The Verbal Morphology of Santiam Kalapuya[*]

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This work is a detailed description of the verbal morphology of Santiam Kalapuya, an extinct Native American language of Oregon. This work is the first in-depth grammatical analysis of this language. The data used for this study are texts with translation which were transcribed by Melville Jacobs in the 1930's from Mr. John B. Hudson, one of the last speakers. The analysis presented here focuses on the verbal morphosyntax of Santiam, including the placement, form, and function of prefixes and suffixes on the verb stem. Eleven prefix positions and six suffix positions have been identified, with a total of twenty-one prefixes and fifteen suffixes. These affixes code a wide range of grammatical features, as, for example, tense, aspect, modality, grammatical relation, subordination, and direction. A brief overview of common phonological processes and non-verbal morphology is also given.

KEYWORDS: Kalapuya; Santiam; Grammar; Verbal Morphology

0. Introduction

Santiam Kalapuya was a dialect of the central group of the Kalapuyan language family. It was spoken in the area east of the Willamette River, in the Central Willamette Valley of Western Oregon. Mithun (1999) gives a detailed description of the history of linguistic documentation of Kalapuyan languages as they approached the final stages of extinction and states that Santiam survived into the 1950's. She also gives an exhaustive bibliography of linguistic research and a summary of certain aspects of these languages.

To my knowledge, all that exists of the Santiam dialect are approximately 140 pages of texts with translation which were elicited and transcribed by Melville Jacobs in the 1930's and published in 1945. In addition to these texts, there are also 150 pages of texts in the Mary's River dialect which contain the Santiam equivalents of certain lexical items interspersed within the text. In both cases, the native speaker for the Santiam material was Mr. John B. Hudson, who was one of the last speakers and bilingual in English and Santiam. Jacobs also mentions that recordings of Mr. Hudson were made on RCA Victor discs and were deposited at the University of Washington. The status and condition of these recordings are unknown to me.

The Jacobs material contains texts from three of the mutually intelligible dialects of the central group; Santiam, Mary's River and Lower McKenzie River. The amount of Lower McKenzie River material is much smaller than the other two dialects and was therefore ruled out as an object of study. The Mary's River texts were originally elicited by Dr. Leo J. Frachtenberg in 1914 from his speaker, William Hartless. According to Jacobs (1945), these texts in their current form were checked and to some degree altered by Jacobs and Hudson in an attempt to make them, in their opinion, more accurately reflect the true nature of the Mary's River dialect. This was also the origin of the Santiam lexical items interspersed within the Mary's River texts. I decided not to use the Mary's River texts since it is impossible to determine what was changed by Jacobs and Hudson without access to the original texts by Frachtenberg. It is unknown to me whether the Mary's River texts still exist in their original form. Based upon the above considerations, the Santiam material was the obvious choice for the focus of this work.

The majority of previous work on Kalapuyan languages has consisted of the phonological reconstruction of proto-Kalapuyan and lexical comparison with the Takelma language of Southern Oregon in an attempt to demonstrate a common genetic affiliation. (Frachtenberg 1918; Swadesh 1965; Shipley 1970; Berman 1988, 1990; Kendall 1997) To my knowledge, the only prior work on a Kalapuyan language which contains substantial morphological or syntactic information is Rude (1986), which focused on the Santiam and Mary's River dialects. The morphemes identified by Rude are:

Verbal — translocative, cislocative, ablative, applicative, SAP, third person plural, first person direct object

Nominal — oblique prefix, article, third person possessive

Of these morphemes, Rude mentions syntactic information for only the applicative, third person plural and the article. Other previous identification of morphemes known to me are: Berman (1990), second person singular possessive prefix; Tarpent and Kendall (1998), reproduced in Mithun (1999:433), intransitive suffix. These are all noted in the relevant sections of this work. All of the above mentioned morphemes were independently discovered by me (before I had access to Rude's paper), with the exceptions of the intransitive suffix, the ablative, and the applicative (partially identified by Rude, see section 3.7).

Jacobs (1945) does not include any grammatical information along with the texts, nor does he give any indication of morphological structure below the word level. Jacobs does use hyphenation to indicate what he terms 'morpheme clusters or groups' (1945:15), but these are clearly referring to cliticization above the word level and no indication of the semantic nature or grammatical function of these clitics is given. Jacobs' use of hyphenation to mark clitics is in many cases inconsistent and questionable and only the most likely cases of true cliticization are detailed in this work.

This study focuses on the verbal morphology of the Santiam dialect and represents the first in-depth grammatical analysis of a Kalapuyan language. The

identification and analysis of the morphology and syntax presented here is entirely my own except for a few cases where suggestions were given to me in personal communications (all by Marianne Mithun) or, as mentioned above, in a few instances by reference to previous work on the language. These outside sources of information are cited in the appropriate sections.

This work was conducted without reference to any material from other Kalapuyan dialects or languages. The decision to limit this work to a single dialect was based upon the notion that an in-depth internal analysis of a Kalapuyan language, as opposed to a comparative work, would be most appropriate at this stage of research, particularly since the morphological structure of these languages has been largely unknown.

The nature of this work presents the researcher with a number of difficulties, not the least of which is the limited amount of data and, at times, questions about the transcription. In my opinion, Jacobs did an excellent job in attempting to transcribe the narratives as accurately as possible. The main drawback to his approach of absolute phonetic accuracy is, of course, unrecognized allophonic correspondences. This generally was not a problem when analyzing the material, though at times questions about the basic form of a morpheme were left unresolved. It is my opinion that, in general, the transcriptional accuracy of Jacobs' Santiam material can be regarded with a high degree of confidence.

This work is divided into three sections. Section 1 lists phonetic segments and gives a description of some of the more commonly observed phonological processes. It also gives a brief syntactic overview of the language and lists prefixes and suffixes with their respective positions on the verb stem. Section 2 describes and exemplifies the function of each prefix and gives an account of grammatical aspects of the language associated with these prefixes. Section 3 describes and exemplifies the function of each suffix. In several cases, forms and functions of suffixes are offered as suggestions in contrast to the more thorough analysis of prefixes. At this point in research, there is, in general, a greater degree of uncertainty regarding suffixes than prefixes. This is partially due to the limited amount of data, particularly with regards to object suffixes. Also, suffixes, in contrast to prefixes, appear to exhibit a greater degree of phonological fusion when they occur next to each other on the verb stem, making the identification of their underlying forms more difficult. It is hoped that future research will resolve some of the remaining uncertainties regarding suffixes and extend into the area of the comparative morphology of Kalapuyan.

1. Language overview

This section gives a general overview of certain aspects of the phonology, morphology and syntax of Santiam Kalapuya. Since the focus of this work is a detailed account of the verbal morphology of Santiam, only a brief examination of phonology and syntax is given. A list of verb prefixes and suffixes and their position classes, as well as clitics, is provided. An in depth look at these affixes is presented in sections 2 and 3.

1.1. Phonetics/phonology

The following segments can be deduced from Jacobs' description of the phonetic aspects of Santiam and the symbols he employed. This section will list the segments of Santiam with currently used symbols corresponding to those used by Jacobs. Jacobs' transcription of Santiam was broadly phonetic, though it may be possible to deduce the underlying phonemes of Santiam. Certain statements by Jacobs indicate allophonic variation for some segments, though the basic underlying forms of phonemes are not discussed. A complete account of underlying phonemes and allophonic variation in Santiam is outside the scope of this work.[1]

1.1.1. Segments according to Jacobs

The following is a list of segments noted by Jacobs. The symbols he used for certain segments are given in parentheses.

Stops

Jacobs (cryptically) indicates that velars and uvulars are in allophonic variation with each other.

Unaspirated	p t k q	
Aspirated	p^h t^h k^h q^h	(Jacobs C')
Voiced?	b d g ġ	(Jacobs B D G Ģ)
Glottalized	ṗ ṫ k̇ q̇	
Labialized		

Unaspirated	k^w q^w	
Aspirated	k^{wh} q^{wh}	
Voiced?	g^w $ġ^w$	
Glottal	$k̇^w$ $q̇^w$ ʔ	(A glottal stop is indicated as [']by Jacobs)

Nasals

m n ŋ m̩ n̩

It is unclear what [m̩] [n̩] represent, since Jacobs does not provide a phonetic description of these graphemes. Most likely, these symbols represent syllabic nasals. Jacobs also indicates that these syllabic nasals are allophones of their non-syllabic counterparts.

