ^wʔis* ‘fairly big’.

Use of the diminutive with scalar roots in Makah is not obligatory. When it does occur with a root in this category, it intensifies the meaning: *k^waʔawišč* ‘really small’ (*k^waʔak^w* ‘small’).

As first discussed in Sapir (1915), the Nuuchahnulth diminutive can be used to indicate persons with certain “abnormal” physical characteristics other than small size such as lame people, left-handed people, those who squint or are cross-eyed, hunchbacks, and others. In these cases the diminutive acts in concert either with a characteristic and otherwise meaningless consonant cluster that is inserted into the word (e.g. -*ħš-* plus = *ʔis* to indicate lameness) or with special articulatory changes that are applied to particular groups of consonants (e.g. to indicate those with a defect of the eye all sibilants are changed to the corresponding lateral stops or fricatives: /s š/ become /ʔ/, etc.). To cite two of Sapir’s examples, *ianeʔisʔi* ‘the little child’ becomes

taλšñeʔisʔi to refer to or to address a lame child; similarly, *yaʔʔaλma* ‘He is yonder now’ (*yaʔ* ‘yonder’, = *aλ* temporal specifier’, = *maʔ* Indicative mood) becomes *yaʔčhʔiçaλma* to indicate a left-handed person, which Sapir translates as ‘There now he is, poor little left-handed chap!’.

7.3.2 Intentive future (Nuuchahnulth)

= *ʔa:qλ* (rarely = *a:qλ*) (INTENT): This Nuuchahnulth clitic is typically used as a future tense marker with the implication, though not the necessity, that the subject or some other participant in the event has control over whether it comes about.

- (455) a. ...*ʔanis* *ʔaʔyiʔλʔaʔqλ...*
 ʔani=*s* *ʔaya-*’*iλ* [L]=*ʔa:qλ...*
 SUBOR=1sg many–invite.PERF=INTENT...
 ‘...because I was going to invite many.’ (NT 140.21)
- b. *čaxš*iλ*ʔaʔqλqas*
 *čax^w-š*iλ** = *ʔa:qλ* = *qaʔ* = *s*
 spear–PERF=INTENT=SUBOR=1sg
 ‘And I am going to spear him.’ (NT 48.4)
- c. *qahš*iλ*ʔaʔqλma* Tom ... *ʔuʔnuʔ* *ʔani* *ʔišʔiʔsqa...*
 *qah-š*iλ** = *ʔa:qλ* = *maʔ* Tom *ʔu-aʔnu:λ* *ʔani* *ʔiš-*’*iʔs* = *qaʔ*
 dead–PERF=INTENT=INDIC Tom so.and.so–reason SUBOR bad–consume–SUBOR
 ‘Tom will die because he is eating something bad.’ (NA 72.26-27)

Example (456) shows the intentive future in an RP. The intentive element is barely felt here:

- (456) *kaʔʔucš*iλ*ʔaʔqλukʔi*
 *kaʔʔuc-š*iλ** = *ʔa:qλ* = *uk* = *ʔiʔ*
 grandchild–PERF=INTENT=POSS=ART
 ‘his future grandchild’ (NA 77.24)

The intentive future does not co-occur with the other future clitics that appear later in the sequence. Rose (1981) reports that = *ʔa:qλ* co-occurs with the irrealis = *a:h* and the past tense clitic = (*m*)*it* in Kyuquot dialect, but examples of either are lacking in the Tseshaht corpus.¹⁰⁸

7.3.3 Temporal specifier

= 'aλ (TEMP): This ubiquitous clitic, common to both languages, has a number of subtle functions, all of which derive from its basic function of fixing a situation at a specified time in the course of events. When translated at all, it is rendered 'now', '(and) then', or 'at that time'.

It often serves as a device for expressing the temporal succession of a series of events. The first two sentences of the following Nuuchahnulth excerpt from paragraph one of Text 77 (77.1.4 and 77.1.5 below; NA 385) relate two events in narrative sequence. The third sentence (77.1.6) introduces information about the setting:

- NUUCHAHNULTH
- 77.1.4 *ši'λuk^waλ* *ʔu-ci:ʔuk* *namint*
šiλ-uk = 'aλ *ʔu-ci:ʔuk [L+S]* *namint*
 change.residence-DUR=TEMP so.and.so-go.to Namint
 'They (the Ucluelets) were moving to Namint Bay.'
- 77.1.5 *ʔuʔiyačistaλ* *kanačištul* *šašwin*
ʔu-.ʔiya-ačišt = 'aλ *kan-ačišt-ul* *šaš-win*
 so.and.so-get.to.be.at.PERF-on.ocean=TEMP camp-on.ocean-PERF trail-in.middle
 'They laid to on the water at Road-Middle.'
- 77.1.6 *hiłas* *ʔanaḥʔis* *čapac* *hiłeʔeʔi* .
hił-a's *ʔanaḥ = ʔis* *čapac* *hił-(w)aʔa [L] = ʔi'*
 there-on.horizontal.surface small=DIM canoe there-at.edge=ART

λušinqakʔi.
λušinq-ak^w = ʔi'
 boarded.over.canoes-DUR=ART
 'There was a small canoe on the barge near the edge.'

Both sequenced sentences are marked with = 'aλ. The third sentence, however, denoting a background or previously existing situation, is not in the narrative sequence and so is not marked with = 'aλ.

7.3.4 Possessive

(Makah, Nuuchahnulth) = *uk* (M = ?ak^w , N = ?ak after vowels) (POSS): In Nuuchahnulth, the possessive clitic occurs on the first word of a possessed RP. If the possessor is third person, the possessive is often, though not obligatorily, followed by the article = ?i . The possessor can be expressed in an independent RP that usually follows the possessed (457)c:

- (457) NUUCHAHNULTH
- a. $\text{?a}^{\check{c}}\text{sa}^{\text{?}}\text{im?ak?i}$
 $\text{?a}^{\check{c}}\text{--}(c)\text{sa}^{\text{?}}\text{:i}a$ [L]–*im* = ?ak = ?i
 support.with.pad–at.forehead–thing=POSS=ART
 ‘his head flattener’ (NT 15.1)
- b. ciyapuxsuk?i
 ciyapuxs = uk = ?i
 hat=POSS=ART
 ‘his hat’ (NA 399.21)
- c. ne?i'qsak?i $\text{?a}^{\check{c}}\text{k}^w\text{a}^{\check{c}}\text{?i}$
 ne?i'qsu = ?ak = ?i $\text{?a}^{\check{c}}\text{k}^w\text{a}^{\check{c}} = \text{?i}$
 uncle=POSS=ART girl=ART
 ‘the girl’s uncle’ (NT 62.16)

If the possessor is first or second person, the possessive clitic is followed by the appropriate

Definite Relative mood clitic (§7.2.16) and pronominal clitic:

- (458) NUUCHAHNULTH
- a. $\text{?a}^{\check{c}}\text{qim?ukqas}$ $\text{ku}^{\check{c}}\text{na}^{\check{c}}$
 $\text{?a}^{\check{c}}\text{--}qim\text{?}$ = uk = $qa^{\check{c}}$ = s $\text{ku}^{\check{c}}\text{na}^{\check{c}}$
 two–X.many.round.objects=POSS=DEF=1sg schooner
 ‘my two schooners’ (NT 144.31)
- b. ?asma'k?itqak
 ?asma = ?ak = $\text{?i}^{\text{?}}\text{tqa}$ = k
 favorite.child=POSS=DEF=2sg
 ‘your (sg.) favorite child’ (NA 313.39)

As in English, a possessive construction in Nuuchahnulth can be used to express concepts like ‘center of the house’ and ‘top of the tree’:

- (459) NUUCHAHNULTH
- a. *ʔappiʔiʔukʔi* *maʔtiʔakʔi*
ʔam-pi(ʔ)-iʔ = uk = ʔi *maʔtiʔ = ʔak = ʔi*
 locative.root-in.middle-in.house=POSS=ART house=POSS=ART
 ‘the center of their house’ (NA 344.2-3)
- b. *ʔapqiʔakʔi* *ʔaqaʔasʔi*
ʔam-qiʔ = ʔak = ʔi *ʔaqaʔas = ʔi*
 locative.root-on.top=POSS=ART tree=ART
 ‘the top of the tree’ (NT 76.15)

In Makah, the possessive clitic has been observed in RPs functioning in a manner similar to that just described for Nuuchahnulth:

- (460) MAKAH
- piʔkuq^wiʔ* *ʔabeʔiqsaʔkqey*
piku-q-(k^w)iʔ [L+S] *ʔabeʔiqsu = ʔak^w = qeyu*
 basket-BFR-make mother=POSS=COND.3sg
 ‘His mother was making baskets.’ (MP, Qweti and his Mother)

However, RP possession is more commonly accomplished by the possessive clitics in §7.2.21.

In both languages the possessive clitic participates in the very common possessor raising construction. In Makah, this is its primary use. It denotes that the subject (as indicated by the pronominal clitic in the clitic sequence) is the possessor of the S/A argument of the predicate head. The possessed is oblique. It occurs with intransitive predicates and, rarely, with transitive predicates.

- (461) MAKAH
- a. *qaʔšišiʔuks* *qidiʔʔ*
qaʔ-šišiʔ = uk = s *qidiʔʔ*
 dead-PERF=POSS=INDIC.1sg dog
 ‘My dog died.’
- b. *cubaʔawic* *ʔačičiʔqs*
cubaʔ = ʔak^w = ic *ʔačičiʔ-qs*
 full=POSS=INDIC.2sg deep-in.vessel
 ‘Your bowl is full.’

- NUUCHAHNULTH
- c. ...*hini'paλuksi* *ʔuwa'tin...*
hina-i:p = 'aλ = uk = si' *ʔu-wa't-'in*
 empty.root-obtain.PERF=TEMP=POSS=1sg so.and.so-related.to-treated.as
 'One of my relatives got it.' (NT 138.9-10)
- d. ...*ʔi'a'tšiʔaλuksi* *ʔu'čmup*
ʔi'a't-šiλ = 'aλ = uk = si' *ʔu'čmup*
 menstruate.first.time-PERF=TEMP=POSS=1sg sister.of.a.man
 'My sister had her first courses.' (NT 138.15)
- e. ...*wi'kcqa'sukqa* *ʔa'si'qsu*
wik-cqi' [L]-'as = uk = qa' *ʔa'si'qsu*
 not-overhead-on.ground=POSS=SUBOR child.of.sibling
 '... for his niece didn't have a roof over her head.' (NT 54.19)
 lit. 'for his niece had nothing overhead (on the ground)'
- f. *ʔuhtinʔak* *mušʔasim* *qu'ʔasʔi* *ʔiḥat...*
ʔu-htin = ʔak *muš-'as-im* *qu'ʔas = ʔi'* *ʔiḥat*
 so.and.so-made.of=POSS closed-on.ground-thing man=ART mat
 'The man's door was made of a mat.' (NA 379.23)

7.3.5 Passive-inverse

(Makah) = *'it*, (Nuuchahnulth) = *'at*, = *'a:n* before = (*m*)*it* past tense and sometimes = *uk* possessive (PINV): This clitic covers the functional range of passive and inverse constructions in other languages. Its use is triggered by the following conditions:

1. The A argument of a transitive clause is lower than the P argument on one of two hierarchies, a person hierarchy (1,2 > 3) or a topicality hierarchy (more topical > less topical).
2. The S argument of an intransitive clause or the A argument of a transitive clause is impersonal.

Let us first consider the principles governing the use of the passive-inverse in relation to the person hierarchy.¹⁰⁹

When one argument of a transitive clause is a speech-act participant (SAP) and the other is third person, the SAP must be the subject regardless of its semantic role. If the third person argu-

ment is the P (patient-like argument), it is coded as object, and the clause is direct, i.e. non-passive-inverse.

- (462) MAKAH
SAP acting on 3 P
kudu'ksa'ʔaλits Bill
kudu'k-sa:p = 'aλ = (b)it = s Bill
 awake-CAUS.PERF=TEMP=PAST=INDIC.1sg Bill
 'I woke Bill.'

If, on the other hand, the SAP is the P, a passive-inverse construction is used (marked by the passive-inverse clitic on the predicate head) with the SAP as subject and the third person A (agent-like argument) as an oblique (463)a. A direct construction with the third person A as subject and the SAP P as object is ungrammatical (463)b.

- (463) MAKAH
3 A acting on SAP P
 a. *kudu'ksa'ʔaλitits* Bill
kudu'k-sa:p = 'aλ = 'it = (b)it = s Bill
 awake-CAUS.PERF=TEMP=PINV=PAST=INDIC.1sg Bill
 'Bill woke me.'
- b. **kudu'ksa'ʔaλʔu* Bill *siya'*
kudu'k-sa:p = 'aλ = (b)u = i Bill *siya'*
 awake-CAUS.PERF=TEMP=PAST=INDIC.3sg Bill 1sg

When *both* arguments of a transitive predicate are SAPs, the two languages differ on the coding strategy employed according to the different grammatical resources they have available. Makah simply uses first on second or second on first pronominals:

- (464) MAKAH
 a. *kudu'ksa'ʔaλitsi'cuχ*
kudu'k-sa:p = 'aλ = (b)it = si:cuχ
 awake-CAUS.PERF=TEMP=PAST=INDIC.1sg/2sg
 'I woke you.'
- b. *kudu'ksa'ʔaλʔucis*
kudu'k = sa:p = 'aλ = (b)u = i'cis
 awake-CAUS.PERF=TEMP=PAST=INDIC.2sg/1sg
 'You woke me.'

A definitive statement of the factors determining topicality in Southern Wakashan requires a quantitative text study, but recency of mention is a relatively clear-cut parameter that will serve to demonstrate the basic principles at work. In general, the more recently a referent has been mentioned in the discourse, the more topical it is. If the A has been mentioned more recently than the P, and is hence more topical, it will likely be coded as subject, and the clause will be direct. Conversely, if the P has more recently been mentioned, it will be subject, and the clause will be passive-inverse. For instance, faced with the Makah sentences in (467)a-b out of context, an addressee could interpret either sentence as ‘Bill saw Mary’ or ‘Mary saw Bill’.

- (467) MAKAH
- a. **Direct clause**
- | | | |
|---------------------------------------|------|------|
| <i>dačʔoʔaλʔu</i> | Bill | Mary |
| <i>dač-uʔaʔ= 'aλ = (b)u = i</i> | Bill | Mary |
| see-perceive.PERF=TEMP=PAST=INDIC.3sg | Bill | Mary |
- a. ‘Bill saw Mary.’
b. ‘Mary saw Bill.’
- b. **Passive-inverse clause**
- | | | |
|--|------|------|
| <i>dačʔoʔaλʔitʔu</i> | Bill | Mary |
| <i>dač-uʔaʔ= 'aλ = 'it = (b)u = i</i> | Bill | Mary |
| see-perceive.PERF=TEMP=PINV=PAST=INDIC.3sg | Bill | Mary |
- a. ‘Mary saw Bill.’
b. ‘Bill saw Mary.’

Now let us assume that the previous sentence in the discourse was *bačidʔaλʔu Bill* ‘Bill came in the house’, and that Mary has not been mentioned for several minutes. In this context, the referent-role relations become clearer. Since Bill is the more topical of the two arguments, he will likely be coded as subject, and the a. translation of each sentence is the most probable.

The second circumstance for the passive-inverse is impersonal reference: clauses with impersonal S/A arguments are often passive-inverse. This impersonal passive-inverse marking is particularly common in the Nuuchahnulth corpus in texts describing how certain rituals are performed. The following example comes from the first two sentences of Text 25, *A Secret Ritual for Spearing Fish* (NT 110). The passive-inverse appears three times in this excerpt: in the intransi-

tive clause ‘one goes into the woods’ and the transitive clauses ‘one goes to (his) training place’, and ‘one makes an imitation canoe with a spear extending out in front’.

- 25.1.1 NUUCHAHNULTH
ɽuyi *λawa'ɽaλqu'* *hinin* *haɽum*
ɽu-yi *λawa' = 'aλ = qu:* *hina-ni'* *haɽum*
 so.and.so-at.X.time near=TEMP=COND empty.root-arrive.PERF fish

hita-qλiɽaλat *ɽucačiɽaλat*
hita- 'a-qλiλ- 'aλ- 'at *ɽu-ca-čiλ = 'aλ = 'at*
 empty.root-in.woods.PERF=TEMP=PINV so.and.so-go.to-PERF=TEMP=PINV

čaxsimčuwásɽi.
čax^w-simč [L]-u^w- 'as = ɽi'
 spear-do.ritual.for-place.for-on.ground=ART

‘When it is nearly time for the fish to come, one goes into the woods (and goes) to (his) training place.’

- 25.1.2 *ɽuk^{wi}-ɽšɽiɽaλat* *čapacti'ɽiɽa* *sima'csyin* *miłsyi*
ɽu-(č)i:ɽ-šɽiλ = 'aλ = 'at *čapac-ti:ɽiɽ [L]-(y)a'* *sim-a'csyin*¹¹¹ *miłsyi*
 so.and.so-make-PERF=TEMP=PINV canoe-pretend-CONT rigid-at.bow spear

‘He makes an imitation canoe with a spear extending out in front.’

Passive-inverse is not obligatory in such procedural contexts. Generally, the first several sentences in a text such as Text 25 are passive-inverse to establish the impersonal S/A in the discourse, but later sentences can be either passive-inverse or direct.

The following example of the impersonal passive-inverse in Makah occurs in a text in which HI is describing the transparent appearance of a jar in a photograph.

- (468) MAKAH
čabułit *dačsarwi'ɽit* *jar'iq*
čabuł = 'it *dač- <a'>-swi' = ɽit* *jar = 'iq*
 able=PINV see-<EPEN>-through=PINV jar=ART

‘You can see through the jar.’ (Frog Story, HI)

The passive-inverse also regularly appears on the predicate head in both Makah and Nuuchahnulth when a body part is an S/A argument.

- (469) MAKAH
- a. *yaʔakits* *tuxwʕid*
yaʔ-ʔak^w = ʔaλ = ʔit = s *tuxwʕida*
 sore-DUR=TEMP=PINV=INDIC.1sg head
 ‘My head is sore.’
- b. *ʕiʕkqeyaʕits* *ʕik^waʕbac*
ʕiʕk-qeyaλ [L] = ʔit = s *ʕik^waʕbac*
 creak-make.sound.PERF=PINV=INDIC.1sg neck
 ‘My neck cracked (lit. made a creaking sound).’
- c. *saʔqšičiʕits* *ʕipiʕi*
saʔq-šičiʕ = ʔit = s *ʕipiʕi:*
 itch-PERF=PINV=INDIC.1sg ear
 ‘My ears itch.’
- (470) NUUCHAHNULTH
- a. *yaʔakaʕatsi* *ʕimaqsti...*
yaʔ-ʔak^w = ʔaλ = ʔat = siʕ *ʕimaqsti*
 sore-DUR=TEMP=PINV=1sg mind
 ‘My mind was troubled.’ (NT 140.21)
- b. ... *ʕani* *hihiyaqʕwat* *ʕatʕa...*
ʕani *his-ʔaqʕ-wi [R] = ʔat* *ʕatʕa*
 SUBOR blood-inside-at.nails=PINV fingernail
 ‘... that he had blood under his fingernails.’ (NT 14.7-8)

Evidently related is the fact that it can optionally replace the possessive clitic (§7.3.4) to mark inalienable possession of body parts in Nuuchahnulth:

- (471) NUUCHAHNULTH
- a. **Inalienable possession marked by possessive**
ʕiʕʕitakʕi
ʕiʕʕiti = ʔak = ʕiʕ
 head=POSS=ART
 ‘his/her/its/their head(s)’
- b. **Inalienable possession marked by passive-inverse**
ʕiʕʕitatʕi
ʕiʕʕiti = ʔat = ʕiʕ
 head=PINV=ART
 ‘his/her/its/their head(s)’

7.3.6 Irrealis (Nuuchahnulth)

= 'a:h (IRR): The irrealis occurs in the following constructions.¹¹²

a) Optionally in past counterfactuals

- (472) a. ...*caqsa'pa'hitah* *su'tit*
caq-sa'p = 'a:h = (m)it = (m)a' = ah *sut-(č)iť [L]*
 on.end-CAUS.PERF=IRR=PAST=INDIC=1sg 2sg-do.to

q^wamihsimtq^s...
q^wa-mihsa = (m)it = qu: = s
 do.thus-want.to=PAST=COND=1sg

'I would have set you on end if I had wanted to.' (NT 88.26)

- b. ...*hayu'yipa'hite?ic* *łisať* *?iš* *mucmuhaq*
hayu-i:yip = 'a:h = (m)it = (m)a' = ?ic *łisať* *?iš* *mucmuhaq*
 ten-obtain.PERF=IRR=PAST=INDIC=2sg blanket and bearskin

'You would have got the ten blankets and the bearskin.' (NT 154.4)

b) Conative: denotes an attempted action (with the gradulative aspect)

- (473) *ha'sika'h* *hayuqumť* *nurťyak*
ha-si:k^w-[L+S] = 'a:h *hayu-qimť* *nurť-yak^w*
 completely-do-GRAD=IRR ten-X.many.round.objects roll.hoop-thing.for

'They were trying to use up ten hoops.' (NA 16.49-50)

c) Optionally in Nuuchahnulth future imperatives

- (474) a. ...*hinatši?a'h?im* *?iťčiniak*
hin-at-šił = 'a:h = 'im *?iťč-i'nak^w*
 empty.root-arrive-PERF=IRR=FUT.IMPER.2sg dog-imitate.in.dance

'Have Dog-Dancer (man's name) come.' (NA 378.3-4)

- b. *wikim* *ku'wiť?a'h...*
wik = 'im *ku'wiť = 'a:h*
 not=FUT.IMPER.2sg steal=IRR

'Do not steal.' (NT 206.13)

These are often negative imperatives, as in (474)b, or involve a third person object with a causative sense (474)a.

d) Optionally reinforcing the past tense denoting 'deceased' on kin terms

- (475) *meʔiʔqacuk^waʔhitʔi*
meʔiʔqac = uk = 'a:h = (m)it = ʔi'
 boy=POSS=IRR=PAST=ART
 'his late son' (NA 125.29)

e) Obligatorily in Nuuchahnulth with the bound root *hi-* 'unable'

- (476) *hicaʔap^aʔhsi* *huⁿiqityap...*
hi-caʔap = 'a:h = si' *huⁿi-q-i'ty^ap*
 unable-go.to.CAUS.PERF=IRR=1sg drift.food-BFR-bring.as.gift.PERF
 'I could not present it anywhere as drift-food.' (NT 198.14)

7.4 Post-modal clitics

7.4.1 Third plural

(Makah) = ^o*aʔ* = *aʔ* = *a:ʔ* = *i:ʔ* = *ʔ* — see §7.2.1 and §7.4.2 for distribution of allomorphs,

(Nuuchahnulth) = *ʔaʔ* (3pl): This clitic indicates that a third person participant (subject, object, or oblique) is plural.

- (477) MAKAH
- a. *daʔuʔqsʔaʔitsaʔ* *hiʔhiʔcaʔk*
daʔuʔqs-iʔ = 'aʔ = s = a:ʔ [R]-*hiʔcaʔk*
 accompany-in.vessel-PERF=TEMP=INDIC.1sg=3pl PL-parent
 'I rode along with my parents (in the car, canoe, etc).'
- b. *haʔukšʔalaʔ*
haʔuk-š-iʔ = 'aʔ = ^oaʔ
 eat-PERF=TEMP=3pl
 'They began to eat.'
- NUUCHAHNULTH
- c. *...čipqaʔʔaʔ* *muʔstatakʔiʔaʔ...*
čipq-(y)aʔ = 'aʔ *muʔstati = ʔak = ʔiʔ = ʔaʔ*
 bow.is.drawn-CONT=TEMP bow=POSS=ART=3pl
 'They had their bows drawn.' (NT 88.8)
- d. *ʔixawuʔaʔsiʔaʔ*
ʔix-(q)awuʔ = 'aʔ = siʔ = ʔaʔ
 red-on.face.CAUS.PERF=TEMP=1sg=3pl
 'I daubed red paint on their faces.' (NA 61.5)

- e. *waʔaλʔaʔ ʔaλeʔi*
waʔ = ʔaλ = ʔaʔ ʔaλa = ʔiʔ
 say=TEMP=3pl two=ART
 ‘The two said this.’ (NA 84.32-33)

- f. *wikmihsaʔaλʔaʔ qaħšiλ...*
wik-mihsa = ʔap = ʔaλ = ʔaʔ qaħ-šiλ
 not-want.to=CAUS=TEMP=3pl dead-PERF
 ‘He did not want them to kill him.’ (NA 410.43-44)

It also occurs in the “associative plural” construction in which the predicate containing the third plural clitic combines with a singular proper name or kin term to mean ‘NAME and associates did X’.

- (478) MAKAH
- a. *waʔšʔaliʔ* Maria
waʔ-šiλ = ʔaλ = ʔi = aʔ Maria
 go.home-PERF=TEMP =INDIC.3sg=3pl Maria
 ‘Maria and her family went home.’
- b. *dačʔaʔiλeʔʔisaλitsaʔ* Maria.
dač-aʔiλ-ʔe:ʔis = ʔaλ = (b)it = s = aʔ Maria
 check.on-enter.house.PERF-go.to=TEMP=PAST=INDIC.1sg=3pl Maria
 ‘I just stopped by to look in on Maria and her family.’
- NUUCHAHNULTH
- c. *hihiʔqwiʔtaλʔaʔ* *maʔcaʔnux*
 [R+L]-hiq-wiʔta = ʔaλ = ʔaʔ *maʔcaʔnux*
 PL-all-move.out.of.canoe.PERF=TEMP=3pl Lunchman
 ‘Lunchman (man’s name) and all got out of the canoe.’ (NA 409.23)

HW volunteered (479) as an alternative way of expressing (478)b, which shows the plural clitic can also appear with an associative reading in the RP.

- (479) *dačʔaʔiλeʔʔisaλits* Mariaʔaʔ
dač-aʔiλ-ʔe:ʔis = ʔaλ = (b)it = s Maria = ʔaʔ
 look.in.on-enter.house.PERF-go.to=TEMP=PAST=INDIC.1sg Maria=3pl
 ‘I just stopped by to look in on Maria and her family.’

When the habitual is followed by the third plural clitic (§7.4.1), which here apparently has the form =*t*, metathesis takes place whereby the /*k*/ of the habitual and the /*t*/ of the plural metathesize: =*a:k=t* surfaces as =*a:tʔk* (cf. Jacobsen 1973: 16).

7.4.3 Responsive (Makah)

=*ši*: (RESP): This clitic indicates that the utterance is made in response to an utterance of the hearer, generally a question, as demonstrated by the following standard greeting formula:

(481) Speaker 1: *ʔuχuʔaλaʔk*
ʔuχ-uʔ = 'aλ = (q)a:k
 so.and.so-APPEN=TEMP=POLAR
 ‘Hello! — (lit.) is it you (sg.)?’

Speaker 2: *ʔuχuʔaλsiši*
ʔuχ-uʔ = 'aλ = si = ši
 so.and.so-APPEN=INDIC.1sg=RESP
 ‘Hello! — (lit.) indeed, it’s me’

Second person plural clitics show longer forms with this clitic similar to those that occur with the habitual: the second plural Set 1 form (see Table 15) becomes =*ico:wa*, and the Set 2 form becomes =*so:wa*.

When the responsive follows the habitual (§7.4.2), the final consonant of the habitual and the initial consonant of the responsive metathesize: =*a:k=ši*: becomes =*a:ški*:. This metathesis also occurs when the habitual has already undergone metathesis with the third plural clitic. Thus, an underlying sequence of =*a:k=t=ši*: surfaces as =*a:tʔški*: (cf. Jacobsen 1973: 18).

Jacobsen (1973: 17) reports that the responsive occurs with the Indicative and the Quotative. Its failure to occur with most of the other moods can be explained pragmatically, e.g. it would be a contradiction of its function to combine it with either of the interrogatives.

7.4.4 'Again'

(Makah) = $\lambda\gamma o$, (Nuuchahnulth) = $\lambda a:$ ('again, also'): This clitic indicates the repetition of an event or entity.

- (482)
- MAKAH
- a. $\gamma u d a' k d u' \lambda \gamma o$ $d u' p i c a' d a \gamma$ $\lambda' u p a \check{c}$
 $\gamma u - d a' k^w = d u: = \lambda \gamma o$ $d u' p i c a: d a \gamma i$ $\lambda' u p a \check{c}$
so.and.so-have=1pl=again all.kinds root
- 'We also have all kinds of roots.' (HW, Our Land)
- NUUCHAHNULTH
- b. $\gamma a \lambda \dot{h} t a \gamma i' s i \lambda a'$ $\dot{n} u p \dot{h} t a' k$
 $\gamma a \lambda - \dot{h} t a - a \gamma i: = s i' = \lambda a:$ $\dot{n} u p - \dot{h} t a - \gamma a k^w$
two-X.many.sackfuls-give.PERF=1sg=again one-X.many.sackfuls-DUR
- $w a w a \acute{c} a q \acute{k} u k$ $\dot{n} u p \dot{h} t a' k \lambda a'$ $\dot{n} i \dot{n} i x \acute{k} u k$
 $w a w a \acute{c} a q \acute{k} u k$ $\dot{n} u p - \dot{h} t a - \gamma a k^w = \lambda a:$ $\dot{n} i x^w - \acute{k} u k$ [R]
beans one-X.many.sackfuls-DUR=again salmon.roe-resemble
- 'I gave him also two sacks, one of beans and one of peas.' (NA 83.6-7)

This is likely a reduced and cliticized form of M, N $\lambda a \gamma u'$ 'another'.

7.5 Organization of the clitic sequence

Clitics fall into three groups: pre-modal (§7.3), mood and pronominal (§7.2), and post-modal (§7.4). Though some combinations of clitics are rare or unattested (e.g. temporal specifier and future in Makah, intensive future and irrealis in Nuuchahnulth), most of the pre- and post-modal clitics may co-occur with one another and with the mood and pronominal clitics or an article. When two or more clitics are hosted by the same word, they appear in a fixed order. The order of clitics in Makah is shown in (483).

- (483) **Organization of the clitic sequence in Makah**
=DIM=TEMP=CAUS=POSS=PINV=TENSE=MOOD=PRO=HAB=3PL=RESP=again

The tense slot can be filled by either future = $'e \gamma i k$ or past = $(b) i t$ (= $(b) u$ preceding second and third person). There seems to be another future clitic = $i \lambda$, but this is not well attested. The pre-

- b. TEMP = PINV = POSS
čani' ?aλ'atuk
čani' = 'aλ = 'at = uk
 not.see=TEMP=PINV=POSS

'Theirs were not seen.' (NA 124.8)

Example (487)b also shows that the temporal specifier normally *precedes* passive-inverse and possessive. When the irrealis and temporal specifier co-occur, however, the temporal specifier *follows* the irrealis and thus these other clitics as well:

- (488) PINV = POSS = IRR = TEMP
k^wa'ya'patuk^wa'h ?aλ'qu
k^wa-ya'p = 'at = uk = 'a:h = 'aλ = qu:
 break.in.two-CAUS.PERF=PINV=POSS=IRR=TEMP=COND
 'If they try to break it ...' (NA 17.14)

When the temporal specifier moves to the right of the irrealis, the passive-inverse and possessive may optionally “piggy-back” along. Compare their positions in (488) to their positions in (489):

- (489) PINV = IRR = TEMP = PINV = POSS
huptsa'pata'h ?aλ'a'nuk^witni
hupt-sa'p = 'at = 'a:h = 'aλ = 'at = uk = (m)it = ni'
 hidden-CAUS.PERF=PINV=IRR=TEMP=PINV=POSS=PAST=1pl
 'Ours would be hidden.' (NA 142.47)

In (488) only the temporal specifier has moved. In (489) the passive-inverse and the possessive have moved with it; all three clitics now follow the irrealis. Surprisingly, a copy of the passive-inverse is retained before the irrealis. This means the passive-inverse occurs twice in the same sequence. Such double marking occurs only in this circumstance and is unknown with other clitics. Example (490) gives two more instances of double passive-inverse marking:

- (490) a. ...wa' ?ani hisiti'yapši ?ata'h ?aλ'atqa...
 wa' ?ani hi-si'a-i:yap-šiλ = 'at = 'a:h = 'aλ = 'at = qa'...
 say SUBOR unable-do-CAUS.INCEP-PERF=PINV=IRR=TEMP=PINV=SUBOR...
 'She said that he (the doctor) had been unable to do anything for her.' (NT 190.30-31)

- b. *wikha's* *mawa'ʔata'hʔaʔat* *ya'ʔi'hitqas*
wik = ha' = s *mawa' = 'at = 'a:h = 'aʔ = 'at* *yaq^w - 'i:h [L] = (m)it = qa' = s*
 not=INTERR=1sg deliver=PINV=IRR=TEMP=PINV that.which-hunt=PAST=DEF=1sg
- ‘Are they not bringing to me what we [sic–MD¹¹³] tried to get?’ (NA 169.40)

8 Word Classes

8.1 Inventory

Southern Wakashan has at least the following classes of unextended words (§4.2.1).

(491) Nominals

Nouns (§8.2.1)

Numerals, quantities, and quantifiers (§8.2.2)

Pronouns (§8.2.3)

Verbs (§8.3)

Predicate modifiers (§8.4)

This list does not include particles, that is, words with limited capacity for taking lexical suffixes or clitics and no implication of aspect. The class of particles includes imperative particles, interjections, and syntactic particles. See Swadesh (1933: 20-23, 1939: 80-81) for more information.¹¹⁴

The degree of grammatical differentiation among word classes in Southern Wakashan is famously low.¹¹⁵ Words are sometimes said to be polyfunctional (e.g. Rose 1981: 10, who, referring to Kyuquot, speaks of “the extreme degree of constituent multipurposeness of lexical entries”), but according to the conception of Southern Wakashan syntax developed in Chapter 4, this characterization is a bit misleading. Referring phrases (RPs), the syntactic realization of referring expressions, are claimed to be headless relative clauses or “nominalized” clauses, where “nominal” is understood to mean “referring expression”.¹¹⁶ This goes hand-in-hand with the idea that all full words (except proper names) are predicative, as Swadesh (1933, 1939) proposed early on. Hence, the difference between (common) nouns and verbs is not in their ability to function in different grammatical roles, for there is only one major syntactic role in Southern Wakashan, predicate

head, but rather in the ease with which clauses headed by them can function as clauses that refer, referring phrases, which fill the syntactic roles of subject, object, and oblique.

Based on this insight, first expressed by Jacobsen (1979a) in somewhat different terms, we can say more precisely that clauses with verbal predicates cannot function as RPs unless they also have an expressed nominal subject or are marked by the enclitic article $M = \overset{\circ}{i}q$, $N = \overset{\circ}{?}i'$, or both. Thus, the second and third words in (492)a, a verbal predicate and its object, cannot be interpreted as belonging to an RP that functions as subject of *hix^wa'ʔal* 'he/she is working hard'. This proposition would have to be expressed by (492)b, which includes the article:

- (492)
- | | | | |
|----|---|---|---------------------------------------|
| a. | ^{MAKAH}
<i>*hix^wa'ʔal</i>
<i>hix^wa' = 'aʔ = ^{\circ}i</i>
working.hard=TEMP=INDIC.3sg | <i>č̣iʔi'č̣i'y</i>
<i>č̣i-(y)a [RepR]</i>
cut-REP | <i>haʔub</i>
<i>haʔuba</i>
food |
| | 'One who is cutting food is working hard.' | | |
| b. | <i>hix^wa'ʔal</i>
<i>hix^wa' = 'aʔ = ^{\circ}i</i>
working.hard=TEMP=INDIC.3sg | <i>č̣iʔi'č̣i'yʔiq</i>
<i>č̣i-(y)a [RepR] = ^{\circ}iq</i>
cut-REP=ART | <i>haʔub</i>
<i>haʔuba</i>
food |
| | 'The one, a certain one who is cutting food, is working hard.' | | |

Note, however, that (492)a could mean 'he/she is working hard cutting fish'.

It may well be, as argued by Nakayama (1997a), that good functional motivations exist for this structural pattern, but since it defines distributional classes, there seems no reason not to call words in the resulting classes "nouns" and "verbs".¹¹⁷ I claim that the essential difference between Southern Wakashan and a language like Latin is one of degree, not of kind: it is not that Latin has nouns and verbs and Southern Wakashan does not, but that the degree of grammaticalization of the classes is much greater in Latin than in Southern Wakashan.

The three nominal subclasses (noun, numeral/quantifier, pronoun) are distinguished by formal criteria discussed in the relevant sections below. Such formal differences are again slight.

Predicate modifiers are distinguished from verbs by their lack of ability to function as predicate heads and by the pattern of clitic placement in predicates containing them (§8.4).

The classification laid out in (491) does not include bound roots, since syntactic tests of the sort used to classify words are irrelevant to them. Some, like M, N *tīq^w*- ‘sitting’ or M, N *hup-* ‘roundish object’, seem clearly verbal or nominal, but, in the absence of specific distributional criteria, attempts at classification are speculative. Additional morphological criteria must be developed to allow definitive placement of bound roots in the classification scheme. One way of doing this is to compare the morphological distribution of bound roots with that of free roots whose categorical status is already established. For instance, it is known that when (free) nouns in construction with restrictive locative suffixes function as predicate heads, along with the regular readings allowed nominal predicates, a bahuvrihi reading is generally possible whereby the subject of the predication is asserted to have some association with the referent of the noun loosely referred to as “possession” (§4.4.3.2), e.g. the noun root M *qidi·λ* ‘dog’ (in its combining form *qilč-*) with the locative suffix -*aχs* ‘in a vessel’ can have the meaning ‘X has a dog in a vessel’ as a predicate head:

- (493) **Noun as base**
 MAKAH
qilč-i·čaxsal
qilč- <i· > -'aχs = 'aλ = °i
 dog-⟨EPEN⟩-in.vessel=TEMP=INDIC.3sg
 ‘It is a dog in a vessel.’
 ‘He has a dog in his vessel.’

When a verb with a locative suffix is predicate head, on the other hand, a possessive-existential reading is generally not possible:

- (494) **Verb as base**
 MAKAH
babuyak^waχsal
babuyak^w- 'aχs = 'aλ = °i
 work-in.vessel=TEMP=INDIC.3sg
 ‘He is working in a vessel.’
 *‘He has someone working in his vessel.’

It appears that when the bound root *tīq^w*- ‘sitting’ is predicated with the suffix, the possessive-existential reading is equally impossible:

(495) **Bound root as base**

MAKAH

*íiq^waxsal**íiq^w-'axs = 'aλ = i*

sit-in.vessel=TEMP=INDIC.3sg

'He is sitting in a vessel.'

* 'He has someone sitting in his vessel.'

The morphosemantic parallelism between *babuyak^w* 'working' and *íiq^w* 'sitting' is one piece of evidence for classifying *íiq^w* as a bound verb root. Until more such tests are developed and systematically applied to the lexicon, however, classification of bound roots must be considered tentative.

8.2 Nominals

8.2.1 Nouns

There are several morphological sources for nouns. First, the Southern Wakashan lexicon contains many free noun roots:

(496) **Free noun roots, e.g.**M *ʔaǰiλ*, N *ʔaʔiλ* 'cave'M *beʔic* 'sand dollar'M *cuʔit*, N *cuʔit* 'silver salmon'M *čiʔseyap*, N *kiʔcup* 'owl sp.'M *kućup*, N *kućim* 'small mussel sp.'M *tuxw'cida*, N *tuhćiti* 'head'M *wadiš*, N *wanuš* 'skirt'

Second, a derived noun can be formed from a base of any class with the addition of a nuclear nominalizing suffix (§5.4.2):

(497) **Derived nouns, e.g.**

M *ciqi'ti?i'*, N *ciqi'ta* 'spokesman' < bnd verb root *ciq-* 'speak' + *-i'ti?i'*, *-i'ta* '...-er'

N *huł?in* 'dancing garment' < bound verb root *huł-* 'dance' + *-.?in* 'costume for ...'

M *ɣuqu'ba*, N *ɣuqu'ma* 'mask' < noun *ɣuqu't*, *ɣuqu't* 'inverted hollow object at one's face' + *-ba*, *-ma* nominalizer '... thing'; the underlying noun base consists of noun root *ɣuq-*, *ɣuq-* 'inverted hollow object' + restrictive locative suffix *-(q)u'(t)* 'at the face'

M *bu'pa'yi't*, N *mu'pi't* 'four long bulky objects' < numeral root *bu'*, *mu'* 'four' + *-pa'yi't*, *-pi't^w* '... many long bulky objects'

M *łi'daqbis*, N *?učqmis* 'fog' < bound verb root *łi'daq-*, *?učq-* 'foggy' + M *-bis*, N *-mis* 'collectivity of ...'

Third, nouns can be derived from lexicalized verbs. This is a particularly common source for personal and place names. Like the examples in (498), many lexicalized verbs are in the iterative aspect, which, as mentioned earlier (§6.5.5.3), can have a habitual sense.