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[1] Examples are given in currently used phonetic characters. Vowel length will be represented, but accent will not be shown. In the texts, hyphenation was apparently used to represent a weak morpheme boundary, though it is unlikely that all cases of hyphenation represent true cliticization. For the purpose of clarity, only forms judged to be likely examples of clitics will be marked by '='.

Fricatives
fʷ,h, hʷ may be allophones.
Bilabial   f
Alveolar s
Palatal   š   (Jacobs [c])
Velar   x ҳ   (ҳ may represent an unvoiced uvular fricative)
Lateral   ł
Glottal   h hʷ

Affricates
Jacobs indicates that alveolar and palatal affricates are in allophonic variation.
Alveolar
       Unaspirated   c   (Jacobs [ts])
       Aspirated   cʰ   (Jacobs [ts'])
       Voiced?   z   (Jacobs [dz])
       Glottal   c̓   (Jacobs [t's])
Palatal
       Unaspirated   č   (Jacobs [tc])
       Aspirated   čʰ   (Jacobs [tc'])
       Voiced?   ž   (Jacobs [dj])
       Glottal   č̓   (Jacobs [t'c])

Approximants
w l y

Vowels
a ɛ i ω u
The above forms were used by Jacobs and will be retained in the examples. The segment
ɛ is described as a sound between [a] and [æ] and as both an independent phoneme and
an allophone of /a/. Jacobs also states that ω may be an allophone of /u/.

Dipthongs
ai   au   ui

Vowel length
Vowel length is indicated by a raised dot [V·] in the texts. It is presently unclear whether
length is distinctive. The following long vowels are listed by Jacobs.
a· ɛ· i· ω· u·

1.1.2. Observed phonological processes
The following are some common phonological processes observed for Santiam.

1.1.2.1. Nasal assimilation

Nasal assimilation occurs regularly throughout the morphology of Santiam and is not a process restricted to verb stems, as, for instance, it also occurs with the first person singular and third person singular possessor prefixes.

In example (2), the underlying finite prefix /*m-*/ (as shown in (1)) assimilates in place of articulation to an alveolar nasal [*n-*] before the translocative prefix *t-*.[2]

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            C              C
Nasal → [α place] / __ [α place]
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(1)   *guš   a ʔ-wai ʔwa   či-ma   g-u-**m**- ʔi·-did*
        DIST ART-woman   ADV-ahead   PST-REAL-FIN-go-DURLOC
        'The woman went on ahead' P104 2 (1)

(2)   *guš   a ʔ-wai ʔwa   g-i-**n**-t- ʔi   či-mɛ*
        DIST ART-woman   PST-REAL-FIN-TLOC-go   ADV-ahead
        'The woman went on ahead' P104 2 (1)

Another example of assimilation occurs in the third singular possessor prefix, as in (3) below.

(3)   *diŋ-gda·*
        /di**N**-gda·/
        3.POSS-ear
        'its ears' P109 6 (4)

Another manifestation of this process occurs when an underlying bilabial nasal is assimilated to a following alveolar nasal, which is subsequently deleted, as in (4).

m→n/_n   then   nn → n
(4)   Surface form   *[gini ʔnak]*
        Underlying form /*g-u-**m**-ni-nak*/
                         PST-REAL-FIN-3.PL-say
                         'they said' P110 (3)

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[2] The following abbreviations are used in glossing the data: 1: first person, 2: second person, 3: third person, ABL: ablative, APPL: applicative, ADJ: adjective, ADV: adverb, ASRT: assertive, ART: article, CIS: cislocative. COLL: collective, COMP: complement, CONTR: contrastive, DISC: discourse particle, DIST: distal demonstrative, DISTR: distributive, DUR: durative, DURLOC: durative-locative, EMPH: emphatic, FIN: finite, HAB: habitual, INCH: inchoative, INF: infinitive, INTER: interrogative, INDEF: indefinite, IO: indirect object, IRR: irrealis, INTRAN: intransitive, LOCNOM: locative nominalizer, NARR: narrative, NEG: negative, NOM: nominalizer, OBJ: object, OBL: oblique, PASS: passive, PL: plural, POSS: possessive, POT: potential, PROX: proximal, PST: past, PURP: purposive, REAL: realis, RECIP: reciprocal, REFL: reflexive, RELLOC: relative locative, SAP: speech act participant (1st or 2nd), SG: singular, SUB: subordinate, TLOC: translocative, TRAN: transitive.

In this instance, this process also triggers vowel fronting, as described below.

1.1.2.2. Vowel fronting

The back vowel /u/ regularly undergoes a process of fronting to [i]. This process occurs on nominal stems and on the prefixal complex of the verb stem.

u → i / __Alveolar Nasal

(5)   *g-**u**-m-ʔi·-did*   (6)   *g-**i**-n-t-ʔi*
       PST-REAL-FIN-go-DURLOC   PST-REAL-FIN-TLOC-go
       '(the woman) went' P104 2   '(the woman) went' P104 2

As can be seen from the above examples, the nasal assimilation and vowel fronting rules are ordered relative to each other, i.e. the output of the nasal assimilation rule can serve as the input for the vowel fronting rule.

In this case, the underlying back vowel has, in some instances, been observed to be fronted before velar nasals, as in (7) and (8).

(7)   *lauʔ č-**i**-ŋ-gaw-i*
       now   SAP-REAL-FIN-throw-TRAN
       'Now I will throw him away' P89 1 (5)

(8)   *di**ŋ**-gda·*
       3.POSS-ear
       'its ears' P109 6 (4)

However, in another instance, the back vowel is retained before a velar nasal, as in (9).

(9)   *du**ŋ**-gʷa*
       3.POSS-head
       'his head' P32 22 (3)

The phrase *duŋgʷa* '3.POSS head' appears in several places in the texts and in each instance the back vowel [u] occurs, indicating that this was the correct transcription for this phrase. It is at present unclear what the conditioning factor is for this type of vowel alternation before velar nasals.

The back vowel [u] can also be fronted before a palatal glide [y]. This process accounts for the alternation in the vowel of the first plural prefix in (11).

u → i / __Palatal Glide

(10)   *waʔ š-dɛ-**du**-hu·k-ṇ   hɛs   a-mu·kiʔ* (Underlying form of 1PL prefix *du-*)
       NEG   SAP-NEG-1.PL-eat-3.OBJ   PROX   ART-deer
       'We do not eat this (sort of) meat' P122 5 (9)

(11)   *waʔ gi-dɛ-di-yuku-n*   *ču   gi-du·-du-daʔc*   (*du → di/ __ y*)
        NEG INF-NEG-1.PL-know-3.OBJ   where   INF-RELLOC-1.PL-find
        'We did not know where to find him' P52 50 (2)

1.1.2.3. Affricate weakening

Another regular process, which may be restricted to occurring on verb stems, changes a palatal affricate /č/ (the SAP subject morpheme) to a palatal fricative [š] before an alveolar stop, as in (13). This is characterized as a process of affricate weakening.

č → š/__ d
(12)   *č-u-m-huli*
        SAP-REAL-FIN-want
        'I want' P114 6 (3)

(13)   *waʔ š-dɛ-huli*
        NEG   SAP-NEG-want
        'I don't want' P110 7 (4)

1.2. Morphology/typology overview

In Santiam, the only morphological indication of core grammatical relations is person marking on the verb stem. Santiam verbal morphology operates on a nominative/accusative basis, where subjects are regularly marked as prefixes and direct and indirect objects as suffixes. In the case of the third person plural prefix, a participant of any grammatical relation (A, S, P or oblique) can be referenced. Nominals are not inflected for core case roles but they can be inflected with a generalized oblique morpheme which is used for all non-core roles. Valency-increasing operations are causative and applicative, whereas valency-decreasing operations are reflexive, reciprocal and passive. Morphologically, Santiam is primarily an agglutinative language, though a fair amount of fusion does occur in the verb stem. Eleven prefix and six suffix positions are proposed for the verb stem.

        Santiam appears to have flexible word order, and it is not known what its basic word order type is, though SVO is a frequent pattern. The pragmatic conditions under which word order among constituents varies are beyond the scope of this work. Observations on word order tendencies in Kalapuya are given in Rude (1986).

1.2.1. Lexical categories

Nouns and verbs are distinguished both morphologically and syntactically as separate lexical categories in Santiam. Two nominalizing suffixes, *-fin -fa,* have been identified. Nouns can appear with main clause verbal morphology, but in the restricted syntactic domain of nominal predication.

        In (14), the possessed noun *du· ʔwa·qiʔ*, 'his husband', is inflected with verbal morphology, including tense, modality and the finite verb prefix.[3]

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[3] This narrative is about a male transvestite who has a husband.