(498) **Nouns derived from lexicalized verbs, e.g.**

M *k^witi'k^witš* 'hummingbird' < lit. 'sticks on at intervals', bound verb root *k^wiT-* 'stick on' + iterative I aspect

N *či'či'waḥsur't* 'bureau' < lit. 'gets pulled out at intervals', verb *či'* 'pull' + restrictive path suffix *-waḥsu(t)* 'move out (perf.)' with iterative II aspect

N *q^wa'ya'ćikši't* 'Turns-into-Wolf (man's name)' < noun *q^waya'ći:k* 'wolf' with perfective (and hence verbalizing) suffix *-ši'ł* and iterative II aspect

The following examples show nouns as predicate heads in RPs. By definition, RPs with nominal predicates can occur without the article under appropriate discourse conditions (see §7.2.21 for discussion of the article), which is not true of RPs with predicates of non-nominal classes. However, proper nouns like N *či'kap* 'Jacob' and N *q^wa'ya'ćikši't* 'Turn-into-Wolf' in

(499)i-j are *not* predicates of nominalized clauses, and perhaps should not be considered RPs, but simply single words functioning directly as referring expressions.

(499)

- MAKAH
- a. *q^wišaʔal* *baʔasiqaʕ*
q^wiš.-(y)aʕ = ʔaλ = i *baʔas = iqa:c*
 smoke-CONT=TEMP=INDIC.3sg house=DEM.ART
 ‘Smoke is coming out of that house.’
- b. *yuxʔapaʔl* *k^wisiʕ*
yuxʔ-apa [L] = ʔaλ = i *k^wis-iʕ*
 float-in.air=TEMP=INDIC.3sg snow-APPEN
 ‘Snow is blowing in the air.’
- c. *duʕbeyaʔλ* *cubaʔak* *čapac*
duʕbeyu = ʔaλ = i *cubaʕ = ʔak^w* *čapac*
 always=TEMP=INDIC.3sg full=POSS canoe
 ‘His canoe was always full.’ (HW, Qweti and Raven)
- NUUCHAHNULTH
- d. *λupkšiʔaλ* *meʔiλqacʔi...*
λupk-šiλ = ʔaλ *meʔiλqac = ʔiʕ*
 awake-PERF=TEMP boy=ART
 ‘The boy awoke.’ (NT 166.13)
- e. *suk^wiʔaλ* *huquʕmakʔi*
su-k^wiλ = ʔaλ *huq-(q)w(ʔ)-ma = ʔak = ʔiʕ*
 hold-PERF=TEMP inverted.hollow.object-at.face-thing=POSS=ART
hitaqawiʔaλ
hita-(q)awiλ = ʔaλ
 empty.root-at.face.PERF=TEMP
 ‘He took his mask and put it on his face.’ (NT 102.37)
- f. *tuʕkšiλ* *ʔaʔuk^waλitʔi...*
tuʕk-šiλ *ʔaʔuk = ʔaλ = (m)it = ʔiʕ*
 cover.with.soil-PERF lake=TEMP=PAST=ART
 ‘He threw dirt in the lake.’ (NT 166.22-23)
- g. *ʔaħʔaʕʔaλitaħ* *maʕkuk^waλsi* *quʔ*
ʔaħʔaʕ = ʔaλ = (m)it = (m)aʕ = aħ *mak^w-uk = ʔaλ = siʕ* *quʔ*
 then=TEMP=PAST=INDIC.1sg buy-DUR=TEMP=1sg slave
 ‘Then I bought a slave.’ (NT 162.39)

- h. *pisaqma* ***ku'wítmis***
píšaqa = ma' *ku'wít-mis*
 bad=INDIC steal-collectivity.of
 'Stealing is bad.' (NT 206.13)
- i. *páčipat* ***čičap*** *ʔuyi'ʔat* ***čiči'wahsurť***
pá-čil = 'at *čičap* *ʔu-ayi' = 'at* *čiči'-wahsurť-[IterL]*
 potlatch-PERF=PINV Jacob so.and.so-give.PERF=PINV pull-move.out.PERF-ITER
 'Jacob was potlatched a bureau.' (NA 260.1-2)
- j. *ciqsa'pałsi* ***q"aya'čikšit***
ciq-sa'p = 'ał = si' *q"ayačik-šil-[IterL]*
 speak-CAUS.PERF=TEMP=1sg wolf-PERF-ITER
 'I had Turn-into-Wolf speak.' (NT 152.39)

Note the lexicalized deverbal nouns from (498) in (499)i-j, examples which provide evidence that these lexemes are, in fact, nouns.

Common nouns may also function directly as predicate heads of main clauses.

- (500) MAKAH
- a. *qidi'l*
qidi'ł = i
 dog=INDIC.3sg
 'It is a dog.'
- b. ***qaʔawačalši*** *ti'*
qaʔawac = 'ał = i = ši: *ti'*
 burden.basket=TEMP=INDIC.3sg=RESP DEM
 'This is a burden basket.' (RC, ANA)
- NUUCHAHNULTH
- c. ***meʔilqacʔisweʔin*** *iañeʔisʔi*
meʔilqac = ʔis = we'ʔin *iaña = ʔis = ʔi'*
 boy=DIM=QUOT child=DIM=ART
 'The child was a boy.' (NT 90.36-37)
- d. ...*ʔani* ***ʔini'łukqa*** *nuwi'qsu*
ʔani *ʔini'ł = uk = qa'* *nuwi'qsu*
 SUBOR dog=POSS=SUBOR father
 '... for his father was a dog' (NT 58.13-14)

However, proper nouns cannot be (syntactic) predicate heads:

- (501) NUUCHAHNULTH
 *Billma'
 Bill–ma'
 Bill–INDIC
 ‘He is, there is Bill.’

Nouns freely accept certain aspectual morphemes, particularly the perfective or perfective inceptive suffixes (§6.4). In this case, they become verbs, e.g. M *qidi'λ* ‘dog’, *qidi'λšiλ* ‘become a dog’ (§8.3).

Southern Wakashan has an interesting set of kin terms, which, to my knowledge, have not received prior description. The class of “associative kin terms” is distinct from (although in some cases morphologically related to) ordinary kin terms like M *ʔabe'ʔiqsu*, N *ʔum'ʔiqsu* ‘mother’ and M *yuk^w'iqsu*, N *yuk^w'iqsu* ‘younger sibling’. It consists of a few free roots, e.g.

- (502) **Associative kin roots, e.g.**

M *qiki'*, *ʔi'k^w* ‘pair of brothers’

N *hicsnup* ‘husband with his wife, a couple’

M *baʔax*, N *maʔah* ‘pair of sisters’

and derivatives with the associative kin suffix M *-čix*, N *-čih* suffixed to kinship nouns, e.g.

- (503) **Derived associative kin terms, e.g.**

M *ʔasčix*, N *ʔasčih* ‘parent with child’ (*ʔas-* cranberry root)

N *hačicčih* ‘sister with brother’ (*hačic-*, *hačimsiqsu* ‘female’s brother’)

N *ka'ʔucčih* ‘grandparent with grandchild’ (*ka'ʔuc-*, *ka'ʔuc* ‘grandchild’)

N *wi'ʔucčih* ‘uncle with nephew’ (*wi'ʔuc-*, *wi'ʔu'* ‘sibling’s child’)

N *yimacčih* ‘brother with brother-in-law’ (*yimac-*, *yimi'qsu* ‘male’s brother-in-law’)

These are not yet well attested in Makah, so examples are taken from the Nuuchahnulth texts. Associative kin terms describe someone in company of a person with the particular kin relation specified by the root. They have syntactic behavior typical of other Nuuchahnulth nominals.

They may occur as nominal predicates in RPs, with or without the article, to directly denote a person with the property they describe, an ability shared with most other nominals.

- (504) NUUCHAHNULTH
- a. *hina'siʔaʔ* *čwčkaʔ*
hina-a's-iʔ = 'aʔ *čwčk = 'aʔ*
 empty.root-on.horizontal.surface-PERF=TEMP all=TEMP
- hina'siʔ* ***hicsnup***
hina-a's-iʔ *hicsnup*
 empty.root-on.horizontal.surface-PERF husband.with.wife
- ‘Both got on, husband and wife got on.’ (NT 76.15)
- b. *ħa'ħwʔš'iʔat* *ʔaħʔa'* ***ħačicčihʔi...***
ħa'ħwʔ-š'iʔ = 'at *ʔaħʔa'* *ħačic-čih = ʔi'*
 instruct-PERF=PINV then female's.brother-with.kin=ART
- ‘They instructed the brother and sister.’ (NA 47.15-16)

Associative kin terms can also occur in construction with proper names, e.g. *Bill hicsnup* ‘Bill with, and his wife’ (505)a. A second name can be added to specify the individual with the kin relation denoted by the root: *Bill hicsnup Mary* ‘Bill with, and his wife Mary’ (505)b-c.

- (505) NUUCHAHNULTH
- a. *mē'ʔiʔaʔat* *si·xuʔmi·k* ***hicsnup...***
mā-iʔ [L] = 'aʔ = 'at *six^w-(q)u'(ʔ)-mi:k^w [L]* *hicsnup*
 bite-get.PERF=TEMP=PINV sores-on.face-getter.of husband.with.wife
- ‘Soreface-Hunter (Douglas) and his wife were “bitten away” (captured in a Wolf Ritual).’ (NA 58.14)
- b. *pač'iʔaʔat* *q^wa'nitux* ***ʔasčih*** *k^wiya'ctin...*
pa-č'iʔ = 'aʔ = 'at *q^wa'nitux* *ʔasčih* *k^wiya'ctin*
 give.in.potlatch-PERF=TEMP=PINV Kwanituh parent.with.child Kwiyatstin
- ‘Kwanituh and his son Kwiyatstin got presents.’ (NA 175.31-32)
- c. *pač'iʔaʔat* ... *wa'mi·š* ***ʔi·k*** *se'sil...*
pa-č'iʔ = 'aʔ = 'at ... *wa'mi·š* *ʔi·k^w* *se'sil*
 give.in.potlatch-PERF=TEMP=PINV Wamish brother.with.brother Cecil
- ‘Wamish and his brother Cecil got presents.’ (NA 175.31-32)

The nature of the syntactic relations in these constructions needs further investigation. It is unclear, for example, whether the second name is an argument of the associative kin term (i.e. ‘with-his-wife Mary’) or merely in apposition to it (i.e. ‘with-his-wife, Mary’).

The same questions arise when associative kin terms function as main predicate heads. (506)a is relatively unproblematic, but, in (506)b, it is unclear whether *si'xu'tmi:k* 'Soreface-Hunter' is the object of *ʔasčih* 'parent with child', or in apposition to it.

- (506) NUUCHAHNULTH
- a. ...*ʔasčihma* *ʔi'htu'p...*
 ʔasčih = ma' *ʔi'h^w-(š)tu'p*
 parent.with.child=INDIC big-thing
 'The whales were parent and child.' (NT 168.20)
- b. *ʔahʔa'ʔaλsi* *y'uq^wa'* *ʔasčihʔaλsi* *si'xu'tmi:k*
 ʔahʔa' = 'aλ = si' *y'uq^wa'* *ʔasčih = 'aλ = si'* *sih^w-(q)u'(t)-mi:k^w* [L]
 then=TEMP=1sg likewise parent.with.child=TEMP=1sg sores-on.face-getter.of
 'I also had my son Soreface-Hunter (Douglas) with me.' (NA 80.50-51)

Bound classificatory (or “figure-conflating”, cf. Talmy 1985, 2000) roots, some which are listed in (507), is another class of noun-like roots that deserves separate mention.

(507) **Classificatory roots, e.g.**

M, N *hup-* ‘roundish object’

M, N *kic-* ‘stick-like object’

M *tiq^w-*, N *ʔaq^w-* ‘soft, yielding mass (e.g. mass of wet seaweed, pile of blankets)’

M N *hic-* ‘fabric-like object spread out’

M, N *tu-* ‘board’

N *ni-* ‘hollow object; container’

M *pa-*, N *tu- tuk-* ‘mass of small, roundish objects (e.g. pebbles, coins, clods of dirt)’

M?, N *ta'-* ‘pole-like object sticking up, out’

M, N *ta-* ‘object on a line’

The most characteristic use of these roots is as base in a derived verb with a restrictive path or locative suffix describing the movement or location of an entity of the sort they denote, which can appear in an independent subject or object RP.

(510) Numerals, e.g.

- 1 M *ćakwa'ʔak^w*, N *ćawa'k^w*; N *ńup-* as base for enumerative suffixes
- 2 M, N *ʔaʔa* ‘two’; *ʔaʔ-* as base for enumerative suffixes
- 3 M *wi'yu*, N *qačća ~ qacća*
- 4 M *bu'*, N *mu'*
- 5 M *šuča*, N *suča*
- 10 M *ʔax^wa*, N *hayu*
- 11 M *ʔax^wa ʔiš ćakwa'ʔak^w*, N *hayu ʔiš ćawa'k^w* (*ʔiš* ‘and’)
- 12 M *ʔax^wa ʔiš ʔaʔa*, N *hayu ʔiš ʔaʔa*
- 13 etc.
- 20 M, N *caqi'c*

Note that multi-word numerals like N *hayu ʔiš suča* ‘fifteen, ten and five’ do not form a syntactic constituent. Evidence for this claim comes from a) the locus of suffixation when a nuclear suffix has semantic scope over a multi-word numeral and b) from the placement possibilities of the individual words of the numeral within larger structures. Only the first word of a multi-word numeral need be affixed by a nuclear suffix, and this affixed word may be separated from the other words of the numeral by grammatically unrelated material. For example, in (511), the verbalizing suffix N -*'i's* ‘consuming ...’ applied to *hayu ʔiš suča* ‘fifteen’ produces *hayu's ʔiš suča* ‘consuming fifteen’, which can be discontinuous in a sentence:

- (511) NUUCHAHNULTH
hayu'sʔapsi *yaʔihteʔitq* *hawit ma'tma's* *ʔiš suča*
hayu-'i's = 'ap = si' *yaq^w-'ihta = ʔi'tq* *hawit maʔas- <t>* [LR] *ʔiš suča*
 ten-consume=CAUS=1sg one.who-at.point=DEF chief tribe-<PL> and five
 ‘I let the leading chief of each tribe consume fifteen.’ (NT 170.25)

There are also a few non-numeral quantity words:

(512) Non-numeral quantity words, e.g.

- M *ʔakyi'q*, N *ʔaya* ‘many’

M *du'ba*, N *čw'čk* 'both, all'

M *ʔidi'q* 'few', N *kaṃa'-...* = *ʔis* 'few, little'

Derived numeral and quantity words are formed by nuclear quantity suffixes like M, N *-i'q^w* '... many score' and N *-ṃa'* (§5.4.2).

(513) **Derived numeral and quantity words with nuclear quantify suffixes, e.g.**

M, N *ʔaλi'q* 'forty' (*ʔaλa* 'two')

M *šuč'i'q*, N *suč'i'q* 'one hundred' (M *šuč'a*, N *suč'a* 'ten')

N *ʔi'qṃa'* 'same amount' (*ʔiq* 'same; still')

M *ʔadis*, N *q^waṃa'* 'however many, as many as'

Finally, there are free quantifier roots.

(514) **Free quantifier roots, e.g.**

M *ʔada*, N *ʔana* 'only'

M, N *λaʔu'* 'another, more'

Words in these categories can appear as predicate heads in RPs with or without the article, thus demonstrating their affinity with nouns:

(515)

a.	^{MAKAH} <i>suk^wiλ'</i> <i>su-k^wiλ = 'i</i> hold-PERF=IMPER.2sg	<i>čakwa'ʔak</i> <i>čakwa'-ʔak^w</i> one-DUR
----	--	--

'Take one!'

b.	<i>kabatsa'ʔaλ'it</i> <i>kabat-sa:p = 'aλ = 'it</i> known-CAUS.PERF=TEMP=PINV	<i>ʔuda'kš'iλqa</i> <i>ʔu-da'k^w-š'iλ = qa:</i> so.and.so-have-PERF=SUBOR.3sg	<i>λaχ^w</i> <i>λaχ^wa</i> ten
----	---	---	--

qidi'λbadaχ
qidi'λ-badaχ
 dog-PL

'They found out that she had gotten ten dogs.' (HW, Dog Husband)

Numerals, quantities, and quantifiers can also function as predicate heads or parts of complex heads in main clauses. Sometimes predication of numerals and other words in this class seems to involve a type of quantifier raising, whereby a word that would otherwise appear as a predicate in an RP is instead raised to main predicate position, e.g. (516)b,d.

- (516) MAKAH
- a. *ʔeʔeʔe ʔakyiʔipi-d* *ʔaʔyiʔcux^wadi* *tiʔ ʔiyaʔ*
ʔeʔeʔe ʔakyiʔq = pi:t = i *ʔiʔcux^wadi: - < aʔy > [L]* *tiʔ ʔiyaʔa*
 DISC many=INFER=INDIC.3sg person-<PL> DEM at
- ‘My, there must be a lot of people here.’ (RC, ANA)
- NUUCHAHNULTH
- b. *čʷčk mačičiʔ muʔiʔ*
čʷčk ma-čičiʔ muʔ = ʔiʔ
 all bite=PERF four=ART
- ‘All four bite him.’ (NA 66.41)
- c. *ʔayaʔ ʔwikmiʔsapʔi* *ʔiʔiʔiʔiʔqu...*
ʔaya = ʔaʔ ʔwik-miʔsa = ʔap = ʔiʔ ʔiʔiʔiʔ = qu:
 many=TEMP not-want.to=CAUS=ART sing.words.of.song=PERF=COND
- ‘Many did not want the words to be sung.’ (NA 74.46)
- d. *ʔaya maʔtiʔšičiʔ yuʔyʔuʔiʔʔaqsup* *iaʔneʔis...*
ʔaya maʔtiʔšičiʔ [R]-yuʔyʔuʔiʔ. - ʔaqsup iaʔna - < t > [L] = ʔis
 many captive=PERF PL-Ucluelet-woman.of child-<PL>=DIM
- ‘Many Ucluelet women and children became captive.’ (NA 388.8)
- e. *caqiʔcma ʔiš qačča*
caqiʔc-maʔ ʔiš qačča
 twenty=INDIC and three
- ‘There were twenty-three.’ (NA 236.31-32)

Southern Wakashan is apparently cross-linguistically unusual in having numerals as predicate heads: it is an exception to Greenberg’s (2000: 770) generalization that “most languages show a reluctance to predicate numerals”.

8.2.3 Independent pronouns

Southern Wakashan has a set of independent first and second persons pronouns. Nuuchahnulth pronouns have distinct forms for referential, predicative, and possessive functions (Table 25). The

simple referential form of the pronoun appears when it is base (in its combining form) to lexical suffixes in a derived word, or when it is used (in its free form) in a subject or object RP. The examples in (517) demonstrate the first of these environments. (517)a shows *si-* ‘I, me’ in a derived

Table 25. Nuuchahnulth independent pronouns

	Referential	Predicative	Possessive
1sg	<i>si-</i> , <i>siya</i> ‘I, me’	<i>siyaq</i> ‘it is I’	<i>siya's</i> ‘mine’
pl	<i>ni'h-</i> , <i>ni'wa</i> ‘we, us’	<i>ni'waq</i> ‘it is we’	<i>ni'wa's</i> ‘ours’
2sg	<i>sut-</i> , <i>suwa</i> ‘you (sg.)’	<i>suwaq</i> ‘it is you (sg.)’	<i>suwa's</i> ‘yours (sg.)’
pl	<i>si'h^w-</i> , <i>si'wa</i> ‘you (pl.)’	<i>si'waq</i> ‘it is you (pl.)’	<i>si'wa's</i> ‘yours (pl.)’

verb with the verbalizing suffix *-'aʔa* [LR+L] ‘doing in revenge of ..., for ...’s sake’, and (517)b shows *sut-* ‘you (sg.)’ in a derived verb with the verbalizing suffix *-ʔi:p* ‘give a gift to ... (perf.)’.

- (517) NUUCHAHNULTH
- a. *wiki's* *si'si'ʔaʔa...*
wik = 'i's *si-'aʔa* [LR+L]
 not=IMPER.2sg/1sg 1sg-do.for.X's.sake
 ‘Don’t do it because of me!’ (NA 336.36)
- b. *sutʔi'mah* *tučšil* *kapčok...*
sut-ʔi:p = (m)a' = ah *tuč-šil* *kapčuk*
 2sg-give.gift.to.PERF=INDIC=1sg woman-PERF Kapchuk.VOC
 ‘I give you a woman (in ransom), Kapchuk.’ (NA 161.13)

Independent pronouns generally occur in subject RPs only for emphasis and contrast (518)a-b.

- (518) NUUCHAHNULTH
- a. *ni'* *wikaʔeʔic* *suwa* *wi'caqʔ*
ni' *wik = 'aʔ = (m)a' = ʔic* *suwa* *wi'caqʔ*
 DISC not=TEMP=INDIC=2sg 2sg shy.about.doing.sth
 ‘See, you on your part do not think it too much (i.e. aren’t hesitant about undertaking it).’ (NT 200.7)
- b. *...tu'huk^wah* *siya...*
tuḥ-uk = (m)a' = ah *siya*
 afraid-DUR=INDIC=1sg 1sg
 ‘I for my part am afraid.’ (NA 74.45)

Their use in object RPs is more common and not pragmatically marked:

- (519) NUUCHAHNULTH
- a. *ka'λhsap'ala'si* *su'wa.*
ka'λh-sa'p-[L+S] = 'aλ = si' *su'wa*
 visible-CAUS.PERF- GRAD=TEMP=1sg 2sg
 'I was introducing you.' (NA 75.29)
- b. *wik'ʔa'qλin* *wi'ca'k* *hati'ʔ* *si'wa* *haw'e'h*
wik = ʔa:qλ = (m)a' = ni *wi'ca'k* *hati'ʔ* *si'wa* *hawit-i:h*
 not=INTENT=INDIC=1pl hesitant ask.to.accompany 2pl chief-PL.VOC
 'We shall not be hesitant in asking you, Chiefs.' (NA 317.2-3)

When a pronoun is to function as the P (patient-like) argument, it often occurs as base in a derived verb with the verbalizing suffix *-(č)iʔ* [L] 'do to ...' rather than appearing as an independent word; this is actually the most common circumstance in which pronouns appear in derived verbs. The derived P-encoding verb usually occurs as a bare absolute predicate following the transitive predicate denoting the main action (§4.6.1.1).

- (520) NUUCHAHNULTH
- a. *qahsa'p'ʔa'qλah* *su'tiʔ...*
qah-sa'p = ʔa:qλ = (m)a' = ah *sut-(č)iʔ* [L]
 dead-CAUS.PERF=INTENT=INDIC=1sg 2sg-do.to
 'I shall kill you.' (NT 126.22-23)
- b. *ʔaʔak^win'ʔa'qλ'ala'ah* *si'h^wiʔ*
ʔaʔak^win = ʔa:qλ = 'aλ = (m)a' = ah *si'h^w-(č)iʔ* [L]
 plead.with=INTENT=TEMP=INDIC=1sg 2pl-do.to
 'I am going to plead with you.' (NA 60.43)

Subject RP elements under certain types of focus, especially identificational and contrastive focus, can appear as nominal predicates in cleft-like constructions. When pronouns do so, they take their predicative form, expanded by the formative *-a'q*.

- (521) NUUCHAHNULTH
- a. *ʔah'ʔa'ʔa'λsi* *si'ya'ʔa'λ* *ciqš'iλ*
ʔah'ʔa' = 'aλ = si' *si'ya'q = 'aλ* *ciq-š'iλ*
 then=TEMP=1sg 1sg.PRED =TEMP speak-PERF
 'Then I myself spoke.' (NT 164.26)
- b. ...*si'ya'ʔa'λah* *ya'q^witit'ʔitqak*
si'ya'q = 'aλ = (m)a' = ah *yaq^w-(č)iʔ[L] = (m)it = ʔi'tqa = k*
 1sg.PRED=TEMP=INDIC=1sg one.who-do.to=PAST=DEF=2sg

Makah pronouns, shown in (523), are apparently particles, taking neither lexical suffixes nor clitics.

(523) **Makah independent pronouns**

- 1sg *siya'*
 pl *duwa'du:*
 2sg *suwa'*
 pl *suwa'č*

They are rarely used and only appear under conditions calling for special emphasis.

(524)

- MAKAH
 a. *wikałeyiks* *siya'*
wik-atł= 'eyik=s *siya'*
 not-included=FUT=INDIC.1sg 1sg
 'I won't go myself.' (Jacobsen 1979a: 124 with modified glosses)
- b. *da'csas* *xeʔiλcey* *siya'*
da'csa=s *xeʔiλcey* *siya'*
 see=INDIC.1sg even 1sg
 'I even see myself.' (HW, Bible Stories)

8.3 Verbs

Verbs are formed in the following ways. First, there are a handful of free verb roots (some of which may contain aspect or lexical suffixes etymologically).

(525) **Free verb roots, e.g.**

M *ʔaʔa'tu*, N *ʔaʔa'tu*: 'ask'

N *ħaħi'či* 'gathering a certain kind of black snail-like shell-fish called *ħayištup*'

M *babuyak^w*, N *mamu'k* 'working'

M *ba'ba'skad*, N *ma'ma'kin* 'playing with shells, dolls, playing in the manner of little girls'

M, N *waha'k^w* 'go (perf.)'

M *wa·wida* ‘hunting game in the forest’, N *wa·win* ‘hunting deer in the manner of wolves’

M, N *we?ič* ‘sleeping’

Second, and more frequently, verbs are formed by aspectual morphemes on bases of any class:

(526) **Verbs formed by aspect morphemes, e.g.**

M, N *?ačšič* ‘wedge up’ < bound verb root *?ač-* ‘wedge up’ + *-šič* perfective

N *?inksyiqnitšič* ‘get stocked up with firewood’ < verb *?inksyiqnit* ‘stocked with firewood’ + *-šič* perfective; the underlying base consists of noun root *?ink^w* ‘fire’ + nominalizing suffix *-(c)syi* ‘medicine for ...’ + verbalizing state suffix *-nit* ‘stocked with ...’

N *λa?u·čič* ‘come to be another’ < quantifier root *λa?u* ‘another’ + *-i:čič* inceptive

M *ba*, N *ma* ‘holding in the teeth’ < bound verb root *ba-*, *ma-* ‘hold in teeth, bite’ + [L] continuative

N *niλkšič* ‘turn inside out’ < bound verb root *niλk-* ‘turn inside out’ + *-šič* perfective

N *ti·čačič* ‘come to life’ < root *ti·č* ‘alive’ + *-ačič* inceptive

M *qidi·λšič* ‘become a dog’ < noun root *qidi·λ* ‘dog’ + *-šič* perfective

A word on the morphological status of aspectual formatives as inflectional or derivational elements in Nuuchahnulth is in order at this point. In this dissertation, word class terms like *noun* and *verb* refer to classes of lexemes. To claim that M *qidi·λ* ‘dog’ is a noun and *qidi·λšič* ‘become a dog’ is a verb is therefore also to claim that the perfective aspect suffix is changing the lexeme class of the base.¹²⁰ The power to change lexeme class is generally seen as a property of derivational, rather than inflectional morphemes. According to such a conception of the inflectional/derivational distinction, it would seem that Southern Wakashan aspect must be considered derivational. Further support for this idea comes from the frequent occurrence of aspect before affixes that would seem uncontroversially derivational, as in the Makah noun

- (527) *λa'λa'škateyak*
λaškat-(y)a [RepR]-yak^w
 rigid-REP-thing.for
 '(an) iron'

where the nominalizing suffix *-yak^w* 'thing, instrument for ...' occurs on a base already containing the repetitive aspect formation. In terms of the analysis of word structure given in Figure 2 (Chapter 5), the word consists of the bound root *λaškat-* 'rigid, stiff' as base followed by the repetitive aspect to form an unextended word *λa'λa'škata* 'making rigid', followed in turn by the peripheral suffix *-yak^w*, which forms an expanded unextended word. (*-yak^w* is one of a handful of lexical suffixes that can function as either core or peripheral suffixes.)

Third, derived verbs are formed by bases of any class with nuclear verbalizing suffixes:

- (528) **Derived verbs, e.g.**

M *ʔakyi'ks*, N *ʔayi'cs* 'bringing many < quantity root *ʔakya-*, *ʔaya* 'many' + *-i'ks*,
-i'cs 'bringing, carrying ... along'

N *cuxnit* 'abounding in coho salmon' < noun root *cux-* 'coho' + *-nit* 'stocked with ...'

M *čeʔi'ks* 'drinking water' < noun root *ča-* 'water' + *-i'ks* 'consuming ...'

M *qalabitqčur*, N *λ'imšyu* 'boiled' < bound verb root *qalabitq-*, *λ'imš-* 'boil' + *-čur*
-yu 'having been ... -ed'

M *haʔubadak*, N *haʔumnak* 'having food' < noun root *haʔuba*, *haʔum* 'food' +
-da'k^w, *-na'k^w* 'having ...'

M *ʔukti'p*, N *ʔur'k^wił* 'doing to, in reference to so-and-so' < deictic pronoun root *ʔu-* 'so-and-so' + *-(k)ti:p*, *-(č)ił* [L] 'do to ...'

(529) shows verbs as predicate heads of main clauses.

- (529) MAKAH
 a. *čaqasiʔi'du'ʔaλ* *tu'ʔał*
čaq-asiʔi:-du:p = 'aλ *tu'ʔał*
 push-under.water-CAUS.PERF=TEMP board
 'He pushed the board down in the water.' (HI, Qweti and Raven)

- b. *káciyeʔis* *ɣuʔ*
kac-iya: = 'is *ɣuʔ*
 pinch-give.PERF=IMPER.2sg DEM
 'Give me a piece of that!'
- c. *dačšʔaλwaʔd* *yuyu λuʔkšwʔd*
dač-šil = 'aλ = *wa:da* *yuyuʔ λuʔkšwʔda*
 look-PERF=TEMP=QUOT.3sg awhile raven
 'Raven looked for a while.' (HW, Raven and his Beak)
- NUUCHAHNULTH
- d. *ʔaʔaʔtuʔaλquweʔin* *witwaʔkʔi...*
ʔaʔaʔtu: = 'aλ = *qu:* = *weʔin* *wiʔak^w* - < t > [R] = *ʔi*
 ask=TEMP=COND=QUOT warrior-<PL>=ART
 'The warriors kept asking him.' (NA 358.1)
- e. *wahaʔkmaλaʔ* *ńuptaqimʔ*
wahaʔk^w = *maʔ* = *λa:* *ńup-(š)taqimʔ*
 go.PERF=INDIC=again one-X.many.bunches
 'One bunch went there again.' (NA 238.25)
- f. *ʔuʔhtaʔsa tuxšil ciʔciʔqhanim ʔačšil*
ʔuʔhtaʔsa tux-šil ciq-ħin [LR+L]-im *ʔač-šil*
 immediately jump-PERF speak-at.end-thing wedge.up-PERF
 'Speak-Ends (man's name) jumped right away and blocked it (the roller).' (from NA 370.1-2)
- g. *ʔinksýiqnitšilʔaλin*
ʔink^w-(c)sýi-q-nit-šil = 'aλ = (m)aʔ = ni
 fire-medicine.for-BFR-stocked.with-PERF=TEMP=INDIC=1pl
 'We got stocked up with firewood.' (NA 235.32)
- h. *casiʔcsuʔaλ* *iaʔtneʔisʔi*
cas-i:cs-uλ = 'aλ *iaña* - < t > [L] = *ʔis* = *ʔi*
 chase-bring.along-PERF=TEMP child-<PL>=DIM=ART
 'He chased the children along.' (based on NT 96.20)
- i. *macmayux^watqiʔcuk^waħ* *ʔaħ nuʔk íapʔyak*
macmayux^wat-q-i:c = *uk* = (m)aʔ = aħ *ʔaħ nuʔk íap-ýak^w*
 supernatural.spearsman-BFR-belong.to=POSS=INDIC=1sg DEM song tama-thing.for
 'This tama song of mine belongs to the supernatural spearsman.' (NA 85.6-7)
- j. *ʔuk^wiʔaħ* *ʔakʔak...*
ʔu-(k^w)i:ʔ = (m)aʔ = aħ *ʔak^w-ýak^w*
 so.and.so-make=INDIC=1sg cut.with.knife-thing.for
 'I am making a knife.' (NT 46.29)

(530) shows denominal verbs, that is, verbs derived from nouns by non-durative aspect suffixes, as predicate heads of main clauses. The typical meaning of such verbs is perfective change of state, i.e. ‘become, turn into NOUN’, although other meanings are possible with certain sub-classes of nouns.

- (530) MAKAH
- a. *q̇idi'λšʔaλ*
q̇idi'λ-š'iλ = 'aλ
 dog-PERF=TEMP
 ‘He became a dog.’ (HW Dog Husband)
- NUUCHAHNULTH
- b. *ħa'witaλš'iʔaλ*
ħa'witaλ-š'iλ = 'aλ
 young.man-PERF=TEMP
 ‘He grew up to be a young man.’ (NT 15.6; see also NT 92.8, NA 343.4, etc.)
- c. *ʔa'tušš'iʔaλ*
ʔa'tuš-š'iλ = 'aλ
 deer-PERF=TEMP
 ‘He had turned into a deer’ (NT 46.40)
- d. *λapisimč'iʔaλ*
λapisim-č'iλ = 'aλ
 racoon-PERF=TEMP
 ‘He had become a raccoon.’ (NT 48.16)

(531) shows verbs as predicate heads in RPs.

- (531) MAKAH
- a. *kuduksa'ʔaλ* ***weʔičiq*** *ħadʔawič*
kudu'k-sa:p = 'aλ *weʔič = iq* *ħadʔak^w = ič*
 awake-CAUS.PERF=TEMP sleep=ART girl=DIM
 ‘He woke the sleeping girl.’
- NUUCHAHNULTH
- b. *ħu'ħš'iʔat* *qu'ʔasʔi* ***qaħš'iλ...***
ħu'ħ-š'iλ = 'at *qu'ʔas = ʔi'* *qaħ-š'iλ*
 bury-PERF=PINV person=ART dead-PERF
 ‘A corpse (lit. person who died) was buried.’ (NA 25.38)
- c. *wałsa'paλatma* ***ma'ma'tpiλitʔi*** *ħayu*
wał-sa'p = 'aλ = 'at = ma' *[R]-ma'tpiλ = (m)it = ʔi'* *ħayu*
 go.home-CAUS.PERF=TEMP=PINV=INDIC PL-captive.PERF=PAST=ART ten

- NUUCHAHNULTH
- b. *λuyačičiʔaλ* ***qahšičiʔi...***
λuʔ- 'ačičiλ = 'aλ *qah-šičiλ = (m)it = ʔi'*
 good-INCEP=TEMP dead-PERF=PAST=ART
 'The one who had fainted (lit. died) got well.' (NT 122.8)
- c. *hawičiʔaλ* ***ciʔciʔeʔi***
hawiči-λ = 'aλ *ciq-(y)a [RepR] = ʔi'*
 finish-PERF=TEMP speak-REP=ART
 'The one who was speaking finished.' (NT 154.26)
- d. *kʷayaʔpatuk* *miłsyi* ***ʔayaʔičiʔi***
kʷa-yaʔp = 'at = uk *miłsyi* *ʔayaq- 'iči [L] = (m)it = ʔi'*
 break-CAUS.PERF=PINV=POSS spear herring.spawn-get=PAST=ART
 'The spears of those who had come for herring spawn were broken up.' (NA 17.7)
- e. ...*weʔičuʔaλ* ***ħaʔkʷaʔičiʔi***
weʔič-uλ = 'aλ *ħaʔkʷaʔ-ičiʔ [L]-(y)a = ʔi'*
 sleep-PERF=TEMP girl-pretend.to.be-CONT=ART
 'The one pretending to be a young woman went to sleep.' (NT 80.9)
- f. *našaʔk* ***qʷičiʔsučičiʔi***
našaʔk *qʷičiʔsu-ičičiλ = ʔi'*
 glad father.in.law-INCEP=ART
 'The new (lit. the one just become a) father-in-law was glad.' (NA 161.25-26)

8.4 Predicate modifiers

The class of predicate modifiers is comprised of a small set of adverb-like modifiers (§4.3.4):

(533) **Predicate modifiers, e.g.**

N *ʔahʔaʔ* 'then'

M *ħuʔaxi*, N *ʔičiʔi* 'still'

M *ʔaʔdi*, N *ʔaʔni* 'really, in fact'

M *kuʔwił*, N *kuʔwiłta* 'doing as directed'

M *yurʔuʔ*, N *čaʔni* 'for a while, temporarily'

N *waʔλ* 'now, then, thereupon'

M *ħičiʔsuba*, N *ħičiʔkʷał* 'almost'

M *yurʔqʷaʔ*, N *yurʔqʷaʔ* 'likewise'

A few words from other classes may sometimes also function as predicate modifiers, e.g. M, N *łaʔkšičiλ* '(as a verb) have pity on, (as a predicate modifier) please!'

Predicate modifiers cannot serve as predicate head; they must be accompanied by a word of another class that functions as head. They are also structurally distinguished by their ability to occur as post-head modifiers within the predicate (534)a. Otherwise they appear as pre-head modifiers (534)b. See §4.3.4 for details on clitic position in this construction.

- (534) MAKAH
- a. **As post-head modifier**
- | | |
|--------------------------------------|--------------|
| <i>haʔukšʔaʔitid</i> | <i>ʔaʔd</i> |
| <i>haʔuk-šʔiʔ = 'aʔ = (b)it = id</i> | <i>ʔaʔdi</i> |
| eat-PERF=TEMP=PAST=INDIC=1pl | in.fact |
- ‘We really did eat.’
- b. **As pre-head modifier**
- | | |
|---------------------------------|-------------------------|
| <i>ʔaʔdʔaʔitid</i> | <i>haʔukšʔaʔ</i> |
| <i>ʔaʔdi = 'aʔ = (b)it = id</i> | <i>haʔuk-šʔiʔ = 'aʔ</i> |
| really=TEMP=PAST=INDIC=1pl | eat-PERF=TEMP |
- ‘We really did eat.’

Predicate modifiers are particle-like in certain respects. They generally lack inherent aspectual implication in their meanings or potential for aspectual marking, and they have limited potential for taking lexical suffixes.

¹ *Makah* is the usual English rendering of the Clallam (a neighboring Salish language) designation for the tribe. In their own language, the Makah call themselves *qʷidiččaʔartx* and their language *qʷiʔqʷiʔdiččaʔ*. Both words are regular formations based on the root *qʷidičča-q-*, a place designation of uncertain reference (Renker & Gunther 1990: 429). The question of an appropriate name for the other language appearing in the dissertation is difficult. The traditional name in the anthropological and linguistic literature, *Nootka*, is not of native origin and disliked by the community. In 1978, the Southern Wakashan people of Canada adopted the name *Nuu-chah-nulth* (*nuʔčaʔnuʔ* ‘mountain range’) (Arima & Dewhirst 1990: 410). However, as an ethnonym, this name actually subsumes peoples speaking two languages, those speaking the language formerly referred to as *Nootka* and those speaking the closely related *Nitinaht* or *Ditidaht*. I follow Nakayama (1997a, see especially p. 2) in using *Nuuchahnulth* in a restricted sense as a linguistic designation to refer only to the language formerly known as *Nootka*. Note that I simplify the spelling by eliminating the hyphens. *Ditidaht* is referred to as such.

² Makah has not been used as a medium of daily communication for decades, and, at the time of writing, there were only three fluent speakers, all elderly.

³ Interestingly, in phoneme charts given in his M.A. and Ph.D. dissertations (1931: 10, 1933: 4), Swadesh did group /ʔ/ and /ʔ̚/ with the glottalized consonants. The latter work agrees with *Nootka Texts* in grouping the affricates with the stops, but the former has them listed separately.

⁴ Sapir and Swadesh refer to them as “voiced continuants”; Rose and Nakayama call them “resonants”.

⁵ Sapir and Swadesh label the “Mid” row “Mid-wide”, the “Central” column “Back”, and the “Back” column “Back Rounded”.

⁶ This, incidentally, is the reason Sapir & Swadesh (1939) represent the high back vowels with the symbol ‘o’, rather than ‘u’. The mid back vowels are represented by them with open o. According to Sapir & Swadesh (1955: 4), by the time *Nootka Texts* was in press, Sapir had decided ‘u’ was more appropriate. This has been the standard symbol for the high back vowels since Sapir & Swadesh (1955).

⁷ A syllable consists of an obligatory onset consonant followed by a single nuclear vowel, long or short. The coda may contain zero, one, or more consonants (Sapir & Swadesh 1939: 13, Stonham 1994a: 76). Consequently, a nasal (or any other consonant, for that matter) is in the coda if it immediately precedes another consonant, or occurs in word-final position.

⁸ In early works, Sapir wrote the murmur vowel with either ‘i’, e.g. *-qEmił* ‘round thing’ in (1911a: 16) (*-qimł* in current orthography) and *inikw-ihł* ‘fire in the house’ in (1921) (*?ink^wił* in current orthography), or with ‘i’, e.g. *’inⁱk* ‘fire’ in (1924).

⁹ [L] indicates the suffix requires the first vowel of its base to be long. See §3.3.1. The colon diacritic is explained in §3.1.

¹⁰ This rule correctly places primary accent in Makah, but there may be secondary accent at work as well since there are sometimes perceived prominences in addition to the primary accent, especially on long vowels. It is unclear whether these are merely phonetic correlates of vowel length or part of the accent system. Accent in Makah is stress accent, which is probably the case in Nuuchahnulth as well.