(14)   *guš   g-i-n-du·ʔ-wa·qiʔ=wat*
       DIST PST-REAL-FIN-3.POSS-spouse=HEARSAY
       'that was his husband it is said' P49 45 (4)

Other categories observed for Santiam are adjective, pronoun, adverb and particle. Appositional adjectives (as opposed to adjectival predication) are identified by the prefix *u·- ~ i·-*. The similarity between this prefix and the realis verbal morpheme *u- ~ i-* (short vowel) may indicate that, either, adjectives diachronically developed from verbs, or adjectives and verbs comprise a single synchronic lexical category. As shown in (15), predicate adjectives can be inflected with full verbal morphology in predicate modifying expressions.

(15)   *waʔ maʰ š-dɛ-dalq*
       NEG 2ND   SAP-NEG-strong
       'you are not strong.' P22 (2)

In contrast to predicate expressions, as in (15) above, adjectives marked with the prefix *u·- ~ i·-* often function as appositional modifiers. In (16), the adjective 'small', marked with the adjective prefix, appears with the oblique case prefix *du-*, which only occurs on noun phrases.[4]

(16)   *lauʔm̩dɛ d-ɛ-ni-ṕi·*   *aŋ-qʷaik čɛ-miyaŋk*
       then   HAB-IRR-FIN.3.PL-put   ART-leaf   ADV-above

       *guš   **du·ʔ-i·-sdu-faʔt***   *aʔ-waʔdaʔk*
       DIST **OBL-ADJ-small-COLL**   ART-stick
       'and they would put leaves on top of the small sticks' P32 23 (1)

Other examples of modifiers are (17) and (18).

(17)   ***u·-bumak**   a-sayum*
       ADJ-female ART-bear
       'female bear' P23 (2)

(18)   *d-ɛ-di-ḱʷɛ·-ni*   ***i·-sdu-fat***   *du·ʔ-wai*
       HAB-IRR-SUB-hold-3.OBJ   **ADJ-little-COLL** 3.POSS-child
       'when she had little young ones' P23 (2)

1.2.2. Nominals
This section provides lists of nominals with selected examples from the texts.

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[4] The fact that it occurs on noun phrases and is not restricted to nouns alone likely indicates that this affix is really a clitic.

1.2.2.1. Pronouns

	SINGULAR	PLURAL
1ST	*či ʔ*	*sdω·*
2ND	*maʰ*	*maʰti·*
3RD	*gʷau ʔk*	*gʷinik*

Table 1. Independent pronouns[5]

The following are examples of independent pronouns.

(19)   ***či ʔ***   *d-ɛ-di-bu·ts*   *an-dω·bi*
       1.SG   HAB-IRR-SUB-full ART-moon

       č-i-ŋ-gam ʔy-ad   *u-mad-fan   guš   amim*
       SAP-REAL-FIN-help-APPL ADJ-all-ADV   DIST people
       'When I am full moon, I help all the people'   P138 4

(20)   ***sdω·***   *du-m-i·-di-huli*   ***maʰ***   *gi·-wu ʔq*   *di-n-di ʔ-niš-dumbui*
       1.PL   1.IRR-FIN-SUB-1.PL-want **2.SG**   INF-arrive   1.IRR-FIN-1.PL-say-2ND.IO
       'When we want you to come we will tell you.' P74 74

(21)   *yɛ·*   *u-m-dalq*   *hɛš*   ***maʰti·***   *d-ɛ-di-dub-manč-ʰʷi-dai*
       who REAL-FIN-strong PROX **2.PL**   HAB-IRR-SUB-2.PL-wrestle-COLL-RECIP
       'Who is the stronger when you wrestle (with the grizzly's children)?' P116 2

(22)   *a-šni*   ***gʷau ʔk*** *g-i-ŋ-gɛ ʔš-ni*   *a ʔ-wa ʔdak*
       ART-coyote **3.SG**   PST-REAL-FIN-make-3.OBJ   ART-tree
       'Coyote himself prepared wood.' P103 5 1

(23)   *wa ʔ* *d-ɛ-n-dɛ ʔ-nag-at*   *dɛn-hu·pna*   ***gʷinik***   *gi-ni-du·l-u·*
       NEG   HAB-IRR-FIN-NEG-say-APPL 1.SG.POSS-heart   **3.PL**   INF-3PL-die-INTRAN
       'I do not say in my heart that they have died.' P73 73 (2)

Indefinite pronouns
čuʰ   'where'
nikɛ·   'what'

(24)   ***ču ʔ***   *maʰ*   *č-u-man-či-yɛmp*
       where 2.SG   SAP-REAL-FIN.CIS-ABL-come from
       'where did you come from?' P131 2 (1)

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[5] Pronouns do not distinguish gender.

(25)   ***nikɛ· ma^h   č-u-m-yuwa-di***
       what 2.SG   SAP-REAL-FIN-follow-APPL
       'What are you waiting for?' P136 2

1.2.2.2. Demonstratives
Number is not distinguished for the following demonstratives. Variations in form may be transcriber-perceived differences.

Proximal Demonstrative   *hɛš ~ hɛs ~ hɛ*
Distal Demonstrative   *guš ~ gus ~ gu·*

Temporal demonstrative
lauʔ   'now'

1.2.2.3. Articles
The articles of Santiam are:
tauʔnɛ   'one'[6]
winhɛ 'some'
aN- (homorganic nasal)

The function of the prefixed article *aN-* is not yet clear. It may be that it has lost any referential function and synchronically functions as a nominal prefix, indicating the lexical category of that root (i.e. noun). If this analysis is correct, the lost referential function may have been taken over by demonstratives. Rude (1986) discusses this article in terms of its occurrence/non-occurrence on noun stems.

Discourse deictic
lauʔm̥dɛ   'then'

1.2.2.4. Possessor prefixes
The following prefixes occur on nouns and reference the possessor of the noun.

	SINGULAR	PLURAL
1ST	*da- ~ dɛ- ~ daN- ~ dɛN-*	*du- ~ di-*
2ND	*bu-*	?
3RD	*du- ~ di- ~ duN- ~ diN-*	*dini-*

Table 2. Possessor prefixes[7]

First singular and third singular have variants with a final nasal segment which assimilates in point of articulation to a following consonant. It is unknown what the conditioning factor is for the choice of forms with or without a final nasal. Vowel fronting occurs for third singular when the nasal is realized as an alveolar, and occasionally when realized as a velar. The vowel of the first plural possessor prefix is also fronted before a palatal glide [y].[8]

Examples of possessive prefixes are the following.

(26)   *č-u-maʔ-u·tyɛ-ni*   ***dɛŋ-ƙu·ni***   *aʔ-luqu*
       SAP-REAL-FIN.CIS-call-3.OBJ   **1.POSS**-brother   ART-big black woodpecker
       'I will call my brother to come, big-black-woodpecker' P98 2 (3)

(27)   *dɛ· =man-di*   *gus*   ***du·-ƙ̓ʷa-fa***
       INDEF=FIN.CIS-be   DIST   **1.PL.POSS**-take-NOM
       'What is the trouble with those packs of ours?' P108 7 (7)

(28)   *waʔ i-n-dɛ-dalq*   ***bu-hu·pna***
       NEG   REAL-FIN-NEG-strong   **2ND.POSS**-heart
       'Your heart is not strong' P22 2 (2)

Example (29) appears to contain a possessive construction, in which the possessed noun 'land' is prefixed with the third singular possessor prefix. The possessor head noun, 'bone', is prefixed with the oblique prefix, indicating that the entire noun phrase is the goal of the motion verb.

(29)   *lauʔ čiʔ yi·kun   č-u-mʔ-yɛ·či-i*
       now 1ST maybe   SAP-REAL-FIN-almost-go

       guš   ***du·-wɛ·qiʔ***   ***din-uwa***   *dumiʔ-alaʔ*
       DIST   **OBL-bone**   **3.SG.POSS-land**   PURP-die
       'Now I myself am perhaps gone on to the land of the dead people to die'
       P73 73

(30)   *či ʔ gi-di·ʔ-i·-sduʔ*   *g-u-m-hɷdə-n*
       1SG INF-SUB-ADJ-small   PST-REAL-FIN-see-3.OBJ

       gus   *gi-di·-ni-gʷagʷa·-di*   ***diniʔ-munʔdi***
       DIST   INF-SUB-3.PL-pull out-APPL   **3.PL.POSS**-facial hair
       'when I was small I saw them when they used to pull out their facial hair.'
       P30 19

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[8] It is interesting to note the formal similarity between most of these prefixes and the oblique morpheme *du-*. This perhaps points to an earlier genitive or possessive type construction in the language.

1.2.2.5. Case marking
The only occurrence of case marking on noun phrases in Santiam is the generalized oblique prefix *du-*.[9] No other case forms have been observed. The oblique morpheme seems to function for all non-core case roles, including a locative meaning. This morpheme is regularly prefixed to noun stems and the first constituent of noun phrases (which may indicate that this affix is really a clitic), but also occurs as a prefix on verb stems in relative clauses, with a location being the relativized NP.

Example (31) shows the oblique prefix *du-* as it functions to code the semantic goal of the second clause.[10]

(31) *lauʔm̥dɛ   d-ɛ-ni-di·-d   tauʔnɛ   anʔ-uihi*
      then   HAB-IRR-FIN.3.PL-give-3.IO   one   ART-man

   gi·-kʷa   gu·   du-waʔna   a-mimʔ   du·n-uwa
   INF-take   DIST   **OBL**-other   ART-person   3.POSS-place
   'and they would give them to one man to take them there to the place of some other people' P33 25

1.2.2.6. Spatial adverbial prefix
The morpheme *či-* ~ *čɛ-* appears to be a non-productive spatial adverbial prefix which occurs only on certain adverbial stems. It is possible that this prefix is lexically required to occur on those stems, since the roots involved have not been observed to occur independently of this morpheme. (32) and (33) are examples of this prefix.

(32) *g-i-n-tʰ-wuʔk   guš   či-lɛ*
      PST-REAL-FIN-TLOC-arrive   DIST   **ADV**-near

   guš   a-fbiʔ   gi-du·-ču-min-u-fid
   DIST   ART-gopher   INF-RELLOC-ABL-come out-INTRAN-COLL
   'He got close to where the gopher came out.' P 115 3

(33) *guš   aʔ-waiʔwa   či-ma   g-u-m-ʔi·-did*
      DIST   ART-woman   **ADV**-ahead   PST-REAL-FIN-go-DURLOC
      'The woman went on ahead' P104 2 (1)

1.2.2.7. Locative nominalizer
The prefix *čam-* functions as a locative nominalizer, creating a proper name for a location. This prefix has only been observed to function in this capacity.[11]

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[9] This is noted by Rude (1986) in his glossing as a locative.

[10] Also, it is interesting to note that the first clause contains a recipient, but it is not marked with the oblique prefix, probably due to the third person indirect object marking on the verb.

[11] The analysis of this morpheme as a locative nominalizer was suggested to me by Marianne Mithun (p.c.), who also mentioned that Iroquoian languages have similar affixes for deriving names for places.

(34)   *č-ε-n-du·-kʷau-ni*   *a-nuwa*   **čam**-*igidi*
       SAP-ASRT-FIN-1.PL-call-3.OBJ   ART-place   **LOCNOM**-*Salem*
       'the place we call *tcamigidi*' (Salem) P52 50 (3)

1.2.3. Verb morphology

The following provides a list of prefixes and suffixes occurring on verbs. The position class of each morpheme is indicated. Eleven prefix positions and six suffix positions are proposed. Certain frozen complexes of prefixes occur with specific grammatical functions. Also, several suffix complexes have been observed, though their component morphemic structure is less clear. Additionally, there does not appear to be any sub-classification of positions, i.e. morphemes of a given position are mutually exclusive and cannot co-occur. In general, a verb stem will usually contain from two to five prefixes and one to three suffixes. Clitics will also be listed, though these are not strictly verbal, since their placement is dependent on constituent position, semantic relationship or, as seems likely in some cases, discourse pragmatic considerations.

In addition to the 11 prefix positions mentioned above, a construction which creates compound stems has been observed. In this construction, the verb 'to be' along with certain specific prefixes creates a structure similar to a prefix complex. This whole group of prefixes plus root can then be prefixed onto another restricted set of prefixes plus a root, yielding a compound stem. It is presently not clear what the grammatical or pragmatic function of this construction is, and it is indicated here only for formal identification. This construction is presumably not productive synchronically since the first part of the compound stem occurs only with the verb 'to be'. This construction almost always appears with the enclitic *=yu* 'again, also', though it occasionally occurs without the enclitic. Examples of this particular construction will be given in section 1.2.3.4.

1.2.3.1. List of prefixes

In the following list of prefixes, variations in form are indicated. Suggested reasons for variation in specific prefixes are given in parentheses. If the variation is judged to be due to allomorphy, the phonological process is stated in parentheses. Variations judged to be transcriptional issues are stated as such.

POSITION	FORM	FUNCTION
1	*g-*	Past Tense Realis
	∅	3rd Subject Non-Past Realis (not indicated in glossing)
	č- ~ š-	Speech Act Participant Subject Non-Past Realis (Affricate Weakening)
	du ~ di-	1st Subject Irrealis (Vowel Fronting)
	n-	2nd Subject Irrealis
	g-	3rd Subject Irrealis
	d-	Narrative/Habitual
	gi-	Infinitive Marker
2	*u- ~ i-*	Realis (Vowel Fronting)
	a- ~ ɛ-	Irrealis (Transcription)
3	*a-*	Assertive
4	*du- ~ dɛ-*	Relative Locative (Transcription?)
5	*m- ~ n-*	Finite Verb Marker (Nasal Assimilation)
6	*dɛ- ~ da-*	Negative (Transcription)
7	*di-*	Subordinate Realis
	i-	Subordinate Irrealis
8	*t- ~ d- ~ di-*	Translocative (Metrical?)
	dɛ-	Emphatic Translocative
9	*du- ~ di-*	1st PL Subject (Vowel Fronting)
	dup- ~ dip-	2nd PL Subject (Transcription?)
	ni-	3rd PL Subject/Object
10	*ma-*	Cislocative
	hɛ- ~ ha-	Proximal Deictic/Static Locative (Transciption)
11	*či- ~ čɛ- ~ ču-*	Ablative (Transcription?)

Table 3. Prefixes

1.2.3.2. Prefix complexes
There exist several groups of prefixes which occur with specific grammatical functions. They are considered complexes or frozen groups of prefixes since these groups always contain the same prefixes in the same order.

dɛ-
d-ɛ
HAB-IRR
'Narrative/Habitual'

dumi-
du-m-i
1.IRR-FIN-SUB
'1st Irrealis Subordinate'

nami-
n-a-m-i
2.IRR-IRR-FIN-SUB
'2nd Irrealis Subordinate'

gami-
g-a-m-i
3.IRR-IRR-FIN-SUB
'3rd Irrealis Subordinate'

dumi-
du-m-i
RELLOC-FIN-SUB
'Complementizer/Purposive'[12]

gʷa-
g-u-a
PST-REAL-ASRT
'Past Realis Assertive'

1.2.3.3. Prefix ordering
The following shows in linear order the prefix position classes.

1	2	3	4	5	6	7	8	9	10	11
g č/š du/di n g d gi	u/i a/ɛ	a	du	m/n	dɛ	di/i	t/d/di/dɛ	du/di dup ni	ma hɛ	či/čɛ

Table 4. Prefix Position Classes

The following examples demonstrate the above position classes.

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[12] The complementizer/purposive complex may have developed from an original relative clause structure, since [*du*-] elsewhere references relativized locations in relative clauses. This would have grammaticalized along the lines of; relativized location > purposive > complementizer. An alternative analysis involving the first person irrealis prefix is given in section 2.12.

Examples of all position 1 and 2 prefixes.

(35) **1 2**
***g-u**-m-ʔi*
PST-REAL-FIN-go
'he went'   P137 3 (1)

(36) **1 2**
***č-u**-m-ʔi*
SAP-REAL-FIN-go
'I am going' P135 1 (1)

(37) **1**
***du**-m-ʔi*
1.IRR-FIN-go
'I will go' P128 2 (3)

(38) **1 2**
***n-a**-m-i-t-q́up*
2.IRR-IRR-FIN-SUB-TLOC-cut
'If you cut'   P136 2 (2)

(39) **1 2**
***g-a**-m-i-ni-ma-ʔi-fid*
3.IRR-IRR-FIN-SUB-3.PL-CIS-go-COLL
'If they should return' P137 3 (3)

(40) **1 2**
***d-ɛ**-mʔ-nak*
HAB–IRR-FIN-say
'(The rabbit) said' P136 2 (1)

(41) **1**
***gi**-di-ʔi*
INF-SUB-go
'(So then) he went along'   P141 2 (2)

The next section demonstrates positions 3 through 11, with relevant prefix positions indicated.