¹¹ Wilson (1986) formulates a similar rule in metrical terms. See also Stonham (1994a, b).

¹² Jacobsen (1969b: 13-14) also discusses Sapir & Swadesh’s (1939) treatment of labialization.

¹³ Vowel-glide contraction also operates synchronically in some cases. See, for example, discussion of (65)b in §3.3.1.

¹⁴ However, caution is required here because Makah vowel-glide sequences do not always correspond to persistently long vowels in Nuuchahnulth. For example, corresponding to the Makah suffix *-čeyat* ‘... many days’ we find Nuuchahnulth *-č*i*ł*, which contains a long vowel that neutralizes as normal.

¹⁵ *-ink* is derived from the underlying form *-(č)ink^w* by other processes. See below and §3.3.8. Incidentally, a more accurate, but also more cumbersome, gloss for *mak^w*- is ‘conduct a commercial exchange, esp. buy’.

¹⁶ There are apparent exceptions in this environment, e.g. *mak?u^wkt* ‘purchased goods’ (< *mak^w*- + *-.?u^wkt* ‘obtained by ...’).

¹⁷ For exceptions see §5.5.4.

¹⁸ There are several other templates in addition to those listed in here that appear in aspectual formations (e.g. [RepR], [IterL]). These are described in Chapter 6.

¹⁹ The [LR] abbreviation is introduced in Jacobsen (1997a) as a substitute for Sapir and Swadesh’s original symbol [R’].

²⁰ See examples (66) and (69) below.

²¹ This process, traditionally referred to as “hardening” by Wakashanists, occurs in both branches of Wakashan, and is one of the best known aspects of the phonology. Confining ourselves first to sources that deal only or primarily with Nuuchahnulth, we can cite (among others) Sapir (1911a: 16; 1924: 82, note 1, 90, note 62; 1938), Sapir & Swadesh (1939: 238), Swadesh (1933: 6), Rose (1976, 1981: 18-19), Nakayama (1997a: 16-19). On hardening (glottalization) in Ditidaht, see Swadesh & Swadesh (1933: 200), and, for Makah, see Jacobsen (1996) and §3.4.2.

²² Cf. also Sapir's (1938, reprint 1949: 231-32) discussion of the historical origins of glottalization, where he argues that it is unlikely to have been simply a result of coalescence of consonant + glottal stop clusters.

²³ Like glottalization (§3.3.2), lenition (referred to as "softening" by Wakashanists) is a well described process, and the two are often treated together. Many of same sources are relevant: Sapir (1924: 92, note 84; 1938), Sapir & Swadesh (1939: 238), Swadesh (1933: 5-6), Rose (1976, 1981: 18), Nakayama (1997a: 19-20). On lenition in Ditidaht, see Swadesh & Swadesh (1933: 199), and, for Makah, see Jacobsen (1996) and §3.4.2.

²⁴ Sapir & Swadesh (1939: 238) cite *λuyʷas* 'good on the ground', but this form is not attested in the corpus. *λuʷʔas* is found at NA 15.18.

²⁵ Sapir (1938, reprint 1949: 236), Sapir & Swadesh (1939: 237), Rose (1981: 22-23)

²⁶ Examples (90) and (91) are from Sapir & Swadesh (1939: 236).

²⁷ Boas (1947: 273), Lincoln & Rath (1980: 199). Boas' orthography has been converted to the one used in this dissertation.

²⁸ Boas (1947: 323), Lincoln & Rath (1980: 253)

²⁹ Boas (1947: 223)

³⁰ Final /a/ is present underlyingly, but does not appear in the surface form due to a rule of final vowel deletion in Makah (§3.4.3) (cf. also Jacobsen 1971).

³¹ Boas (1947: 238), Lincoln & Rath (1980: 111)

³² This, incidentally, raises the question of the historical source of modern Southern Wakashan non-labialized velars, which, with the exception of /x/, are by no means rare in the present day languages. That is, if PW velars became alveo-palatals, whence the velar in morphemes like the N, M root *ka-* 'stick-like object protruding'?

³³ TRANS = transitivizing suffix used with stative or intransitive verbs (Boas 1947: 241, #6); NOM = nominal suffix (Boas 1947: 323). Thanks to Emmon Bach for checking my Kwakwala forms. He drew my attention to the fact that Boas (1947: 353) erroneously writes the 'lick' root in (120)c with a plain voiceless velar stop. I have substituted the correct glottalized form per Lincoln and Rath (1980: 244).

³⁴ See Haas (1969: 111-112, 115-120) for discussion and examples of similar correspondences between Nuuchahnulth and Ditidaht.

³⁵ This word, like many others with original */x^w/, now contains morphophonemic /h^w/ (§3.3.2).

³⁶ Makah voiceless stops undergo the allophonic process of coda aspiration described for Nuuchahnulth in §2.1.

³⁷ This example and the next are found on page 16 of a revised version of Jacobsen (1996) in Jacobsen's possession.

³⁸ Jacobsen (1996) indicates these segments with a capital barred-l.

³⁹ Jacobsen (p.c.) has recorded this suffix as -'a and -'i. The -'u form appears in my data.

⁴⁰ This example is found on page 9 of a revised version of Jacobsen (1996) in Jacobsen's possession.

⁴¹ See §2.5 for accent.

⁴² Some speakers change /a/ preceding /w/ to /o/ so they would have [da:ʔo:^w].

⁴³ Interestingly, Ditidaht shows similar patterns of syncope except that, in Ditidaht, it is the second of the two vowels that deletes rather than the first. See Swadesh & Swadesh (1933).

⁴⁴ This first-syllable shortening sometimes seems to apply also in words that have undergone epenthesis (§3.4.3).

⁴⁵ More fully translated in Makah as 'good, rich tasting, full of fat (said of shellfish)'.
⁴⁶ Actually, the question of whether Makah, Nuuchahnulth, and other languages with lexical verbalizing suffixes can be characterized as incorporating is controversial. I am agreeing with the

view expressed by Sapir (1911b) and Mithun (1984), among others, that these languages are not incorporating. See Jacobsen (1993: 266-67, note 2) for discussion.

⁴⁷ Swadesh himself (1933: 11, note 1) compares them to the Latin enclitic conjunction *-que*.

⁴⁸ At least one of these, *yaʔ* ‘yonder’, is attested in Makah as well.

⁴⁹ See §4.4.1 for brief comments on grammatical relations. The relevant aspect of this topic here is that a subject category can be justified for Southern Wakashan.

⁵⁰ Cf. Swadesh (1933: 101-02).

⁵¹ This characteristic of Nuuchahnulth and Southern Wakashan languages contrasts sharply with the situation in Salish languages, which are generally quite careful about indicating transitivity.

⁵² However, equational clauses involving personal names, place names, and RPs that contain the article do require a copular element. See below for discussion.

⁵³ See Chapter 8, note 114 for discussion of classification of property words.

⁵⁴ Jacobsen (1979a: 114) tentatively reports a possible restriction in Makah against occurrence of the future tense clitic with nouns. However, I was able to elicit several examples of nouns with this clitic with no difficulty.

⁵⁵ A few exceptions to this generalization have turned up in Nuuchahnulth, but syntactic predicates expressing names all seem to have existential readings, e.g. *there at the door is Codfish-always-getting it* (the name of a family crest), rather than equational readings.

⁵⁶ See §8.2.3 for the forms of independent pronouns.

⁵⁷ Cf. Sapir (1924: 86, note 31)

⁵⁸ This claim does not apply to proper names, which, as discussed in §4.4.3.2, cannot function as (syntactic) predicate heads.

⁵⁹ Swadesh (1939: 82) proposes the same analysis, labeling the Nuuchahnulth article a “subject relative” in a list of modal formatives and glossing it ‘he who is, does’.

⁶⁰ However, the proper analysis of Makah RPs with possessive clitics, which have essentially the same syntactic distribution as the article, (e.g. *čapac = sis* ‘my canoe’) is as yet unclear.

⁶¹ Some have suggested that referring expressions in Salish languages are also nominalized predicates or clauses. See, for example, van Eijk (1997) on Lillooet and Thompson, Thompson, & Egesdal (1996) on Thompson. Similar claims have been made for other languages of the Americas. See Comrie & Thompson (1985: 391-95) for a brief review.

⁶² Relative roots do have the special property of remaining the grammatical head of the word when affixed by nuclear lexical suffixes, which otherwise become head themselves. See §5.1.

⁶³ These might be considered a kind of equational clause (§4.4.3.2).

⁶⁴ Often it is also possible to express manner of action and relation in a single derived verb, with the manner expressed by the base and the relation by a suffix, e.g. M *kac-iyaʔ*, N *kac-iʔ* pinch-give.PERF ‘pinch sth off and give it to’, M *čaq-iyaʔ*, N *čaq-ayiʔ* push-give.PERF ‘push sth to sb’, M *čick-iyaʔ* throw-give.PERF ‘throw sth to sb’, N *cas-iʔcs* chase-bringing.along ‘chase sth along’. For an example of the first word, see (201)b.

⁶⁵ With some hesitation he terms this construction “serialization”, a characterization I find misleading because of the many differences between the Southern Wakashan construction and constructions called “serial verb” constructions in other languages, e.g. 1) any number of predicates can be so combined (although more than two or three is uncommon), 2) the set of predicates from which bare absolute predicates can be drawn is open-ended, 3) any lexical item can fill the role of main predicate or of the bare absolute.

⁶⁶ “Serialization combines multiple clauses into a unit that expresses a single state of affairs (= event or state), i.e. a predication” (Nakayama 1997a: 115).

⁶⁷ See Anderson (1985: 9-10) and Spencer (1991: 37-39) for introductory discussion. In Sapir's (1921: 142-43) morphological typology, Nuuchahnulth (or Nootka, in his terminology) is classified as having a polysynthetic level of synthesis and "agglutinative (symbolic tinge)" technique.

⁶⁸ See Fortescue (1994) for more detailed characterization of polysynthetic languages.

⁶⁹ In a 100-word sample from Text 2 in Sapir & Swadesh (1939: 19-21), Jacobsen (1993: 266) counts an average of 3.66 morphemes per word in Nuuchahnulth, which is just slightly lower than Greenberg's (1954) figure of 3.72 morphemes per word in a similar sized sample from Eskimo.

⁷⁰ Figure 2 should be understood as a static representation of the structure of existing words, rather than a generative device for creating new words. Without extensive filtering or constraint mechanisms, Figure 2 will generate many impossible words.

⁷¹ This statement does not apply to words formed on relative roots like N *yaq*^w, M *yaqa* 'one who, that which', which always determine the category of the resultant word regardless of suffix type, e.g. N *yaq*^w plus the verbalizing suffix N *-?ič* 'clothed in ...' forms the noun *yaq*^w*?ič* 'clothing, what one is wearing' rather than the verb *'wearing sth that is ...'.

⁷² The terms "core" and "peripheral" are borrowed from Nakayama (1997a), where they are used in a different sense.

⁷³ See Haas (1972) for more on Nootkan root structure.

⁷⁴ As mentioned later (see note 114 in Chapter 8), it is not clear if evaluative and dimensional terms are a subclass of verbs or constitute a separate class of adjectives.

⁷⁵ See Rose (1981: 284-89) for a different classification scheme.

⁷⁶ Eskimo languages also have suffixes of this type, which are sometimes called "post bases" in the specialist literature (e.g. Jakobson 1984, Miyaoka 1996). Eskimo, Wakashan, and Quileute are strikingly similar in their reliance on these suffixes to the virtual exclusion of other word-formation techniques. Eskimo languages are even more extreme than Wakashan and Quileute in this respect.

⁷⁷ Other works refer to nuclear suffixes as "governing" suffixes, a term I avoid since nuclear suffixes sometimes do not "govern" the base in the sense used in current grammatical theory.

⁷⁸ This statement is generally true, but oversimplified. Certain restrictive path-orientation suffixes have the effect of deriving verbs due to their inherent perfective aspect (§5.5.1). In these cases, the restrictive suffix could be considered the grammatical head, but the base remains in some sense the main semantic element.

⁷⁹ These types roughly correspond to Swadesh's (1933, 1939) governing action and governing state suffixes.

⁸⁰ Rose (1981: 357-58) categorizes most of my verbalizing state suffixes as "adjectival" rather than "verbal" suffixes, but, assuming her (p. 344) definition of the adjective class, it is not clear how this could be correct. Jacobsen (1979a: 139) refers to Makah *-i:c* 'belonging to ...' as forming adjectives, but since he considers Makah adjectives a subtype of intransitive verb, there is no disagreement with the present analysis.

⁸¹ Locale suffixes are called "zone" suffixes in Davidson (1999).

⁸² The initial vowel is shortened due to insertion of the long epenthetic vowel (§3.4.3).

⁸³ "The use of suffixes for adding new material ideas to the initial morpheme is common to a restricted area inhabited by all the Kwakiutl dialects, Nootka [and other Southern Wakashan languages—MD], Quileute, and Salish. Outside of this area it is unknown. Its closest analogue is found in the suffixes of the Eskimo language" (Boas 1947: 236).

⁸⁴ This root element must go back to Proto-Wakashan, cf. Kwakwala forms such as *wiḡənɣ*^w*a* 'to fail to go straight to a person' (Boas 1947).

⁸⁵ My analysis of Southern Wakashan aspect draws on that of Swadesh (1931, 1933, 1939), Sapir & Swadesh (1939), and Rose (1981), but, as will be seen, differs in certain respects from each of these.

⁸⁶ Actually, to be more precise, aspect is indicated by the final morphological constituent of a stem. This is often a single morpheme, as stated in the text, but may also be a combination of two or more restrictive spatial suffixes, which together have a single aspectual value (§5.1), or an aspectually significant CV template applied to a base.

⁸⁷ “[A]ll verbs have durative and momentaneous, or inceptive, aspects, most have also at least one iterative aspect, and many have still other aspects” (Sapir 1924: 82, note 1). “The aspect system consists of a set of categories based on two primary aspects, durative and momentaneous.” (Sapir & Swadesh 1939: 240).

⁸⁸ “We may class Nootka words into three semantic types, on the basis of their meaning in the durative and momentaneous aspects” (Swadesh 1931: 24).

⁸⁹ These definitions were formulated for momentaneous and durative categories in Ditidaht, but can be shown to reflect Swadesh’s thoughts on Nuuchahnulth as well, although these were never so succinctly expressed.

⁹⁰ Some authors (including Klein) reserve the term “aspect” for viewpoint aspect.

⁹¹ In fact, potential for occurring with the graduative imperfective is a good test for determining whether a base is perfective.

⁹² Rose (1981: 275) describes the graduative morpheme as [L] in Kyuquot dialect, but examples like perfective M, N *waha’k* ‘go’: graduative M, N *wa’hak* ‘going’ show that it must be [L+S] in Tseshaht and Makah.

⁹³ The term “continuative” is from Rose (1981). Sapir & Swadesh (1939) simply call this aspect the ‘durative’, not differentiating it terminologically from the *-ak^w/-uk* durative described in §6.5.2.

⁹⁴ This kind of “what-if” elicitation technique was suggested to me by Ann Renker (p.c.).

⁹⁵ Formation of the repetitive in Makah is first described in Jacobsen (1971).

⁹⁶ Iterative formation is first described for Makah in Jacobsen (1971).

⁹⁷ Note in this regard that the formal resemblance between the Habitual enclitic = *ʔaʔa* (§7.4.2) and iterative II morphology may not be coincidental.

⁹⁸ See also Swadesh (1933: 8-11), Rose (1981: 291-92), and Nakayama (1997a: 21-23).

⁹⁹ Jacobsen (1973) describes a “relative” formative *-x* (e.g. in *wiki^tx weʔiç* ‘no one is sleeping’). Since I judge this to be a specialized use of the peripheral suffix *-(x)x* ‘while, meanwhile’ rather than a clitic, it is not discussed in this chapter.

¹⁰⁰ See also Rose (1981: 212-234) for Kyuquot dialect forms and Nakayama (1997: 30-41) for Ahousaht.

¹⁰¹ The Inferential I is, however, listed in Sapir (1924: 101, note 178).

¹⁰² These formatives are not mentioned in Sapir & Swadesh (1939), but are listed in Swadesh (1939: 82-83).

¹⁰³ Two other Makah morphemes given by Jacobsen (1986) as evidentials, *-qadi* and *kuk*, are here analyzed as specialized peripheral layer evidential uses of lexical suffixes rather than as clitics. In this regard, it is significant that = *pi:t* follows the temporal specifier, which shows it must be a clitic, but *-qadi* and *-kuk* precede it. This does not guarantee peripheral suffix status, but is consistent with it.

¹⁰⁴ Jacobsen (1973) refers to the first of these moods as the “informational interrogative” and the second as the “confirmational interrogative”.

¹⁰⁵ There are a few examples of it attaching to a lone demonstrative in Nuuchahnulth, however, e.g. *ʔaḥkuʔi* ‘that one’.

¹⁰⁶ Tsessaht *yaʔ* is probably cognate with the morpheme *haʔ* in Kyuquot dialect that Rose (1981: 40) describes as a definite article.

¹⁰⁷ In Makah, the article itself may be extended by demonstrative elements: = *ʔiqa:d* proximate article, e.g. *qidiʔliqa:d* ‘this dog’, = *ʔiqa:c* distal article, e.g. *qidiʔliqa:c* ‘that dog’.

¹⁰⁸ See Rose (1981: 206, ex. 43; 209, ex. 60-61)

¹⁰⁹ Rose (1981), Rose & Carlson (1984), Whistler (1985), Emanatian (1986), and Nakayama (1997b) may be consulted for further discussion of passivization in Nuuchahnulth, especially the controversy over whether this construction should be properly be considered a passive or an inverse. The reader will correctly infer from my labeling the morpheme in question “passive-inverse” that I consider the question to be terminological. The Southern Wakashan construction simply mixes properties associated with constructions called “passive” and “inverse” in other languages. It appears to be intransitive like the English passive, but is subject to person and topicality hierarchies like inverse constructions in Algonquian languages.

¹¹⁰ An obvious alternative analysis of this construction some have suggested describes *-(č)itʔ* as an object case marker. Rose (1981: 62-67) presents several arguments against such an analysis and for a multi-clausal analysis like the one given here.

¹¹¹ This is perhaps a typo for *-aʔcyin*, the normal shape of this suffix, cf. Sapir & Swadesh (1939: 319).

¹¹² Makah has a morpheme *-ʔux* seems analogous to the Nuuchahnulth irrealis clitic, but it is not yet fully analyzed.

¹¹³ In formal speeches first person singular forms may have plural reference (i.e. ‘I’ = ‘we’).

¹¹⁴ The classification of many words expressing property concepts is unclear. This uncertainty primarily involves free roots like dimension terms, e.g. M, N *ʔaq* ‘wide’, M *ʔiʔiʔxʷa*, N *ʔiʔhʷ* ‘big’, and evaluative terms, e.g. M *ʔuʔw*, N *ʔuʔ* ‘good’, and also some words with the durative aspect suffix, e.g. M, N *ʔisuk* ‘white’, M, N *ʔačakʷ* ‘propped, wedged up’. Most property words probably belong to a subclass of verbs, as proposed by Jacobsen (1979a), but some may constitute a separate class of adjectives (Rose 1981). Their syntax requires further investigation before definitive classification can be made. Other property words such as those formed with suffixes I have classified as verbalizing state suffixes (§5.4.1), e.g. M *-dit*, N *-nit* ‘stocked with ...’, M, N *-i:c* ‘belonging to ...’, are more clearly verbs.

¹¹⁵ Jacobsen (1979a: 84-108) includes a thorough review of various proposals concerning Southern Wakashan word classes in both the primary and secondary literature.

¹¹⁶ This is a different sense of “nominal” from the one used in the preceding list of word classes, where the word simply means ‘having the character of a noun, noun-like’.

¹¹⁷ I therefore disagree with Nakayama’s (1997a: 64) contention that “...[T]here is no strong formal basis for positing word classes in Nuuchahnulth. That is, there is no unique and constant correspondence between sets of words and formal markers or formal structuring patterns that justifies grammatical classes among words.”

¹¹⁸ Note also that this is a rare example of a post-head predicate modifier hosting a clitic.

¹¹⁹ The speaker is the mythological culture hero Kwatyaat, whose speech is characterized by inserted /xʷ/s (Sapir 1915, reprint 1949: 186; Sapir & Swadesh 1939: 210, footnote 8).

¹²⁰ Jacobsen (1979a: 106) makes the same claim: “[T]he momentaneous [i.e. perfective—MD] formation ... derives verbs from stems of other classes.”

Appendix A: Lexical Suffixes

Lists of Nuuchahnulth and Makah lexical suffixes are presented below. Citation of Nuuchahnulth suffixes is based on the more-or-less complete list provided by Sapir & Swadesh (1939: 316-34). When possible, Makah equivalents (not necessarily cognates) to the Nuuchahnulth suffixes are given as well. Many suffixes listed by Sapir and Swadesh are not well attested, or even unattested, in the Nuuchahnulth corpus; classification of these is obviously subject to revision. A few suffixes have been posited that are not listed by them, e.g. *-ca'pi* [L] ‘facing ...’ and *-(c)cipakλi* ‘at the hams, upper thigh, rump’. Makah suffixes are often attested only in a word or two; their shapes, morphophonemics, CV template associations, and glosses must be considered provisional, pending discovery or elicitation of more examples. Around 300 Makah suffixes have been isolated to date; there are certainly many more yet to be found.

Throughout, Nuuchahnulth glosses are based on those given by Sapir and Swadesh, although in some cases their original gloss has been modified based on corpus examples. This statement also applies to morphophonemic indications. To save space, only one allomorph of each suffix in each language is shown, even though many occur in more than one shape. However, it is often unclear whether two apparently related forms should be considered allomorphs of a single suffix or two suffixes. For instance, certain suffixes occur (in a phonologically unpredictable fashion) in some words with the initial formative element N *-(c)s-*, M *-(k)s-* and in other words without it, for example N, M *-ac* ‘vessel for ...’ in N *yašmaq-ac*, M *yaša'baq-ac* ‘fur-sealing canoe’ and N *-(c)sac*, M *-(k)sac* ‘container, vessel for ...’ in N, M *patq-sac* ‘valise’. Decisions as to whether these pairs are allomorphs of a single suffix or two distinct suffixes have been made on a case-by-case basis. Sometimes the meanings and/or morphophonemic properties of the two forms have diverged enough to justify considering them separate suffixes. In other cases, they appear to be

lexically-conditioned allomorphs of a single suffix, and only one form, the form that seems most characteristic, is listed.

The symbol ‘/’ after a CV template diacritic following a Makah suffix indicates that the template is associated only with the Makah suffix, not with the Nuuchahnulth suffix. An asterisk following a Makah CV template diacritic indicates its association with the suffix was taken from Jacobsen (1997a) or Jacobsen (1998a).

Nuclear verbalizing suffixes

N - *'aʔa* [LR+L] doing for ...'s sake,

revenging ...

N -(w)*aʔa:hut* [L] in a hurry for ...

M -*a'daxi* [L] in ... condition (cf. N -*sinhi* below)

N -*a:hin* deprive of ... (perf.)

M - *'aluχ* [L] working for ...

N, M - *.ʔat* aware of ...

M - *'a:t* [R] controlling, looking after ... (cf. N, M - *'atuk*)

N, M - *'atak* [L] longing for, liking, in love with ...

N - *'atsimhi* [L] yearning for, wanting, loving ...

N, M - *'atuk* [L or R] supervising, looking after ...

N, M -(w)*aλ* [L] find, come upon ... (perf.)

N, M -*a:ʔaλ* [L] destined for, makings of ...

N -*ʔamač* [L] signifying, auguring, casting a spell for ...

N -(n)*a'nak* having ... along with one out at sea

N -*anim* [L] get, bring along ...

N -*a'nu:λ*, M -*a'du:λ* because of ..., for ... reason

N -, *'ap*, M - *'a'ʔa:p* buy ...; gain ...

- N -*apíat* [L] in competition with ...
- N -(*q*)*apuł* imitating, impersonating, representing ...
- N -(*w*)*aqsa-q-*, M -*aqsak* [L] in ... generation, layer
- N, M -'*as* about to ...; go in order to ... (perf.)
- N -(*n*)*as?i:* approach (perf.)
- N -*a'ta* directing action, blows at ...
- N -*?a'ta* lacking ...
- N -*atah*, M -*a:taḡ* [L], [R]/, [R+L]*/ lying in wait for, trying to get ...; [R] ready to, about to ...
- N -*a'tuk*, M -*a:tuk* making ... sound
- N -(*y*)*a'wa*, M -*yawa:* go for, take ... at intervals
- N -*awił*, M -*u'ł* [L] expecting ...; considering one to be ...
- N -*awi:qš* [L+S], M -*i'yuqš* calling, sending for ...
- N -*ayi'*, M -*iya'* give ... (perf.)
- M -*a'yu* [R] saying ...
- N -*ayuk*, M -*uya?* [R+L] angry, crying, miserable on account of ...
- N -'*ayimč* [L] presaging, forecasting, praying for ... weather
- M -*bida* [L] 'owe ...'
- M -*bu'p* be ...
- N -*c-* facing ...
- N, M -*ca-* (N durative -*cu:-?uk* [L+S], M durative -*c-?ak^w*) go to ..., go in direction of ...
- M -*c?ak^w* [R] acting like ...
- N -*caḡta-* going towards ..., going in ... direction
- N -*cama* [R], M -*caqλ* going towards ...
- N -*ca'pi* [L] facing ...
- N -*ca'q-*, M -*ca:q* [L] busied with getting, cooking, eating ... food; taken up with ... thing

- N *-caq-* paying attention to ...
- N *-cawi:* suitable for ...
- N *-cawinyuk* [L] doing (esp. giving a potlatch) on account of, in honor of ...
- N *-çha* [L] go in order to ...; go in connection with ...
- N *-çhi*, M *-çxi* married to ...; N having sexual intercourse with ...
- N *-ç?i:* go in direction of ... (perf.)
- N, M *-cit-* on ... side, end
- N *-çit?is* [L] ... shore
- N *-çi:yuk* [L+S] going to ...
- N *-çqma:p*, M [R+L]/ *-çi:qbap* taking notice of ...
- N *-çsh* [L] paying ... for services
- M *-çta?ł* descended from, come from ...
- N, M *-çuk* needing, requiring ...
- N, M *-çuq-* in ... hand
- N *-çu:t* on ... side
- N *-çuwat*, M *-çowat* [L] on ... side; on the ... side
- M *-çxad* [L or R] doing for benefit of ...
- N *-çyak* [R] dressed in ...; appearing like ...
- M *-çak* [L+S] cooking ...
- N *-çatł-* [LR] give attention to, do only ...
- M *-(k)çap* sell ...
- N *-çaqsim* wanting ...
- N *-ças* betting ...
- M *-çax* [L] depending on ...
- N *-çi?łh*, M *-çi?łç* using ... as fuel

- M -*ciλ* come from ...
- N -*cimʔak* [L] doing on account of, in honor of, in reference to ...
- N -*cinaq-*, M -*cidaq* [L] talking about ...
- N -(c)*ciq* accompanying ... in canoe
- N -*ci:q-* unable to find ...
- N -*cus*, M -*cis* [L] laughing at ...
- N -*čas* [R] fond of ...
- N -(k)*ča'sči* [L or LR+L] playing, participating with ...
- N -*či*, M -*či* at, in ...; [LR] attached to ...
- N -(k)*či*, M -*čči* along with ...; N [R] siding with ...
- N -*čił* [R] naming, mentioning ...
- N -*čim* [LR] for the sake of, on account of ...
- N -*či'p-* [L] having ... stored up
- N -*či:qa* [R+L] dragging along, impeded by ...
- N -*čiyuq-* dealing with ...; attacking, trying to capture ...
- N -*čiyat* [R+L] pursuing, following ...
- N, M -*ču'* ... -ed; having ... -ed
- N -*čap*, M -*ča:ʔap* [R] sore in ... (body part); sick, sore with ... disease
- N -*ħa'*, M -*ħa'* buy ... (perf.)
- N -*ħsa'*, M -*ħsa'* longing for, desiring to eat ...
- N -*ħta'* doing to ...
- N -*ħtin*, M -*ħtida* made of ...
- N -*ħwat* [L], M -*ħwa:ł* [L+S]* using ...
- N -*ħwink^w* [L] using ...
- N -(q)*ħyu'* related to ...
- N -*ʔašt* caused, accomplished, obtained by ...

- N -*ziλ* find, come upon ...
- N -*zin* [L], M -*qadi* [R] making ... sound
- N -.*zi*, M -.*ziya* get to be at ... (perf.)
- N, M -*i:c* belonging to ...
- N -*i:cs*., M -*i:ks* carrying ... along
- N -(y)*i:cuk* arrive at ... time
- N -*zič*, M - '*ič* clothed in ...
- N -*ičas* [L] having ... as covering in bed
- N - '*i:h*, M - '*eyax* [R] hunting, collecting ...; [L] pursuing, trying to get ...; [R+L] trying to get, earn ...
- N -*i:hzi* go to ... to give gifts (perf.)
- N - '*ik^w*, M - '*eyik^w* [L or LR] given to, fond of ...-ing, adept at ... -ing (also nominalizing suffix 'expert at ...')
- N, M -*ił* [R] sleeping with ...
- N -(č)*ił* [L] doing to, with reference to ...
- N -(č)*i:ł* [sometimes L], M -(k^w)*i:ł* [L or L+S] making ...
- N -.*i:λ*, M - '*i:λ* lose ... (perf.), win ... (perf. caus.)
- N, M - '*iλ* [L] go for, take, invite ... (perf.)
- N - '*in*, M - '*ida* treated as ...
- N - '*in*, M - '*adi* [L, R] making a sound of ...
- N -.*inł*, M - '*idil* [L] giving a feast of ..., distributing ... in feast
- N - '*inmaš*, M - '*adi* taking the place of ...
- N -(w)*inqa* [L] baited with ...
- N -.*inhi* [L] waiting for ...
- N -(w)*ink^w* [L], M -*pi:duk* intermixed with ...

- N *-inqλ* [L or LR] inimical toward ...
- N *-inyuh* on a visit for the purpose of getting, seeking ...
- N *-inyuk* [L] having ... many points, branches
- N *-inyu*, M *-ida:* left behind
- N *-i'nak^w* imitating ... in dance
- N *-inakuḥ* [L] looking on at ...
- N *-?i:p* give a gift to ... (perf.)
- N *-(y)i:q*, M *-yuq* traveling in ... vehicle, traveling by ... means
- N *-'i's*, M *-'i'ks* consuming ...; costing ...; having sexual intercourse with ...
- N *-'itut*, M *-'aput* [R] dreaming of ...
- N *-ityak* [LR+S], M *-(k^w)i'ta:k* fearing ...
- N *-i'tya'p*, M *-i'tyap* or *-i?i:tap?* bring ... as gift (perf.)
- N *-iyaqḥ*, M *-eyax* [R] singing ... song
- N, M *-i'yuq-* doing to ...
- N *-i:yip*, M *-a'yup* capture, obtain ... (perf.)
- N, M *-k^wačil* because of ...
- N *-k^wayi:h* [L] pursuing ...; trying to earn,
get ...
- N *-ka:* having ... many successive points in the hoop game
- N, M *-kuk* apparently, seemingly; [R] resembling ...
- N *-k^wap* [L] caring for, liking, loving ...
- N *-(č)ta'*, M *-(k)ta'* having ... as name; N name, mention ... (the second and third meanings are
not yet attested in Makah; cf. *-(k)ša:t* below for a Makah suffix with these meanings)
- N *-ma* [R] going toward ...
- N *-ma:ʔaλ*, M *-ba:ʔaλ* intending to ...

- N *-maćuk*, M *-aba:ću* talking about ...
- N *-maʕi:qλ*, M *-beyaql* wanting to ...
- N *-ma:p* paying attention to ...
- N *-maqa* [LR+L] doing for the sake of ...
- N *-maqak*, M *-baqak* skilled in ...
- N *-ma:sa* [L] take back, take home ... (perf. and impf.)
- N *-mću* [R+L] feeding, regaling ...
- N *-mħi*, M *-baħi* [R] fit, suitable, enough for ...; able to ...
- N *-mi:ʔak* [LR], M *-be:ʔak* [R+L?] N fearing ..., M expecting ... to happen
- N *-miʔak* [L] thinking one is ...
- N *-miħsa* desiring to ...
- N *-mitaq-* [L] telling about ...
- N *-mīta* concealing, withholding ...
- N *-mūp* absent, away for the purpose of ...
- N *-naʕk^w*, M *-daʕk^w* having ...
- N *-naqa* [L] use ... as bait
- N *-naq* fond of eating ...
- N *-nim*, M *-daba* [R+L] having the objective of obtaining ...
- N *-nit*, *-dit* stocked with ...
- N *-ħaħ*, M *-idux* seeking ...
- N *-ħaħi* [L] ready, intending to ...
- N *-ħaqi:t* [L] find ... (perf.)
- N *-niʕ*, M *-diʕ* come, arrive (perf.)
- N *-pi:yaqħ* doing in accompaniment with ... -ing
- N, M *-pāʕ* [L] disliking ...

- N, M *-pʌt* smelling, tasting of, like ...
- N, M *-pʌt-* looking on admiringly at ...
- N, M *-pʌč* [L] having ... spouse
- N *-pʌčh* doing while ... -ing
- N, M *-pʌq* do in passing, do slightly (perf.)
- N *-pʌqš* [R] engaging in ...
- N *-pʌ:λ* get paid for ...; get paid ... (perf.)
- N *-pʌqs* smelling of ...
- N, M *-q* [R] N traveling in ... vehicle; M traveling (in company) with ...
- M *-qeyaλ* arrive (perf.?)
- M *-qeyaql* need to, feel like ... (used with verbal bases denoting bodily functions)
- N, M *-s* doing ...
- N *-saʰi* because of ...
- N *-sapi* [R+L] having ... as backing, support
- M *-siʰa:p* [L?] send ...
- N *-siʰʔi:* go to ... on a gift visit (perf.); present gifts to ... (caus.)
- N *-si:k^w*, M *-seyak^w* make, complete ...
- N, M *-siʰa* do ..., act like ... (perf.)
- N *-sim*, M *-suba* lacking, needing ...
- N *-simč*, M *-subač* [L] doing ritual for ...
- N *-sina:h* [L] trying to ...
- N *-sinhi* [L] trying to ...; keeping in ... condition (caus.)
- N *-(c)sma* defending ...
- N *-(c)snaʰaʰ*, M *-(k)sdaʰaʰ* [L] handling, playing with ...
- N *-stukh* [L or R] for ... reason

- N *-(c)supíatʔ* [LRc], M *-(k)supíatʔ* [LR+L] competing in ...
- N *-sýup* [R+L or LR+L] trying to make, coax into ... -ing
- N *-š -č -kš*, M *-č* [L] asking for ...
- N *-šahap* [L] doing ...; acting like ...
- N *-šahi*, M *-šaxi* [L] having ... wrong with one
- M *-(k)šatʔ* [L] mention ... by name
- N *-(š)taʔaqʔ* obtained by ...; paid for with ...
- N *-taq* [R+L] working on ...
- N *-(š)taqa* [L] blaming, doing to because of ...; doing to, punishing because of ...
- N *-(š)taq-šiʔ*, M *-taqšiʔ* go, do before ... -ing; ... before going, doing (perf.)
- N *-taq-šiʔ* come from ... (perf.)
- N *-(š)taqyu*, M *-(k)taqyu* powered by ...; having shamanistic power derived from ...
- N *-(š)tiʔp*, M *-(k)tiʔp* doing to ...; doing to while ...
- N *-(š)tis*, M *-(k)tis* [L] guided by ...; acting by reference to ...
- N *-(š)tu:q-* [R+L] going through ... formalities
- N *-íi:ʔiʔ-* [sometimes L], M *-íe:ʔiʔ* [L+S]* pretending to (be) ...
- N *-íu:ʔa* [L] giving a potlatch or ceremony in honor of, because of ...
- N *-ʔu:* [R+L] having food-right to ...
- N *-ʔu:-* intending to get ...; camping out for the purpose of getting ...; waiting in ambush to get ...;
- M *-ʔawi* waiting for ...
- N *-ʔuʔkt*, M *-ʔuʔkt* obtained by ...
- N *-uwa* [LR] acting together with ...; [L] ... doing together
- N *-(y)uʔatʔ*, M *-uʔatʔ* perceive ... (perf.)
- N *-ʔuʔ* having ... as means of conveyance
- N *-u:matʔ*, M *-ubaʔ* [L] born at ...

N *-u:ʔuk* [L+S] going along on one's way

N, M *-wa'* ([R] N impf. only) say ... (perf. and impf.)

N *-wāt*, M [LR]/ *-wat* related to, friend of ...

N *-wītas* about to ..., about to be ...; go in order to ... (perf.)

N *-yit* showing evidence, traces, marks of ...

M *-yuk* [R] doing ...

N *-yā'*, M *-ya'* troubled by, with ...

N *-yī'ḥa*, M *-i'ḥa* suffering from excess of ..., ... -ing excessively; die of ... (perf.)

N *-yīḥtaq-* derived, originating from ...

N *-yuk* born of ...

N *-yuk* wrapped in ..., covered over with ..., surrounded by ...

N *-yū:qḥ* referring to, mean, deriving from ...

Nuclear nominalizing suffixes

N *-aʔaq* ... hide, skin

N *-a'csyi* ... thing

N *-acūs*, M *-acīs* surface, platform for ...

M *-a'puṭ* habitual consumer of ...

N, M *-a'qλ* gifted in, given to ...; expert ... -er

N, M *-a'qs* ... woman (in women's names)

N, M *-a'qsup* woman of ... tribe, band

N, M *-(q)as* daughter of ...

N *-ʔath*, M *-a'tx* (sg reference) man of ... tribe, band, (pl reference) men, persons of ... tribe,
band (also a restrictive path-orientation suffix 'dwelling, residing')

N *-camis* ... thing

- N, M *-ck^wi'* having been ... -ed, having ... -ed; remains of ...
- N, M *-ćiq* ... many long objects
- N *-(q)ħsi'* ... -er
- N *-ħta'*, M *-ħta* ... instrument
- N *-ħta-*, M *-ħta:k^w* ... many flexible receptacles full
- N *-ħtinama* ... instrument, device
- N *-i* [R or L] quality of ..., manner of ... -ing, thing ... -ed
- N *-i'čħ*, M *-e'ʔičħ* season of, year of ...
- N *-i'ʔin*, M *-ida* costume for ...
- N *-in*, M *-adi* ... string, means of suspension
- N, M *-i'qsu* suffix in kin terms
- N *-i'ta*, M *-i'tiʔi'* ... -er
- N *-ma*, M *-ba* ... thing, being
- N *-maʔuk* [L] maker of ...; one skilled in
- N *-mapt*, *-bap* ... plant, bush, tree
- N *-mi:k^w*, M *-bi:k* [L] getter of ...
- N *-mis*, M *-bis* collectivity of ...; business of ... -ing
- N *-mi't*, M *-bit* son of ...; this suffix occurs in Makah in the names of a few story characters, e.g. *hupdabit* 'Wren', *ʔixbabit* 'Woodpecker'; it is unclear if it is otherwise productive.
- N, M *-pał* season of ...
- N, M *-pa'tu* ... thing, instrument
- N *-pi:t^w*, M *-pa'yił* ... many long bulky objects
- N *-qimł*, M *-qapł* ... many round objects
- N *-(c)sac*, M *-(k)sac* ... vessel, receptacle
- N *-sa'htak^w*, M *-sa'ħta:k^w* ... many kinds, varieties; ... kind, ... variety

N *-siyapi* [L] ... many bands, families; ... band, family

N *-(c)syi*, M *-(k)si?i:* medicine for ...

N *-(š)taq-* ... many units

N *-(š)taq-imł*, M *-(k)taqapł* ... many groups, bundles; ... group, group of

N *-(š)tu'p*, M *-(k)tu'p* ... creature, being, thing; ... class, genus, species

N *- 'u:* ... berry

N, M *-(.?)uł^w* place of ...

N *-w'i'* ... mark, mark of ...

N *-ya:s'ca* [L] ... many rolls

N *-y'ak^w*, M *-yak^w* ... device, instrument

Path-Orientation suffixes

N, M *-a'-* go out to sea (perf.)

N *-(.?)ał* attached on

N *-a'qtu'* move across (perf.); extending across

N, M *-as* reaching to, touching on, following close

N, M *-a't-* move downstream, out of the woods (perf.); extending downward

N *- 'ath*, M *- 'atx* dwelling, residing

N *-?atu*, M *- 'atu* fall off, come off; ... ends; stop, leave off ... -ing; [L] sink (esp. into water);
faint, die (perf.)

N *-a?u:*, M *-a'yił* following behind

N *-ayi: ?ił*, M *-a'yił* move into a building (perf.)