Positions 1 through 5

(42)   **1 2 3 4**
        ***g-w-a-du**-hɛn-ťɛcdu·*
        PST-REAL-ASRT-RELLOC-PROX-sit
        'where I was (sitting)' P140 1 (3)

(43)   **1 2 3 5**
        ***g-w-a-n**-ťɛcdu·*
        PST-REAL-ASRT-FIN-sit
        'I was' P140 1 (3)

(44)   **4 5**
        ***du-m**-i-hω·du*
        RELLOC-FIN-SUB-see
        '(I will go) to see' (Purposive)

Positions 5 through 7

(45)   **5 6**
        *wa   i-**n-dɛ**-dalq*
        NEG   REAL-**FIN-NEG**-strong
        '(your heart) is not strong' p2 2 (2)

(46)   **6 7**
        *waʔ lauʔ gi-**dɛ-di**-ni-daʔc*
        NEG   now   INF-**NEG-SUB**-3.PL-find
        'they could not find him'   p52 50 (3)

Positions 7 through 9

(47)   **7 8**
        *du-m-**i-dɛ**-ʔwuk*
        1.IRR-FIN-**SUB-EMPH.TLOC**-arrive
        'when I reach there' P142 2 (6)

(48)   **8 9**
        *g-i-n-**di-ni**-hɛk*
        PST-REAL-FIN-**TLOC-3.PL**-go away
        'they went along' P108 5 (10)

Positions 9 through 11

(49)   **9 10**
    *d-ε-di·-**ni-ma**-ʔi*
    HAB-IRR-SUB-**3.PL-CIS**-go
    'When they came' P61 56 (1)

(50)   **10   11**
    *hε   g-u-**man-či**-yu·*
    here PST-REAL-**CIS-ABL**-sit
    '(Coyote) sat over here (opposite)'P107 5

1.2.3.4. Compound stems

As mentioned above, a specific construction involving compound stems has been observed. This first part of this construction takes the verb *di* 'to be' as its root, and occurs in the forms *gumandi, gamandi, čumandi,* and *dεmandi*. These forms are comprised of the following:

g-u-man-di
/g-u-m-man-di/
PST-REAL-FIN-CIS-be

g-a-man-di
/g-a-m-man-di/
3.IRR-IRR-FIN-CIS-be

č-u-man-di
/č-u-m-man-di/
SAP-REAL-FIN-CIS-be

d-ε-man-di
/d-ε-m-man-di/
HAB-IRR-FIN-CIS-be

The form *gumandi* can occur with additional optional affixes, and presumably the other forms can occur with similar affixes as well, though this has not been observed. In the texts, the only observed affixes after *gumandi* are the third plural prefix and either the cislocative or translocative, as shown below. In the majority of instances these stems co-occur with the enclitic *=yu* 'again' 'also', which appears either on the verb stem itself, or elsewhere in the clause. It is unclear what the synchronic grammatical and/or pragmatic function of this construction is, and is mentioned here solely for the purpose of formal identification in the texts. The following diagrams illustrate this compound structure. The '+' sign indicates a stem boundary and parenthesis indicate optional elements.

g-u-man-di   + (3PL - Cisloc/Transloc) + root
PST-REAL-FIN.CIS-be

g-a-man-di +   root
3IRR-IRR-FIN.CIS-be

č-u-man-di +   root
SAP-REAL-FIN.CIS-be

d-ɛ-man-di +   root
HAB-IRR-FIN.CIS-be

The following are examples of these compound stems.[13]

(51)   *g-u-man-di+ni-ma+iʔ=yu·ʔ*   *dini-yuʔwɛl*
       /g-u-m-man-di + ni-ma + iʔ=yu·ʔ/
       PST-REAL-FIN-CIS-be + 3.PL-CIS + go=again   3.PL.POSS-follow
       'They went away hunting again'   P122 6

(52)   *taunʔnɛ=yu·ʔ g-u-man-di+wai*
       one=also   PST-REAL-FIN.CIS-be + lie down
       'One more went to bed' P120 3

(53)   *dɛ·   g-a-man-di·+huʔ-yu*
       INDEF   3.IRR-IRR-FIN.CIS-be + be-INCH
       'What was the matter with him…' P108 5 (6)

(54)   *d-ɛ-man-di+hu·k=yu·*
       NARR-IRR-FIN.CIS-be + eat=again
       'she ate it also' P117 6 (3)

In examples (55) and (56), the adverbial meanings of 'again' and 'also' are associated with each clause, though the enclitic *=yu* does not appear in the clause, apparently indicating that the compound stem has taken on this function in this instance.

(55)   *g-u-man-di+ma-min-u·*
       PST-REAL-FIN.CIS-be + CIS-come out-INTRAN
       'again (one Grizzly) appeared' P120 2 (2)

---

[13] In (52)–(54), the segment *man-* is understood to represent a combination of the finite and cislocative prefixes.

(56) *ma ʰ nɛfuʔ   č-u-man·di+huli   hɛs   a-mu·kiʔ*
      2ND like   SAP-REAL-FIN.CIS-be + want   PROX ART-deer
      'So it seems you (also) want this meat'. P118 6 (4)

Examples (57) and (58) show the root *ti ~ di* 'to be' in predicating clauses.

(57) *dinʔɛ·wi am-bgɛʔ   g-a-m-**ti**   mat-fan ču*
      always   ART-water 3.IRR-IRR-FIN-**be**   all-ADV   where
      'There will be water everywhere for all time' P136 1 (3)

(58) *dɛ· =man-**di**   gus   du·-ƙʷa-fa*
      INDEF=FIN.CIS-**be** DIST   1.PL.POSS-take-NOM
      'What is the trouble with those packs of ours?' P108 7 (7)

1.2.3.5. List of suffixes

The following is a list of identified verb suffixes and their positions. Suffixes of unknown positions are also listed. In most cases, if the position of a suffix is not known, this is because it has not been observed to occur with other suffixes, perhaps indicating that there are restrictions on the co-occurrence of certain suffixes. Suffixes and their functions are discussed in Section 3.

POSITION	FORM	FUNCTION
1	*-fin*	Nominalizer
	-fa	Nominalizer
	-∅	Intransitive
	-ω ~ -u	Intransitive
	-i	Transitive
	-wa	Transitive
	-fu	Transitive
2	*-fʷid ~ -hʷi ~ -fid ~ -fit ~ -fat ~ -wit*	Collective
	-nɛn ~ -na	Causative
3	*-di ~ -ad*	Applicative
4	*-ni ~ -na ~ -n ~ -i*	3rd Direct Object
5	*-fa*	1sg Direct Object
	-fubu ~ -fub	2sg Direct Object
	-fω	1pl Direct Object
	-fi	2pl Direct Object
6	*-n*	Durative
UNKNOWN POSITIONING	*-did*	Durative-Locative
	-čɛ ~ -či	Reflexive
	-yu ~ -yω	Inchoative
	-q ~ -k	Passive
	-da ~ -dai	Reciprocal
	-dint ~ -dind	Distributive
	-t	3rd Indirect Object
OBSERVED RELATIVE POSITIONING	*intran suffix -fʷid -da*	Intransitive - Collective - Reciprocal
	tran/intran suffixes -yu -q	Transitivity - Inchoative - Passive

Table 5. Prefixes

1.2.3.6. Suffix complexes

As with prefixes, a number of suffix complexes have been identified. Some of these complexes are fairly transparent regarding their components. Other complexes appear to be polymorphemic, though their constituent parts have not been identified. Examples of all complexes will be given in Section 3.

-yuq
-yu-q
INCH-PASS
 'Passive' (*-yu* may loose its inchoative function in this complex)

The following two complexes seem to be composed of suffixes already mentioned, though they both contain an unknown final [*-i*]. It is not known what the nature of this

final segment is. In the case of the '2nd Indirect Object-3rd Direct Object' a suggested morphophonemic derivation is given. As will be shown in 3.13.1, other morphophonemic derivations occur involving the applicative *-di* and direct object suffixes.

-dinifai
-di-ni-fa-i
APPL-3.OBJ-1.SG.IO-?
'1st Indirect Object-3rd Direct Object'

-dumbui
/-di-ni-fubu-i/ → */-di-m-bu-i/* → *[-du-m-bu-i]*
APPL-3.OBJ-2.SG.IO-?
'2nd Indirect Object-3rd Direct Object'

Indirect Object-Direct Object complexes involving other person combinations have not been observed in the Santiam material.
        The following suffixes are possibly polymorphemic (at least diachronically), though it is unclear what the constituent morphemes are.

-dɛd
'1ST SG Indirect Object'

-dub
'2ND SG Indirect Object'

1.2.3.7. Suffix ordering
The following displays in linear order the above suffixes with known positions.

1	2	3	4	5	6
fu	na	di	ni	fa	n
fin	fʷid			fubu	
fa				fω	
∅				fi	
ω/u					
i					
wa					

Table 6. Suffix ordering

The following are examples of the ordering of suffixes with positions indicated.

(59)   **1 2**
        d-ɛ-ni-cagalʔ-wa-na
        HAB-IRR-FIN.3.PL-dry-**TRAN-CAUSE**
        'They dried (eels)' P 20 4 (2)

(60)   **2   3 4**
        di·-ni-suʔ-nɛn-di-ni
        SUB-3.PL-good-**CAUSE-APPL-3.OBJ**
        'The thing that they fixed (their fire) with' P 17 1 (4)

                        1 2
(61)   *gi-du·-ču-min-u-fid*
        INF-RELLOC-ABL-come out-INTRAN-COLL
        '(to where the gopher) came out.' P 115 3

(62)   **2   3   4**
        č-i-n-du·-ṭak-ʰʷiʔ- lɛd-i
        /č-i-n-du·-ṭak-fʷid-ɛd-i/
        SAP-REAL-FIN-1.PL-play-**COLL-APPL-3.OBJ**
        'with which we are playing shinny' P101 3 (2)

(63)   **1   3 4**
        g-i-ni-gau-fuʔ-lad-iʔ
        / g-i-ni-gau-fuʔ-ad-iʔ/
        PST-REAL-FIN.3.PL-to fish-**TRAN-APPL-3.OBJ**
        'They fished (trout) with it' P 18 3

(64)   **3 4 5**
        g-a-niʔ-niš-ti-ni-fa-i
        3.IRR-IRR-3.PL-SAY-**APPL-3.OBJ-1.SG.OBJ**-?
        '(I'm waiting for) them to tell me'   74 74 (1)

(65)   *u-m-yuʔwi-lɛcʰʷa-n*
                        3 4 5 6
        /u-m-yuʔwi-lad-i-fa-n/
        REAL-FIN-talk-**APPL-3.OBJ-1.SG.OBJ-DUR**
        '(wonder who) is talking about me.'   P78 84

1.2.4. List of clitics
The following is a list of proposed clitics. It is doubtful that all instances of hyphenation
as used by Jacobs actually represent cliticization. However, some of the more likely
candidates are listed here. Example numbers which contain instances of these clitics are
also given.

dɛ=   Indefinite Adverbial 'how', 'what', 'how if' (example 100)
This morpheme occurs as a proclitic to the first constituent of a clause.[14]

=nak   Modal 'wonder' (example 242)
This morpheme occurs as an enclitic on the first constituent of a clause.

The following clitics can appear on a variety of constituents, though they always appear as enclitics.

=wat   Hearsay (example 14)
=yu   'again' 'also' (example 54)
=wi   Emphatic (example 164) (-yu, -wi appear in this order relative to each other)
=yɛ   Interrogative (example 90)
=t́e ~ t́i Contrastive (examples 138, 190) (also occurs as a free standing particle)

2. Prefixal morphology

This section will examine in depth the morphology of prefixes on the verb stem. As shown in the last section, eleven prefix positions are proposed for Santiam. Morphemes are by and large concatenated in an agglutinative fashion, though certain morphemes combine multiple functions, as, for instance, subject prefixes, which combine tense, modality, and person. This points to a certain degree of functional and semantic fusion, though the overall morphological structure is primarily agglutinating and morpheme boundaries are usually identifiable. Frozen sequences of morphemes with specific functions also occur. These morpheme complexes are likely to have resulted from grammaticalization processes. Morphemes will be discussed in order of their functional and syntactic domains as opposed to strict linear occurrence on the verb stem. The order of presentation is as follows:

Section 2.1 Finite verb marker

Section 2.2–2.9 Tense/aspect/modality and person marking

Section 2.10–2.12 Complex clauses

Section 2.13 Spatial affixes.

2.1. Finite verb marker

Position 5 contains the morpheme /*m-*/ [*m- ~ n-*], which is termed the 'finite verb marker'. The exact semantic and functional nature of this morpheme is somewhat elusive, but I propose that it is an indicator of a finite verb stem. Its status as a finite verb marker

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[14] *dɛ=* is noted by Rude (1986) in his glossing as 'imperative'. Though it does frequently appear in imperative clauses, its function is not specifically limited to coding a clause as imperative, since it has been observed to occur as an indefinite adverbial marker in non-imperative clauses as well.

may be inferred from contexts in which it does and does not occur. It commonly occurs in main clauses with an overt expression of temporal deixis, either by means of the past prefix *g-* or realis, non-past subject markers. It also occurs with irrealis subject markers in both main and subordinate irrealis constructions. Although irrealis clauses themselves do not strictly indicate tense, there is often a future temporal reading associated with the irrealis mode. It also occurs with the narrative/habitual complex *dɛ-* in main clauses.

        Syntactic situations in which the finite marker does not occur are areas which tend to be non-finite or less finite cross linguistically. Subordinate clauses with the subordinator *di-* do not occur with *m-* (though irrealis subordinate clauses with the subordinator realized as *i-* do take the finite prefix). In general, the finite marker *m-* does not occur with the negative prefix *dɛ-*, with the exception of third person adjectival/nominal predication. It also does not occur in dependent clauses marked with the infinitive prefix *gi-* (these clauses can function as complements, relative clauses, and adverbial clauses). In all of these environments the lack of tense distinctions indicates that non-finiteness is at least part of the meaning of the prefix *gi-*.

        Example (66) illustrates the occurrence of this prefix in main clauses. This example contains the first four clauses of a narrative.

(66)   *a-sni*   *g-u-**m**-ʔi·-did*
        ART-coyote   PST-REAL-**FIN**-go-DIR

        i·-sdu   *a-mu·kiʔ*   *g-u-**m**-ʔalaʔ*
        ADJ-little   ART-deer   PST-REAL-**FIN**-die

        lauʔm̩dɛ   *a-šni*   *g-u-**m**-daʔc*
        then   ART-coyote   PST-REAL-**FIN**-find

        lauʔm̩dɛ   *g-u-**m**-hu·k*   *ma·dfan*
        then   PST-REAL-**FIN**-eat   all
        'Coyote was going along. A small deer had died, and coyote found it, and then he ate it all.' P135 1

In the following stretch of discourse, the affirmative clause is marked with /*m-*/ (*m* → *n* / _d), whereas the negative clauses and the locative relative clause are not.

(67) *lauʔm̩dɛ waʔ lauʔ sdω gi-dɛ-du·-daʔc*
   then NEG now 1.PL INF-NEG-1.PL-find

   *g-i-**n**-di-ʔu·-di*   *guš du·-pgiʔ*
   PST-REAL-**FIN**-1.PL-search-APPL DIST OBL-water

   waʔ gi-dɛ-di-yuku-n   *ču* *gi-du·-du-daʔc*
   NEG INF-NEG-1.PL-know-3.OBJ where INF-RELLOC-1.PL-find
   'Now then we were unable to find him. We sought him there in the water. We did
   not know where to find him' P52 50 (2)

In (68), both clauses are negated and neither takes the *m-* prefix. The first clause is coded as non-past by means of the SAP prefix, so it does retain some sense of time reference inherent in that prefix. The second clause is a counterfactual clause marked with the infinitive prefix *gi-* and has no specific time reference.

(68) *waʔ ma^h š-dɛ-dalq*
   NEG 2.SG SAP-NEG-strong

   waʔ lauʔ ma^h gi-dɛ-t-g^w̩in   *aʔ-wadak*
   NEG now 2.SG INF-NEG-TLOC-take ART-tree
   'You are not strong. You could not wield a pole' P22 2

Example (69) shows a subordinated clause without *m-* and a main clause in which it does occur.

(69) *lauʔm̩dɛ gi-di·-ni-yi·*
   then INF-SUB-3.PL-go

   *lauʔm̩dɛ a-šayum g-u-**m**-t́ab-ad-i*   *du-fa*
   then ART-grizzly PST-REAL-**FIN**-step-APPL-3.OBJ 3.POSS-foot
   'Then when they went back, now grizzly stepped on his (sapsuckers's) foot'
   P125 8 (5)

Examples (70) and (71) show this morpheme as it occurs with 3rd person positive and negative predication. Negated third person predication is the only environment in which negated clauses have been observed to occur with the finite prefix.