M *-bu:sa* climbing

N *-caqimł*, M *-caqapł* [L] N all about; M go around, circle

N *-ci:q-* [R+L] move along the shore

- N, M *-cpa'* go over, past (perf.); on ... side (impf. and perf.); ... on a side
- N *-ħçir*, M *-ħçir?i:* holding over the fire, drying at the fire
- N *-(q)ħsa'* in a bundle
- N *-ħt-*, M *-ħt-* move downstream, come out of the woods (perf.)
- N *-ħta-*, M *-ħta-* apart, divided off; out to sea
- N *-ʔa'ʔatu*, M *- 'aʔatu* move down (perf.)
- N *-i:ʔas*, M *-uya:ʔas* go outside (perf.)
- N *-i:ʔatu* [L] get to be under water (perf.)
- N *-i'č-* on, covering
- N *-im* [R+L] through an aperture
- N *-inʔatu* go up the coast (perf.); up the coast (impf. and perf.)
- N *-(č)ink^w*, M *(k^w)i'duk* together, ... -ing in competition; N [LR], M [R] engage in competition, play, conversation with ...
- N, M *-(ʔa)k^wa-č-* apart, dispersed, in pieces; used up, destroyed, spent (of money); attacked; completely ...
- N, M *-k^wis-t-* move away from; miss, fail to hit (perf.)
- N *-mał-*, M *-bał-* moving about
- N *-ma's*, M *-biʔi:s* moving about on the ground, in the village
- N *-mi'ʔa* moving about on the rocks
- N *-mi'ł* moving about in the house
- N *-mi's* moving about on the beach
- N *-ni'q-* down a slope
- N *-p.-* go across (perf.)
- N *-pi'ł*, M *-pi'ł* [L] extending across, M move across (perf.)
- N *-(c)sa'ʔa* come to land (perf.)

- N *-(c)sapi*, M *-(k)sab* in the way; screened by ...
- N *-(c)s?atu* fall off, fall behind; be born (perf.)
- N *-(c)sta'*, M *(k)sta'* move down into (perf.)
- N *-(c)sti's* move into the interior (perf.)
- N *-(c)suhta*, M *-(k)sihta* come out into the open; come out of the woods (perf.)
- N *-(c)swi'*, M *-(k)swi'* go through (perf.); extending through (impf. and perf.)
- N *-(c)syaqsti* main ...; in the lead, leading
- N *-syu:č*, M *-yu:č* [L] exposed, showing
- N *-(y)u:k* [L], M *-u:k* [R+L] all over
- N *-waḥsu(ʔ)*, M *-waḥsiʔ* N go out (perf.), M go out of mouth (perf.)
- N *-wa's* go outdoors (perf.)
- N, M *-wi'* N point comes out (impf. and perf.); M come out
- N *-wi:ʔas* go outside (perf.)
- N *-wi:ʔis* go down to the coast (perf.)
- N *-witu(ʔ)* move past, over the head (perf.)
- N *-wihta*, M *-wihta* come out of canoe, vessel (perf.)
- N *-wisa*, M *-wisa* [R] come out of one's hands; escape (perf.)
- N *-wisa'*, M *-wisa'* come to the surface of the water; come to consciousness (perf.)
- N *-wisč-* farther up; move up the bank (perf.)
- M *-ḥsuwa:* move downstream

Site suffixes

Body Parts: Head

- N *-ayuk*, M *-eyuk* [L] at the head, hair
- N *-ciim*, M *-ciab* on the side of the head

N -*caqi* [L] at the head, foremost

N -*ca:s* at the crown of the head

N -(w)*i:k^w* [L] on the head

N -*inkstas.* at the back of the head

N -*ku:ʔas* [R] at the side of the head

N -(c)*sinyuk* [L] on the head

N -(č)*uxs* on the head as headgear

N -*wihta* at the head

Body Parts: Face

N -(ʔ)*aksu(ʔ)* at the mouth, lip

N -*aku(ʔ)* [R] at the lower part of the ear, in the ear lobe

N -*a'nuʔihta* [L] along the nose

N -(ʔ)*aqsu(ʔ)*, M -*aqsiʔ* at the mouth, opening

N -*as* [R] on the cheek

N, M -*ciʔuʔ* in front of the face

N, M -*cuq-* in the mouth

N -*'imʔ*, M -*'abiʔ* [R] at the ear; N at the gun-hammer

N, M -*iyuqλ* in the mouth

N -*i'yu(ʔ)*, M -*i'yiʔ* at the throat; with reference to the voice

M -*paquʔ* [R] at the cheeks

N -*pi'yaʔa* [L] on the forehead, between the brows

N -*pi'yas* [L] on the forehead

M -*patas* [R] on the cheeks

M -*patuʔ* at the cheeks

N *-(c)sa:ía*, M *-(k)sa'ía* [L] on the forehead
 N, M *-suk* [L] at the septum
 N *-(c)su(ɬ)*, M *-(k)siɬ* [R+L] at the eye; N [Rc+L] in, on the eye
 M *-(k)swi?i:* [R] at the teeth
 N, M *-(q)u'(ɬ)* on the face

Body Parts: Torso

N *-a'csi.* on the lap
 N, M *- 'a'či* at the groin; in the crotch; at the lower part of the belly; in the bay
 N *-ačnuɬ* from the spout to dorsal fin
 N, M *- 'akłi* at the rear, last; N [R] at the heel
 N, M *-a'páɬ* on the upper back; behind
 N *-asʔakłi* on the rump, buttocks
 N *-asɬu'(ɬ)*, M *-asxu'(ɬ)* on the chest, breast
 N, M *-ci:* [L] at the crotch
 N *-čaʔači* [L] at the lower part of the belly, in the groin, at the crotch
 N *-(w)inɬ*, M *-adiɬ* [L] on the neck
 N *-(č)it*, M *-(kⁿ)i't* on, at the body; at the side of a canoe
 N *-ɬa'qłi* on the penis
 N *-ku:ʔiɬ* [R] at the side in the region of the loins
 N *-pi'* on the back
 M *-péyiɬ* on the back
 M *-(k)sʔaɬ* on the back
 N *-(c)si:* [L] on the lap
 N *-(c)sinqi*, M *-(kⁿ)itqi* on the belly

- N -(c)*sinqit* [L], M -*adaqit* [R] at the ribs
- N -(c)*sitk^w* in a crotch, in between; [R] between the fingers, claws
- N -*sta'qs* at the hip, side
- N -*sti't* at the collar bone
- N -(c)*su'qλ*, M -(k)*su'qλ* inside the body, in the womb; in mind; having ... quality, emotion
(particularly of women)
- N -(c)*swint* [LR], M -(k)*swadi't* [R+L?] in the arm-pits
- N -*wi'qλint* [L] on the nape of the neck
- N -*yimt* [sometimes R] on the shoulder

Body Parts: Limbs

- M -*apa:qλ* [L] at the heel, elbow
- N -'a:s [LR] on the wrist
- M -*askabit* [R] at the arms
- M -*bat* [R] at the arms
- N -*ca's*, M -*ca:s* in the hand, at one of a pair of body parts
- N -(c)*cipakλi* [L] at the thigh joint, hams
- N -*ci'ači* [R] at the thigh
- M -(k)*čit* [R+L] at the feet
- N -*čink* [R] on the calf of the leg
- N -*hi* [R+L] at the limbs; under one's knees (as one kneels)
- N -(q)*hta* [R] on the foot
- N -*huk* [R], M (after vowels) -*tk^w* [R+S]*, (after consonants) -*duk* [R+L] at, on, of the hand
- N -*pič* [R] on the ankle
- N -*piqa* [R] on the knee

N *-(c)spu(ʔ)*, M *-(k)spu(ʔ)* between the legs

M *-(k)sta* [LR] at the legs

N *-stúwáčĭ* [R] at the inner part of the thigh

N *-wi'* [R] at the fingernails, claws

Nature

M *-ʔa:ciʔ* in the sky

N *-(w)ač* [LR], M *-a'č* [L] at the margin along the water

N *-ačĭšt*, M *-ačakt* on the sea

N, M *- 'a'qʕʕas* in the woods, bush

M *- 'a'qʕli:ʔ* upsound, to the east

N *-asu.*, M *-asiʔi:* under, in liquid (esp. water)

N *-ča:tu*, M *-ča:tu* on the water, out to sea

N *-čit.-*, M *-čita* in the water, in water hole

N *-ču:s*, M *-ču:ʔis* in a bay; M in meadow, yard

M *-kʷiʔi:* on the river bank

N *-ni'*, M *-di'* on water

N *-sa'mi:čuʔ* on the bluff

N *-(c)sit.*, M *-(k)sit* [L] on the surface of a liquid

N *-(c)smu(ʔ)* [L] along the bank

N *-(c)suʔis* far out at sea; at a distant place out over the sea; on the horizon

N *-(c)swaqʕi* downstream

N *-(c)sya'ħu(ʔ)*, M *-(k)šya:χu(ʔ)* on the face of a cliff

Man-made Objects

N -*a'cyin*, M -*k^wada* at the bow

N - '*aḥs*, M - '*aḥs* in a vessel; in the vagina; N [R] at the teeth

N -(w)*ak^win*, M -*aku(ʔ)* [L] at the head of the bed

N, M -(.*ʔ*)*aʔ* on a fabric-like surface; ... fabric, blanket, etc.

N -(w)*aqsi* [L] at the side (of canoe), at bank (of stream)

N, M -*a'sca* on the roof

N -*a'yiʔ* on a raised platform in the house; in the sky

N -*caqs* at the side of a vessel

N -(c)*ci:ʔas* [L] at the outside wall of the house

N -*cimu(ʔ)*-, M -(k)*sbici:ʔ* on the ceiling

N -*caqiʔ*, M -*caqi:ʔ* [L] at the rear end of the house

N, M -*cú* inside a container; in a bay

N -*cúʔ* in the center of the floor; initiated in Wolf Ritual

N -*i'cú* at the lid of a container, on level with the top of a container, (full) to the top; at the bow-string

N -(w)*iqs* on top of, on the lid of a vessel; box

N, M -*ista* ... person(s) in canoe as passengers, crew

N -*páʔ* at the handle

N -*qu:(ʔ)* [L] at a harpoon point

N -(c)*sa:maqλi* on the wall

N -(c)*saqλ*, M -(k)*saqλ* under one's clothing, under covers; in shelter

N -(c)*sʔatu.*, M -(k)*sʔatiʔi:* [L] at the door

N -(c)*sʔáʔ* at the top of a vessel; up to the top of a vessel

N -(c)*stú:qs* at the bow of a canoe

N -(c)suʔit̄ over the walls in the house

N -wi:ʔis. at the bow

Geometric (including spatial extension)

N -(w)aʔa [L] at the edge

N -(w)aʔaq alongside

N -.ʔaʔcu(ʔ) on, against a surface; on the palm, on the sole

N -aḥu(ʔ), M -axu(ʔ) in front

N, M -at̄ca at a vertical surface

N -aʔnu(ʔ), M -aʔdiʔ [L] all along, on a long thing; up the river; [R or R+L] along the leg, along
the shin

N, M -api [L] up in the air, erect, standing; best

N, M -ʔapu(ʔ)- [L] underneath, on the bottom

N, M -aʔi:- in the rear

N, M -ʔaqλ inside

N -ʔaʔsta, M -ʔaʔsta [L] amongst

N -aqstiʔ amongst, within

N, M -aʔs on a (horizontal) surface

N, M -caʔqs on the side

N -ciʔ on the edge; on the ... edge

N -caq̄cu, M -caq̄caw at the end

N, M -cqiʔ [L] on top, above, overhead

N -ḥin [LR+L] at the end

N -ḥnaʔk^w in between

- N *-(q)ħsa* [L], M *-ḡsa* [R] N along the edge, bank, M in the bushes; N [LRc+L], M [LR+L] at the brink, along the front edge
- N *-ħsnu(ʔ)*, M *-ḡsdiʔ* in between
- N *-ħwək^w* [R] in between, having all about one
- N *-(w)i:c* [L] along the edge; around the head
- M *-i:da* [R] on top
- N *- 'iħta*, M *- 'iħta* at the point, end, at the nose
- N *-(w)i:ħtu(ʔ)*, M *-(k^w)i:tiʔ* N at the front, at the edge, at the top; N, M [LR] on the shoulder
- N *- 'i:ħa* [L] below
- N *-(q)imʔ*, M *-(q)apʔ* over a rounded surface; in a bunch, group (with various extended senses)
- N *-(w)inksta*, M *-k^wi:du:ksta* [L] in between (M, more specifically, in a crevice or crack)
- N *-(w)ink^w* in the corner
- N *-kumqλi*, M *-kapiqλ* behind
- N *-misa* on top
- N *-ħa'qi*, M *-da'qi* up on a height
- N *-pi'(ʔ)* in the middle
- N, M *-pič* at the base of an upright object
- N, M *-piq-* at the summit
- N *-pit* at the edge
- N, M *-qi'* on top, on the head
- N *-qu:-*, M *-qawa-* at a point extending out
- N *-(c)sim* [L] at an opening
- N *-(c)ska'pu(ʔ)*, M *-(k)ska'pu(ʔ)* at a hole in the top end
- N *-(c)spi'* on top; prevailing (in combat)
- N *-(c)stū'*, M *-(k)stā'y* behind a screen, hidden, sheltered, protected

N *-(š)tqa*, M *-(k)tqi'* underneath

N *-win*, M *-wadi* in the middle

Miscellaneous restrictive suffixes

N *-at'ca* [R+L] at fault

N *-(k^w)a'st*, M *-akt* dried ...

N *-cu:* probably, preferably

N *-čhʔas* ... far into the woods

N, M *-k^wa't* absent, missing, lacking

N *-k^win* young, toy ...

N *-ma:t*, M *-ba't* [L] ... surviving

N *-maqšiλ*, M *-baqšiλ* constantly

N *-matak*, M *-batak* probably, supposedly, presumably

N *-mu't* left-over part of ...; defunct ...; former ...

N, M *-pa:cu* immediately, at once

N *-pa:t* [LR] half ...

N *-panač*, M *-padač* [L] moving about at random

N *-qa'th*, M *-qa'tx* pretendedly

N *-(q)h*, M *-(x)x* meanwhile, all the while

N *-sčim* along with others

N *-(y)u:k^wa't* absent

N *-wi'* first

Miscellaneous suffixes

Suffixes in this section are either residual suffixes that do not seem to belong to any of the above classes (e.g. N *-čip* peripheral benefactive suffix), or are not adequately attested to permit clear categorization (e.g. N *-ma:q-* ‘... growing at a place’).

N *-atća* arrive at the scene of action; go to meet a returning hunter, fisher (perf.)

M *-ati* [R] cause to (be) ...

N *-aya* [L] repeatedly, continuously ... -ing; (added to graduative) in the act of ... -ing, gradually ... -ing

M *-bi?i:* [L] ?

M *-čitq-* ‘... colored’

N *-čip* of, for him (benefactive)

N *-hi*, M *-xi* [R+L] durative formative

N *-i^wk* going along

N *-ma:q-* [L] ... growing at a place

N *-pať* [L] along with ...; in the same group with ...

N, M *-pať-* [R] ... on each side; several ... at once

N *-pa^wtu* to go ... far; left behind in ... condition

N *-pit* [usually R] ... many hand spans

N *-qčik^w* going along

N, M *-sa^wcu* in ... places, in ... place

N *-sči*, M *-šči* ... many on a side

N *-(c)skapuť*, M *-skapuť* rascal

N *-(c)sk^w*, M *-(k)sk* ... far apart

N *-(c)stať*, M *-(k)stať* reciprocally

N *-(c)sti:ħ* [L] ?

N *-su:λ*, M *-siwi'* ... dies (perf.)

M *-(k)šʔibiʔ* occurs with emotion and cognition terms applying to females

N *-wa't* ... a part

N *-yaʔ* ... many fathoms

Appendix B: Makah Vocabulary

The following Makah vocabulary is offered as a preliminary and highly selective survey of the Makah lexicon, pending completion of a full dictionary currently in the planning stages at the Makah Cultural and Research Center and the Makah Language Program.

Bound roots are given with the perfective suffix, if it is attested with the root, followed by one or more of the basic imperfective forms (i.e. continuative, durative, repetitive). Other aspects are occasionally given if they have specialized meanings with that root. Aspects that are known to occur with a root but that are not listed separately are noted in parentheses. Attested combining forms of free roots are listed first, followed by the free form. Perfective or (perfective) inceptive aspect forms of free roots are sometimes included as well, if attested.

Possible Nuuchahnulth cognates or partial cognates from Sapir & Swadesh (1939) are given in brackets following the aspect forms.

A selection of derivatives containing more or less productive lexical suffixes is included at the end of entries. Derivatives with special lexical suffixes or non-productive lexical suffixes are generally given their own entries.

Short final vowels, which are not present in surface form due to an apocope rule (§3.4.3), are indicated where evidence is sufficient to determine their existence and quality. Word-final labialization of velars and uvulars following a consonant or /a i/ is indicated where its existence is known. See §3.2.2 for word-final labialization following /u/.

Sources

Makah Dictionary: preliminary English-Makah word list (1990), manuscript on file at Makah

Cultural and Research Center

Elicitation notes by Matt Davidson (1996-98), Maria Pascua, Ann Renker, Cora Buttram

Jacobsen (1969a, 1971, 1996, 1997a)

ʔaʔ interj. what did you say? [N *ʔaʔ*]

ʔaʔ ʔaʔ interj. expression of sympathy

ʔaʔaʔba first [N *ʔama-*, *ʔeʔim*]

ʔaʔaʔbaʔi poor thing (said in sarcasm) [N *ʔaʔaʔhʔi*]

ʔaʔaʔsićadi ʔaʔaʔsićitqa singing a lullaby *ʔaʔaʔsićadeyak^w* lullaby *ʔaʔaʔsićitqaʔeʔis* baby
gift-giving potlatch

ʔaʔaʔtu ask (a question) [N *ʔaʔataʔ-*, *ʔaʔaʔtuʔ*] *ʔaʔaʔtoʔ* heard, learned by asking

ʔakwiʔ-q-, *ʔaʔaʔwiqyu* playing *ʔaʔaʔwiqyuyak^w* toy block *ʔakwiʔqoʔwas* gym *ʔakwiʔqpaʔ*
playtime *ʔaʔwiʔqik* playful

ʔaʔaʔyaʔib ear ring

ʔabeʔiqsu mother [N *ʔumʔac-*, *ʔumʔiʔqsu*]

ʔaʔbeyu tomorrow, yesterday

ʔackaT- *ʔackat-*, *ʔackatšiʔ* jump *ʔaʔaʔckata* jumping *ʔaʔckatuk* skipping along [N
keʔeʔckat- *kackeʔeʔt-*, *keʔeʔckata kackeʔeʔta*] *ʔackadaqatu* jump down *ʔackatcpa* jump
over *ʔackatwiʔta* jump off a boat or canoe

ʔač-, *ʔačšiʔ* wedge in, prop up, support *ʔačak^w* wedged up, blocked, supported [N *ʔač-*,
ʔačak] *ʔačakuba* pillow *ʔačskaʔpuba* wooden plug for whale hunting floats *ʔačtuʔp* (a)
block

ʔačaq (only with Content-Interrogative mood) who? [N *ʔača-*, *ʔačaq*]

ʔačaʔyaq-, *ʔačaʔya:p* gather wood [N *ʔač-ʔyaq-*, *ʔačʔya:p*] *ʔačaʔyaquʔ* place name (Sooes
Beach)

ʔačic (only with Content-Interrogative mood) whose?

ʔačpaʔba salmon eggs; kidney *ʔaʔaʔčpabaʔdiʔ* corn on the cob *ʔaʔačpabakuk* cheese
ʔačpabadakšiʔ spawning

ʔačuʔ blind

ʔada, *ʔadi-*, *ʔadu-* only; thus much; as much as; (with Content-Interrogative mood) how much?

how many? [N *ʔana*, *ʔani-*, *ʔanu-*] *ʔadisita* as soon as, immediately after (lit. doing only, nothing but) *ʔadiyu* later *ʔaduq^wapʔ* family; however many are in a group *ʔadu's* as many as are (residing) in the house

ʔa'da' thus far, at this distance; (with Content-Interrogative) how far?

ʔada'ba breast, milk; sucking milk [N *ʔin.-*, *ʔin-ma-q-*, *ʔinma*]

ʔada'k^w fire *ʔada'kšiλ* a fire starts [N *ʔink^{w-}*] *ʔada'kqi* fire on top *ʔada'k^wačis* stove

ʔada'k^wiʔ fire in the house, fire is burning in the house *ʔa'dak^wi'ʔ* making a fire

ʔa'di in fact, really [N *ʔa'ni*]

ʔadic however long a time; (with Content-Interrogative mood) how long a time? [N *ʔanic*]

ʔa'di'daxi instead, only, just

ʔadis however many, much; (with Content-Interrogative mood) how many? *ʔadisa'tx* popula-

tion, however many are residing sw^h *ʔadisqapʔ* however many round objects, much money

ʔadisqičx age; however many years

ʔa'dixx real, serious [N *ʔa'na-qh*] *ʔa'dixuʔ* (or *ʔa'dixxuʔ*?) serious face

ʔaduk^wit thus big in girth; (with Content-Interrogative) how big? [N *ʔanikit*]

ʔadux thus big; (with Content-Interrogative) how big? [N *ʔanaħ*]

ʔa'dwa interj. isn't that right, really?, seriously?

ʔaha'ha: chicken, rooster

ʔakt-, *ʔaktšiλ* gnaw *ʔakta'ʔa'kta* gnawing [N *ʔakt-*, *ʔakta'* *ʔaktak*]

ʔakwati:da bald eagle [N *čix^wat-* *čix^watin-q-*, *čix^watin*]

ʔaʔ-, *ʔaʔšiλ* (to) vomit *ʔaʔa'ʔa'ʔa* vomiting [N *ʔaʔ.-*, *ʔaʔa'*] *ʔaʔck^wi'* vomit (substance)

ʔaʔa'qeyaql nauseated

ʔaʔq^{w-}, *ʔaʔqšiλ* unpack [N *ʔaʔq^{w-}*, *ʔaʔq^wa'*]

ʔaλ-, *ʔaλa* two *ʔaλi·wiλ* become two [N *ʔaλ-*] *ʔaλacxi* have two wives *ʔaλak^widuk* two together, a couple *ʔaλasuba* eight *ʔaλčeyat* for two days; Tuesday *ʔaλi·tta* seal harpoon prongs *ʔaλista* two-man canoe, two persons in a canoe *ʔaλisteyak^w* two-man canoe *ʔaλi·q* forty *ʔaʔaλʔakλi* swallow (bird), any variety (Gunther 1936: 110)

ʔaλačib pectoral fin

ʔaλiʔi: afterbirth, placenta [N *ʔaλi·(q-)*]

ʔaλi·tq^wat black bear, *Euarctos americanus* (Gunther 1936: 114)

ʔaλpu^r seven [N *ʔaλpu*]

ʔaP- *ʔab-* locative root; right in the center; proper, correct, true [N *ʔam-*, *ʔap-*] *ʔaʔapwa^ryik* Wise Wren (story character) *ʔapxsa^rdił* right in the middle, in between *ʔapxta^{k^w}* midnight; divided in the middle *ʔabił* right in the middle indoors; middle of the floor *ʔapa^rčičuł* on the face of a point *ʔapa^rpiq* peak of activity, tip of mountain *ʔapa^rwadi* middle *ʔapqawa^r* point of rocky land *ʔaʔabadaqit* side of the body, midriff *ʔa^rbaqλas* in the middle on the ground or woods

ʔap-, *ʔapčičiλ* (perf. with impf. sense) carrying, packing on the shoulder [N *ʔap-*] *ʔaʔapi^rtił* packing something on the shoulder *ʔapi^rs* carrying something on shoulder

ʔapa^rʔas at the peak, in the very act of doing [N *ʔamaʔa^rs*]

ʔapa^rs nice, cute [N *ʔapa^rs-*] *ʔapa^ryida* considered cute by everyone

ʔapqu^rł bold

ʔapt-, *ʔaptšičiλ* hide *ʔapta^r* hidden *ʔa^rptuk* sneaking around (iter. play hide-and-see) [N *hupt-*, *hupta^r*] *ʔaptsi^rwi^rya^rp* murder sb in hiding

ʔapta^rba keep a secret [N *huptim*]

ʔaq wide, big, large [N *ʔaq*] *ʔaqaqsit* basket's top is flared out *ʔaqitqi* big belly, stomach, paunchy *ʔaqi^ryit* wide throat *ʔaqaqs* wide (canoe, container) *ʔaqa^s* wide (road, trail, etc.)

ʔaqičiλ cave [N *ʔa^rčičiλ*]

ʔaǰiːyu:k wide opening

ʔas-, *ʔasuk* flock of birds feeding in the ocean [N *ʔas-*, *ʔasuk*]

ʔasaːba high born child [N *ʔasma(q-)*]

ʔasčix parent and child together [N *ʔas-čih*] *ʔasčixbik* getter of mother and baby (whale)

ʔasčixpał January (or *ʔasčixpałʔ*)

ʔasicxwi:tuba niece [cf. N suffix *-hwiłim*]

ʔasic-, *ʔasiːqsu* nephew [N *ʔasic-*, *ʔasiːqsu*]

ʔašx-, *ʔašxšił* do sth sloppily, mess sth up *ʔašxak^w* messy, dirty, sloppy (rep. doing sth sloppily) [N *ʔašx-*, *ʔašxak*] *ʔašxk^waːyaːp* do a messy job

ʔatu but, nevertheless, still yet [N *ʔata*, *ʔatʔ*]

ʔatkseːʔi-q-, *ʔatkseːʔi:* wood [N *ʔinksyi*] *ʔatkseːʔiqoːwas* woodshed *ʔatkseːʔiqčiːłč* using wood as fuel, burning wood

ʔatq-, *ʔatqaːk^w* prized, coveted, highly valued [N *ʔatq-*, *ʔatqaːk*] *ʔatqaːba* valued, sacred

ʔatxiː-, *ʔatxiːyu:u:* night *ʔatxičił* evening, dusk [N *ʔath-*, *ʔathiː*]

ʔaıa thick [N *ʔaıa*] *ʔaʔaıa* nickel, 5 cents

ʔax^w-, *ʔaxšił* shake sth *ʔax^waː* *ʔaxaːʔax^wa* shaking sth

ʔaxuːsatx Ahousaht Tribe [N *ʔaːhuːs(-)*]

ʔaya- *ʔayi-* *ʔayiː-* *ʔayu-*, *ʔakiːq* many, much [N *ʔaya*] *ʔaːʔayaːpi* too many *ʔakyakiduk*

many together *ʔakyapitšił* many times *ʔakiːcitqak^w* variegated, many-colored object

ʔakiːcitqał variegated, many-colored fabric *ʔakiːks* bringing much, many *ʔakyuːs* many

in the room, in residence, *ʔaːyak^wiːł* making many, a lot

ʔayisaq-, *ʔayisaquk* mischievous, tricky [N *ʔayisaq-*, *ʔaːʔayisaqaxa*]

baː *baːbaː* drink (child's word) [N *maːh*]

ba-, *bačił* bite, close teeth *baː* have teeth closed, biting down (rep.) [N *ma-*, *maː*; *mač.-*]

babatkił bite sb on the hand *babaːdił* fish biting on the line *back^wiː* bite marks *bačak^w*

- clothes pin, pliers *bak^wi'duk* teeth, jaws clamped together *bapał* bitter *ba'yak^w* pincher (of a crab) *be?iλ* get sth by biting it *be?iłtadiλ* bite sb on the nose *be?i'ks* carrying sth by holding it in the teeth
- ba-*, *ba?as* house, dwelling [N *ma-*; *ma-*, *ma?as*; *maħti-q-*, *maħti'*] *babałdikł?it* big white guy *babałdi* white person, Caucasian *batba?as* houses *ba'ba'bałdiqaqlsił* white man's eyes *ba?asi'ł* making a house
- ba?ax^w* foxtail, horsetail *ba?a'wiks* eating horsetails
- ba?aḡ* two sisters [N *ma?aḡ*]
- ba?aḡsi:qsu* sister or female cousin of a female [N *ma?aḡ-syi-*, *ma?aḡsyi:qsu*]
- ba'ba'skad* playing with seashells, dolls [N *ma'k-it-q-*, *ma'ma'kin*]
- babaḡsi:da* leader (fish gear)
- babeyita* fishing for cod with live bait [N *mami't-* *mami't-a-q-*, *mami'ta*]
- babic-*, *ba'bi'qsu* older sibling or senior line cousin of a female [N *mamic-*, *ma'mi'qsu*]
- baba'bic'uba* big toe *baba'bicdukuba* thumb
- ba'blis* marbles (< Eng. 'marbles') *ba'ba'liškuk* radish
- babu-*, *babuyak^w* working [N *mamu-*, *mamu'k*] *babu?as* going to work *babubis* a bother, business, work *babudak^w* have a job *babuduḡ* looking for work *babuktqi* basket base *babu?uwił* office, workroom
- ba'cba'yux^wadi:* supernatural being (little man with spear spirit) [N *macmayux^w-at-q-*, *ma'cma'yux^win*]
- ba'ck^wa'd* fly (insect) [N *mack^w-aq-*, *ma'ck^win*]
- baččiba* commoner [N *masčim*]
- bačidiλ* enter a building *bači?i:yił* *bači?i:ł* *bač?ił* inside a building
- ba'čuk* going fast on water (e.g. boat, fish)
- bačas-*, *bačasi:da* flea [N *mačas-*, *mačasin*] *bačasał* have fleas (e.g. a dog)

ba'da-, *ba'duk^wiλ* try, try out, test [N *ma'na-*, *ma'nuk^wiλ*] *ba'dak^widukšiλ* engage in a test of strength *ba'dapaλ* practice, try out *ba'dapeyačiλ* taste, sample *ba'date'riλ* try to imitate, imitate

ba'dawi: smelt fish [N *mañu-q-*, *mañu'*] *ba'dawi'pał* smell like smelt *ba'dawi'idił* giving a feast of smelt

badida:p leave behind, abandon [N *-inyu*]

baduqšiλ put a spell on, cast a disease object into [N *minu-q-*, *minuqšiλ*]

badwa'atx sailer (< Eng. 'man of war')

bak^w-, *bak^wał* *bakšiλ* engage in a commercial transaction, esp. buy [N *mak^w-*, *ma'kuk*]

baka'beyił browsing *bak^wi'duk* trade, barter *bak^wi'ti'ri'* store keeper, clerk *baka'bi'ri's* peddling *bako'was* store *bakur'kt* a purchased item *bak^was* go to buy sth *ba'k^watak* want to buy sth for sb

ba'la ball (< Eng. 'ball') *ba'laksda'qał* playing ball

bała'cadit place name (Ozette site; said to mean 'place where there's always cold water')

bałat-, *bałatšiλ* (large object, ground) shake, tremble, move, sway *bałatuk* shaking, trembling [N *mał.-*, *mała'*]

bate'ri'ri': widowed brother- or sister-in-law [N *małti-q-*, *małta-*, *małti'*]

bał/l- *bał.-*, *bała'ł* cold [N *mał.-*, *małuk* *mała*] *baba'łcił* cold feet *baba'łduk* cold hands

baba'łur'k cold all through (e.g. in a house) *bała'beyił* cold house *bała'paxs* cold water

bałčidiλ enter a cold house *bate'riłta* cold nose; west wind *bate'riłti's* west wind *bałsit*

cold water *bałtapi* cold (weather, air), *ba'li'ks* eating sth cold

bał-, *bałšiλ* tie *bała'* tied (rep., iter.) [N *mał-*, *mała'*] *babałeyax* policeman *bała'bup* tie

sth up *bała'pł* barrel *bałił* prisoner in jail *bałis* sth tied down on the beach *bałi'ks* tow-

ing *bałi's* towing *bało'was* jail *bałska'puba* rope to attach floats for whale hunting

bałtu'p cordage *bałas* door locked *bałqapłeyukuba* dentalium headband

- ba'q-* be in shade, under cover away from rain or mist *ba'qcqi'ba* umbrella *ba'qč?es* under an awning
- baqi-*, *baqiq* (only with Content-Interrogative mood) what? [N *?aqi-*, *?aqaq*] *baq?iks* eating or drinking what? *baqičeyał* what day? *ba'qikća'p* sell what? *baqi'wa* say, mean what? *baq?iḡa* suffer from lack of, die from what? *ba'qi'daḡi* how?
- baqisḡ* (only in Content-Interrogative mood) why?
- baqλ-*, *baqλi?i:* left in the care of a baby-sitter [N *maqλi-q-*, *maqλi'*] *baqλa'dida'p* leave sth in sb's care
- baq^w-* tie, fasten [N *maq-*] *ba'ba'q^wi'da'kćuba* shoelace *babaq^wi'tuba* suspenders
baq^waqsuba bridle *baq^wi'tuba* harness
- ba'sa'* roasting over coals [N *ma's(-)*] *ba'sa'dak^w* roasting sth in ground under coals
- basi'wił* wail, mourn, howl
- basš*i*ł* swelling goes down [N *mas.-*, *masak*]
- ba?uk^wił* take sth to its destination, deliver [N *ma'wa'*]
- baḡ-*, *baḡš*i*ł* trap falls *baḡa'baḡš* trapping birds [N *maḡ-*, *maḡat-*] *baḡa'yak^w* trap *baḡa'as* a trap is sprung
- be'ḡic* sand dollar
- bi'bi'da:k* fierce, awesome
- bi'c-*, *bi'ci'* meat *bi'cḡsa'* wish for, crave meat *bi'bi'ćcu* canned meat
- bick^w-*, *bick^wa'* hesitant, reluctant to do
- bida'ł-*, *bida'ti* landmark for fishing [N *minał.-*, *mina'ti*] *bida'łat* map
- bi'dis* beans (< Eng. 'beans') *bi'disćak* cooking beans
- bi?id?a* place name (Baadah Village)
- bi'la'č* skate (fish); triangular

- bił/l-*, *biłak*^w level, even, flat [N *mił.-*, *miłak*] *bilis* flat, level beach *biłta's* flat on a horizontal surface *biłi'duk* evenly together (e.g. books stacked on a shelf, boards fitted together)
bi'łata'ya'pyak^w mat creaser *biłat'ł* smooth *bi'łsa'ta* flat forehead *bi'las* smooth place on the ground, smooth ground
- biłsi?i*: sealing spear [N *miłs.-*, *miłsyi*]
- bił-*, *biła'* raining *bi'łšił* start raining (iter.) [N *mił-*, *miła'*] *biłi'yeyak*^w rain coat
- biqat* sockeye salmon [N *miqat-*, *miqat'*]
- bis-*, *bisšił* smell, sniff *bisa'* smelling, sniffing [N *mis.-*, *misa'*] *bisi'pał* smell sth *bisi'bi?i's* sniffing along on the ground (e.g. a dog)
- bistat-*, *bistati*: bow (for arrows) [N *mus.-*, *mu'stati-q-*, *mu'stati*] *bistati'ł* making a bow
- bišati*: missionary, preacher
- bi'šarwiḡ* black cod [N *mi'šarwi'y-*, *mi'šarwi'h-q-*, *mi'šarwi'h*]
- bit-*, *biłšił* spin kelp, cedar bark into rope, dog hair into wool (rep.) [N *mit-*, *mita'*] *biti'bi'teki'* a spun rope
- bi'ta* dime (< Eng. 'bit')
- bitu'li*: place name (city of Victoria; < Eng. 'Victoria') [N *mitu'ni(q-)*]
- bu-* *buy-*, *bu'* four [N *mu-*, *muy-*, *mu'*] *bu'cxi* have four wives *bu'čeyat'ł* four days; Thursday
bukyi'q eighty *bu'q^wapł* four round objects; four dollars *bu'q^wičḡ* four years *bu'xta'k^w* four sackfuls
- bu-*, *bučił* burn *bu?ak^w* burning *bu?akšił* start burning [N *mu-*, *mu?ak* *muya'*] *bubutk^w* burned on the hand *buckiqaḡsyak^w* ashtray *bucki'* ashes, sth that is already burned *buk^wi't* sunburned body
- bubu'sḡa?ap* do sth any old way
- bučis-*, *bučisak^w* gunpowder [N *mučis-*, *mučisuk*]
- buk-*, *buk^wak^w* blue

- buk^waq-*, *buk^waqbis* gravel [N *muk^{w-}*, *muksyⁱ*]
- bukwač* Columbian black-tailed deer, *Odocoileus o. columbianus* (Gunther 1936: 117) (perf. act like Deer) [N *muwač*] *bubuwačcʔak^w* act like a deer
- bukux* having lips tightly closed [N *mak^wit-* *mak^witx-*, *mak^witak*]
- bu^wla^r* engine, machine, motor (< Eng. ‘motor’) *bubu^wlaʔuwił* machine room
- bu^wł-*, *bu^włšił* tide rising *bu^włuk* high tide [N *muł-* *mu^wł-*, *muła^r mułuk*]
- bułatqšiš* waves break over jetty
- buqu^wbuqš* steaming, boiling [N *muq-*, *muq^wa^r*]
- buquš* mute, dumb [N *muq^wi^ryutł*; *mu^wqmu^wq-ʔatu*]
- buqušbeyił* nightmare
- bursbu^s* cow, bull [N *musmus-*, *mu^wsmu^s*]
- bursceyu* someday
- bu^s- bu^sce-*, *bu^scu^r* someplace *bu^sceʔak^w* going sw
- bu^ssq-*, *bu^ssqšiš* draw bow, cock gun *bu^ssq^a* hold bow drawn *bu^ssqak^w* bow is drawn [N *mu^wsq-*, *mu^wsqak*]
- buš-*, *bušak^w* closed *buša^r* watertight, sealed *bušu^wʔaqłiłta* clogged-up nose *bušu^wʔasuba* door *bušu^wʔas* closed (door) *bušu^wʔa^r* fish trap
- but-*, *butšił* cut *butu^wbu^rta* cutting [N *mut-*, *muta^r*]
- buta^s* short, bobbed hair
- butq-*, *butqšiš* cut into small pieces; amputate *butqa^r* cutting *butqak^w* cut [N *mutq-*, *mutqak*]
- butqčw^r* fish cut in short pieces for cooking *butqk^wačyu^r* fish cut in short pieces for cooking
- bux-* *buxu^wbu^xš* boiling, place name (Bahobohosh Point) [N *mux^{w-}*] *buxck^wi^r* steam
- bux^wiču* ceremonial bird rattle
- bux^wi^r* clam or open weave basket, large basket
- cacakis* razor clams [N *cakis-*, *cakisi-q-*, *cakisa-q-*, *cakisi*]

- caq-*, *ca'qak*^w head down, on end, steep, vertical [N *caq-*, *caqak*]
caqi'c twenty [N *caqi'c*]
caqkat-, *caqkatšiλ* fall forward *ca'qkatuk* tumbling along
cask-, *ca'skšiλ* (bell) ring *caska'* ringing (rep.) *cacaskadi* continuous pealing of bell
caska'yak^w bell
cax^w- round *cax^wapł* round, spherical *ca'x^wa'dił* round (post, pencil)
cax^w-, *caxšiλ* roll, rotate, spin *ca'x^wak^w* rolling *caxca'xš* spinning, whirling *ca'waqatu* roll
down *caxta'qas* wagon *caxtqi'* steam boat, ship
caxł-, *caxłšiλ* rope loosens *caxłta'* have loose movement, low tension
caxt-, *caxtšiλ* fit loosens *caxta'* loosely put together, joined, packed [N *ciht-*, *cihtak*]
ca'caxta'pi too loose *caxa'taxs* packed loose in box, basket, sth loose in a container
ce'baḡ-, *ce'baḡšiλ* turn sour *ce'baḡak*^w sour
cikya'puxs hat [N *ciyap-*, *ciyap-uxsim-q-*, *ciyapuxsim*] *ciciyapuxskuk* black cap berries;
thimble; mushroom
cikyeš-, *cikyeyu* elderberries *cikyešbap* elderberry shrub
ciṭuq-, *ciṭuqšiλ* splash in shallow water *ci'ci'ṭuq^wa* splashing *ci'ci'ṭuqadi* sound like one has
water in one's shoes (e.g. squishing along)
ciq-, *ciqšiλ* speak *ci'qci'qa* speaking [N *ciq-*, *ciqa'*] *ciciqadi* scold *ciqi'ti?i'* spokesman, one
who speaks for you at a potlatch *ciqi'yak^w* eloquent *cici'qyu* argue, quarrel *ciqi'bataqsit*
mumble *ciqsi'tał* arguing back and forth *ciqik* expert at speaking, good speaker
ciqci'qš riding the waves, moving in the wake of a fast moving object
ci't-, *ci'tšiλ* dip food in oil *ci'ta'* *ci'tci'ta* dipping in oil
ciṭaq-, *ciṭaqšiλ* spatter, splash *ci'ci'taqa* spattering *ci'taquk* splashing along *ciṭaqatł* spotted
ciḡ- sour [N *ciḡ-*, *ciḡuk*] *ciḡapiḡ* crab apples *ciḡi'pał* taste sour, sour taste *ciḡapiḡbap* crab
apple tree

cuba' full (container) *cubi'wił* fill up, become full [N *cuma-*, *cuma'*] *cubi'yuqł* have a full mouth *cu'ba'dił* getting full *cu'cuba'pi* too full

cuc-, *cucšił* scratch *cu'ccuca* scratching [N *cuc-*, *cucšił*] *cucał* fine striped fabric

cu'cu'ci'da chipmunk, *Eutamias* sp. Gunther 1936: 116)

cup-, *cupšił* liquid flows out *cu'puk* liquid flowing [N *cup-*, *cupak*]

cus-, *cusšił* liquid flows *cusuk* liquid flowing *cu'yaqatu* waterfall

cusk-, *cuskił* animal (esp. dog) urinates *cuska'* urinating [N *cusk-*, *cuska'*]

cux-, *cu'wit* coho, silver salmon [N *cux^w-*, *cu'wit*] *cux^wakt* dried silver salmon *cu'witᵗsa* wish for, crave silver salmon

cᵗe' cᵗe' cᵗe' interj. Qweti's laugh

ca-, *ca'ᵗuk* river, creek, stream, flowing water, ocean current *ca'ᵗukšił* starting to flow [N *ca-*, *ca'ᵗak*] *ca'bałsuqł* intestinal noise *ca'ck^wi'* driftwood *ca'ca'ak^widuk* waves flow together causing whitecaps *ca'ca'qadibałsuqł* intestinal noise *ca'ca'qadiksuqł* growling stomach

ca'ksta's (to) drain *ca'ᵗa'dił* bunch of junk floating around *ca'ᵗa'diłtačakt* current

ca'bab sound, large body of water [N *ca'maqak*]

ca'ca'kčuba toe

ca'ca'kčukuba finger

ca'ca'ᵗxačiy place name (south fork of stream off Educkat)

ca'ca'ᵗuqš gaffing fish in stream or river *ca'ca'ᵗuqšpał* November

cada'č large bullhead, rock cod [N *čana'č*]

ca'k^wit antler; barbs made of antler on whaling harpoon

ca'k^waq-, *ca'k^waqbis* dust, dirt, mud [N *ca'k^wa-q-*, *ca'kumc*]

ca'pi' separate *ca'pi'ᵗta'k^w* apart

ca'pid red-breasted merganser, *Mergus serrator* (Gunther 1936: 107) [N *capatq-* *capitq-*, *ca'pin*]