(70) *hɛš lauʔ u-**m**-bu-tquʔ*
   PROX now REAL-**FIN**-2.POSS-tail
   'here now is your tail' P109 (5)

(71)   *waʔ i-**n**-dɛ-dalq*   *bu-hu·pna*
        NEG REAL-**FIN**-NEG-strong   2ND.POSS-heart
        'Your heart is not strong' P22 2 (2)

This final example shows that an indirect quote with the illocutionary value of an imperative does not take the *m-* prefix.

(72)   *u-mʔ-nag-ad*   *dɛʔ=lɛ·tg-ʷɛ-nɛ·*   *bu-ƙu·niʔ*
        REAL-FIN-say-APPL   INDEF=care for-TRAN-3.OBJ?   2.POSS-brother
        'He was saying take care of your brother' P89 1 (4)

The above examples indicate that this prefix tends to appear in main clauses with temporal deixis marking, whereas it does not occur in clause types which tend to be non-finite cross-linguistically, such as negated, dependent, and certain types of imperative clauses.

2.2. Realis and irrealis thematic prefixes

The two morphemes of position 2, *u-* realis and *a-* irrealis, are epistemic in nature. I use the term 'thematic' to indicate that these prefixes define the modality of the clause in which they appear. In general, realis marking in Santiam reflects a high degree of certainty of the actuality of the event from the point of view of the speaker, whereas irrealis clauses indicate less certainty.

The realis thematic prefix co-occurs with a specific set of prefixes, namely *č-* SAP subject, *∅-* 3rd subject, and *g-* past tense. These prefixes only occur with the realis thematic prefix. Also, the past tense, realis, and assertive prefixes combine to form the prefix complex *gʷa-*, which codes past realis assertive, as discussed in section 2.9 below.

Irrealis subject prefixes co-occur with the irrealis thematic prefix. An exception to this is the first person irrealis subject prefix *du-*, which, idiosyncratically, does not take a theme prefix. Also, the narrative/habitual prefix *d-* always co-occurs with the irrealis thematic prefix, yielding the narrative/habitual prefix complex *dɛ-*. The epistemic value of the narrative/habitual morpheme is transparently irrealis. This morpheme complex is often used to narrate past events of a mythic nature, thereby indicating a certain degree of removal from reality. When used to code habitual events, the narrative/habitual does not indicate a specific occurrence of an event, rather the concept of the event occurring in general or repeatedly over a period of time. This lowered specificity of occurrence can also be seen as being removed from reality to a degree and is appropriately marked as irrealis.

Semantically, realis clauses have a high degree of certainty from the point of view of the speaker and in Santiam these clauses code states or events which definitely happened in the past, are currently occurring or are immediately expected in the future. Irrealis clauses in Santiam code events/states whose actual existence from the point of view of the speaker is generally uncertain. They are commonly used in counterfactual and conditional clauses as well as clauses which indicate a low degree of probability. Irrealis clauses are also used to denote future events, but with perhaps less certainty as to their

eventual occurrence and in some instances they seem to code future events with less direct relevance/connection to the speech act than realis clauses. Irrealis future clauses may also represent a more distant projection into the future, whereas realis future clauses seem to indicate an imminent event/state. It seems that the intersection of an epistemic modal value with the temporal placement of events/states helps to create a past/non-past perspective of time in Santiam.

Interrogative clauses have been observed to appear with the irrealis thematic prefix, as in (103), though there are also many examples of interrogatives which are coded as realis, as in (90) for instance. It is not at present clear what the conditioning factors are for the variation in modality marking of interrogative clauses in Santiam.

Another interesting aspect of realis/irrealis coding in Santiam is that negated stative clauses with a third person subject are marked with the realis thematic prefix, as in examples (73) and (116) below. Cross-linguistically, negated clauses often occur in irrealis mode, indicating that this is a somewhat idiosyncratic area of realis and irrealis coding in Santiam. However, it is the case that negated narrative/habitual clauses (118) and negated irrealis clauses (114) appear with the irrealis thematic prefix. (Other types of negated clauses do not take thematic pefixes and appear with either the infintive prefix *gi-* (111), or the SAP prefix (113)).

The following is a list of morphological environments in which the realis *u-* and irrealis *a-* prefixes occur, respectively.

Realis		Irrealis[15]	
SAP Subject Non-Past	*č-u-*	2nd Subject Irrealis	*n-a-*
3rd Subject Non-past	*∅-u-*	3rd Subject Irrealis	*g-a-*
Past	*g-u-*	Narrative/Habitual	*d-ɛ-*
Past Assertive	*g-ʷ-a- (u → ʷ)*		

The following examples illustrate the realis/irrealis distinction of these two thematic morphemes. In (73), the first clause is realis as it pertains to a definite fact, though it is negated. The second clause is irrealis since it pertains to an unrealized potential event.

(73)   *wa·ʔ* **u**-*wɑɔg-ud*   *yi·kun*   *g-**a**-m-ʔalaʔ*
         NEG   **REAL**-arrive- APPL   maybe   3.IRR-**IRR**-FIN-die
         'He has not gotten back. Maybe he will die'   P51 49 (1)

The next example is also an unrealized hypothetical event.

(74)   *laga*   *an-tkɛ·*   *g-**a**-m-yiʔq*   *a-mim*
         maybe   ART-rattlesnake   3.IRR-**IRR**-FIN-bite   ART-person
         'Perhaps a rattlesnake might bite a person'   P51 48

In (75), both clauses are realis since they refer to definite events which occurred.

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[15] 1st Subject Irrealis does not occur with a theme prefix.

(75) *g-**u**-m-yɛltʔšwa*   *lauʔmde* *g-**i**-n-t-hi·č*   *du·-pgiʔ*
      PST-**REAL**-FIN-slip   then   PST-**REAL**-FIN-TLOC-fall   OBL-water
      'He slipped on it, and then he fell into the water.'   P52 50 (1)

(76a and b) are examples of the first person irrealis subject prefix which idiosyncratically does not take a theme prefix. In 76b, the back vowel of the first person irrealis prefix is fronted before the alveolar nasal, as described in section 1.1.2.2.

(76a) *maič   **du**-m-ʔi   dumi-hω·du*
       morning   **1.IRR**-FIN-go   PURP-see
       'I will go tomorrow to see' P128 2 (3)

(76b) *di·s   **di**-n-diʔ-ya·-cɛ   du· ʔ-yɛlʔwa*
       soon   **1.IRR**-FIN-1.PL-stand-REFL   1.PL.POSS-dance
       'we will stand up to our dance (we will dance).' P113 9 (5)

In the next example, a conditional irrealis subordinate clause is juxtaposed to an irrealis main clause, indicating a hypothetical future response to a condition.

(77) *g-**a**-m-i·-niʔ-alaʔ*   *dinʔɛ·wi   g-**a**-niʔ-alaʔ*
                                                        /g-**a**-m-niʔ-alaʔ/
       3.IRR-**IRR**-FIN-SUB-3.PL-die   always   3.IRR-**IRR**-FIN-3.PL-die
       'If they die, they will die for all time' P137 3 (2)

2.3. Past tense realis
Past tense is signaled by the prefix *g-* of position 1. Examples (78)–(80) show that this morpheme does not indicate the subject of the clause in contrast with other realis morphemes which are fused with subject marking.

(78) *lauʔmdɛ wi·nɛc=wi   **g**-i-n-di-kʷʔid   a-šni*
       then   indeed=EMPH   **PST**-REAL-FIN-TLOC-drink   ART-coyote
       'Then indeed coyote drank' P135 1 (3)

(79) *ču   ma ʰ   **g**-a-man-ťɛšdu·*
       where   2.SG   **PST**-ASRT-FIN.CIS-sit
       'Where were you seated?' P140 (3)

(80) *winhɛ   waʔ š-dɛ-yuku-n   lauʔ **g**-u-m-haidub-di*
       some   NEG SAP-NEG-know-3.OBJ   now   **PST**-REAL-FIN-forget-APPL
       'Some of it I do not know now, I have forgotten it' P142 (4)

In textual narrative it can be difficult to distinguish between past tense and perfective, since perfectives are most likely to occur in past narratives and non-perfectives in present

narrative. The next examples show that this morpheme occurs in clauses with both punctual (81) and durative aspect (82), indicating that this morpheme is coding the tense of these clauses.