ćapi's ćapi'ks carrying along holding against chest [N *ćap-* *ćam-*] *ćapi'si'yił* holding on lap

ćapi'yił hold on lap or knees

ćaptšił sting, smart (e.g. a wound) [N *ćapt-*, *ćapta'*]

ćaq-, *ćaq'a'bis* outer tree bark [N *ćaq-*, *ćaqmis*]

ćas-, *ćasapł* grey-haired [N *ćas-*, *ćasmis*]

ća'sq-, *ća'sqšił* knock *ćasqa'ća'sqa* knocking *ća'sqsa'ʔati'ʔi'* knock at the door

ćatšił narrowly avoid an accident, e.g. *ćatš'ʔałits hick^watšił* 'I almost tripped' [N *ćat-*, *ćata'*]

ća'ʔuł-, *ća'ʔułšił* surf gets rough *ća'ʔuła* waves, rough surf [N *ća-ʔuł-*, *ća'ʔuła*] *ća'ć'ʔoł'ći'ʔa'*

harlequin duck, *Histrionicus histrionicus pacificus* (Gunther 1936: 107, glossed literally as 'bird that lies in the surf')

ćawa'- ćawi'- ćawu'-, *ćakwa'ʔak^w* one [N *ćawa'-*, *ćawa'k*] *ća'ćawadak^w* each having one

ća'ća'waksił Sasquatch *ćakwa'ćiq* one long thin object, one o'clock *ćakwa'suba* nine

ćakwi'sta one rider in a vessel *ćakwa'ćeyał* one day; Monday *ćakwa'ćiduk* going swh

alone *ćakwa'qapł* all one family *ćakwa'siwi'* for one person to die *ćakwi'sacu* all in one

place *ćakwu's* home alone *ćakwu'ʔit* once *ćakwu'si'da'p* to leave sb home alone

ća'wu'bał one surviving

ćaweyu:s rainbow [N *ćawa-yu's*]

ća'wił king salmon, spring salmon (saltwater name)

ćax^w-, *ćaxšił* spear, hurl spear (rep.) [N *ćax^w-*, *ćax^wa'*] *ćaxa'yak^w* spear

ćax-, *ćaxšił* raise the eyebrows *ćaxu'ł* having a certain facial expression (looking pleasant)

ća'yiq ceremonial healing (group and songs) [N *ća'yiq*]

ća'yupsi: kelp, seaweed [N *ćayi-q-*, *ća'yimc*]

će'ʔidiwa goose neck barnacles (known locally as 'boots') [N *će'ʔit-q-* *će'ʔin-wa-q-*, *će'ʔinwa*]

- éi- éi'-, éičiλ* (liquid) go out of a vessel *éi'ʔuk* going out of a vessel (rep.) [N *éi-*, *éičiλ*]
éi'ʔatʔyak^w perfume *éi'ʔaʔatu* downpour of rain *éi'ʔiλ* scoop up water in a vessel *éi'ʔi'ks*
 drink from a cup *éi'ʔi'ksyak^w* cup
- éi-*, *éi'ʔas* vessel lying on side [N *éi-*, *éi'ʔas*] *éi'ʔa'pi* aslant, overbalanced
- éiba'x^wa'ʔa'* kelp cod, kelp sucker *éiba'x^wa'ʔa'pał* October
- éibičibi:* mouse, rat
- éibiławi:* squirrel, *Sciurus* sp. (Gunther 1936: 116) [N *éipta-q-* *éimła-q-* *éimłax^{w-}*, *éimłu'*]
éick-, *éickšiλ* throw, pound (rep.) [N *éick-*, *éicka'*] *éickciłabił* get hit on the head with rock
éicki'yak^w hammer *éicki'ʔił* pounding sth on the floor *éickiya'* throw sth to sb *éi'ckapi*
 bouncing
- éi'číkata* rocking a canoe
- éi'číxkata* pulse, heartbeat, throbbing
- éi'dax-*, *éi'daxšiλ* tide goes out *éi'daxuk* low tide *éi'daxłup* small black chiton(s)
- éidi'wis* minus, slack tide, low tide
- éi'ʔis-* braided [N *éi'ʔis-*, *éi'ʔisak* *éi'ʔisa*] *éi'ʔisapł* braided hair *éi'ʔisču* finished braiding
- éi'kčík* wagon [N *éikčík^w*]
- éikyup* intestines, guts [N *éis-*, *éiyup*] *éi'eyupkuk* macaroni, spaghetti
- éik^wi'xšiλ* reenact a bad dream to prevent it from coming true
- éik^wa'bac* neck [N *éiku-q-*, *éikumc*]
- éi'łku'ʔu:* dolphin [N *éi'łk-uł*]
- éi'łl-*, *éi'łak^w* soft, yielding earth, mud *éi'łi'čí'ł* muddy, soft mud [N *éi'łk-* *éi'łx-*, *éi'łkak*
éi'łxak] *éi'čí'las* muddy puddle *éi'łi'čí'łyak^w* swamp
- éiptapł* hair dripping wet [N *éipt-*, *éiptak*]
- éi'q-*, *éi'qa'* singing secret chant with a rattle [N *éi'q-*, *éi'qa'*]

ćis-, *ćisak^w* in a line, file, strung out; measured [N *ćis-*, *ćisak ćisa'*] *ćistu^p* rope, string *ći^ssapi*

telephone line *ći^{ći}γyas* black mountain berries *ćistqi^ppuba* buoy ropes for whale hunting

ći^ssapiχwa^tγyak^w telephone (object)

ćisa^r hate, loathe [N *ći^{ći}s-a*]

ćisa-q-, *ćisabac* sand *ći^{ći}saqis* sandy beach *ći^{ći}saqkuk* sugar *ćisaqis* sandbar

ćisa^tu^t fish gear

ći^sayaχtib cork line

ći^ša^γatχ Tsishaa Tribe [N *ći^š-a^γ*]

ćitk^{w-}, *ćitkšil* twist, turn over *ćitk^wak^w* twisted, lying on side [N *ćitk^{w-}* *ćink^{w-}*, *ćitk^wa^r* *ćink^wa^r*]

ći^{ći}ćitk^was watermelon *ćitk^wi^t* lying on one's side in the house *ćitk^wi^{beyi^t}* twisting on floor

while lying down *ćitk^waqsuba* the weave along the rim of a basket

ći^tq-, *ći^tqšil* squirt *ći^tqa^r* squirting [N *ći^tq-*, *ći^tqa^r*]

ćiχat-, *ćiχati:* arrow [N *ći^hat-*, *ći^hati:*] *ćiχatsac* quiver (for arrows)

ći^yukuba dipper, cup [N *ći^yukum(q-)*]

ću-, *ćuk^wi^λ* wash [N *ću-*, *ćuya^r*] *ćubeyi^t* washing the floor *ću^ćukswi^γi^γak^w* tooth brush

ću^ćutki^λ wash one's hands *ću^γeyukyak^w* shampoo *ćuksac* wash pan, tub *ćuqo^rwi^λsac*

sink, wash basin *ćuqo^rwi^λγak^w* sink, wash basin, wash cloth *ću^γu^rwas* laundromat

ću^rbaχ^wasatχ Sumas Tribe

ću^rbuq^was place name (Alberni) [N *ću^rma^γ-as*]

ćuca^r tippy, unstable canoe [N *ćuc-* *ćuck-*; *ćuca^r-*, *ćuca^r*; *ćuck-*, *ćuckak* *ćucka^r*]

ćuk^wic-, *ćuk^wa^pi:qsu* grandson

ćuk^wicχwi^tuba granddaughter

ćupkšil kissing sound made to babies [N *ć^čapk^{w-}*, *ć^čapkšil*]

ćuq-, *ćuqšil* hit with fist, punch *ćuqu^rću^rq^wa* punching [N *ćuq-*, *ćuq^wa^r*] *ćuqcitabi^λ* get

punched on the head *ćuqsw^tat^t* boxing

ćus-, *ćusšił* dig *ćusa'* digging (rep.) [N *ćus-*, *ćusa'*] *ćućuryas* ditch *ćusuryak^w* shovel *ćuyis*

hole dug in the beach *ćursa'dił* ditch *ćuryas* Sooes village *ćuryassaqsup* woman of Sooes
ćustk-, *ćustku'* new [N *ćuš.-*, *ćušuk*] *ćustku'da'k^w* have sth new *ćustw'k^wa?ap* buy a new one

ćux-, *ćuxšił* stab [N *ćux^{w-}*, *ćux^wa'*] *ćux^wa'dił* halibut backbone

ćaba- *ćaba'-* right, proper, as desired; arranged; on the right-hand side [N *ćama-* *ćim.-*]

ćabakš?ibił sensible, wisdom (said of a woman) *ćabaqł* sensible, wisdom, good at, skilled
 at (said of a man) *ćaba'siła* do the right thing *ćaba'ca's* right hand or arm *ćaba'cpa'* lie on
 right side, right side *ćabi'ya'p* proper person *ćabi'y?ak^w* capable, intelligent person, good
 (quality), proper *ćabi'yit* clear throat

ćaba'ci:quł sober, sane [N *ćami'q-uł*]

ćabaquł sober, serious, calm [N *ćami'q-uł*]

ćabas sweet (rep. smacking lips in anticipation of good food) [N *ćamas*] *ćabasbap* pine tree,
 white fir tree *ćabaspał* sweet smell or taste, taste sweet, smell good *ća'bassit* soda pop

ćaćaba'yaqł cake, candy, pastries

ća'baťa chief, wealthy, rich [N *ća'maťa*]

ćabe'rił bed [N *ćim?ił*]

ćabixt very good

ća'burk cedar bark splits easily

ćabuł be able to, can

ćabu'piqak^w untangled rope [N *ća'maqsa-q-*, *ća'maqsak*]

ćaćabaxi correct, right [N *ćaćimħi*] *ćaćabaxi'yik* always fixing sth

ća'ća'bučqa talking dirty, slang, talking about sex

ća'di' place name (Tatoosh Island)

ćapx^{w-}, *ćakup* male, husband [N *ćapx^{w-}*, *ćakup*] *ćapxa'da'k^w* married woman

čape'ʔi-q-, *čape'ʔi:* heart *čačapiqč'a'ʔap* heart pain *čape'ʔi'č'a'ʔap* heart pain *čape'ʔiqč'a'ʔap*
sore heart

čapxtuʔ fur seal harpoon (barbs of elk antler)

čapxuʔ fast (person)

čaq-, *čaqs̄iʔ* shove, push *čaq'a'* shoving (rep.) [N *čaq-*, *čaq'a'*] *čaqcuk* require kneeding
čaqiya' push sth over to sb

čašx^w-, *čašx̄siʔ* act swiftly *čašx^wak^w* walking quickly [N *čašx^w-*, *čašx^wak*]

č'a'wiq-, *č'a'wiqak^w* sad, miserable, lonely [N *č'a'wiq-*, *č'a'wiqak*] *č'a'wiqsuq̄ʔ* lonely, sad (said
of a woman) *č'a'wiqut̄* sad face *č'a'wiq̄aq̄ʔ* lonely, sad (said of a man)

čaxčaxa dripping

č'a'yax^w picking berries [N *č'a'yax^w-*, *č'a'yax*]

č'a'ybo' clam chowder

č'a'yde'tx Chinese

č'i' pull steadily *č'i'λč'i'ya* pulling hand over hand [N *č'i'*] *č'i'č'i'ksup'laʔ* tug of war *č'i'ʔaqatu*
pull sth down *č'i'ʔiʔ* pull sth to oneself *č'i'ʔi'ks* trawling *č'i'č'i'ʔayiʔ* pulling sth along with
force

č'ibiqaba:t̄x Chemicum Tribe

č'ibu-q-, *č'ibu'da* halibut hook *č'ič'ibuqš* halibut fishing [N *č'imut-q-*, *č'imun-q-*, *č'imun*]
č'ibuq̄xwaʔ using a halibut hook *č'ič'ibuq̄spuʔ* bow-legged *č'i'č'ibuq̄sta* bow-legged

č'ič-, *č'ič'i'ʔi:* tooth, teeth [N *č'ič-*, *č'ič'ič'i-q-*, *č'ič'ič'i*] *č'ič'ič'č'a'ʔap* tooth ache

č'ič'kawas dog salmon, chum salmon [N *hinkw'ʔas*]

č'idi'q- cut cross ways *č'idi'qk^wač'iʔ* cut up meat in a certain way *č'idi'qakt* dried seal, whale, or
game meat

č'i'du'psiqsu sister-in-law m. cos./brother-in-law [N *č'i'ńic-*, *č'i'ńupsiqsu*]

č'ik^waḡ-, *č'ik^waḡsiʔ* stretch *č'ik^waḡak^w* stretched (rep.)

- čilax-*, *čilaxšiļ* sag, become loose fitting *čilaxak^w* sagging (rep.) *čilaxapł* oval, football
- čit-*, *čitšiļ* rip, tear *čita'* ripping *čitak^w* ripped
- či'qλisatx* Chickleset Tribe [N *či'qλis?ath*]
- čišk-*, *čiškšiļ* jerk the head, beckon with the head (rep.) [N *čisk-*, *čiska'*]
- čit-*, *čitsiļ* saw *či'tči'ta* sawing [N *čit-*, *čita'*] *čiti'yak^w* saw (tool)
- čix^w-*, *čixšiļ* chunk, piece, part falls out *čixuk* easily breakable [N *čix^w-* *čix^w-*, *čix^wak* *čix^wa'*]
- ču-* bent over *ču?uk* sneaking up on [N *ču-*, *ču?ak* *čuya'*] *ču?a'pi* crouching *ču?as* (dog)
cowering on the ground
- ču'da* vagina, vulva [N *ču'na(q-)*]
- čuk^wi?i:* eel
- čuša'* leaking
- ču?ułtaba* *ču?iłtaba* nose
- čux-*, *čuxšiļ* tickle *čuxčux^wa* tickling [N *čux-*, *čux^wa'*]
- ča-*, *ča?ak^w* water [N *ča-*, *ča?ak*] *ča'čitqšiš* choke (on water) *ča'ča'qabaqλsił* cry, teary-eyed
ča'ča'qadikusqλ for one's stomach to rumble *čaksac* water container *ča^wistās* spring water
ča'ksabiļ runny nose *ča'kwašisł* drool *ča'qλa'* blister *ča?a'qatu* waterfall *ča?as* temporary
pond, puddle *ča'ča'ksitās* slough in tide flats *ča'ksit* watery *če?i'ks* drink water *če?iļ* get
water *če?i'yuqλ* water in the mouth *če?i'ksyak^w* water drinking cup *če?i'xa* thirsty
- ča'da-q-*, *ča'di'* not see *ča'daqšiš* gone out of sight [N *ča'ni-q-*, *ča'ni'*] *ča'daqpiq* overlook
- čał-*, *čałšiļ* split lengthwise [N *čał-*, *čała'*]
- čała'ča* fingernail [N *čałča(q-)*]
- ča'p-*, *ča'puk* manned canoe, canoe party [N *ča'm-*, *ča'puk*]
- ča'p-*, *ča'pšiļ* skim from the surface of a liquid *ča'pa'ča'pa* skimming [N *ča'p-*] *ča'psitiļ* skim
oil from the surface of a liquid

čab-, čapac canoe [N čam-, čapac] čarbeyuq go by canoe, riding in a canoe čačapacakli

peas čapacasxuba breast bone čapaciʔ make a canoe

čapsaʔa: a certain moon phase

čačat-q-, čačaʔadu: crow čačačatqkuk blackbird čačatqbab wild honeysuckle, crow berries

častubac Pacific mink, *Mustela vison energumenos*; this word was not recognized by HW, but is listed by Gunther (1936: 114) and appears to be a perfect cognate to N častu-q-, častimc ‘mink’

čat-, čatšiλ paint, draw, write, color čatak^w broad stripe [N čat-, čatak] čatačis blackboard,

desk čatačeyak^w blackboard čataʔwas post office čataʔ letter, written document

čatayak^w chalk, crayon, pencil čataʔqeyaλ for mail to arrive čataʔsičap send a letter

čatawadi marked bone in slahel (bone game) čatčuʔ design (drawn or made) čatčuʔ crest

čatiʔs note taking čatiʔt streaked on the body čatiʔtiʔi secretary čatiʔi family crest, design

čattup color, paint, dye čatuwiʔ artroom čačaqλču photo, picture čačaqλčuk^{wiʔ} printing

film for pictures čačaqλčuyak^w picture frame čačaqλčiʔdaʔpyak^w camera čačatu (to) di-

vorce sb čatik artist, author, writer čartapaʔs signal flag, banner čartaʔdiλ apply paint or

make-up

čatq-, čatqšiλ spoon up čatqačartqa spooning čatqayak^w spoon čatqayakbab galvanized

metal (spoon material)

čaʔwq^{wiʔ} dizzy, drunk

čaʔuš raw, uncooked, green fruit; brass [N čaʔuš-, čaʔuš] čačʔuškuk bronze čačʔušwadi

musket čaʔušapʔ brass kettle čaʔuwiks eat sth raw

čawickéy purple

čaḡ-, čaḡšiλ urinate (said of male) čaḡayak^w penis

či-, čičiλ cut sth soft, e.g. meat, fish čikyaʔ cutting (rep.) [N či-, čiyaʔ] čičičitab peach, plum,

nectarine čikstaʔas crevice čixtaʔk^w (already been) cut apart čiʔyak^w knife čiʔaʔ cut on a

- person *č'kciyap* castrate, geld (an animal) *č'kidu'ksta's* canyon *č'yaksaʔa'* captain's hat
čiči'wadi humpback whale *čixti'yup* behead *č'ksaʔa'* bangs, haircut
- čiba't* canoe mat
- čiči'buʔu:* scapegoat [N *čičmu-q^w*-, *čičmu'*]
- č'ida'k^w*-, *č'ida'kšiλ* pay a sympathy call *č'ida'k^wiʔ* funeral, wake
- čidi'paʔ* hair wrestling [N *čin.*-, *čina'*]
- čiʔic* butter clam
- čikyaḡ*-, *čikyaḡšiλ* fry food *čikyaḡbaʔasyak^w* frying pan *čikyaḡč'u* fried food
- čit-*, *čitšiλ* weave together *čiti'č'ita* weaving [N *čit.*-, *čita'*] *čitqi'ba* basket base weave
- čitseyap* screech owl, *Otus asio kennicotti* (Gunther 1936: 109) [N *ki'ʔcu'p*]
- čitšiλ* escape, run away [N *čit-* *čit^w*-, *čitšiλ*]
- čip-*, *čipšiλ* plug, jam in *čipak^w* plugged [N *čim-*] *čibaḡs* jammed into a container
- čipska'puba* plug, stopper
- čipsi'di:* sudden downpour
- čipitab* fish scale [N *čipaʔ-*, *čipaʔmis*]
- čiš-*, *čiššiλ* sweep [N *čis.*-, *či'sa'* *čisak*] *čiši'tiʔi'* janitor *čiši'beyiʔyak^w* broom
- čiši'yuʔu:* belongings of the dead (items thrown away)
- čišk-*, *čiškšiλ* shave, scrape [N *čisk-*, *čiška'*] *čiškaqsiλ* to shave (oneself) *čiška'ʔa'ya'p*
 scrape sth off
- čiškali:* western belted kingfisher, *Megaceryle alcyon caurina* (Gunther 1936: 110)
- čit-*, *čitšiλ* turn sideways, on edge *čitak^w* sideways, on edge [N *čit-*, *čitak čita'*] *čitačakt* gill
 net set in ocean *čita'buba* horizontal longhouse planks *čitis* gill net set in river
- čit-*, *čita'* dig clams (rep.) [N *čit-*, *čita'*] *čiti'yak^w* clam digging stick
- čitap-*, *čitapuk* whale *čiči'ʔapa'taxyak^w* whaling canoe *či'ʔapbik* getter of whales
- čitas-*, *čiteyaḡa* (a person) feeling cold *čitassišλ* feeling cold [N *čitas-*, *čitassišλ*; *či'čin-i'k*]

čiT-, *čiti'* soft, easily torn *čiti'wiλ* soften [N *čitkis(-ʔis)*, *čitʔis*] *čičidis* soft beach

čiti'bit hemlock bark dye [N *čit-mita*]

čitwʔ war club [N *čitwq^w-*, *čitwʔ*]

čix-, *čixuk* shaking, trembling, having chills (rep.)

čix^w-, *čix^wa'* ghost, scary thing; dead person; worm, bug; penis (slang) [N *čiḥ-*, *čiḥa'*]

čixi'da'k^w one caring for the dead *čiči'wapwʔ* dream about bad things or about dead people

čixpaʔ six

čixsiλ *čix^watsiλ* get startled, frightened [N *čiḥat-*, *čiḥata*]

ču-, *čupaʔ* stink, have an odor [N *ču-*, *čupaʔ*] *čubap* denim jeans, overalls *čučw'kciʔ* stinky feet

čučuwaḥsiʔ gray or timber wolf, *Canis gigas* (Gunther 1936: 115) *čuʔis* Stinking Beach

(place name)

čuč- twist, spin into string [N *čuč-*, *čuča'*] *čučqi'* hair in a bun *čuču'ba* mountain goat, *Oream-*

nos americanus americanus (Gunther 1936: 117)

čučq-, *čučqak^w* bunched up, wadded [N *čučq-*, *čučqak*]

čuksiʔi: long, green worm-like creature living on the beach

čuks-, *čuksiʔi:* freckle, mole *čuksuʔ* freckles on face

ču'ku'dabi: song sparrow, *Melospiza melodia* (Gunther 1936: 113) [N *čukna(q-)*]

čuš-, *čuša'* suspicious, aware (of sth) *ču'šuk* careful [N *čuš-*, *čuša'*] *ču'štis* careful, cautious,

use care

daʔa' hear, perceive, sense *deʔi'wiλ* incept. [N *naʔa'*] *daʔa'paʔ* smell, recognize by smell

daʔa'íʔeʔ pretend to pay attention *daʔa'ksuqλ* sense, feeling inside (said of a woman)

daʔa'qλ sense, feeling inside (said of a man)

daʔa'ʔux listen [N *naʔa'taḥ*]

daba- only [N *nama-*]

daba- tired *dabakšʔibiʔ* tired (said of a woman) *dabaqλ* tired (said of a man)

dabaʔ have a party, potlatch

dač-, *dačšiλ* look; look in on, check on *daʔcsa daʔca daʔsa* see [N *nač-*, *naʔcsa*; *naš-*, *našiλ*]

dačasiʔiʔ looking down into the water *dačaʔwiʔtyak^w* mirror *dačaʔxuʔ* looking at front of sb's stomach *dačaʔyiλ* go in for a quick visit, pop in for a visit *dačaʔaʔciʔ* looking up at the sky *dačaʔbaʔid* looking around in the ocean *dačaʔbeyaʔaʔ* looking around on the rocky shore *dačaʔčakt* looking at the ocean *dačaʔpeyiʔ* looking at sb's back *dačaʔcuʔ* looking in a bag *dačcpaʔ* looking over a wall or partition *dačis* looking down on the beach *dačiʔduk* two people looking at each other *dačk^wada* looking at bow of canoe *dačkapiqλ* look back where one was *dačksaʔwiʔ* realize sth *dačqiʔ* looking at top of sb's head *dačsaʔwiʔ* clear (as glass, an opening), see through opening *dačuʔ* looking at sb's face *dačʔoʔ* see, discover, find *dačakλi* looking at sb's bottom *dačaʔqλ* looking at, inside a solid enclosure (eg. hold, oven) *dačaʔqatu* looking down *dačas* looking down on the ground *dačatu* brief visit *dadaʔčuʔk* looking around *dadaʔčaʔyiʔ* watch sb leaving or passing by *dadaʔčiʔ* looking at sb's feet *dadaʔčdab* watchman, lookout, Peeping Tom *dadaʔčduk* looking at sb's hand(s) *dadaʔčiduk^waqλsiʔ* cross-eyed *dadaʔčaʔqatuksiʔ* look down with eyes *dačapi* looking up *dačtis* copying sth from a pattern or model by looking *dačaʔdiʔ* looking along a straight, long object (e.g. river, road) *dačpaʔ* looking across sth with sides (e.g. river, road)

dačkatšiλ catch a glimpse of

dadaʔya:k tattle

dadeʔiqsu grandparent [N *nani-* *nanic-*, *naniʔqsu*]

dahuʔbšatx Snohomish Tribe

dakaʔ sun, moon [N *naʔs*]

dakwʔas lounging around, sitting around chatting [N *naw-aʔs-*]

- daʔt-*, *daʔšiʔ* watch, observe *dadaʔbaʔaʔ* to read *dadaʔbaʔaʔyakuwiʔ* library *daʔpadač* sight-seeing *dadaʔbaʔaʔyak^w* book *daʔdaʔdabeyak^w* watchman *daʔaʔoʔwas* theater *daʔaʔyak^w* article for display, display
- daʔaʔwi* strange, awesome, unusual sight [N *naʔt-aʔwi(-q-)*]
- daʔpak^w* coiled [N *naʔp-*, *naʔpak naʔpaʔ*]
- daʔpitaq* entirely, all at one time [N *naʔpin-aq-*, *naʔpinaqak*]
- daš-*, *dašuk* strong [N *naš.- naš-uk-*, *našuk*] *dadašduk* strong hands *dadeyaqʔ* strong person, stronger, very strong *dašaʔ* strong cloth (i.e. denim) *dašaʔpaʔ* strong, bitter tasting *dašaʔcuʔ* packed in tight *dašqapʔ* packed tight
- daʔat* bump, nudge, touch, glance off, bounce off
- daʔuʔ-*, *daʔuʔk* accompany, go with [N *naʔuʔ- naʔuʔ-k-*, *naʔuʔk*] *daʔuʔqs* ride along with *daʔuk^wa:čiʔ* help *daʔuk^wa:čiʔyak^w* nurse
- daʔaʔiač* mallard duck, *Anas platyrhynchos platyrhynchos* (Gunther 1936: 106) [N *naʔiač-*, *naʔiač*] *dadaʔiačkuk* teal duck?
- dayačʔuʔ* echo [N *nayiq- nayiʔiʔq-*, *nayiʔiʔ*]
- deʔdiʔsʔ^wa:* robin
- deʔiʔyuʔ* share food with
- diʔatu* sink [N *ni-*; *niʔtk-ʔatu*]
- diʔca(-q-)* short *diʔciʔwiʔ* get short [N *niʔc*, *niʔc-ʔis*] *diʔcaqapʔ* short *diʔdiʔcaqsta* short legs *diʔcaʔuʔp* bottom piece of two pronged fur seal harpoon (yew)
- diʔ* penis (child's word)
- diʔq-*, *diʔqšiʔ* grunt *diʔqaʔ* grunting [N *niʔq-*, *niʔqaʔ*; *ʔinq-*, *ʔinqaʔ*]
- diʔ-* lying on back *diʔiʔdiʔa* rowing [N *niʔ-*, *niʔšiʔ*] *diʔiʔ* lying on back on floor or inside *diʔiʔyak^w* oar *diʔas* lying on back on ground *diʔaʔyiʔ* fall backwards into the house (e.g.

- when someone opens the front door one is leaning on) *diłas'ca* lying on one's back on the roof
- diłak* fight [N *niłk^waq-*, *niłak*]
- diłkat-*, *diłkatšił* move one's head back, bend, fall backward (rep.)
- dīq-*, *dīqšił* sew *dīqa' dīqi'di'qa* sewing [N *ni-*, *niya'*; *niq-*, *niqa'*] *dīqi'ba* net twine, thread
dīqi'yak^w sewing machine *dīqsac* sewing basket
- dis-*, *disak^w* have a full stomach, satiated *disi'wił* get full [N *nīs-*, *nisa'k*] *didisča'ʔap* lazy from being full, in pain from over-eating *disi'čitqšił* belch
- diti'da(-q-)* Nitinaht [N *nitina-q-*, *ni'ti'naʔa*] *diti'daʔa'tx* Nitinaht Tribe
- ditup dituk* beam [N *nit-*, *nitup*]
- dix-*, *dixak^w* tangled, bunched [N *nix-*, *nixak*] *dixapł* tangled, bunched hair, wrapped around
didi'xsabowas grapes
- dix-*, *dixi'čuʔu:* overturned stump with tangled roots [N *niḥ-*, *niḥuk*] *dixi'ʔas* uprooted tree
- di'ya'* place name (Neah Bay) [N *ni'ya'*] *di'yaʔaqsup* woman of Neah Bay
- du'ba* all, every, both *du'bačiduk du'bakiduk* all together *du'ba'pił* put all (of sth) on one's back *du'beyučeyał* every day *du'durbaq* go together with sb *du'beyu* always *du'bʔiksčił* eat it all *du'bisartx* all tribes, nationalities, everybody *du'durbaskabił* both arms
- dučiʔi:* mountain *duči'wił* become a mountain [N *nuč-i'q-* *nuč-*, *nuči'*]
- dučak^w* egg *dudučakkuk* light bulb
- du'du'cis* making fun of, taunt [N *nu'-ti'ʔił-* *nu'ti'ʔił-aq-*, *nu'ti'ʔiła;* *nu'-ḥi'ʔ*]
- dudučači:* glossed in the Makah Dictionary, preliminary English-Makah wordlist (p. C-4) as 'chickadee'; perhaps refers to the same bird as Gunther's (1936: 112) *dūdūtciłtkcadx* Oregon towhee, *Pipilo maculatus oregonus*
- du'k-* *du-*, *duku'* song *dudu'k* singing [N *nu-*, *nunu'k*] *du'ʔił* start a song *duku'ču'* phonograph, radio *du'k^waqł* phonograph, radio *du'ʔa'qa* a large group singing

- du'du'quq^wa* wishing for someone else's food
- duku'yac* pitch-wood [N *nuk^wic-*, *nuk^wi'c*]
- du'pi-*, *du'p?ek^w* all over, scattered about [N *nu'pi-*, *nu'pi?ak*] *du'picaqabiλ* go around every-
where, all over *du'picaχtačiλ* go around everywhere
- du'pica:dax* every kind, variety *du'pica'daxa?a'p* buy all kinds of things
- dupu'yaq* harpoon shaft
- dupxta'* near fatal injury, fatal blow, die instantly on be struck [N *napxta'(-q-)*]
- dupχta'* very sleepy, can't keep eyes open
- duq-*, *duq^wi?i:* abscess, boil, suppurating tumor [N *nuq-*, *nuq^wi'*] *dudu'qsit* sty in eye
- duqšiλ* swallow food or drink [N *nu?aq-*, *nu?aqšiλ*]
- du'siq* small degree, slightly better *du'siqi'wiλ* incept. [N *nu'saq-a* *nu'saqak*]
- duš-*, *duššiλ* distribute property in a potlatch *duša'* distributing [N *nuš.-*, *nuša'*]
- du'stid* crybaby, delicate (story character)
- dut-*, *dutu'dutš* rolling, rotating [N *nut-*, *nut'a'*, etc.] *dutapł* hoop, round disk, wheel
- duwa'du:* we, us [N *ni'h-*, *ni'wa*]
- du'wiqsu* father [N *nuwi(c)-*, *nuwi'qsu*]
- du'xk^wačiλ* become sun-cracked [N *nux^w-*, *nux^wa'*]
- du'χlu'bi:?atχ* Lummi Tribe
- duχ^wac* pocket
- ?ed* but, emphatic particle
- ?e'?e'* interj. my! my!, wow! *?e'?e'kł?it* terrific
- ?e'?e'?išiya* hurry, do quickly [N *?e'?i'š-*, *?e'?e'?iša*]
- ?e'?i'ktaqš* magical, perform a miracle [N *?e'?i'k-taq-*, *?e'?i'ktaqš*]
- ?e'?is* Indian dice game
- ?e'pilis* apple (< Eng. 'apples') [N *?epit-q-*, *?epinis*] *?e'pilisbap* apple tree

haʔaʔ bass fishing gear, bass fishing [N *haʔaʔ*] *haʔaʔbap* devil's club

habuqadi: baby fur seal

hacis- *hacs-* this way, this side [N *hačis*] *hacispa* this side, on this side *hacseʔiya* come here,
this way

ha'ca(-q-) long, tall *ha'ciwił* get long, tall [N *ha'ca(q-)*] *ha'ha'caqsta* long legs *ha'caqapł*
oblong tall container, tall basket, tall person *ha'caquł* having a long snout

ha'caʔu:p top piece of two piece fur seal harpoon (longer piece)

hacíc-, *hacícšičił* run *ha'ha'cica* running *hacícpiq* run past *hacícici'ł* ran over, trampled
ha'ha'cicsupíaʔ foot, horse race

ha'cił near, close by

hačuk^wit large end of a whale's intestines *hahačuk^witkuk* cannon

hadaʔ interj. say!, hey, you! [N *ha'ni hani haneʔ*]

hadeʔiqsu aunt, uncle

hadid pink or humpback salmon [N *hinkuʔas*]

hat-q-, *haʔdiq* common Canada goose, *Branta canadensis canadensis* (Gunther 1936: 106)
hahatqkuk domestic goose

hadita-q-, *haditap* strawberries [N *kałkint-* *kałkintapimł-*, *kałkintapi'ħ*] *hahaditaqkuk*
bracken fern, birthmark

ha'h interj. what did you say?

haha'čłwi:s northwest, northwest wind [N *hačł-*, *hačłi'ł*]

hahaqčuba *hahaqčiba* hardly, barely, slightly [N *hahaqčim*]

ha'ha'yacaqa stuttering

haku- hunger, famine [N *haku-* *hak^wi-*] *hakʔuxa* hungry

hakwa'diš sea lion, *Eumetopia jubata* (Gunther 1936: 115)

hakya'qawił forget [N *hayičquł*]

- hak^wit, hak^{wi}λ* borrow [N *ʔak^wat-, ʔakut-, ʔa^kuλ*] *hak^witiya* lend, loan
- ha^llaʔa* bone game (a gambling game) [N *haⁿnaʔa(-q-)*]
- haʔa⁻, haʔa^čiλ* pay [N *haʔa⁻(-q-), haʔa^čiλ*] *haʔa^ba* payment
- haʔi^t* invite, ask to accompany one in doing sth [N *haʔi^t*]
- ha^tʔa^d* interj. this foolish thing, oh you!
- hama* feces *ha^λha^meya* diarrhea [N *hama^s-*] *hama^ʔo^was* toilet
- ha^mi^ča* a kind of dance [N *ha^mma^ča-q-, ha^mma^ča*] *ha^mi^čeyak^w* dance gear
- ha^ps* hops (< Eng. ‘hops’) [N *he^ps(-)*] *ha^psi^t* picking hops
- hap-, hapsa^yup* hair, fur [N *hap-, hap^x-, haps^yup*] *hahapa^t* furry *hahapaskabi^t* hairy arms
- hahapswi^ʔi* hairbrush, hair in teeth *haha^psuba* eyelash *hapaqsi^t* mustache, has whiskers
- hapi^t* having hair on the body *hapa^čiba* pubic hair *hapa^ʔaqsi^t* goat (hair under the chin)
- hapaqsuba* beard, mustache, whiskers
- ha^qa^t* willing [N *ha^ʔa^t*]
- ha^šha^ša* breathing [N *haš-, haša^ʔ*]
- hašit* knowing about, having news of [N *hašit*] *hašit^ča^ʔap* interest *ha^ši^{tu}x* curious
- hati^ʔ* soaking in water *hati^čki^ʔ* has been soaked
- hatu^badi*: swan, little brown crane, *Grus canadensis canadensis* (Gunther 1936: 108)
- [N *hatu-q-, hatu^min-q-, hatu^min*]
- ha^adi^ʔ* bathe [N *ha^tin-q-, hati^s*] *ha^adiksac* bathtub *ha^adi^ʔuwi^t* bath room
- hatu⁻, ha^tʔuk* wading *hatubeyis* wading around on beach, in the surf
- ha^wa-, ha^ʔuk* eating *ha^ʔukš*i*λ* eat, start eating *ha^ʔuba* food [N *hawa-, ha^ʔuk; ha^ʔum*]
- haha^ʔuba^ta^x* going to get food, fishing *haha^wwak^čuba* witness to a potlatch invitation
- ha^ʔubadak^w* have food *ha^ʔubi^ʔi^tap* bring food as a gift *ha^ʔubi^ʔks* bringing food
- ha^ʔubasa^xta^k* food, staples *ha^ʔukš*i*λ*č*kida* eat lightly, have a light lunch *ha^waca^q* busy

eating *ha'waćis* dining table, table *ha'wa?uwił* dining room *ha'wa?u'was* cafe, restaurant,
dining room *ha'wačyur* have already eaten *ha'wa'qa* a large group eating
ha'wićaqš telling a story
haḡkatšil fall forward, bow
haḡ^w- lie on one's front *hawil* lying facedown on floor *haḡ^wa's* lying face down on a horizontal
surface
haḡ^wi'dukš bentwood box, chest, trunk
haya'- not know, be uncertain [N *hayač*-, *haya'ak*] *hakya'qλ* worry (said of a man)
hakya'ksuqλ worry (said of a woman) *ha'ya'padač* lose direction, wander around lost
ha'yte'atḡ Haida Tribe [N *ha'ytič*-?atḡ]
hayubat-q-, *hayu'badi'* (a) swing *hayubatqšil* (to) swing *ha'ha'yubatqa* swinging
he?icx-, *he?icxšil* sneeze (rep.) [N *ha?icx*-]
hi- have face against, towards, head located *hičil* use one's head to move sth [N *hi*-, *hičil*]
hiči'dukšil kiss *hi?at* having one's chin resting on sth
hibiks deer tallow [N *himiks*(.-)] *hihibiksa'dił* candle
hick^wat-, *hick^watšil* (a person) stumble, fall down *hick^watil* fall down inside *hick^watis* fall
down on beach *hick^watás* fall down outside *hick^watá'* stumble, fall down on the rocks
hiča'k light fishing (light on end of canoe attracts fish) [N *hič*-, *hiča'k*]
hi'daqł amazed, surprised *hi'daqłowi* sb/sth who should be marveled at
hi'daxi done, ready [N *?i'nax*-, *?i'naxi*]
hidi'qšil growl, snarl, bare teeth
hi'hi'keyaḡ delicate, walking a fine line
hi?ib pigeon
hik^w- overhang [N *hik^w*-, *hik^wak*] *hikuł* hair hanging over the face
hili'kub wolf mask

hi·tca·k parent [N *hił-*, *hiłsyu·k?*]

hi·t?eyax trying, perhaps, maybe [N *hi·t?i·h*]

hiłi·q-, *hiłi·qšił* forget *hiłi·qak^w* not know; *hi·hiłiqik* forgetful

his-, *hisšił* hit with beating instrument (club, whip, axe, etc.) *hi·si·sa* rep. hitting [N *his-*]

hihisbi?i·syak^w mattock (for chopping on ground), hoe *hihisck^wiqkuk* soda crackers

hisatca strike the wall once *hisi·yu* shredded cedar bark *histu·p* stick (to hit with), fish

club, whip *hiscitabił* get hit on the side of the head *hisck^wi* chips from chopping *hisi·yak^w*

axe, bark shredder

hi·saçi consequence

his?at-q-, *hisi·?a:d* red huckleberries *his?atqpał* June, July *hihis?atqkuk* currant berries

hi·suba almost *hi·subeyaçił* incept. [N *hi·sim*, *hi·k^wat*]

hita- *hida-* empty root: be or do sth (exact meaning specified by suffix) [N *hita-* *hin-* *hina-*]

hidałca wall *hidałci·t* inside wall *hidasxuł* chest (body) *hidawi* out *hidačuł* in front

hidayup obtain, catch *hida·čakt* ocean, ocean water, sea *hida·čił* go out to sea *hida·qłas*

forest, woods *hida·s* on a horizontal surface *hida·sca* on the roof *hida·?at* carry on back,

backpack *hideyił* enter (a building) *hideyuq* to ride in, on (e.g. car, boat, horse) *hididux*

look for, search *hidi·ks* bring, carry, take along *hidi·łta* end or point (of something)

hidi·łtaba canoe prow *hidi·yił* throat *hidi·yuqł* inside of mouth *hid?awi* wait for

hi·d?eyax hoping to *hihitapaquł* cheeks *hihitaḡswa·s* underbrush *hihi·taqłcił* sole of foot

hihi·taqłduk palm of hand, holding in the hand *hitabu·s* climb *hitacpa* go over *hitacḡpida*

mate, spouse, wife *hitaču* inside a container *hitača·qst* swallow sth *hitačita* in water

hitači·dił enter (a harbor) *hitakłaba* name *hitaksaqł* under one's clothing *hitaksiłta*

come out of the woods *hitakswi* go through an opening *hitaks?ati?i* front door

hitaktaqyu gifted with supernatural power *hitak^wada* bow of canoe, harpoonsman

hitak^wisču to leave, go out of the harbor *hitak^wi?i* at the front edge, river bank *hitak^wičida*

clothes *hitapaʔaʔ* cross (a stream) *hitapiduk* mixed with a group *hitaʔpuʔa* underneath
hitapič̣as stump, base of tree *hitapič̣iʔta* bridge (of nose) *hitapiq* passing by sb or sth
hitapiqas passing by sb or sth *hitaqawaʔ* come around a point of land *hitaqλ* inside a tun-
 nel, oven *hitaqλč̣uʔdak^w* cooking sth in the oven *hitaqλiʔta* nostril *hitaqs* in a canoe
hitaquʔ face (body part) *hitasab* obstruct, block, be in the way *hitasita* did, do, accomplish,
 do as intended *hitawaxsiʔ* come out of mouth *hitawiʔta* get out of a canoe or boat, go over-
 board *hitaʔsuwaʔ* go downstream *hitaʔaʔciʔ* sky *hitaʔaʔciʔatx* God *hitaʔaʔč̣* at the groin,
 crotch *hitaʔdaqi* top of mountain, hill *hitaʔdi* arrive *hitaʔqλiʔt* upsound, to the east *hitaʔqsiʔ*
 mouth or lip(s) *hitaʔqatu* get down from swb, move down *hitaʔtu* come off *hitaʔwadi* waist
hiteʔiʔλ defeated, lost a game or competition *hitʔas* on the ground, garden *hitʔasdak^w* have
 a garden *hitʔiʔt* stored *hitʔiʔtač̣is* cupboard, storage cabinet *hiʔdakuʔwiʔ* at the head of the
 bed *hiʔdapaʔs* up above outside *hiʔdapiʔt* above, up inside *hiʔdasubač̣* ritual, ritual training
hiʔdawaλ find, found *hiʔdač̣is* on the beach *hiʔdaʔdiʔ* way of thinking, mind, mental rea-
 soning (said of a woman) *hiʔdaʔdiʔ* upstream *hiʔdaʔduʔwaʔaʔ* upstream west of Neah Bay
hidiʔ give *hiʔdʔataʔak* desire something *hiʔtaksata* forehead *hiʔtakšaʔt* mention by name
hidas arrive, reach a destination *hidasiʔiʔ* under water, bottom (of the sea, water), uncon-
 scious *hidatabeyis* going around inviting *hidʔoʔt* carrying on the back *hihidaskabiʔ* arms
hihiʔdeyukdukuba wrist *hihiʔtaqλswadiʔ* armpit *hitaciʔtakλi* hip *hitacqiʔ* above *hitač̣uʔaʔ*
 inlet *hitač̣uʔiʔis* bay, cove, clearing *hitakʔabiyaʔ* give a name to sb *hitʔakλiʔ* a male's rump,
 at the tail *hitaksʔaʔt* on the back of the body *hitaksʔaʔy* backside, backstreet *hitaksuqλ* at
 the guts *hitakšyaʔxuʔ* on the face of a cliff *hitakšyaʔxuʔwis* on the face of a beach cliff
hitaktqi bottom (of vessel) *hitak^waʔ* absent, away *hitak^wit* on the body *hitak^witqi* abdomen,
 belly *hitaqi* up above (on s.th.), upstairs *hitaqeyaλ* arrive *hitaqλč̣uʔ* sth already baked
hitawisa *hidusa* come to the surface of the water *hitaʔsdiʔ* between *hitaʔtuk^wič̣* undress
hiʔdač̣ ask for *hiʔdakč̣aʔp* sell *hiʔdapi* above, up (there) *hiʔdapaʔqλ* elbow, heel

- hi·daḡwaʔ* use *hi·da·ʔaqsit* chin *hi·da·ča* rock by seashore *hi·da·duwis* tide flats
hi·da·taḡ chase (try to catch) *hi·dubaʔ* birth, born *hi·duʔ* expect sb *hi·hi·taḡs* at the (front)
 edge *hi·hi·taḡsi·s* at the front edge of the beach, along the beach front *hi·ta·ʔa·qst* mixed
 with a group, amongst, taking part in *hi·tacaqapʔ* going around, circling around sth *hi·takci*
 a female's rump *hitak^widukst* between *hi·tak^wi·ʔi·* at a river bank *hi·tapičaqʔadiʔ* nape of
 neck *hi·tasi·ca·p* send sth *hi·tʔasiʔ* planting a garden
- hitaččʔida* brother of a male
- hitaxwiʔtuba* daughter
- hit-*, *hiti·* remember, keep in mind *hitšiʔ* remember (iter.)
- hiti·da* blanket *hiti·dak^wič* wear a blanket *hiti·dak^wičyak^w* clothing
- hi·tkadi* strange situation, condition *hi·hi·tkadʔedi* strange noise
- hix^waḡyuk* *hix^waḡcʔak^w* act crazy or drunk, desperate [N *hayux^w-*, *hayuxšiʔ*ʔ]
- hi·xdiʔi*: land otter, also known as Pacific or river otter, *Lutra canadensis pacifica* (Gunther
 1936: 114) [N *waxni-q-*, *wa·xni·*]
- hixuq-*, *hixuqšiʔ* shout together *hixuq^wa* shouting [N *hixuq-*, *hixuq^wa*]
- hix^w-*, *hixuk* weak, simple, unimportant [N *hix^w-*, *hixuk*] *hihixcʔak^w* stupid, act foolish
- hix^w-*, *hix^wa·* exerting effort, working hard [N *hix^w-*, *hix^wa·*]
- hi·yaḡtiba* beloved
- hiyu·* done, finish, stop
- ho·ʔ* interj. yes [N *ha·ʔa*]
- hu-*, *huk^wiʔ* variant of *su-* 'hold, take'
- hu·* interj. expression to warn sb to get away
- huʔa-*, *huʔa·* back, again [N *huʔa-*] *huʔadak^w* have sth back, again *huʔa·di·* come back
huʔakaʔ still gone *huʔasapiʔ* continue with, begin again after a break *huʔaseyak^w* put sth
 back to the way it was, repair *huʔiya* go back, return *huʔacačiʔ* return someplace

- huʔačidukšiλ* make up after a fight *huʔaqeyaλ* return home *huʔasiʔa* recur, happen again
huʔayaʔ give back, repay *huʔeyʔuk^{wi}* history, long ago *huʔacaqabiλ* birthday potlatch
huʔak^{wi}ʔ repair sth
- huʔabiʔi:* same as before, still the same
- huʔaqit* old, worn (object)
- huʔaxi* still, yet
- huʔa:ya:tɬ* Ohiat Tribe [N *huʔi-ʔatɬ*]
- huʔbaʔq* wild rhubarb [N *humaq-*, *humʔaʔq*]
- hubaqλ* whole, complete, total, in one piece [N *hum-aqλ*] *hubaqλcaʔqst* swallow sth whole
- hububabi:* moon shell
- hurdiʔ* food found adrift, esp. a drift whale [N *hurni-q-*, *hurniʔ*]
- huhuʔacitq* burp, belch
- hurʔič* several sleeping [N *hurʔič*]
- hurʔiʔi:* lump, tumor [N *hu-*, *hu-ʔiʔq-*, *hurʔiʔ*]
- hurʔiʔ* not too much! [N *hurʔiʔ*]
- huksčiλ* count [N *huks-*, *huksaʔ*]
- huktup* bird [N *hu-*, *huʔak*]
- huluqskub* navel
- hurʔ-*, *hurʔšiλ* dance *hurʔuk* dancing [N *hurʔ-*, *huryaʔ*] *hurʔk^{wi}čiʔida* dance costume *hurʔaʔqa*
 many people dancing *hurʔcaqapʔ* dancing around sth *hurʔeyiλ* dancing into a building
hurʔxsaʔ feel like dancing
- hup-* roundish, chunky or spherical object [N *hup-*] *huhupis* big chunky rocks on the shore
huhupasxuʔ heart beat (in chest) *hupačakt* island *hupaʔs* boil *hupaʔsyak^w* kettle, pot *hupis*
 round or chunky object on the beach *hupiʔyiʔ* choke (on food) *hupqapʔ* bulge of flesh on

- body *hurpsuwiyat* button *hu'hurpxsi's* least sand piper, *pisobia minutilla* (Gunther 1936: 108)
- hupa'pt* crippled, lame
- hupdabit* little bird (story character)
- hurpičar'tx* Hopachisat Tribe [N *hurpačas-?ath?*]
- hupiduwa:š* canoe for one or two persons, name of Qweti's canoe [N *hupinwa-q-*, *hupinwaš*]
- hupk-*, *hupkak^w* lump or knot [N *hupk-*, *hupkak*; *hupq-*, *hupqak*] *hupka's* lump on a horizontal surface
- hus-*, *husšiλ* get wrinkled *husak^w* wrinkled *husa't* wrinkled fabric *husitqi* wrinkled belly
- husu'ʔihta* wrinkled nose *husur't* wrinkled face
- huš* interj. expression for coaxing baby to sleep
- huše'k* rascal, also used as interjection 'oh you!' [N *huša'k*, *huše'k*]
- hut-*, *huta'* bare, exposed
- hu'at* jealous over a man or woman [N *hut-* *huti'q-*, *huti'qak*; *hutʔatu*]
- hurwa:ye:tχ* black person (< Eng. Hawaii) [N *hurwa:yi-?ath*]
- hux^watq-*, *hux^watqšiλ* gust of wind blows (iter.)
- hurxsʔat* resting [N *hurx-sʔatu*] *hurxsʔatpadač* on vacation
- hux^{w-}*, *huxšiλ* fall over (tree, object) [N *ʔux^{w-}*, *ʔux^wa' ʔux^wak*; *hux^{w-}*] *huhuxšiλataχ* liable to fall over *hu'was* fallen tree or object
- huχ* animal, ugly animal (child's word)
- huχ^{w-}*, *huχšiλ* holler *huχ^wa'* hollering [N *huχ-*]
- hu'χʔadi* call, invite *hu'χʔadu'kt* invited
- huχtak* know how *huχtakšiλ* learn [N *huχtak^{w-}*] *huχtaks'a'qtiʔi'* teacher *huχtakšiλo'was* school *huχtakšiλuwi't* classroom
- hu'y* interj. shout used to introduce mask dance [N *ho'y*]

hurya-, *huryuk^wiλ* *hu^wλhuryuk^wiλš* waves, ocean swells [N *huyá-*, *huyá^wk(-)*] *huryabis* waves

hurya^wp busy, “raising Cain”

ʔi^w interj. expression of disgust or dismay

ʔiči^w rich in flavor (esp. seafood), full of fat [N *ʔič-* *ʔič^w-*, *ʔič*]

ʔič-a-q-, *ʔič^wup* old, mature person; right whale *ʔičaqš^wiλ* (to) mature [N *ʔič-aq-*, *ʔič^wim*]

ʔičaqaqsił speaks like a mature person *ʔičaqš^wiλckida* middle aged person *ʔičaqš^wibił*

sensible (said of a woman)

ʔidak^w wish *ʔidak^weyač^wiλ* incept. [N *ʔinis*]

ʔidi- small quantity *ʔidi^wq* few

ʔidic for a short time *ʔidicuk^wał* gone for a short time

ʔiʔicba(-q-) sword fern [N *ʔic-maq-* *ʔic-maq-*, *ʔicmakt*] *ʔiʔicbaq^wkuk* deer fern

ʔiʔidič^wa:k shallow water

ʔiʔilaxa:yu:s common skunk (Puget Sound striped skunk), *Mephites occidentalis spissigrada*

(Gunther 1936: 115)

ʔiʔiłx^waʔa:t^w Elwha Tribe [N *ʔiʔiłx^wa-ʔat^w*]

ʔiʔiš^wpał blue whale (also known as “sulpher bottom”)

ʔiʔiš^wtač^wiλ get divorced

ʔi^wx^w-, *ʔiʔi^wx^wa* big [N *ʔi^wh(-)*] *ʔiʔi^wx^wbał* big arms and legs *ʔiʔi^wx^wcił* big feet *ʔiʔi^wx^wduk* big

hands *ʔi^wwač^wiλ* get big *ʔi^wx^wbis* valuable, of great worth *ʔiʔi^wwabił* donkey

ʔiʔi^wdis place name (Port Angeles; < Clallam?)

ʔikat-, *ʔikatuk* spiteful, unfriendly through quarreling (said of a woman) *ʔikatš^wiλ* act spiteful [N

ʔikat-, *ʔikatak* *ʔikata*] *ʔiʔi^wkatik* gets mad quick (said of a woman)

ʔiki^w son

ʔikye^wʔiqsu brother-in-law, sister-in-law [N *ʔiyac-*, *ʔiyi^wqsu*]

ʔi^wsa, *ʔi^wsuk^wiλ* urinate (said of a woman) *ʔi^wsaq^we^wqλ* need to urinate

ʔiš and [N *ʔiš*]

ʔišiλ discard *ʔišiλxčʔi* scram! *ʔišiλck^wi* discard (rejects)

ʔiškida interj. ouch! [N *ʔiškatax*]

ʔixi'waqλ expensive [N *ʔi'hwāqλ*]

ʔi'x^wti'satx Ehatisat Tribe

ʔiyaḅ-, *ʔiyaḅa* be at *ʔiyaḅi't* be at in the house *ʔiyaḅa'tx* live at *ʔiyaḅciλ* come from

ka- stick-like object protrudes [N *ka-*, *kaʔak*] *kawadi* killer whale, *Globicephala scammoni*

(Gunther 1936: 117) *ka'ʔa'pi* sticklike object protruding *keʔi'tap* drive a post into the ground

kabat shown, known, definite *kaba'ap* (with causative) know [N *kamat*] *ka'ba'adaḅ* curious (want to know)

kabataʔa:p know how to

kac-, *kacšiλ* measure (rep.) [N *ka-*, *kaya'*] *kaca'yak^w* small snake

kačak^w jutting out [N *kač-*, *kačak*]

kadʔoł carry piggy-back [N *kanup-*, *kanupał*]

ka'ka'laḅa clunky, clattery noise, e.g. rattling dishes [N *kitḅ-*, *kitḅa'*]

kakwał lost *kakwałšiλ* get lost, misplaced [N *pawał-*, *pawałta*]

kala'kali: ankle

kaλ-, *kaλšiλ* speak harshly to, scold [N *kaλ-*, *kaλšiλ*] *kaka'λaqałsił* glaring (eyes)

ka'λx-, *ka'λxšiλ* come into view, become visible *ka'λxuk* in view, visible [N *kaλḅ-*, *kaλḅak kaλḅa'*]

ka'pibis favorite (Kyuquot N *ka'pap* 'like (to)', Rose 1981: 71, ex. 165-66)

kas-, *kasšiλ* glance furtively out of the corner of the eye *ka'ska'sa* glancing (iter.) [N *kas-*, *kasa'*]

kasʔał carry sb on the back [N *kas-*]

kaT-, *katšiλ* kneel; poke or push with the knee [N *kan-*, *katšiλ*] *kadił* kneeling in the house

kadis kneeling on the beach

ka'tɕka'tɕa limping

kaʔubadi: ladder, step [N *xaʔamin(-q-)*]

kaʔupšiλ be critical [N *kuʔuq-*, *kuʔuq^wa*]

kax^w- fall (from something) *kakaxwisa* drop something accidentally (from hands) *kaxpaλ* fall off

(shaken off, like when truck drives by) *ka'waqatu* fall off a high place (person or thing)

ka'watu drop off (an object) *kaxa'siλ* fall onto a horizontal surface

ke'bič cabbage (< Eng. 'cabbage')

kibi't pry up, raise [N *kimt-*, *kimtak kimta'*] *ki'bi'tapi* sth levered up

kibta'la kiwta'la horse [N *kiwita'na(q-)*] *kibta'labap* horse turnip *kibta'lači's* ride on a horse

kibta'lači'spadač ride around on a horse

kic- long piece of wood *kicšiλ* poke with a stick [N *kic-*, *kicuk kica'*] *kictu'p* stick

k^wi't-, *k^wi'ta'* bathing, praying ritual (rep.) [N *k^wi't-*, *k^wi'ta'*]

kiλ-, *kiλšiλ* break into pieces, shatter, crack (dishes, etc.) (rep.) [N *kiλ-*, *kiλa'*] *kiλu'k* glass or

ceramic bowl, dish (breakables) *kikiλuk^waqλsił* glass eye

ki'pɕki'pɕa limping, (horse) trotting

ki'sta'bac gall [N *ki'sti-mc*]

ki'stap cow parsnip sprout

ki'šuk resentful over defeat

kixapł go fast on land

kixłak^w rapid, speedy [N *kixł-*, *kixłak*]

ku' interj. here! (handing sth to sb)

kudu'k awake *kudu'kšiλ* wake up

kuku'wiye:ɕ cheat

ku'l school (< Eng. 'school')

ku'la' gold (< Eng. 'gold') [N *ku'naʷ(q-)*] *kuku'lakswiʔi'* gold tooth *ku'ku'lakuk* penny

ku'laʔtida made of gold *ku'laʔtidakiʔ* make sth of gold

kuʔtab dear, dear girl

kuʔ-, *kuʔu'cida* provisions, lunch [N *kuʔ-*] *kuʔi'tyap* bring food gift to relative *kuʔsac* lunch pail, bucket

ku'λ-, *ku'λuk* open *ku'λas* sth is open (door, etc.)

kusowit blade of mussel shell for whale hunting

ku't coat (< Eng. 'coat') [N *ku't*]

ku't-, *ku'tšiλ* beckon, gesture to come (rep.) [N *ku't-*, *kuta'*; *kuta-*]

ku'tx-, *ku'txšiλ* (to) drum *ku'txku'txa* drumming *ku'txu'yak^w* (a) drum

ku'wiʔ doing as directed, as desired [N *ku'wiʔa*]

ku'wiʔ steal [N *ku'wiʔ-*, *ku'wiʔ*] *ku'wi'yik* thief *ku'ku'wiʔdab* stealing

kuxsak^w fresh (seafood) [N *kuxc-*, *kuxcak*]

kuḡ-, *kuḡ^wak^w* hole [N *kuḡ^(w-)*] *kukuḡpaquba* dimples *kukuḡ^was* crevice *kuwiʔ* hole in the floor *kuwis* hole on the beach *kuḡqi'ba* soft spot on baby's head *kuḡsu'wi'* hole through sth *kukuḡswi'* macaroni

ku'yuʔu: float (fish gear)

k^wa-, *k^wačičiλ* move backwards; sit *k^wa'ʔuk* moving backwards *k^waλk^wa'č* lobster [N *k^wa-*,

k^wa'ʔak k^wa'ya'] *k^waba* canoe stern *k^wa'ʔacis* seat, chair *k^wa'ʔas* fall on one's bottom on the ground *k^wa'ʔa'pi* bent over with rear end sticking up

k^wa'ʔak^w small, little *k^wak^wʔakabiʔ* little ears

k^wa'ʔaksa:tx Queets Tribe

k^wa'cxi grandchild's spouse, spouse's grandfather [N *k^wa'cxi(c-)*]

k^wačiči'luwatx Quatsino Tribe [N *k^wačiči'nux-ʔatḡ*]

k^wa'dis camas, wild onion [N *k^wan̄is*] *k^wa'disdit* place having wild onions

k^wak^wati:buks golden eagle

k^wałš̄iλ stem breaks off [N *k^wał-*, *k^wała'*]

k^wa'suk salmonberry stems turned hard

k^wa'ta' quarter (< Eng.) [N *k^wa'ta'(q-)*]

k^wa'ʔuc grandchild [N *ka'ʔuc-*, *ka'ʔuc*]

k^wa'xi' uncovered, revealed *k^wa'xi'č̄iλ* become uncovered [N *k^wa'hi'*] *k^wa'xi't̄* uncovered on the floor *k^wa'xi's* uncovered, visible on the beach

k^wi'č̄i'ya: earth, ground, land, world, universe

k^wi'da'yiłatx̄ Quinault Tribe [N *k^wi'na'yił̄*]

k^widi'łatx̄ Quileute Tribe [N *k^winyu't-*] *k^widi'łaqsup* Quileute woman

k^wi'k^wa'ła social dance, fan dance [N *k^wik^wał-*, *k^wi'k^wa'ła*]

k^wi'λk^wi'ya sharpening, grinding, filing [N *k^wi-*, *k^wi'λk^wi'ya*]

k^wi'q-, *k^wi'qa'* sanding, smoothing *k^wi'qa'płsac* whale harpoon sheath *k^wi'qa'pł* seal or whale harpoon head

k^wis- different [N *k^wis-*, *k^wist-*, *k^wista-*] *k^wisasila* change, transform *k^wisa'ʔatx̄* people from a different tribe *k^wiscapał* change position, shift *k^wiscaqi'dak* face opposite direction, look away *k^wiscaxtač̄iλ* change direction, turn around *k^wisitswa'tx̄* people underneath *k^wispe'ʔił̄* in the other room *k^wi'sa'dax̄* different, different condition *k^wisaqč̄aw* the other, opposite end *k^wisituwis* the other end of beach, west end of beach *k^wispa'* other, opposite side, hand *k^wissa'cu* elsewhere *k^wistw̄p* something else, different *k^wi'sabi'ʔi'* different from others, is different *k^wi'sowat* on the other side

k^wišk^wiši: Stellar's jay (know locally as 'blue jay')

k^wiš̄u'(-q-) pig (< F. or CJ.?) *k^wi'š̄uqč̄ak* cooking pork

k^wi'xk^wi'x^wa rubbing causing friction [N *k^wix-*, *k^wixa'*]

k^wi·xšil get running sores, scabies, itch [N *k^wiχ-*, *k^wiχa'*]

k^wi·t-, *k^wi·yił* quiet *k^wi·yačil* incept.

ka-, *kaʔak^w* ashamed *ka·quʔ* embarrassed, shame-faced *ka·kakʔak* acting ashamed, embarrassing

ka·keyik bashful nature

kaba·k ring (fish gear) [N *ka·maʔk^w-*] *ka·ka·bakdukuba* ring (for finger)

kac-, *kacšil* pinch *kaca'* pinching [N *kac-*, *kaca'*] *kacqi'* pinching the top of sb's head

kaca·da:bac small bullhead [N *kacna-q-*, *ka·cnimc*]

kacq- torn [N *kacq-*, *kacqak kacqa'*] *kacqa·yur* torn fabric *kacqk^wačyur* torn up, ragged

clothes, fabric

kača' soon, shortly, in a short time [N *kača'*]

kada·di: weasel, *Mustela* sp. (Gunther 1936: 114)

kada·dis uvula; ornament at bow of canoe

kakyi·c-, *kakyi·cak^w* purple [N *kayi·c-*, *kayi·cuk*] *kakyi·capiχ* salal berries *kakyi·capiχpał*

August

ka·ka·basi?i: embarrassing, shameful, disgraceful

k^wa·tuk ritual branches, fir needles [N *k^wa·t-*, *k^wa·tuk*]

kaλxa·yak candlefish?, ratfish? [N *kaλxa·y-ak^w-*]

kapšil take away [N *kap-*, *kimkima*]

kaš- inside out [N *kaš-*, *kašak*] *kašapł* inside out *kašur* cross-eyed *kaši·yił* hoarse

kašču-q-, *kašču?u:* Pacific harbor or hair seal, *Phoca richardi richardi* (Gunther 1936: 116) [N

ka·sča(-q-)] *kaščuq^wiks* eating hair seal

kaT-, *katuk* oil, oily *kašil* get oily *kata·ču* oil in a container *ka·ka·daqλ* donuts, fried bread

kata·ci·tč to feed a fire with oil *katsac* wooden oil bowl

kati·s lag, unable to keep up

kaía-, *kaíʔak^w* insufficient, not enough *kaíačil* run out, become insufficient [N *kaía-*, *kaía'*]

káíuq^w neatly stored

kawaḥ stare in amazement, awe; mouth gaping [N *kawaḥ-*, *kawaḥak*]

kax-, *kaxšišil* burst, break *kaxak^w* dry (wood); shattered, broken, burst, agape *kaxa'ka'xa* breakers, whitecaps (iter.) [N *kah-*, *kaha' kahak*]

kaxa'wa't half dollar

kayiškadī: sea shell, shell game [N *kayiš-t-q-*, *kayiškin-q-*, *kayiškin*]

keṛitq-, *keṛitqšišil* squeal, scream, caw [N *keṛitq-*, *keṛitqa*]

kičak^w fabric-like thing rolled back [N *ki-č-*, *ki-čak ki-ča'*]

kidi'ttubac sea anemone [N *kinṭi-mc*]

kiṭ-, *kiṭšišil* meat or fish spoils *kiṭak^w* spoiled [N *kiṭx-*, *kiṭxak*]

kiṭat-q-, *kiṭadu:s* Alaska fur seal, *Callorhinus alascanus* (Gunther 1936: 115) [N *kiṭat-q-*, *kiṭanu's*]

koloṛo: wild currant

koṛuṭ further away *koṛuṭšišil* move away [N *ku'*] *koṛiṭckida* little ways, short distance

ku-, *ku'* hooked *kučišil* (to) hook (rep.) [N *ku-*, *kuya' ku'*] *kuku'k^widuk* chain *kuṛataqḷ* hooked on the end of a hook *ku'ṛišil* hook sth, get sth by hooking it *ku'ṛa'pi* hanging up on a hook *ku'yak^w* hook, fish hook

kubac hoarfrost [N *k^wimac-*, *k^wima'c*]

kuc-, *kučup* small, black mussel sp. [N *kuc-*, *kučim*] *kucqi'* sperm whale

kuč- *k^wič-* having spines, spiny *kučka'piḥ* purple sea urchin

kuP-, *kuPšišil* point, poke, push with the finger *kupa'* pointing (rep.) [N *kum-*, *kuma'*]

kuPu'yak^w index, pointing finger *kukupasiḷyak^w* keyboard *kuku'baqḷsiḷ* poke a finger in sb's eye *kupa'sišil* press a button with the finger *kupi's* pushing along, nudging with the finger

kusub fish barb

kux-, *kuxšičil* suck *kux^wa^r* *kuxu^wkux^wa* sucking [N *k^wix-*, *k^wixa^r*]

kux^wa^rš black scoter?, perhaps equivalent to Gunther's (1936: 106) *waxwac* black brant, *Branta nigricans* [N *kux^wa-q-*, *ku^{xu}*]

ku^x-, *ku^xšičil* weather calms, clears up *ku^xuk* calm, clear weather

k^wa-, *k^wačičil* break in two *k^wa^λa^rk^wač* elbow, joints *k^wa[?]uk* brittle [N *k^wa-*, *k^waya^r*]

k^wak^w?ak^λi^r porpoise *k^wa^xta^yu^r* broken in two *k^wa[?]asi[?]i^r* put branches in water for herring

to spawn on *k^wa^xtačičil* to break apart into two pieces *k^wa[?]ak^wa^ya^p* break in pieces

k^wak^wa^rskabiš broken arm

k^wa^rci^rdi[?]i^r south wind

k^wa^rčib dear, dear boy!, poor boy

k^waš- *k^waš/-*, *k^wašičil* break off, get cracked, chipped [N *k^waš-*, *k^waša^r*] *k^wak^wašqadi* make

sound in underbrush *k^wak^wa^yas* bushes *k^waški^r* branch, broken off *k^wa^rlatup* break a piece off *k^wa^yas* bush

k^wičičid fish knife

k^wiqaš lucky in fishing *k^wiqeyačičil* get lucky [N *k^wiq-aš*]

k^wis-, *k^wisa^r* snowing *k^wisi^r* snow

k^wiT- *k^witq-*, *k^witšičil* get stuck, glued on *k^wita^r* *k^witqa^r* stuck on *k^witi^rk^wi^rta* baby nurses

k^witi^rk^witsš sticking on at intervals; hummingbird, *Selasphorus rufus* (Gunther 1936: 110) [N

k^win- *k^witx-*, *k^wina^r* *k^witxa^r*] *k^widiš* stuck on the floor *k^witqaš* glued, stuck on *k^witqi^rbis*

glue *k^witqi^rduk* stuck together *k^wik^wi^rdaq^λsiš* sth sticky in one's eye(s) *k^witi^rbap* bed straw

la^r?alačx flower

la^rba whiskey, alcohol (< Eng. 'rum') [N *na^rma*] *la^rbi^rdux* look for whisky *la^rb[?]iks* to drink

whisky *la^rbaqapuš* alcoholic *la^rba[?]urwašuk* bartender *la^rba[?]urwas* bar

lačičta pointed

lačkaqsiš pitcher (for liquid)

lak^w-, *lakšičiλ* stick out tongue, lick *lak^wa'* tongue sticking out (rep.) [N *nak-*, *naka'*] *laka'yak^w*

tongue *laka'bataqsit* licking one's lips *laksʔaba* visor cap *lak^wiłtaba* canoe prow

lalak^wadi lisp

lakč-, *lakčuk* light *lakča'la'kča* *lakča'la'kčš* lightening *laka'čaḡs* lamp *lakči's* going around

with a light *lakči'syak^w* lantern, oil lamp, flashlight

la'la' toy (child's word)

lalaxe'ya: rainbow trout

lalax^we: Puget Sound sparrow, *Zonotrichia leucophrys pugetensis* (Gunther 1936: 113)

lalwpa: ribbon [N *nanuʔpi(q-)*]

lapu'ta'y bottle (< Chinook Jargon)

libi'tu-q-, *libi'tu* lamb, sheep; wool *libi'tuqał* wooly, wool fabric *libi'tuq^waqλ* quilt

li'lwt train

liq^wasʔi sea elephant

lišo'l shawl [N *mišat-q-*, *mišo'n*]

li'xuk cheap, inexpensive [N *nix^w-* *ni'x^w-*, *nix^wak* *ni'x^wak*]

lu'lapi: hand

lu'la'sakt old sockeye

luluškali: seesaw

lu'lux^wac thimble berry *lu'lux^waci'yub* rooster wattles

lupḡ-, *lupḡšičiλ* open one's eyes *lupḡa'* eyes open [N *napḡ-* *napḡ^w-*, *napḡ^wa'* *napḡ^wak*]

lušk-, *luškšičiλ* flip over, turn facing up *lušku'lu'ška* rocking *luluškadi* teeter-totter *lušku'beyił*

rocking back and forth *lušku'beyiłyak^w* rocking chair *lušu'k^wiłta* turned-up nose

łaʔa's bag

łakčičḡ scarce

ła'kičičiλ release, let sth go [N *łáč-*, *łáč'a'λ*, *łáčičiλ*]

ʔak^w-, *ʔak^wiqdak* having a hard time doing, poor, miserable *ʔakšil* have pity on; (as predicate modifier) please! [N *ʔak^w-*, *ʔak^wiqnak*] *ʔaksuqλ* sympathetic *ʔakurʔ* poor faced, having an unhealthy look *ʔakpaʔ* time of poverty *ʔata^was* cemetery *ʔata^wadi* plead
ʔako^wi poor, destitute *ʔako^wipaʔ* time of famine
ʔakxʔ tell hard luck story seeking sympathy
ʔak^wa^xi orphan, slave [N *ʔak^wa^hi*]
ʔakit-, *ʔakitbis* pitch (from a tree), spruce gum, rubber *ʔa^wʔakita* chewing gum (m. full of pitch)
ʔakitaʔ rain gear *ʔakitapʔ* rubber rain hat *ʔakita^wyič* wearing a rain coat
ʔakitawa^x salmon harpoon points, pitch-treated harpoons
ʔa^wʔakixt-, *ʔa^wʔakixtšil* *ʔa^wʔakixta* abstain, leave alone
ʔapx-, *ʔapxšil* flap wings, fly *ʔapxuk* flying [N *ʔaph-*, *ʔapha^w*] *ʔa^wʔapxwisa* escape by flying out of one's hands *ʔapxa^wyiλ* fly into a building *ʔapx^wa^wʔšil* fly away
ʔapi^wx-, *ʔapi^wxšil* spread wings or arms *ʔapi^wxiba* wings
ʔaq^w- soft, spongy mass [N *ʔaq^w-*, *ʔaq^wak*] *ʔaq^wa^w* soft, spongy mass on rocks or shore
ʔaq- give as a gift, for free *ʔaqi^w* give as a gift *ʔaqič* ask for something, beg *ʔaqwkt* gotten as a gift
ʔaqata:t^x Plains, Plateau Indian
ʔaš-, *ʔaššil* pick, choose the best *ʔašuk* picking, selecting *ʔaš^wʔaš^wa* sorting [N *ʔaš(-)*]
ʔax-, *ʔaxa^w* just now, right now [N *ʔah^w(-)*] *ʔaxck^wi^w* recently, having been
ʔaxcu^wta recently
ʔaxuk man
ʔayik generous
ʔe^wʔišuk red cedar
ʔe^wʔix-, *ʔe^wʔixšil* measure by spread arms, fathoms

- tʰiʔa's* disagreeable, mean person *tʰiʔa'yadi* unpleasant noise *tʰiʔa'ssuqʌ* angry, mean feeling
 (said of a woman) *tʰiʔa'yaqʌ* angry, mean feeling (said of a man)
- tʰi'baqstiʔi:* mind, reasoning, will power [N *tʰim-aqsti(-q-)*]
- tʰic-*, *tʰicʃiʌ* cover with a cloth *tʰicak^w* cloth spread out [N *tʰic-*, *tʰicak*] *tʰicaʃuʔ* wearing an apron
tʰica'buba head scarf, bandana *tʰica'suba* small woven mat *tʰica'syak^w* table cloth *tʰiciʔ* sth
 cloth-like spread on floor *tʰiciʔuba* floor mat, carpet, rug *tʰicityak^w* carpet, rug *tʰicis* cloth-like
 object spread on the sand *tʰici'waduba* canoe mat *tʰi'cas* cloth-like object spread on ground
tʰi'capi'tyak^w curtain, dance, or room divider, screen *tʰicaʃuba* apron *tʰicakʌi'yak^w* diaper
tʰi'ca' for a cloth-like object to be spread on rocks *tʰi'capi'yak^w* sail *tʰi'cciba* diaper (for a girl)
- tʰici't* pregnant [N *tʰic-*, *tʰici't*]
- tʰi'ʔiʔi:* snake
- tʰik^waʃaʔ* cloth [N *tʰik^waʃ-aʔ*] *tʰik^waʃaʔcki* rag *tʰi'ti'k^waʃbaʔ* bat (animal)
- tʰiʔiʔa'y* insult
- tʰipʃa'* inhale
- tʰit-* *tʰitq-* *tʰitqʰi'tqʰa* twitching, jerking [N *tʰit-*, *tʰita'*; *tʰitk-*, *tʰitka'*] *tʰiʔi'teyʌʃ* small hook, lead jig-
 ger, live bait, jig fishing
- tʰiʔu'* miss a mark or target [N *tʰiʔa'*]
- tʰi'waʃ-*, *tʰi'waʃʃiʌ* get cloudy *tʰi'waʃak^w* cloudy [N *tʰi'waʃ-*, *tʰi'waʃak*] *tʰi'waʃbis* cloud
tʰi'tʰi'waʃu'k cloudy all over
- tʰix^{w-}*, *tʰix^wak^w* cloth spread out covering [N *tʰix^{w-}*, *tʰix^wak*; *tʰih-*, *tʰihak*] *tʰix^waqsuba* outer lip
tʰi'ti'ʃduk wearing gloves *tʰi'ʃsa'tuba* baby face covering
- tʰixʌʔ* canoe mat
- tʰixuqak^w* skinny
- tʰu-*, *tʰuʔaʔ* board [N *tʰu-*, *tʰuʔak*] *tʰutubaʔid* place name (Forty Mile Bank, La Perouse) *tʰutubeyis*
 flounder *tʰutuʔas* place name (flat rocks at the end of Shi Shi beach)

tuč- female, woman [N *tuč-*, *tučsma*] *tučw'da'k^w* married man *tučtučc?ak^w* flirt *tučtučuxa* intercourse

tučaqsuba older sister of a male

tuk-, *tukw'tap* muscle, sinew [N *tuk-*, *tuktapt*]

tuq-, *tuqšil* spill, tip over *tuquk* tipped over [N *tuq-*, *tuqyu' tuqak*] *tuqapł* whiskey flask

tuttu'tš Thunderbird [N *tut-*, *tuta'*]

ła- pole-like object in vertical position [N *ła-*, *ła?ak*] *łałaabatpič* woodpecker, any variety (Gunther 1936: 110) *łała?asyak^w* fence post *łaqsuba* mast *łayak^w* iron *ła?as* upright object, post, totem *ła?asyak^w* totem pole *ła?a?api* propped up *ła?a?api's* salmon roasting on sticks

łabuxsi: wedge

łada-, *łada?ak^w* remain in place, stay still *ładi'wił* incept. [N *łana'k(w-)*]

ła-, *ładit* adze, wedge *łačil* use a wedge *ła'cłaya* hewing stone [N *łat-*, *łanat*] *łačak* chisel

łakiš-, *łakiš* (person) stands [N *łakiš-*, *łaki's*] *łakišas* standing up on a horizontal surface *łakišqi?a* standing on top of a rock *łaki'yis* standing on the beach *łakiyił* standing on the floor or inside *ła'kišapi* standing up *ła'kišapi-ł* standing up on the floor *ła'kišapi's* standing up on the beach

łakyaba extra, bonus [N *łaya-*, *łayim*]

ła'ła'čit song or chant sung by Indian doctor [N *łačit-*, *ła'čituł*]

łała'iaqł stiff muscles [N *łatč-* *łatčk-*, *łatčak* *łatčkak*]

ła'ła'waq-, *ła'ła'waqbis* blood *łała'awaq?a'ł* tuberculosis *ła'ła'waqsabił* bloody nose

łapiq- *ła'ła'pīqa* driving nails, dowels [N *ła-pīq-*, *łapiqšil*] *łapiqiba* dowel, nail

ła'sa-, *ła's?ak^w* foreign, artificial; a stranger [N *ła'sa-*, *ła'sa?ak*] *ła'ła'sakswi?i'* dentures, false teeth *ła'ła'sakswi?i'yak^w* dentures, false teeth *ła'ła'saqłsił* glass eye *ła'saqułł*

- nickname *λa'λa'saksta* artificial leg *λa'sadakšiλ* have a visitor *λa'saqapł* toupee, wig, wearing wig or toupee
- λaškat-*, *λaškatuk* rigid, stiff *λa'λa'skata* making rigid; ironing *λa'λa'skateyak^wacis* ironing board *λaškatał* stiff fabric *λa'λa'skateyak^w* iron
- λa'sqi'yał* lizard
- λata'wačak^w* paddle (object) [N *λatwa-*]
- λa?u-*, *λa?u'* another, more [N *λa?u'- λa?u-*, *λa?u'*] *λaλa?upitš* do over and over
λa?usapiλ begin again *λa?u'ya'* give another, more *λa?u'suba* need more, another
λa?u'ci'čidiλ add more wood to fire *λa?usaqsup* woman of different tribe
- λa?uk^wa?atx* Clayquot Tribe [N *λa?u'-k^wi-?ath*]
- λawa-*, *λawa'* close by, near [N *λawa-*, *λawa'*] *λawas* follow closely *λawe'?ił* close to in the house
- λawa'ča* low
- λax^wa* ten
- λe?idiw* Olympic flying squirrel, *Glaucomys sabrinus olympicus* (Gunther 1936: 116; she records the initial segment glottalized)
- λič-*, *λiča'* stern (of boat) *λi'čli'ča* steering a boat [N *λiča'*] *λiλiča'ł* steering boat
λi'čli'čeyak^w rudder; fish or mammal tail
- λičsap* cinquefoil, silverweed [N *λič-*, *λičsyup*]
- λi?išča-q-*, *λi?iščida* foot, feet, leg, legs, fish tail, whale flukes [N *λišli-q-*, *lišlin*]
λi?iščaqaqyak^w pants, trousers
- λi'sał* paper [N *λi's-*, *λi'sa'*] *λi'sałxtida* paper towel, paper money
- λisi'daw* place name (town of Forks)
- λiχ-* move pointwise *λi'χ-*, *λi'χak^w* paddling, driving a car [N *λih-*, *λiha'*; *λi'h*, *λi'hak*]
λi'χapi's point of land *λiχe'?aqλyak^w* pullover shirt *λi'λi'χsuptał* canoe race

λixatšil start a canoe, boat, car

λuʔis camped temporarily *λu'saλ* (to) camp [N *λuʔuw-is*] *λuʔisyak^w* campground

λuk-, *λukšil* widen *λuk^wak^w* *λuk^wi't* wide [N *λuk-*, *λuk^wi't*]

λuk^wat-q-, *λu'k^wa'li*: Wolf Ritual *λuk^watqšil* perform the Wolf Ritual [N *λuk^wat-q-*,
λu'k^wa'na]

λukšut-q-, *λu'kšuda* raven [N *quʔišit-q-*, *quʔišin*]

λuʔλuʔa do sth slowly [N *λuʔa'*]

λuʔl-, *λuʔu* clean, good [N *λuʔ*] *λulis* good beach *λu'lič* wear sth clean *λuʔaʔ* clean (fabric, person's body) *λuʔa'čakt* calm water, sea *λuʔa's* clean surface *λuʔi'duk* on good terms
λuʔqa'tx think oneself good *λuʔsa'ía* clean forehead *λuʔsu'qλ* be in good humor, feel at peace
λuλuʔkuk look good (things, people), handsome, good looking *λuʔsit* still, good, or clear water

λus-, *λusu'buʔt* herring [N *λus-*, *λusmit*] *λuλu'sa'taxyak^w* herring rake *λu'yi'ks* eating herring

λu'spaʔ bridge [N *λuš.-*]

λa'ʔas- south [N *λe'-ʔiʔ*, *λa'-ʔas-*, *λa'-ʔay-*, *λa'-ʔa'*] *λa'ʔasatx* cape dwellers *λa'ʔaspa*
south side

λaba's fat, blubber, dogfish roe [N *λims*]

λabax-, *λabaxšil* shoot slingshot; snap [N *λami'x^w.-*, *λami'xšil*] *λabaxyak^w* sling shot

λac-, *λaca'* fat, obese *λaci'wiλ* get fat [N *λac*] *λacqapʔ* pudgy *λacsi'ʔi'* butter *λacu'ʔ* fat face
λa'caqλ soaked *λa'λacpi'čas* fat ankles *λa'csit* fatty oil floating on soup

λač-, *λačšil* fold (rep.) [N *λač-*, *λačšil*] *λačk^wačil* collapse (buckle) *λačqapʔ* bundle
(folded) of cedar bark

λača'pʔ black granite, black stone [N *λač-imʔ*]

λa'čk^wa'la black periwinkle snail [N *λačk^wa-q-*, *λa'čk^win*]

- łaka'wap* western hemlock [N *łak-maq-*, *łakmapt*]
- łak'k'it* spreader bar (for halibut fishing) [N *łak'kut*]
- łalaba:tx* Clallam Tribe [N *łan'im-?ath* *łan'ama-?ath*]
- łala?ub* cockle clams
- łal'a'y* long, Haida-type canoe [N *łan'a(q-)*]
- łal'iq-*, *łal'iqšil* collapse *łal'iquk* leaning, collapsing (e.g. wall of a house)
- łal'ława:ta* butterfly
- łal'ława:yis* place name (Clallam Bay)
- łalP-*, *łal'pšil* cut with scissors *łal'pa'* two-pronged object clamped on [N *łal'm-*, *łal'ma'* *łal-mak*] *łal'paya'k*^w scissors *łal'bapi's* barbecue *łal'bil* pick sth up with tongs
- łal'pat* storage basket [N *łal'pat-*, *łal'pat*]
- łal'pčk-*, *łal'pčkak*^w have legs folded Indian-style [N *łal'pčk-* *łal'pčk*^w-, *łal'pčkak* *łal'pčk*^wak]
- łal'p-q-* soft, mushy substance *łal'p-qšil* throw sth soft and mushy *łal'łarqaqλ* pie *łal'pqa'ya'k*^w jam, jelly
- łal'p-x-*, *łal'p-xšil* slam, slap broad object against (rep.) [N *łal'p-h-*, *łal'p-ha'*] *łal'p-xat'ca* slap the wall (once) *łal'p-xa'cita* whale slapping water with tail *łal'p-xi'duk* clap hands
- łal'q-* *łal'qšil* grow; spring [N *łal'q-*, *łal'qa'*]
- łal'qa-q-*, *łal'qap* bush, leaf, plant, grass [N *łal'qa-q-*, *łal'qapt*] *łal'qaqi't* harvesting hay
- łal'qat-*, *łal'qatšil* come untied, unfastened *łal'qatuk* untied, unfastened *łal'qat'a'ya'k*^w key *łal'qat'paλ* release from prison
- łal's-* *łal'sk-*, *łal'skšil* make smooth *łal'skak*^w smooth, bare, slippery [N *łal'sk-*, *łal'skak*; *łal's-* *łal'sk-*, *łal'ska'*] *łal'ska'pł* bald (shiny skin) *łal'syaqatu* slide down
- łal'skatšil* slip
- łal'sš-*, *łal'sššil* get slippery *łal'sšuk* slippery *łal'sšwisa* slip out of one's hands
- łal'sšitq-*, *łal'sšitqšil* thrash, kick *łal'sšitqa* thrashing

łá·šqí·lux turkey

łax- *łaxa·łaxa* adzing [N *łax^{w-}*, *łax^wak*] *łaxa·yak^w* adze *łaxck^wi* chips from adzing

łax- flatwise *łaxšil* patch, mend *łaxa·łaxa* patching [N *łax*, *łaxak*; *łah-*, *łahak*]

łalaxbatdi skimming the water *łalaxtqas* sled *łalaxcuba* sole of shoe, shoes

łalaxdukuba palm of hand *łalaxiduk* patchwork quilt *łaxatca* flat against a vertical

surface *łaxačakt* raft *łaxa?atu* cut off flat *łaxi?i* patch on a canoe *łaxsa'ta* frontlet

mask

łaxa' not crying [N *łah*]

łe?i'daw supernatural lucky charm animal [N *łe'-?inwa*]

łe'ko' interj. thank you! [N *łe'ko'*]

łeyu' interj. let me see!

łi-, *łi'zak^w* walking *łi'beyit* walking around the house *łi'beyis* walking around on the beach

łi'padač walking around *łi'zakkačil* caused by walking, because of walking *łi'bi?is*

walking around the yard *łi'beyityak^w* person who keeps people off the floor at potlatch

łi-, *łičil* shoot bow and arrow, gun [N *łi-*, *łičil*] *łiqik* expert in accurate spearing

łic-, *łicuk* white clay, dirt [N *łic-*, *łicak* *łicmis*] *łici'bis* white, dry dirt, dust *łiłi'caqłsič*

gray-eyed, cataract *łiłickuk* buckskin bread, flour *łiłickuk^waxsyak^w* bread box, flour bin

łicux^wat-q-, *łicux^wadi*: Indian, person *łi'łi'cux^watqa* speaking Indian

łicx^{w-}, *łicxšil* fade *łicx^wak^w* faded, grey [N *łicx^{w-}*, *łicx^wak*]

łi'daq-, *łi'daqak^w* foggy, moldy *łi'daqat* moldy *łi'daqbis* fog, mold *łi'daqsit* cloudy liq-

uid, olachen oil

łi'du'c *łi'di'c* whale skin [N *łi'na-q-*, *łi'ni-c-*, *łi'nimc*]

łi-, *łi'piti* *łi'cu'* gathered for a party, feast *łi'cidił* gather for a party [N *łi-*, *łi'-?it-*; *łi-*,

łi'cu' *łi'piti* *łi'ya'*] *łi'zak^wačil* people leaving a gathering, dispersing

łiʔiqʷat-, *łiʔiqʷati*: shell-rattle *łi·łi·ʔiqʷata* rattling with shell-rattle [N *łiʔiqʷat-*,
łiʔiqʷata]

łikatšił start walking

łiłq-, *łiłqšił* explode, spark [N *łiłk-*, *łiłkak*; *łiłq-*, *łiłqa·*] *łiłqckʷi* ashes from sparks
łiłqi·bis ashes from sparks

łiłi·daqabač Vaux's swift, *Chaetura vauxi* (Gunther 1936: 110, literally glossed as 'anything
that brings fog', so this word may be related to *łi·daq-* 'foggy')

łiłikaqadi turtle [N *łiłi·k-ʔin(-q-)*]

łiłisqi·ʔiba window

łip-, *łipšił* comb, rake [N *łim-*, *łipšił*] *łipčur* combed *łipi·biʔi·s* raking the ground
łipi·yakʷ (a) comb *łipi·biʔi·syakʷ* (a) rake

łipsi·ka·d barnacle sp. [N *łiphit-q-* *łiphā-q-* *łimħinq-*, *łimħin*]

łis-, *łisuk* white [N *łic-* *łis-*, *łisuk*] *łiłisakswi·* white-winged Scoter or white tipped black
duck *łiłiyis* white on the beach (place name) *łisa·wiḡ* white-face spirit, ghost *łi·seyuk*
blond hair *łisu·t* light-faced; ghost

łisi·da-, *łisi·da·kʷ* clearing in the woods, meadow, prairie *łisi·dačurʔis* prairie, meadow, val-
ley

łisi·qa-, *łisi·qačił* day breaks, dawn comes *łisi·qʔakʷ* day, daylight *łiłisqakʷiduk* pray
łisi·qacpa sunny side of a mountain

łi·staḡ lesser snow goose, *Chen hyperborea hyperborea* (Gunther 1936: 106)

łi·ʔuqʷati: scallops [N *łi·yaʔaʔu(-q-)*]

łi·xʷ-, *łi·xšił* laugh *łi·xʷa·* laughing [N *łi·xʷ-*, *łi·xʷa·*] *łi·xu·t* smile *łi·łi·xqadi* sound of
laughter *łi·łi·xyu·* whole bunch of people laughing *łiłi·wik* laughs *łi·waqł* amused (said
of a man) *łi·xsu·qł* amused (said of a woman) *łi·xʷo·wi* funny (laughed at, made fun of)

łix-, *łixšil* turn red *łixuk* red [N *łix-* *łix^w-*, *łixak* *łix^wak*; *łih-*, *łihuk*] *łiłixi'yit* white-crested cormorant, *Phalacrocorax auritus cincinatus* (Gunther 1936: 106) *łiłixpatas* rosy cheeks *łiłixpatasyak^w* rouge, blush, make-up *łiłixs?at* chitons, red backs *łiłi'xa'dit* carrots *łixapix* red snapper *łixa'pat* cherry bark binding for whale hunting *łixi'daqsuba* lipstick *łixi'citqak^w* pink, reddish *łixi'raqłbap* western yew *łi'xeyuk* red hair *łixi'řitta* red nose *łixi'ba* northern flicker, *Colaptes auratus luteus* (Gunther 1936: 110) *łixi'patuł* blush, embarrassed *łixuł* red blotch on face *łixbabit* Woodpecker (story character) [N *łihmamit*]

łixaq skin, leather, hide [N *łih-aq(-)*]

łi'yit footprints, animal tracks *łi'łi'yitis* many footprints on the beach

łi'yuq^wa?a shinny game [N *łi'yuq^wa?a(-q-)*]

łubukušbap buckthorn

łubuxsit broth [N *łimš-?*]

łučqa knot on tree [N *łučq-*, *łučqa*]

łuč-, *łuča'ba* large mussel [N *łuč-*, *łučim*] *łuča'pł* name of an outlying sea rock *łuču'dit* place name (Lyre River) *łuči'ks* eating mussels

łuł/-, *łułšil* put hand against, touch, feel with hand *łuła'* hand flat against, feeling, touching [N *łuł-*, *łuła'*] *łulis* hand flat on beach *łułapi* hand up in the air *łułaqsił* hand over mouth

łu'łu'bac testicles

łu'łubuqadi motorboat, gas engine [N *łu'łumu-?in*]

łu'łučuksuk sea parrot, puffin

łuP- *łupa'ł* hot, warm [N *łum* *łu'm-*, *łupa'*] *łu'bi'ks* eat, drink sth hot, warm *łu'łupča'zap* feeling warm, hot *łupsaqstuba* warm underwear *łu'baqs* warm water, soup, etc. *łu'bi'xa* sweating *łu'baduba* neck scarf

λurpa' doctoring by laying hands on belly and singing songs [N *λurp-*, *λurpa'*]

λupk-, *λupkšiλ* hit with beak, peck *λupkuλurpka* pecking [N *λupk-*, *λupkšiλ*] *λupku'yak^w*

beak

λupsu'c rib

λupw's cormorant, shag [N *λipus-*, *λipw's*]

λupač root [N *λupač*]

λupe'γičx summer

λuq-, *λuqu'* wide [N *λuq*] *λuq^waq's* platter

λuš- *λuš.-*, *λuššiλ* become dry, empty (liquid container) *λušak^w* dry, empty [N *λuš-*, *λušuk*

λuša'] *λušaktpał* smell like dried fish *λušakt* dried fish *λuša'ł* dry (cloth) *λušu'cu'* empty

(of container for liquid) *λušu'γa'* shallow bank, dry spot on the rocks *λuyił* dry spot on the

floor, dry floor *λuyis* dry spot on the beach *λu'sa'duwis* place name (Chilean Memorial

Area) *λu'γas* dry spot on the ground, dry ground

λuxλux oyster [N *λuxλux*]

λuxq-, *λuxqšiλ* small explosion *λuxqapiλ* get blown up into the air by an explosion

mačłatx Muchalat Tribe [N *mačł-a'tx*]

maq'a' Makah Tribe (< Clallam)

na'ni' grizzly bear [N *na'na-q-* *na'ni-q-* *nana-q-* *nani-q-*, *na'na na'ni*]

nuč'a'łatx Nuchatl Tribe [N *nuč'a'ł-γatł*]

nu'č'a'nuł Nootka Tribe [N *nu'č'a'nuł*]

γo'linčas orange (fruit) (< Eng. 'oranges') *γo'γo'linčaskuk* lemon

pak^waq cross (object)

pa'ł.-, *pa'łšiλ* fillet, de-bone fish *pa'łck^wi'* salmon strips *pa'ła'yu'* fish filleted for roasting on sticks

pa'ła'č potlatch (< C.J.) [N *pa'ła'č*]

pa's-, *pa'sak*^w damp *pa'sapi* damp, misty air

pa'staqšił yawn

pa's̄xsuk Raven's wife [N *pa's̄h-uk*]

pa'taqak^w parched, dry mouth or eyes

paḵ- peeking [N *páḵ-*, *páḵak*] *paḵsa'wi'* peeking through a window *papaḵdab* peeping tom

pa'ḵac beehive, nest [N *pa'wac*] *pa'pa'ḵackuk* yeast bread

pa'yis pie (< Eng. 'pies') *pa'yisćakyak*^w pie pan

picksiʔi-q-, *picksiʔi:* grave [N *pi'ck-syí(-q-)*] *pipicksʔiǵas* graves

pic-, *pićup* inner cedar bark [N *pic-*, *pićup*] *pipickukcaqł* orange (color) *pipickuk* orange (color)

piku-q-, *pikuǵu:* small trinket basket [N *pikaǵu'* *pikuǵu'*] *pi'kuqi'yił* make baskets indoors

pi'kuq^wi'ł basket weaving *pi'kuq^wi'łuwil* basket weaving room

pila'q liver

pile'pile: sword fern, fern game

pitq- *pił-*, *piłšił* get tight *pitak*^w *piłta'* tight [N *pitq-*, *pitqa'*; *pił-*, *piłta'*] *pitqapł* tight around a circular object

pisat-, *pisatšił* move about *pistatuk* moving about [N *pisat-*, *pisatuk*]

pi'sbe'd fisherman (< Eng. 'fisherman') [N *pi'sme'n*]

pi'spiš cat (< Chinook Jargon) [N *pi'spiš*] *pi'pi'spiš'kuk* bobcat

pišq-, *pišqšił* close one eye, wink *pišqa'* one eye closed *pi'sqpi'sqa* winking

pišq-, *pišqšił* (to) dent *pišqak*^w dented

pit-, *pitšił* bunch together *pitak*^w bunched together [N *pit-.-*]

pitás halibut strips

pitq-, *pitqšił* get wedged in tight *pitqa'* wedged in tight [N *pitq-*, *pitqak* *pitqa'*] *pitqi'duk* crowded together, packed tightly together

pi'x-, *pi'xšil* aim, look through telescope, binoculars *pi'xa'* aiming [N *piḥ-*, *piḥa'*] *pi'xi'yak^w*

binoculars

pu-, *puʔak^w* several running, running enmass [N *pu-*, *puʔak puya'*] *pupuʔayit* fish in schools

puku'bis wild, untamed person; person mask of the nearly drowned [N *puk-*, *pukmis*]

pupuḥciʔa seaweed of a certain species

pu'tq-, *pu'tqšil* blow a horn *pu'tqa'* blowing [N *pu'tq-*, *pu'tqa'*] *pu'tqu'yak^w* fog horn or whis-

tle

pux-, *puxšil* inflate, fill with air; blow *pux^wa'* inflating, blowing *pux^wak^w* inflated [N *pu'x^w-*,

pu'x^wa'] *pux^wapł* inflated *pu'was* blown down on the ground *puxsiʔi'* baking powder,

yeast, leaven *puxska'puba* air valve (seal skin float air hole) (female end) *puxu'bałid* get

blown around on the water *pu'x^wapił* get blown up in the air

pu'yak^w gun [N *pu'*]

pa-, *pačil* give money, gift away at a potlatch [N *pa-*, *pa'ya'*]

pa-, *paʔak^w* small, round objects scattered about (rep.) [N *paḥ-*, *paḥa'*] *pa'pʔespał* September

paqu'ł apply powder to one's face *peʔit* small round things scattered on the floor

paʔak^wa'ya'p scatter small round objects about *pa'pʔes* cranberries

pac-, *pacšil* foaming up, bubbling *pacapacš* whipped berries, Indian ice cream [N *pac-*,

pacak pacar'] *pacar'bis* foam (substance)

pa'čidaʔa:tx Pachenat Tribe [N *pa'čina-ʔaḥ*]

pa'čidak^wiyit northeast, northeast wind

padawit large freight canoe [N *pinwał*]

patq^w-, *patq^wak^w* goods, stuff, one's belongings *patqšil* pack one's belongings [N *patq^w-*,

patquk] *pa'patqi'ʔib* excess baggage *pa'patq^wit* many possessions in house *pa'ta'q^waḥsyak^w*

box, container

paḥak^w decayed, rotten (tree) [N *paḥ-*, *paḥak*]

pítuq-, *pítuq^wak^w* soft (material) *pítuq^wat* soft fabric, surface, soft cloth

pípi-q-, *pípi?i:* ear [N *pápi-q-*, *pápi'*] *pípiqč'a?ap* earache

púqλu't small tide pool crab

púq-, *púq^waqλituba* feather, down [N *pú-qλ-*, *púqλi'tim*] *púq^waqλ* feather mattress

pús-, *púsšil* get tired *pusak^w* tired [N *pús-*, *pusak*] *púyatu* rest after work

pú?up moss [N *pú-*, *pú?up*]

qa-, *qačil* prick, puncture with needle or awl [N *qa-*, *qaya'*] *qačak^w* fish net needle, needle, pin

qe?i'yuba broach *qačur* tattoo *qaksa'wi'* poke through

qa?awac burden, pack basket [N *qa?u'-c*] *qaq?awaca'at* Basket-Woman (story character)

qa'bi't- caught by a trap [N *qa'mi't-*, *qa'mi'tšil*] *qa'bi'tapi't* hanging (by noose rope)

qabq^wa' maybe, I suppose

qac- on the left [N *qac-*] *qaca's* left hand *qacpa'* left side *qacuq* left-handed

qačat-, *qačati:da* lice eggs, nits

qačaqap't water-tight basket

qa'diχχ demanding, insistent *qa'diχχiduk* forceful, stubborn

qakwaš-, *qakweyu* salmonberries *qakwašak^w* red hot [N *qawaš-*, *qawi'*] *qakwašpa't* June

qaqawaškuk raspberries *qaqawaškuk^wasxu't* birthmark on chest

qalabitq-, *qalabitqšil* boil *qa'qa'labitqa* boiling *qalabitqčur* boiled food *qalabitqiks* eating

sth boiled

qa'laqeyuk beheaded [N *qatq^w-*]

qaš-, *qali?i:* eye [N *qas-*, *qasi'*] *qaqašč'a?ap* eye (sore) *qasqi'ba* crown of head

qalupqi: nettle

qała'tk^w *qała'tik^w* younger brother or junior line cousin of a male [N *qałatk^w-* *qała'tik^w-*,

qała'tik]

qałse'?i: calm weather

qaP-, *qapšil* (to) trap, snare *qapa'* trapped, lassoed, snared (iter.) [N *qam-*] *qa'baqluba* sth

tied on head (e.g. bandana, cedar headdress)

qa'q cry of Raven [N *qa'q*]

qasqeyap starfish [N *qasqi-q-*, *qasqi'p-*, *qasqi'p*]

qat-, *qats'il* cut into two pieces [N *qat-*, *qatak qata'*]

qaT-, *qata'* hard (to cut or break), tough [N *qat*] *qaqadis* hard beach

qata'wa't half

qatq- amputate [N *qatq^{w-}*, *qatq^{w'a'}*] *qa'qatqsta* amputated leg

qa'wic potato [N *qa'wac*]

qaḡ-, *qaḡšil* die, become numb *qaḡak^w* dead, numb [N *qaḡ-*, *qaḡak*] *qaḡak^{wi't}* corpse *qa'ḡuk*

half dead *qa'ḡuba't* still born

qa'ḡ-, *qa'ḡas* barbed [N *qa'ḡ-*, *qa'ḡas(-)*] *qaqax'cuba* safety or blanket pin *qa'ḡasuba* salmon

harpoon barbs

qaḡu'k thirty

qa'yaqšil shout, yell

qi'y- *qiy-*, *qi'* long time [N *qi'y-* *qiy-*, *qi'*] *qi'dax* way or condition *qi'k^wa't* gone a long time

qi'ḡa'pi erect, up in the air a long time *qi'ḡa'pi's* standing on the beach a long time *qi'ya'p*

too long *qiyur'č* stay awake late

qi- shift position [N *qi-*, *qiya'*] *qi'kwiya't* pocket knife *qi'ḡak^wa'ci'l* break down (car)

qic-, *qicšil* mark, paint, write [N *qic-*, *qica'*] *qicqicap't* spotted, speckled *qic'čw* tattoo *qici'ḡi'*

tattoo

qič-, *qiči:da* louse [N *qič-*, *qičin*] *qičat* have lice *qiqič'kuk* tick

qitcbaḡa:tx Kelsemat Tribe [N *qitcmaḡ-ath*]

qi'qeyač thunder

qiš-, *qiššił* go askew, sideways [N *qiš-*, *qiša'k qiša'*] *qišapt* crooked, dented, out of shape,

bent *qišapi* bent over *qišaqsil* mouth goes sideways (when a ghost looks at you)

qišim spirit of Wolf Ritual [N *qišap-q-*, *qišim*]

qi'tqi'ta making a net in knots [N *qit-*, *qitak qita'*]

qit-, *qitap* bass *qiti'dit* place name (Duncan Rock)

qi'wax steelhead trout [N *qi'wah*]

qiwicida:tɬ Cowichan Tribe [N *qiwic'in-ɬath*]

qi'yut long life

qu?ac- *qu?as-*, *qu?as* husky person, man of worth; person (only in derivatives) [N *qu?ac-*,

qu?as] *quq?acátɬ* village *qu?acasi?i'* mermaid *qu?acut* good for nothing *qu?a'yičida*

shadow, soul *quq?acc?ak^w* responsible

qulu'l salmonberry blossom

qułw' slave [N *quł-*, *quł'*]

qu's-, *qu'sšił* poke with a sharpened pole, stick *qu'squ'sa* poking *qu'qu'sk^widuksta'qsuba*

tooth pick *qu'stu'p* pole

qutak^w *qutkak^w* hard, tough, stiff [N *qut-*, *qutk-*, *qutkak*]

qu?u'í sturgeon

qux-, *quxšił* freeze *quxu'* ice [N *qux^{w-}*, *qux^wa' qu'x*]

q^wa-, *q^wa'* be thus, be so, be a certain way [N *q^wa-* *q^way-*, *q^wa'*] *q^wa'ss?oɬ* intentionally

q^wa'ʔa'p do thus, like so *q^wa'ʔu'kt* get sth thus or in a that *q^waq^wakuk* what sth looks like

q^wa'yak^w whatever sth is for *q^wa'du'λ* that's why *q^wa'í?eł* pretending, make believe

q^wa'cał beautiful, pretty (said of objects only) [N *q^wa'cał'*] *q^waq^wa'całi'ʔib* ornament *q^wa'całatł*

pretty garment *q^wa'cała'yič* wearing sth pretty

q^walat-q- *q^walit-q-*, *q^walala* glaucous-winged gull, *Larus glaucescens* (Gunther 1936: 108) [N

q^wit-q-, *q^wini'*] *q^walatqi'c* belong to a sea gull *q^walitq'a'ʔa'* sea gulls on the rocks

q^wapał custom

q^waq^wakʔi acting different, actions

q^waʒaʒ for this reason, because of this

q^wayaći:k wolf (< Nk.) [N *q^wayac-*, *q^wayaći:k*]

q^wi (only with Relative mood) whoever, whatever [N *q^wi-*, *q^wiq*] *q^wibu:p* whatever it is

q^wi·ba'cu whatever one is talking about *q^wi·bi·k* whatever one hunts, quarry *q^wi·ʔiλ* what-

ever one gets *q^wipáł* flavor *q^wiq^wiyuk* whatever one is doing

q^widičča-q- Makah *q^wi·q^wi·diččaqa* speaking Makah [N *q^winišči-ʔatʔ*] *q^widiččaʔa·tʒ* Makah
Tribe

q^wi·ʔiqsu parent-in-law, child-in-law [N *q^wi·ʔic-*, *q^wi·ʔiqsu*]

q^wisi· q^wasi· fix sth; do sth, do thus, so [N *q^wis*, *q^wisiłta*]

q^wiš.-, q^wiša' smoke, smoking *q^wi·šq^wi·ša* smoking tobacco [N *q^wiš.-, q^wiša'*] *q^wišaćis* chim-

ney stove pipe *q^wiši·ʔi'ks* smoking (a cigarette, etc.) *q^wišsac* pipe *q^wišsacɓap* clay pipe

q^wišurwas smoke house

q̇abačapł dishpan, enamel ware

q̇a·bapiʔi: sap-wood [N *ʒamiɓa(-q-)*]

q̇abatšiλ sing the chorus of a song [N *ʒimt-*, *ʒimta'*]

q̇abićaqɓap cottonwood [N *ʒamića-q-*, *ʒamićapt*]

q̇abi·q horse clams [N *ʒamiq-*, *ʒami·q*]

q̇abitqak^w water whirling in a whirlpool [N *ʒimatq-*, *ʒimatqa*]

q̇a·bi·wi:ya:p punish sb to teach a lesson [N *ʒa'miq-i'ł*]

q̇acawit cataleptic state in Wolf Ritual [N *ʒac-*, *ʒaca'*]

q̇aci's continue

q̇a'cuk continually, habitually [N *ʒa'c-*, *ʒa'cuk*]

q̇aćik artful, talented, expert, versatile

qáč-, *qáčšiči* extend one's arm; strike with the elbow [N *qáč-*, *qáča'*; *řáč-* *řáčk-*, *řáča'*

řáčka'] *qáčiya'* give sth to sb by extending the arm

qáčatsiči extend the elbow

qadat-, *qadatbis* bird droppings [N *řint-*, *řintmis*]

qak^w- cut sideways, whittle [N *řak^w-*, *řak^wa'*] *qaka'yak^w* knife *qak^wabup* peel potatoes

qakck^wi' shavings from whittling

qalalčūžu: flounder [N *řanałca(-q-)*]

qala'ʔaxs chamber-pot

qaltadis bear grass

qapa'k^w willing *qapi'wił* yield, become willing [N *řap-* *řap-a'k^w-*, *řapa'k*] *qaqapax* ambitious, diligent

qapk^w-, *qapkšiči* put arms around, hug *qapk^wa'* arms around, hugging [N *řapk^w-*, *řapk^wa'*]

qapka'qapkeyak^w cuddly (thing for cuddling) *qapk^wasxuł* arms folded against the chest

qa'qawa:d fish nose, salmon nose [N *řawat-q-*, *řawin*]

qas-, *qasa'qasa* carving [N *řas.-*, *řasřasš*] *qasa'qaqł* carpenter, carver *qaso'was* carving room or building *qaspał* September

qaš-, *qaššiči* string or line breaks *qašuk* broken (string or line) [N *řaš.-*, *řaššiči*] *qašk^wačyu* broken in pieces

qatšiči heal [N *řat-* *řan-*, *řata'* *řana'*]

qatak^w limber, pliable [N *řał-?*]

qatiqšiči express thanks, appreciation [N *řatiq-*, *řatiqšiči* *řatiqak*]

qatx^w-, *qatxšiči* shrivel, curl up *qatx^wak^w* shriveled, curly [N *řatx^w-*, *řatx^wak*] *qatx^wapł* curly hair

qatawa Pacific beaver, *Castor canadensis pacificus* (Gunther 1936: 116) [N *řatax^w-*, *řatw'*]

qaʔuk lake, body of water [N *řaʔu-k*] *qaqʔok^w* as many puddles, ponds *qaʔuk^w* as tide pool

q̇a'yaqsit dirty, cloudy water

q̇e'ʔiʔi: wound, laceration [N *ʔe'ʔi'*]

q̇iʔat-, *q̇iʔatšil* cry, start crying *q̇iʔatuk* crying

q̇iba'd umbilical cord [N *ʔimat-q-*, *ʔimin*]

q̇iceyit (female) puberty, menstruation [N *ʔic-*, *ʔic'a't*]

q̇ičkat-, *q̇ičkatšil* nod the head *q̇i'q̇i'čkata* nodding

q̇i'da'k speak sympathetically, kindly [N *ʔina-*, *ʔina'k*]

q̇iʔč-, *q̇idi'λ* dog [N *ʔiʔč-*, *ʔini'λ*] *q̇idi'λi'ks* bringing a dog *q̇iʔči'bap* pacific dogwood

q̇i'q̇iʔčkuk coyote *q̇i'λi'čaxs* dog in a vessel

q̇iki' pair of brothers [N *ʔik(w-)*]

q̇iʔ-, *q̇iʔi'ʔit* big, long feather [N *ʔiʔ-*, *ʔiya'ʔ*] *q̇iʔq̇i'ba* feather in hair, feathered head-dress

q̇i'q̇šil yell, cheer [N *ʔiq-*, *ʔiqšil*]

q̇i'q̇iča eyebrow [N *ʔaʔič-*, *ʔaʔiči*]

q̇i'q̇i'ʔsuba dust in the eyes (refers to a child in the way)

q̇it-, *q̇i'tʔuk* lie, prevaricate (durative form apparently used only to describe women) [N *ʔit-*,

ʔita'] *q̇i'tk^wačil* lie, prevaricate, “stray from the truth” *q̇i'taqλ* liar (said of a man)

q̇ita'k^w disbelieving [N *ʔitak^{w-}*, *ʔita'k*] *q̇ita'ksuqλ* doubt

q̇iwi'šaq-, *q̇iwi'šaqak^w* pink open scab like blood blister, etc. *q̇iwi'šaqsiʔi'* medicine for healing wounds

q̇ix-, *q̇ixak^w* crying [N *ʔih-*, *ʔiha' ʔihak*] *q̇i'xiʔi'k* crybaby

q̇ixe'ʔičida coat

q̇iyi'q̇i'y onion

q̇i'q̇i'yupqa galloping

qu'caqtup fruit

q̣uP-, *q̣uṗšil* (liquid) flows, pours out *q̣uṗuk* pouring, flowing out [N *ʔup-*, *ʔupaʔ*]

q̣uq̣ubadi sound of liquid flowing

q̣uq̣uḍa:bac limpets, china hats

q̣uq̣ušaḡdukuba knee

q̣uṣap alien, Salish [N *ʔuṣap-*] *q̣uq̣uṣapa* American golden-eye duck, *Glaucionetta clangula*

americana (Gunther 1936: 107, glossed literally as ‘anybody that talks Klallam’) *q̣uṣapət̚x*

alien, Salish

q̣usot-, *q̣usotʔiʔi:* belly, stomach [N *ʔus-pat-* *ʔus-pat̚u-q-*, *ʔuspat̚u*]

q̣uṣya medicine [N *ʔuṣi*]

q̣uṣyap translate, interpret, clarify [N *ʔuṣap*]

q̣ʷaʔap̚eyis place name (in the prairie along Waatch river)

q̣ʷabaq-, *q̣ʷabaqakʷ* green, yellow [N *ʔumaʔq-*, *ʔumaʔqak*] *q̣ʷaḡʷabaqap̚t̚* gold finch, orange-

crowned lutescent warbler, *Vermivora celata lutescens* (Gunther 1936 112) *q̣ʷaḡʷabaḡaq̚λ*

squash (vegetable)

q̣ʷaḡaqakʷ partially dried fish, fresh fish [N *ʔaḡaq-*, *ʔaḡaqak*]

q̣ʷaʔlaʔ Pacific raccoon, *Procyon lotor pacifica* (Gunther 1936: 114)

q̣ʷaʔlis heron [N *ʔaʔnus*]

q̣ʷaλ-, *q̣ʷaλaʔkʷ* flexible, easy to bend, limber [N *ʔaλ-*, *ʔaλaʔ* *ʔaλak*] *q̣ʷaʔaλḡaqap̚t̚* con-

torted (double-jointed)

q̣ʷaḡʷaʔabap wild rose

q̣ʷaḡʷalabaḡš osprey, *Pandion haliaetus carolinensis* (Gunther 1936: 108)

q̣ʷataʔbap yarrow

q̣ʷaḡsaʔbap alder tree

q̣ʷaʔyeʔiḡx autumn [N *ʔaṣ-iḡh*]

q̣ʷaʔyuq-, *q̣ʷaʔyuqʷakʷ* pale *q̣ʷaʔyuqut̚* pale of face

q̣ʷe'ti trickster story character

q̣ʷič'a'kʷ rotten, decayed [N *ʒič-*, *ʒič'a'k*]

q̣ʷi'daqšiλ smoulder

q̣ʷiλ- snow, rock, earth slide [N *ʒi'λ-kʷač'iλ*] *q̣ʷiλ'aqatu* snow, rock slide *q̣ʷiλ'as* mud, rock slide *q̣ʷiλ'a'* place name (Koitlah Point) *q̣ʷiλkʷač'iλ* collapse when support gives way in a structure

q̣ʷi'q-, *q̣ʷi'qšiλ* char bottom of canoe to make it smooth [N *ʒi'q-*, *ʒi'qa'*] *q̣ʷiqi'ba* dogfish, shark skin sandpaper

q̣ʷiq̣ʷi'daqapawaχ red-tailed hawk, *Buteo borealis calurus* (Gunther 1936: 107, glossed literally as 'slug-eating hawk', so this word may be related to *q̣ʷiti'da:bac* 'snail')

q̣ʷiti'da:bac snail [N *ʒinmi(q-)*]

q̣ʷiti?i: backbone of fish, salmon backbone

q̣ʷitya't mink [N *kʷatya't*]

sa-, *sa'ʔuk* crawling on all fours [N *sa-*, *sa'ʔuk*] *seʔiʔ* crawling on the floor

saʔač'iλ strike with weapon, wound [N *saʔa-*, *saʔač'iλ*]

saba's shark [N *mama'siyak(ʷ-)*]

saba'xtaqbap Douglas fir

sačup jack salmon, small young king salmon (freshwater name) [N *sac-*, *sačup*]

sadʔaʔ kelp line for fishing [N *sanapaʔ*] *sasadʔaʔkuk* earthworm, angleworm

sa'diča:tχ Saanich Tribe [N *sa'nič-ʔath*]

sa'dti Sunday (< Eng. 'Sunday') *sa'di'taχ* Saturday *sa'dti'ʔo'was* church

salaxaʔ rush, tule reed [N *sanaxaʔ*] *salaxaʔbap* cattail

satq-, *satqšiλ* itch *sa'sa'tqaʔ* itchy, scratching an itch

saxa'ʔap peeling cedar bark [N *sah-*, *sahas*]

sa'yupq-, *sa'yupqšiλ* whistle *sa'yupqa* whistling

si-, *sičił* strike a match; stir, mix *si'łsi'ya* striking matches, stirring *si'łi'ya^w* drill for starting fires

sibi'ta roast fish over open coals [N *simt-*, *simta'*]

siči' fish chowder

sidu'ɔu: small turban snail, black periwinkle snail

si'k-, *si'ka'* sailing [N *si'k-*, *si'ka'*]

siłsiti:d'ɔqɔł Pacific fisher, *Martes pennanti pacifica* (Gunther 1936: 114)

siq-, *siqa'* cooking *siqɔł* ripe, cooked [N *siq-*, *siqa'*; *si'ɔał*] *siqčur* cooked (food) *siqi'* cooked (done) *siqi'da'k^w* cooking sth *siqi'ti'li'* chef, cook

siq-, *si'quk* suppurating, discharging pus [N *siq-*, *siqa'*] *siqi'bis* pus *siqɔqɔł* pimple, abscess

sisi'quwe: savannah sparrow

sit-, *sitšił* split *si'tsi'ta* splitting [N *sit-*, *sita'*] *siti'yur* split *si'sitck^wi* chips from splitting wood, splinters

sitk-, *sitkšił* wag tail *si'tksi'tka* wagging tail [N *sitx-*, *sitxšił*]

sitx-, *sitxšił* rip, tear *si'txsi'txa* ripping [N *sitx-*, *sitxa'* *sitxak*] *sitxi'yur* torn

sita tail [N *sit-*, *sita'*]

six^{w-}, *six^wi'li:* scattering of scabs, rash *sixšił* have scabs, rash, sores [N *six^{w-}*, *six^wi'*] *six^wa'wiç* gray whale *six^wa'wiçpał* December *six^wi'li'ta* scabby nose

siya' I, me [N *si-*, *siya'*]

si'yurp fish for octopus [N *si'yur-q-*, *si'yurp*] *si'yurpyak^w* octopus fishing pole *si'yurpe'lis* go fishing for octopus

si'c-, *si'ci'ba'da* maggot *si'cšił* full of maggots [N *si'c-* *si'c-min-q-*, *si'cmin* *si'cma'na*]

slahe'l bone game

su-, *suk^wił* take hold of, pick up, get *su'* holding [N *su-*, *su'*] *susutkił* shake hands *su'ɔa'pi* catch sth

- su'p* soup (< Eng.) [N *su'p*] *su'pʔiks* eating soup
- su'p* soap (< Eng.) [N *su'p*]
- sugwa'biš* Suquamish Tribe
- sus-*, *susšiλ* swim *su'suk* swimming [N *sus-*, *susa'*] *su'spadač* swimming around
- su'tsu'ta* boring a hole [N *su't-*, *su'ta'*]
- suwa'* you (singular) [N *sut-*, *su'wa*]
- suwa'č* you (plural)
- su'yaq* net, web *susu'yaqš* fishing with a gill net *su'yaqi'yik* spider *su'yaqapł* wicker bottle
- sweta'* sweater (< Eng.) [N *swata*]
- šaba* feces, excrement *ša'λša'beya* diarrhea *šabaʔuwił* bathroom, outhouse, toilet *šabaʔe'ʔis*
going to defecate *šašabakuk* brown
- šačaqatł* sharp
- šačk-*, *šačkak^w* sharp [N *šačk*] *šača'kiłta* sharp-pointed object, sharp-pointed *šačka'piḡ* goose
berries *šačkqi'* place name (Spike Rock) *šačka'pł* sea urchin *šaša'čkapi's* sharp points
sticking up on the beach
- šača-* *šačiya-*, *šačʔak^w* permanently, unceasingly [N *šača-* *sa'ča-* *sač'-iya-* *sači-* *saču-*]
šačaksuqλ constipated *ša'čiyacaqabiλ* circle around sth continually
- šača's* one of a pair of appendages [N *šača-*]
- ša'su'* interj. altogether now!
- ša'xtak^w* fuzz sticking straight up [N *ša'xt-*, *ša'xtak*]
- šax^{w-}*, *šaxšiλ* flee in fear [N *šax^{w-}*, *šax^{w'a'}*] *šax^{wi}'s* chasing (along) *šaxuyʔi'tap* chase out of
the house
- šiλ-*, *ši'λuk* moving, changing residence [N *šiλ-*, *ši'λuk*]
- šiλa'bab* fern [N *šiλ-*, *šiλa'*]
- šiq-* drawn together, pursed [N *šiq-*, *šiqak šiqa'*] *šiqska'pił* pursed up *šiqu'ł* frown

šiš- pared, peeled; brushed off, swept clean [N *šiš-*, *šišak šiša'*] *šiši'yur* cleaned, brushed off,

picked clean *šiša'pł* peeled

šiš-, *šiššił* weather clears *šišuk* clear weather *šiššiła'pał* clear (weather), likely to clear (sky)

ši'sdaḡ naked *ši'sdaḡtił* undress [N *hañah*, perf. *hañahṭuł*]

šu' interj. okay, good-bye [N *ču*, *ču'*]

šuḡał rusty

šuča'paḡ soldier (< Eng. 'soldier')

šuča five [N *šuča-* *šuči-*] *šuča'ciq* five long objects *šuča'čeyał* Friday *šučaqaḡ* five dollars,

round objects *šuča'qičḡ* five years *šučaḡta'k^w* five sackfuls *šuči'q* one hundred

šuč-, *šučas* tree [N *šuč-*, *šučas*] *šušuč'kuk* look like a tree

šutk-, *šutkšił* sniff, snort *šutka'* sniffing, snorting *šutka'qadi* snorting sound

šuḡuk interj. come here!

šuḡuk^watḡ Sooke Tribe [N *šuḡuk^w-aṭḡ*]

šuwa interj. well, then

šu'yurł halibut *šu'su'yula'taḡsac* halibut canoe *šu'yurłakt* dried halibut

ta' there

ta-, *ta'ḡuk* drifting [N *ta-*, *taḡak*; *ta'-*, *ta'čił*] *ta'padač* drifting around *tatabeyis* hooks at-

tached to drifting floats *taḡsuwa'* drift downstream; flow out *taḡtačił* slip away (e.g. rope, pole, canoe)

tača^w ghost, spirit

ta'čił singing a dinner song

tada:bac mosquito [N *tanak-ma-q-* *tanak^w-*, *tanakmis*]

ta'das beyond, far, way over there

ta'ka' anyway, nevertheless [N *taka'*]

takya'yu older brother or senior line cousin of a male [N *tayic-q-*, *ta'yi'*]

takyi'yuk heavy [N *k^watyi-*, *k^watyi'k*]

tała' warm, comfortable [N *ta'ł*]

tapa'ba canoe cross piece [N *tapʔa-q-* *tapa-q-*, *ta'pʔim*]

tapšił add on

taqi' earthquake [N *taqi'*]

taq^{w-}, *taqšił* squeeze, wring with the hands *taq^wa'* squeezing [N *ta'q^{w-}*, *ta'q^wa'*]

taqa'wadi'yak^w pestle, maul *taq^wi'yił* choke, strangle (a person) *tata'qduk* squeeze sb on the hand

taqatł-, *taqatłč* person who walks with a cane [N *taʔatł-*, *taʔata*] *taqatłuba* cane

tas-, *tasšił* rub on/off, smear *ta'sta'sa* rubbing on/off, smearing [N *tas-*, *tasa'*] *tasapł* enamel ware cooking utensil *tasa'ła'ya'p* smear sth *ta'yatupyak^w* eraser

ta'xšił moving about slowly

ta'yi'dił fish or seal club

ta'la' money [N *ta'na'(q-)*] *tata'lʔeyax* earning money *ta'la'dak^w* to have money *ta'laite'ʔił*

counterfeit money, play money *ta'la'x̣tida* silver substance *ta'laʔur'was* bank *ta'la'ksac*

billfold, wallet, purse *ta'ta'laqλsuba* eyeglasses *ta'ta'laqλsubač'u'yak^w* glasses case

te'dups turnips (< Eng. 'turnips') [N *tanups(-)*]

te'ʔidiwa sea cucumber [N *te'-ʔic-* *te'-ʔinwa-q-*, *te'ʔinwa*]

te'ʔił sick [N *ta-*, *te'ʔił*] *ta'tʔeł* sick (pl.) *te'ʔiłčkida* a little sick *te'ʔiło'was* hospital *te'ʔiłuk* feel

sick *te'ʔiłbaqšił* sick constantly *te'ʔiłbis* catch (a disease), sickness *te'ʔiłowałuk* nurse

te'kidis socks, stockings (< Eng. 'stockings') *te'te'kidisčił* wearing socks *te'kidisbap* yarn

ti' tea (< Eng.) [N *ti'*] *ti'čakyak^w* teapot *ti'ksac* teapot

ti' this

ti-, *tič'ił* wipe *ti'łti'ya* wiping [N *ti-*, *tiya'*] *tibeyił* wiping in the house *tibeyiłyak^w* mop

tiktup paper towel, kleenex *tiqa'wuba* face towel *tiqu'ba* face towel *titiqsupyak^w* dish

- towel *tititk^w* wiping one's hands *tititkuba* hand towel *tiʔaqsuba* napkin *tiʔkcuba* toilet tissue *tiʔaʔaʔyaʔp* wipe sth on the exterior *tičak^w* branches in bundle for bathing, brush of branches *titiksiλ* wipe tears from eyes *titiqsup* wiping dishes
- tibis-*, *tibisbis* charcoal [N *tum-is-*, *tumi's*] *tibisawiλ* get ashes put on face (for dancing)
- tiburt* skunk cabbage [N *timaʔt*]
- tiʔcaʔa*: *tiʔc* that one there
- tičaq* northern sea otter, *Enhydra lutris lutris* (Gunther 1936: 114)
- tič-* *tič-*, *tičiʔ* alive, healthy [N *tič-* *tič-*, *tič*] *tiʔtiʔčiʔiʔ* soul, life *tičʔeyaχ* trying to stay alive
- tičsiʔwiʔ* survive
- tičʔuʔχ* gather seafood *tičʔuʔχbaʔyaʔaʔ* out on rocks collecting seafood
- tidaʔ* that one, this one here
- tiʔkaʔa*: *tiʔk* this one here (close at hand)
- tił-*, *tiłaʔ* fish bait [N *tił-*, *tiłaʔ*] *tiłaʔł* bait on *tiłsac* bait pail
- tiłq-*, *tiłqšiλ* squash, smash *tiłqtiłq* smashing [N *tiłq-*, *tiłqaʔ* *tiłqak*]
- tiłwʔp* octopus [N *tił-* *tił-uʔp-*, *tiłwʔp*] *tiłwʔpiks* eating octopus
- tubwʔk^wa:bac* sand flea
- tubuʔs* garbage *tubuʔssac* garbage can *tubuʔyaχsyak^w* garbage can
- tucq-*, *tucqšiλ* pluck *tucqaʔ* plucking [N *tucχ-*, *tucχaʔ*]
- tučičł* stretch tight, taut [N *tučičł-*, *tučičłak*; *tučičł-*, *tučičłšiλ*] *tutučadi* speaking harshly
- tučča-*, *tuččiʔi*: east, east wind [N *tučča-*, *tuččiʔ*]
- turk-*, *turkšiλ* cover with soil, bury *tukturkš* burying at intervals; mole, *Scapanus* sp. (Gunther 1936: 113) [N *turk-*, *turk^waʔ*] *turk^wis* for sth (e.g. bread, potatoes) to bake in sand *turk^was* buried in the ground *turk^wisdak^w* sand bake, pit-cook sth
- tuksac* garbage can
- tuktuk^wadi*: owl

tuk^waq skin, hide [N *tuk^w-aq*] *tuk^waqapł* seal skin float for whale hunting *tuk^waqxtida* made of leather

tup-, *tupak^w* evening, twilight [N *tum-*, *tumak tupšišil*]

tupa't inherited family privileges, rights [N *tupat-*, *tupa'ti*]

tupk.-, *tupkuk* black *tupkeyuk* black hair *tupktupkeyuk* snow bird *tupku'łiłta* black nose
tutupkabił black ears *tutupki'yuqł* blackmouth salmon (young king salmon)

tupał salt water, ocean water [N *tupał tupał(-)*] *tupa'yixa* drown in salt water

tuq-, *tuqšišil* melt [N *tuq-*] *tuqkačišil* melt away

tuška'wiḡ lingcod [N *tušk-*, *tušku'h*]

tušq-, *tušqšišil* bunch together *tušqak^w* bunched, bundled (things) [N *tušq-*, *tušqak*] *tušqista*
people bunched together in a boat or canoe

tutu'watš grouse

tu'wa'dux^watḡ Twana Tribe [N *tu'wa'nux-łath*]

tu'wisaq Olympic elk, *Cervus canadensis occidentalis* (Gunther 1936: 116)

tu'x-, *tu'xšišil* spit *tu'xtu'x^wa* spitting [N *ta'x^w-*]

tu'ḡ-, *tu'ḡšišil* become afraid *tu'ḡuk* afraid [N *tuḡ-*, *tu'ḡuk*]

ía- object on line *íačišil* throw out a line with sinker [N *ía-*, *íačišil*] *ía'ładił* wearing a necklace
ía'ładuba necklace

ía'łaqas fish drying rack

íaba' singing a certain kind of song [N *íam-*, *íama' íapšišil*]

íabuq-, *íabuqšišil* tie a knot *íabuq^wak^w* knotted, a knot [N *íamuq-*, *íamuqak*]

íaččišil- sudden *íaččišilšišil* do suddenly *íaččišil'áqatu* sudden drop off, cliff, steep shore

ía'da- stacked, piled in layers; layered inside [N *ía'na-* *ía'na-q-*, *ía'naqak*] *íata'dak^wič* wearing layers of clothes *íata'dakčityak^w* shoe(s) *íata'dakčuba* golashes, overshoes

íata'dakčubakčičil wearing golashes, overshoes

iadʔoʔ carry on the back [N *íanup-*, *íanupa*]

íakwʔak^w vehicle overloaded [N *íawaʔk^(w)*]

íak^{w-}, *íakšiči* scratch with claws or nails; hold in claws (iter.) [N *ńik^{w-}*, *ńik^waʔ* *ńikšiči*; *íak^{w-}*, *íak^waʔ*] *íakaʔyak^w* claw *íatakbiʔiʔs* chicken scratching around on the ground *íatak^wik* eastern sparrow hawk, *Falco sparverius sparverius* (Gunther 1936: 108)

íak^was fish gills [N *íak^{w-}* *íak^{w-}as-*, *íak^was*]

íap- wearing a belt, girded about, tied about [N *íap-*, *íapq-*] *íapaʔwadi* wearing a belt

íapaʔwaduba belt *íatapwadi* ant

íapat-, *íapatšiči* think, concentrate, plan [N *íapat-*, *íapata*] *íaʔíapata* thinking, planning

íapł.-, *íapłšiči* close eyes *íapłtaʔ* closed eyes *íapłtaʔíapłtaʔ* blinking [N *íapł.-*, *íapłtaʔ*] *íapłtaʔi* lying down inside with eyes closed *íatapłbałaksi* flirt (said of a woman)

íapsčiči dive [N *íaps-*, *íapsaʔ*]

íaq- straight, going directly to where one is heading [N *íaq-*] *íaqatiʔs* directly to the beach, straight down the beach *íaqččik* going directly where one is going

íaqu-, *íaqʔuk* honest, truthful (durative is only said of a woman) [N *íaqu-*, *íaquqł*]

íaq^waʔčak^w one who is witness *íaqubaʔcu* tell the truth, speak the truth

íaquʔbis absolutely

íaq^{w-}, *íaq^wak^w* believing [N *íaq-*, *íaq^wak^w*]

íaqasi: noon

íasaʔwaʔ lingcod eggs

íaš-, *íašiči* door, doorway, trail, road [N *íaš-*, *íašiči*] *íaʔyas* trail, road

íašsuk part hair down the middle

íaʔíawic bucking wind in a canoe or boat

íawisaʔbac stars [N *íatus-*, *íatuʔs.*]

iax- lean against [N *iaḥ-*, *iaḥak*] *iaḥačakt* sleep curled up on the water (as a seal) *iaḥatca* leaning against the wall

īaywʔis *īaywʔaʔ* anchored [N *īayw-*, *īayw:s*; *īayaʔ-ʔa(q-)*] *īaywʔaʔyak^w* anchor

īic-, *īiciʔ* simultaneous *īicšišil* do simultaneously

īickaʔ drumming in a rapid beat, thundering [N *īick-*, *īickaʔ*]

īičatšišil weigh

īičxiʔyak^w (a) file

īičuʔp cooking pit, pit cooking

īidič-, *īidičuk* rock [N *īi-*] *īīīīīīčis* rocks on the beach *īīīīīīčaqλ* cherry (stones, seeds inside)

īidičukxwaʔ using a stone

īīk^wicqšišil hiccup [N *īīk^wacq-*, *īīk^wacqšišil*]

īīl-, *īīlaʔ* *īīlak^w* wet, soaked [N *īīl-*, *īīlaʔ* *īīlak*] *īīlīʔ* wet spot on floor *īīlis* wet spot on the beach *īīlaʔ* wet *īīlaʔs* wet spot in a canoe *īīlas* wet spot on the ground

īīq^w- sitting *īīq^waʔk^w* rump, bottom [N *īīq^w-*] *īīqīʔwadi* riding alone in a canoe *īīqīʔwadiyak^w* small one-man fishing canoe *īīq^waʔs* sitting on a horizontal surface (e.g. a chair) *īīq^wiʔ* sitting on the floor or inside *īīq^wis* sitting on the sand or on the beach *īīq^wiʔcita* sitting in water *īīq^wačis* chair, bench, seat, stool *īīq^waʔs* sitting in a canoe

īīx-, *īīxšišil* sharpen *īīxiʔaʔ* whetstone

īīxckiʔ tears [N *īīx-*, *īīxšišil*]

īīubaʔ diving into the water (e.g. fish)

īīucaʔpʔ having the hair cut short [N *īīuc-imʔ*, *īīucimýuʔ(λ)*]

īīucup giant red sea urchin [N *īīuc-*, *īīucup*]

īīudʔax^w cattail, reed, rush [N *īīunax-*, *īīunaʔx*] *īīudʔaxuʔ* place name *īīudʔaxbap* cattail

īīuk^waʔatx Toquat Tribe [N *īīuk^waʔ-ʔath*]

īīuk^wiʔyu:k narrow opening

íulw'itali: shrew, *Sorex* or *nesorex* (Gunther 1936: 114)

íume'nuwis spiritual power

íwP-, *íw'puk* happy, glad, proud *íupsu'qλ* proud *íú'wbik* fancy, vain person *íú'upi'ʔib* show, share prize

íupqiʔi: wart [N *íupq-*, *íupqak*]

íupicxšil sneeze [N *íupicx-*, *íupicxšil*]

íú'ubaqš lesser loon, *Garia immer classon* (Gunther 1936: 106)

íú'upčas rabbit

íw'xseyap large horsetail sprout

íux-, *íuxu'cida* head *íuxšil* behead [N *íuḥ^w-*, *íuḥ'citi*] *íú'uxč'a'ʔap* headache *íu'watup* chop the head off a fish *íux'cki'* skull *íux^wakt* dried halibut head

ʔu'ba' this far [N *ʔuma'*]

ʔu'ba'saqλ nice, friendly, kind, tame

ʔu'či'ba:d the most, best

ʔuksa'p urge, coax [N *ʔuk-sa'p*]

ʔukwac-, *ʔukwe'ʔiqsu* step child, parent [N *ʔuwac-*, *ʔuwi'qsu*] *ʔukwacdak^w* have a step-parent

ʔukyax-, *ʔukyaxbis* news [N *ʔuyaqḥ-*, *ʔuyaqḥmis*] *ʔukyaxbisał* newspaper *ʔukyaxču* radio, television *ʔukyaxdak^w* tell news, have news *ʔukyaxi'ks* messenger

ʔuk^wa-, *ʔuʔu'k^waḥ* oneself; one's own [N *ʔuk^wa-*] *ʔuk^wacxi* married to a relative *ʔuk^wi'c* belong to *ʔuk^waki'ł* homemade *ʔuk^waki'yukt* handmade (by self) *ʔuʔu'k^wasa'tḥa* speaking one's own language

ʔupak^w numb in pain, infection [N *ʔup-*, *ʔupak*]

ʔupu'č rump, bottom (< C.J.)

ʔupu'ł deaf

ʔuʔq- good, pleasant, happy [N *ʔuʔq-*] *ʔuʔqubis* good, pleasant weather, atmosphere *ʔuʔuʔquʔk*
 weather looks good *ʔuʔqʷaqʷ* happy, pleased, pleasant feeling (said of a man) *ʔuʔuʔqpadač*
 dating *ʔuʔqsuʔqʷ* pleased, happy (said of a woman)

ʔuʔqʷi think or believe [N *ʔuʔqʷaʔp*]

ʔusaʔdiʷ break up, separated (a couple)

ʔuseʔʔiʷ place name (Ozette village)

ʔusiʔdukʷida relative

ʔusiʔti trunk of body, torso [N *ʔusiti(q-)*]

ʔust- locative root [N *ʔust-*] *ʔustʔas* earth, on the ground *ʔustʔaʔ* on the rocks (like a seal)

ʔustʔiʷ on the floor *ʔustʔis* on the beach

ʔuʔšaʔuʔwid child

ʔuʔšbaqakʷ terrible (like huge waves on ocean), turbulent [N *ʔuʔšmaqak*]

ʔuʔšiʔiʷ poison sb [N *ʔuʔšʔiʷ*]

ʔuʔš- someone, something [N *ʔuʔš*] *ʔuʔšsiʷa* accident *ʔuʔšʔbis* trouble *ʔuʔšʔbisdakʷ* have a
 problem *ʔuʔšʔyakʷ* useful, beneficial *ʔuʔšʔyaʔ* a chronic drunk *ʔuʔšabaʔceyakʷ* word *ʔuʔšcuk*
 difficult *ʔuʔšʔcidaʔq* talk about sth, discuss sth *ʔuʔuʔšabaʔcaʔyik* talkative *ʔuʔuʔšciʔqbaʔ*
 pay attention to *ʔuʔuʔšqatʔ* something wrong, at fault *ʔuʔšabaʔcu* tell, talk *ʔuʔšpaʔ* looking
 admiringly at s.o. *ʔuʔšsuʔqʷ* worried mind *ʔuʔštaqyu* Indian doctor, spirit healing *ʔuʔštuʔp*
 something

ʔuʔubaxi enough, to fit, just, right [N *ʔuʔumʔi*] *ʔuʔubaxickida* just right

ʔuʔuʔči often

ʔuʔuʔkʷiʷ accusing, blaming sb *ʔuʔuʔkʷiʷšʔiʷ* accuse, blame sb

ʔuʔuʔšcab efficient worker [N *ʔuʔuʔšcim*]

ʔuʔuʔšʔiʷta fishing for halibut

ʔuʔuʔyuksa always

ʔuʔwadiλ sometimes, at times

ʔuχ-, *ʔuχšiλ* chew *ʔuχuʔuχ^wa* chewing

ʔuχcaʔa: *ʔuχc* that person

ʔu-, *ʔuχuʔ* so and so, such and such; this, that one [N *ʔu-*, *ʔuh*] *ʔuʔakλi* last, taking up the rear
ʔuʔaʔ included with *ʔuʔawaλ* find *ʔuʔaʔap* buy *ʔubaqak* skillful *ʔuburpšiλ* become
ʔucʔak^w going *ʔuʔcɔʔwat* side of a team *ʔuctaʔ* descended from, belong to *ʔucuʔ* belong to
ʔucxi married to *ʔuččʔes* being close together outside (e.g. sitting, buried next to) *ʔuččʔiʔ*
sitting close together inside or on the floor *ʔučiču* in a container *ʔuʔipiʔ* standing by *ʔučuʔ*
ask for in prayer *ʔuk^wiʔduk* with, together *ʔuseyak* make *ʔusiwiʔ* die *ʔuʔucxad* doing
something for sb else *ʔuʔukuk* look like *ʔuʔuʔta* ahead, first *ʔuʔuʔtaχ* hunting (esp. whale),
collecting *ʔuʔuʔyaʔp* crying because of *ʔuʔyuq^wa* doing to; particularly, especially, namely
ʔuʔbideyak^w sth used for repayment of a debt *ʔuʔduʔλ* reason for, because of *ʔuk^wiʔ* mak-
ing *ʔuʔsubač* ritually preparing for *ʔuʔuʔwat* kin, related to *ʔuʔuʔwatida* friend, relative
ʔuʔuʔuduχ looking for *ʔuʔwaʔuk* looking after, taking care of *ʔuʔaxawaʔ* use *ʔucačiλ* go to
ʔucaqiʔdak face a certain direction, direction facing towards *ʔucaqλ* going toward a given
point, toward *ʔuckiʔ* part of, left over from *ʔucpaʔ* on that side *ʔucaʔ* especially *ʔuččuwʔs* live
together, cohabituate *ʔučiqλ* inside *ʔučiʔaqst* mixed with a group *ʔudaʔk^w* have, own
ʔuktaqyu spirit of an animal *ʔukyuq* to ride on, in *ʔuk^wiʔtaʔk* in fear of *ʔuk^wič* wear *ʔuq^waʔs*
child of *ʔuquqʔa* one's name is *ʔuqʔoʔ* see, find *ʔusuba* need, want *ʔuχsaʔ* hungry for,
want, crave a certain food *ʔuyawaʔ* going for at intervals *ʔuʔadi* taking the place of *ʔuʔidiʔ*
serving sth at a party *ʔuʔiyiʔ* sleeping with *ʔuʔiʔxa* resulting from *ʔuʔuʔtaχpaʔ* March
ʔuʔuʔtaχsac whaling canoe *ʔuʔuʔtaχyak^w* whale hunting gear *ʔuʔuʔyaχ* singing a song
ʔuʔbaʔcu tell *ʔuʔbida* debt, owe *ʔuʔcxad* doing something for someone else *ʔuʔcak* cooking
ʔuʔcaχ depend on *ʔuʔcis* laughing at *ʔuʔktis* following directions, schedule, pattern *ʔuʔaʔak*
longing for desiring *ʔuʔiλ* go for, get *ʔuʔuʔ* expecting

- wa* interj. was it not so? right?
- waʔ-*, *waʔ* say [N *waʔ-*, *wawaʔ waʔ*] *waʔsuʔqʌ* attitude, thought, thinking to yourself (said of a woman) *waʔyaqʌ* attitude, thought, thinking to yourself (said of a man)
- waʔač* place name (Waatch Village) *waʔačaʔtʃ* Waatch people
- waʔaq-*, *waʔaqap* kelp perch
- waʔaqsuba* lower jaw
- waʔbit* left-over dinner
- wačit-q-*, *wačida* thin skin [N *wačin*] *wačitqapiʃ* almond *wačitqapʔ* almond
- waʔda* interj. isn't that right?
- wadiʔq* larynx, voicebox, adam's apple [N *waniq-*, *waniʔq*]
- wadiš* skirt [N *wanuš*(.-)]
- wahaʔk^w* go [N *wahaʔk*(^w-)]
- waks-* on both sides or ends *wakscaʔtačilʌ* fork in river *waksaqčaw* both ends *waksaʔs* arms (both sides)
- wakyaqšilʌ* have a miscarriage
- walaʃ-*, *walaʃšilʌ* speak harshly, harsh sounding, angry voice *wawalaqadi* sound resembling a trill
- waʔ-*, *waʔšilʌ* go home [N *waʔ-*, *waʔšilʌ*] *waʔaʔyaqitʔ* at home *waʔaʔyuʔ* home *waʔaʔyaqida* left at home *waʔʃsaʔ* homesick
- waʔ-*, *waʔuk* weak in strength
- waʔuq-*, *waʔuqšilʌ* bark (seal, dog, etc.) *waʔwaʔuq^wa* barking [N *waʔyuq-*, *waʔyuq^wa*]
- waʔxyiʔyuk* light in weight
- waʔaq-*, *waʔaqšilʌ* make a “u”-turn, zig-zag *waʔaqbeyitʔ* pacing back and forth
- waʔqaʔa:t* bull kelp

wa'qit frog [N *waʔit-*, *waʔit*] *wawa'qitapuł* lesser scaup duck, *Nyroca affinis* (Gunther 1936:

107) *wa'qite'ʔis* tadpole, polywog

wa'sa (only with Content-Interrogative mood) where? [N *wa's(t)-* *wa'sa-*, *wa'si*] *wa'sʔatx* live

where? *wa'scačičił* go where?

wasaq-, *wasaqšičił* cough *wa'wasaqqa* coughing [N *wásaq-*, *wásaqqa*] *wasaqsiʔi'* cough

medicine

wa'sco'wat (only with Content-Interrogative mood) which one?

wa'sqeyu (only with Content-Interrogative mood) when?

wawačaxkuk beans [N *wawačaq-kuk*]

wa'wida hunt game in forest [N *wa'win*]

waxaččaqak bruise

wax^w-, *waxšičił* break wind [N *wax^w-*, *wax^wa'*] *waxa'čičił* bee, wasp, hornet

waxatut kelp fishing (to catch kelp fish with sea eggs)

wa'yid wine (< Eng.)

weʔič asleep, sleeping *weʔičičił* go to sleep [N *weʔič*] *weʔičca'q* sleeping and sleeping

weʔičqeqł drowsy *weʔičuwit* bedroom *weʔiča'* sleeping, lying on the rocks *weʔičbis*

moth *weʔičičił* sleeping, lying in the house *weʔičičiłpaču* fall asleep at once *weʔičičis* sleeping,

lying on the beach *weʔičkičičida* nightgown, pajamas *weʔičkičičideyak^w* sleeping garment

weʔiču'was hotel, motel *weʔičyak^w* mattress *weʔiččas* sleeping, lying on the ground

weʔičičik sleepy head

wi- insufficiently, incompletely [N *wi-*]

wi'ba not know a person

wi'ba'saqł disagreeable, unfriendly

wibat doesn't show, not known *wibatap* (with causative) not know

wi'bič durable, sturdy object

- wi'c?ak^w* timid, hesitant *wi'cuk^wiλ* incept. [N *wi'ca'k*]
- wick-*, *wickšiλ* lift one's head up, back *wickak^w* have head up [N *wick-*, *wickak wicka'*]
wi'ckeyukšiλ raise head slightly
- wi'ca'd* dim light
- wičaq-* having no sense, unwise, irresponsible *wičaqš?ibił* no sense, irresponsible (said of a woman) *wičaqaqλ* no sense, irresponsible, unwise (said of a man)
- wičaqał* dull, blunt
- wiči'kiłta* dull-pointed, blunt
- wičq-*, *wičqak^w* clear, bare, bald; a clearing [N *wi-* *wičx-*, *wi?ak wičxak*] *wičqa'pł* bald
wičqqi' bald on top
- wi'čuk* slow vessel
- wita-*, *wi'da* raid, war, fight, wage war [N *wita-*, *wi'na*] *witaksac* war canoe
- wi'dač* fear, be afraid *wiwi'dačik* coward
- widi's* steady canoe [N *wins(-)*]
- wi?iba* angry (said of a woman) [N *wi?um*] *wi?ibaqλuł* having a mad face (said of a man)
wi?ibaqłik gets mad quick (said of a man) *wi?ibaquł* having a mad face (said of a woman)
wi?ibaqλ angry, mad, unafraid, fearless (said of a man)
- wikaxuł* barren, childless, sterile
- wik-*, *wiki'* not, no, nothing *wikeyačiλ* incept. [N *wik*] *wikca's* on the wrong side *wikcuk* easy
wiki'pi'č not having a spouse, unmarried, bachelor *wiki'batak* probably won't *wiki'ba'?aλ*
not intending to *wiki'cu'* empty (box, etc.) *wiki'qatx* pretending to not *wiki'yak^w* good for
nothing *wiki'?ał* unaware *wiksita* for nothing to happen *wikstu'p* nothing, good for nothing,
worthless *wiksuba* not want *wiktaqšiλ* didn't before going *wiku's* empty, no one in room
wikaqλił empty house (no people) *wikaxs* empty canoe, having caught no fish *wika'p*
doesn't hear or understand, deaf *wikič* not wearing *wiwi'kci'qbap* ignore *wi'kuł* expecting

nothing, nobody; August *wi'kaba'cu* talking about nothing *wikał* not go along, stay behind, not included *wikał* not, nothing on fabric or paper *wikał'ca* nothing on the wall *wikcačił* go to the wrong place, make a mistake *wikił* not at home *wiki'baqak* awkward, unskilled *wiki'ta'k* brave *wikiya'* not give *wikkał* nothing missing *wik?oł* not perceive *wiksaqλ* no underwear *wi'ksa'yuk* wearing nothing on the head *wiksa'cu* in the wrong place *wikstu'pił* bare (floor) *wi'kalux* work for nothing, work without pay, volunteer *wiki't* absent, no, none *wiwi'kcił* bare feet *wi'ki'bi'k* catches nothing, unlucky *wi'ki'cidaq* not much talking, visiting

wiki'ba unwilling to give

wiki'caçak^w stormy weather

wikwi'ya:k^w boy

wiłaqλ reluctant, unwilling *wiwi'łaqλx* lazy

wi'łaq-, *wi'łaqšił* (fire, light) goes out, becomes extinguished *wi'łaqbap* spruce tree

wipax- annoyed by, weary (of) *wipaxšił* make a nuisance, annoyance of oneself [N *wipax-*]

wipaxbis nuisance *wiwipa'waqλ* drowsy

wipxuł feeble, slow

wi'q- angry, unpleasant; stormy, bad (weather) [N *wi'-q-*] *wi'qibis* bad weather, unpleasant atmosphere (e.g. at a party) *wi'qpał* November

wiqał unlucky in fishing

wi'qsi' windy weather, wind *wi'qsi'pał* March

wiqał stingy, greedy (said of a male)

wi'qis bad, dirty *wi'qeyačił* incept. *wi'qisačakt* stormy, rough water *wi'qisał* dirty fabric

wi'qisaqsił foul mouth *wi'qisa'tuk* cursing swearing, talking dirty *wi'qisbis* bad things

wi'qisčitqak^w dirty colored *wiwiqiskuk* ugly looking *wiwiqiyił* dirty house *wi'qispa* not

good *wi'qisas* dirty surface *wi'qiyakλi* dirty end

wisičix head cold

wisti'qa-, *wisti'qačičiλ* get dark *wisti'q'ak^w* dark, darkness *wisti'q'aaq'as* shady spot, in the shade

wiš-, *wiššičiλ* deflate, become flat *wišak^w* deflated, flat [N *wišk-*, *wiškak*] *wišapł* collapsed, flat (balloon, sealskin float) *wiši'čičiλ* flat nose

wiłapał no luck, always unlucky

wiwibaχ insufficient, not fit

wi'ya never [N *wi'-ya*]

wi'yi'k stingy, greedy (said of a woman)

wiyi'wiλ miss, lonesome for

wi'yu three *wi'yucχi* have three wives *wi'yučiq* three long objects *wi'yu'q* sixty *wi'yučeyat* three days; Wednesday *wi'yu's* three residents

xač-, *xača'* apart, separate, separate out [N *xača-*, *xača'*; *xač-*, *xačšičiλ*] *xačχtačičiλ* separate from a group

xad'ak^w woman

xut-, *xutaqsiλ* drink *xutac* water container, bucket *xučur* had a few drinks *xu'tik* alcoholic

xuti'ks lead by the hand [N *kuta-*]

xuwic-, *xuwicšičiλ* get drunk [N *xu'c-*, *xu'ca'*] *xuxuwicc'ak^w* staggering

x^wac-, *x^wa'cx^wa'ca* crumbling *x^wacak^w* crumbled [N *χic-*, *χicak*] *x^wacaqsił* crumbs on the mouth *x^wa'ckačičiλ* crumbling apart

x^wak-, *x^wakšičiλ* swell *x^wakuk* swollen [N *x^wak-*, *x^wakak*] *x^wakas* hill *x^waku't* swollen face

χa- sufficient, complete, entirely [N *ħa-*] *χa'qadiqadi* the sound of noise *χa'qadi'yak^w* bull roarer *χa'qadi* loud, noise *χe'čičiλ* eat up all the food

χa'atapiχ steamer clams, little neck clams

- xa'ba-*, *xa'bʔak^w* sleep overnight, stay overnight [N *hama*, *hamuk^wiλ*] *xa'bak^wat* gone (over night), overnight trip *xa'bʔatx* staying overnight
- xabaqšišiλ* dodge, evade [N *himq-*, *himqa'*]
- xabup* know, recognize (a person) [N *ham-up*] *xabupi'yił* know, recognize a voice *xabupida* famous
- xa'ca-*, *xa'cʔak^w* bold, unafraid *xa'cuk^wiλ* incept. [N *ha'ca'k*] *xa'xacʔik* nervy person
- xaca'd* bright light
- xacatšišiλ* exhausted, used up [N *hačat-*, *hačatak*]
- xaci'* deep down [N *hači'ʔ*] *xaci'k^widukst* canyon *xaci'qs* deep soup bowl
- xacł-*, *xacła'* widowed, divorced *xacłeyačił* incept. [N *xacł.-*, *xacła'*]
- xacupsi:qsu* brother of a female [N *hačic-*, *hačimsiqsu*]
- xadi'cuq^wa* eloquent, speaking fluently, fluent in a language
- xadu's* enthusiastic
- xaku'ba* chief's wife, upper-class woman [N *hakum*]
- xalawi-q-*, *xalawuʔu:* Dungeness crab *xalawiqbap* plant sp.
- xala'x* lizard
- xaxux-*, *xaxuxšišiλ* *xaxaxaxux^wa* shiny
- xaxuxkatšišiλ* flash of silver
- xapux-*, *xapuxšišiλ* relax, enjoy oneself *xapuxpadač* relax from work, take a walk
- xaspu'x-*, *xaspu'x^wak^w* bright (color) [N *has.-* *hastk-*, *has hastkak*]
- xasu'ba* allow, let
- xasš-*, *xasša'bis* bone [N *xasš(-)*] *xasšč^wi'* skeleton *xasi'yił* bone in the throat *xasšpał* time of severe famine *xaxašiši'da* rock cod, turtle *xaxašičuk* crackers
- xat-* (to) oil hair [N *hat-*, *hata'*] *xatapł* oiled hair *xatču'* oiled hair
- xatix* anxious, eager

- ḡaiap-*, *ḡaiapał* always having good luck (esp. lucky in love) *ḡaiapsi?i'* love potion
- ḡaxad?at* extremely, very [N *ḡaḡana?at*]
- ḡaxadi'p* bold, extreme, too much
- ḡaxapḡta* advice, advising [N *ḡapḡti-q- ḡapḡti'-q-*, *ḡapḡti'*; *ḡa'ḡup-*, *ḡa'ḡupa*]
- ḡaxapḡteyak^w* advisor
- ḡaya'* far distance [N *saya-* *sayaʔ-*, *saya'*] *ḡaya'qa'tuk* loud noise, loud-voiced person
- ḡaya'ca'tu* far out at sea
- ḡa'ya'ca* high [N *saya'ca*]
- ḡe?iłcey* even so, including, and even
- ḡi-*, *ḡi'ḡuk* crawling [N *ḡi-*, *ḡiya' ḡi?ak*] *ḡibeyił* crawling on the floor *ḡiktu'p* animal *ḡixibi?i's* car *ḡibu's* climbing *ḡi'ḡa'pi* stooped
- ḡicbu-q-*, *ḡi'cbu?u'* herring eggs [N *si'ḡmu-q-*, *si'ḡmu'*] *ḡixicbuḡkuk* goat's beard plant
- ḡixicbuḡḡsa* flower part of goat's-beard plant
- ḡi?ida* northwestern mountain lion, *Feles oregonensis* (Gunther 1936: 115)
- ḡik^watšił* bend over
- ḡiḡuk* trash [N *ḡiḡ-*, *ḡiḡuk*]
- ḡiḡk^wi'ḡatḡ* Hesquiat Tribe [N *ḡiḡk^wi'ḡ*]
- ḡi'ḡi'ḡit* licorice fern
- ḡu'* that
- ḡu-*, *ḡučił* bail, pump water *ḡu'łḡu'ya* bailing [N *ḡu-*, *ḡuya'*] *ḡuča^w* canoe bailer, water pump
- ḡu'bi'adi* snoring [N *ḡuḡt-*, *ḡuḡta'*]
- ḡuda'* *ḡude'* that one there
- ḡulu'wa:bac* jellyfish [N *ḡunḡun-wi(-q-)*]
- ḡuł-*, *ḡułak^w* slimy [N *ḡuł-*, *ḡułk-*, *ḡuła'* *ḡułka'*] *ḡułapiḡ* sole fish *ḡułu'bis* nasal mucous
- ḡuḡu'łduk* slimy hands

- xuq-* hollow object inverted against a surface *xuqšičil* capsize [N *ħuq-*, *ħuq^wa^r*] *xuqis* (canoe)
 upside down on the beach *xuqačakt* tipped over on ocean *xuqu^wba* mask
- xut-*, *xutšičil* splash *xutxuta* splashing [N *ħut-*, *ħuta^r*] *xu^la^xsičil* splash into a vessel
- xu^lu-*, *xu^luk^wičil* respond, answer, do in turn, retaliate; exchange [N *ħa^lu-* *ħa^lu^r-*] *xu^luqawičil*
 change masks *xu^luk^wičičil* change clothes *xu^luya^r* trade, exchange
- xu^lyaq^l* sliver *xu^lyaqstičil* get a sliver *xu^lyaq^ltup* (a) skewer
- x^wades* sound heard but not seen, thing makes a sound
- x^wayx^wa^y* Salish mask dance
- ya^r-*, *ya^rak^w* be hurt, sore; longing for [N *ya^r-* *ya^rk^w-*, *ya^rak*] *ya^radič* sore neck *ya^rwadi*
 backache *ye^ričičil* sore nose *ye^ri^lyič* sore throat *ya^rksu^lq^l* sad, sorrow, sadness, sorry
- yaba^rt* resent *yaba^rtsuq^l* jealous, nasty feeling
- ya^rbis* love
- yac-*, *yacšičil* step, take a step [N *yac-*, *yaca^r*; *ya^rc-*, *ya^rcuk*] *yacačisyak^w* stirrup *yaca^rs* having one's foot flat on a horizontal surface (e.g. rock, table, chair) *yaccpa^r* stepping over sth
yaci^las having one's foot flat on the ground *yaci^lič* having one's foot flat on the floor
yayacisyak^w leg *ya^rčičil* take a step forward
- yacatšičil* take a step
- yack-*, *yackšičil* kick, push with foot [N *yack-*, *yacka^r*] *yackatčca* kick the wall
- ya^rčard* bright sunshine, clear day *ya^rčadeyačičil* incep.
- yača^la^r*: dogfish [N *yač-*, *yača^r*]
- yačqapč* wrapped bundle
- ya^rda^rk* having an ache, being sick [N *yanu-*, *ya^rna^rk*]
- ya^rdaq-*, *ya^rdaqak^w* baby, child [N *na^lyaq-*, *na^lyaqak*] *ya^rdaqic* belonging to a baby
ya^rdaqspati^r cradle *ya^rdaqte^rič* doll
- yadi-* soon, right away, at once; early [N *ča^rni^l?*] *ya^ryadi^lpi* too early, premature

yał (only with Relative mood) where, place at which

yał yonder; interj. here (handing sth to sb) [N *yał*]

yaq^w-, *yaqa'* (only with Relative mood) he who, that which [N *yaq^w-*] *yaqcxi* spouse

yaqcxi?ida spouse (when speaking about one) *yaq^wa'bida* what one owes *yaqtaqyu* guardian spirit *ya'yaqwat* friend

yas-, *yasšił* spread one's legs *yasa'* have spread legs [N *yas-*, *yasak*]

yaša'ba-q-, *yaša'bał* hunting fur seal [N *yašma-q-* *yašmi'-q-*, *yašmał*] *yaša'bałpał* April

yaša'baqac sealing canoe

ya'tya'ta singing in one place [N *yat-*]

yaḡsa'wi' meet going opposite directions

yaya'qł hate, dislike *yaya'qłsíał* dislike or hate one another *yaya'qłida* not liked

yayaḡa:d blue berries

ye'yił hurting *ye'yiłšił* get hurt

yubas sour, unpleasant smelling

yubata?a:p not know how to

yube'ziqsu brother-in-law of a male [N *yimac-*, *yimi'qsu*]

yubw'k dense brush, growing densely

yubut cannot, not able *yubw'ził* restless, sleepless night

yubu'piqak^w tangled rope

yuč-k-, *yučkak^w* narrow [N *yučk-*, *yučkak*] *yučka'dił* slim, thin length *yučkuł* narrow face

yuyučwadi ant; peanut *yuču'k^waḡs* narrow (canoe, vessel) *yuyučpič'as* slim ankles

yuyučskapił pear

yuk^we'ziqsu half sister

yuk^wic-, *yuk^wi'qsu* younger brother or junior line male cousin of a female [N *yuk^wi-*, *yuk^wi'qsu*]

yuyu'k^wicdukuba little finger *yuyu'k^wicčuba* little toe

yuč'i'it̚ narrow (board, rope)

yu'lu?it̚at̚ Ucluelet Tribe [N *yu'lu?it̚-?at̚*]

yupaxsi?i: mischief

yu'q^wa' also, too [N *y^wu'-q^wa'*]

yux lungs [N *yux^(w-)*]

yuxt-, *yuxtš'iλ* blow away *yu'xłuk* floating; staggering, sick [N *yuxt-*, *yuxta'*] *yu'xłapi* floating
on air, blowing around

yuxta' prepare for departure [N *yuxt-*, *yuxta'*]

yu'-, *yu'x^wi'* even, equal, alike, same [N *y^wu'-q^wa'*] *yu'yukuk* look alike, twin *yu'xtač'iλ* divide
in half

yu'yu morning *yu'yuyuč* get up early *yu'yupadač* walking around early

yu'yuw for a while

yuyub omen, taboo

yuyubač wrong

yuyub?iy stupid

yuyuqsi's north, north wind [N *yu-*, *yu?i*]

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