(81) *wi·naš=wi·*   *guš*   *am-bun*   ***g-i-n-t́i-dip***
      indeed=EMPH   DIST   ART-rabbit   **PST**-REAL-FIN-TLOC-jump
      'Sure enough the rabbit jumped'   P137 2 (3)

(82) *lauṃde guš*   *ali·fa*   ***g-u-m-ṕi·-did***   *du·-bgɛʔ*
      then   DIST   log   **PST**-REAL-FIN-stay-DURLOC   OBL-water
      'Now a log was there in the water'   P107 5 (4)

The past tense prefix can also apparently be used as a potential marker. In (83), the tense is clearly not past, rather the past prefix is coding a potential action (glossed as 'POT'). It is interesting to note that the realis prefix is used here, indicating that potentials are categorized as realis modality in Santiam.

(83) *waʔ*   *lauʔ* *ma^h*   *g-dɛ-d-gʷin-faʔ*
      NEG   now   2ND   INF-NEG-TLOC-get-1.OBJ

      gus   ***g-i-n-dɛŋ-ġan=wi***
      DIST   **POT**-REAL-FIN-EMPHTLOC-go by=EMPH

      g-i-n-t-q́up   *guš*   *an-tkʷililɛk*   *du-mućɛl*
      POT-REAL-FIN-TLOC-cut   DIST   ART-blackberry 3.POSS-rope
      'You could never catch me! I can go right along there. I will cut the blackberry rope.' P136 2 (2) – P137

A possible origin of this prefix may be that it is historically related to the distal demonstrative *guš*. Since in the irrealis series, a morpheme homophonous with the past tense prefix codes third person, it can be conjectured that the past tense prefix originally coded third person as well, and that both the past tense and irrealis prefixes ultimately derived from the distal demonstrative.

2.4. Narative/habitual irrealis
A narrative/habitual function is coded by means of the prefix complex *dɛ-*, composed of the narrative/habitual *d-* of position 1, and the irrealis thematic prefix *a-* of position 2. Though the narrative/habitual prefix always co-occurs with the irrealis theme prefix, it seems best to consider them as constituting a bi-morphemic complex, since the function is in the domain of irrealis and the irrealis theme prefix occurs independently of this complex. This complex is termed narrative/habitual since it appears to function in two distinct but semantically related domains. It is used in narrative structures where a sequence of mythological events is narrated, indicating that the events described are not necessarily real or directly observed. As a habitual marker, it codes the prototypical or

habitual occurrence of an event as opposed to a specific event. It seems that the grammar of Santiam codes the non-specificity of events in the same way as unreal/mythological events, i.e. as irrealis. Main clauses with the narrative/habitual complex are also marked with the finite prefix *m-*, indicating their finite nature. The habitual function of this prefix is exemplified in (84) and (85).

(84)   *či ʔ*   ***d-ɛ**-di-bu·ts*   *an-dɷ·bi*
       1ST   **HAB-IRR**-SUB-full   ART-moon

       č-i-ŋ-gam ʔy-ad   *u-mad-fan*   *guš=amim*
       SAP-REAL-FIN-help-APPL   ADJ-all-ADV   DIST=people
       'When I am full moon, I help all the people'   P138 4

(85)   *mad-fan*   ***d-ɛ**-ni-ʔu·-di*   *dini-k̓ʷa·nɛ-fin*
       all-ADV   **HAB-IRR**-FIN.3.PL-seek-APPL   3.PL.POSS-eat-NOM

       ***d-ɛ**-di ʔ-ya·d-u*   *am-pyan ʔ*
       HAB-IRR-SUB-stand-INTRAN   ART-sun
       'They all go to look for food when the sun is standing'   P139 2nd line

(86) and (87) illustrate the narrative function of this morpheme.

(86)   *lau ʔm̩dɛ*   *t̓iš*   ***d-ɛ**-mičis*
       then   sapsucker   **NARR-IRR**-FIN.run

       gus   *a-sayum*   *dɛ-hɛm-p̓i·-did*
       DIST ART-grizzly   RELLOC-PROX-lie-DURLOC

       lau ʔm̩dɛ   ***d-ɛ**-n-tʰ-wuk*   ***d-ɛ**-m-nak*
       then   **NARR-IRR**-FIN-TLOC-arrive   **NARR-IRR**-FIN-say

       hɛš   *uwa·čɛ ʔt*   *či ʔ*   *g-ʷ-a-man-t̓wa ʔ-ni*
       PROX   hole   1ST   PST-REAL-ASRT-FIN.CIS-hit-3.OBJ
       'And sapsucker ran to where grizzly was lying, and he got to it, he said, 'Here is the hole where I hit him' P123 7 (3)

(87)   *gus   am-bun   **d-ɛ**-di-ma-ʔi   guš   du-din-gauniʔ*
       DIST ART-rabbit   **NARR-IRR**-SUB-CIS-go   DIST OBL-3.POSS-trail

      *lauʔm̩dɛ   guš   **d-ɛ**-m-hω·du   an-t́a·da*
      then   DIST **NARR-IRR**-FIN-see   ART-trap

      *lauʔm̩dɛ   **d-ɛ**-m ʔ-niš-d-ni   an-t́a·da*
      then   **NARR-IRR**-FIN-say-APPL-3.OBJ   ART-trap
      'When rabbit came along on his trail, and he saw deadfall trap, then he said to deadfall trap…'   P136 2

2.5. Infinitive marker

Position 1 also contains the prefix *gi-*, which occurs on non-finite and dependent clauses. It appears to function as an infinitive marker. An indication of the non-finite nature of verb stems on which it appears is that it does not co-occur with the finite verb marker *m-* or tense/aspect/modality morphology. It also does not co-occur with subject prefixes, some of which have a past/non-past opposition. In the Santiam corpus, it has been observed to occur in relative, complement, and adverbial clauses. Its occurrence in these types of clauses is discussed in the relevant sections below. It also frequently occurs on negated main clauses with the negative morpheme *dɛ-*.

(88)   *waʔ   **gi**-dɛ-di-yuku-n   ču   **gi**-du·-du-daʔc*
       NEG   **INF**-NEG-1.PL-know-3.OBJ   where **INF**-RELLOC-1.PL-find
       'We did not know where to find him' P52 50 (2)

The above example shows the infinitive prefix as it occurs on a negated main clause and a dependent clause (indirect question) marked with the relative locative prefix.[16] (89) is another example of a relative clause marked with the infinitive *gi-*.

(89)   *pɛš   d-ɛ-niʔ-nak-ʷit*
       SO   HAB-IRR-FIN.3.PL-say-COLL

      *guš   yi·   **gi·**-huk·-ni   an-tmuwak   waʔ   i-n-dɛ-bɛ·haʔ*
      DIST who   **INF**-eat-3.OBJ ART-fish   NEG   REAL-FIN-NEG-cook
      '…they would always say that to anyone who ate uncooked fish'   P18 2 (1)

The next example shows a subject complement clause marked with *gi-*. This example shows that, though tense/aspect/modality morphology does not co-occur with the infinitive, the verb stem can be marked for person, and in this case the first plural subject is coded.

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[16] Indirect questions and relative clauses are structurally the same in Santiam.

(90)   *lauʔ=yɛ*   *u-m-su*   **gi·-du-ṕi·**   *du-di·ʔb*
        now=INTER REAL-FIN-good   **INF**-1.PL-put   1.PL-camas
        'Is it all right for us to put our camas (a type of plant) on them?' P18 4 1

The *gi-* prefix can also mark the non-finite nature of adverbial clauses.

(91)   * čiʔ*   **gi**-*di·ʔ-i·-sduʔ*   *g-u-m-hɷ·də-n*
        1SG **INF**-SUB-ADJ-small   PST-REAL-FIN-see-3.OBJ

        gus   **gi**-*di·-ni-gʷagʷa·-di*   *diniʔ-munʔdi*
        DIST   **INF**-SUB-3.PL-pull out-APPL   3.PL.POSS-facial hair
        'when I was small I saw them when they used to pull out their facial hair.'
        P30 19

2.6. Tense, modality, and person marking

The majority of the morphemes of position class 1 have more than one semantic value or grammatical function and code some combination of the categories tense, modality, and subject. All prefixes of position 1 belong to either the realis or irrealis modal set, with the exception of *gi-* 'infinitive'. The idea that there are separate person-marking prefix sets for realis and irrealis modalities was first suggested to me by Marianne Mithun, who also mentioned that Caddo, a language of North America, has a similar arrangement of pronominal prefixes with a realis/irrealis distinction.

 Santiam appears to have two distinct tense categories; past and non-past. Future as a temporal concept is signaled by the irrealis series, and does not appear to exist as its own category in the language. The non-past category covers the semantic space on the time continuum of present-immediate future. Along with the present temporal deixis, the aspectual notion of a perfect can also be conveyed by a non-past prefix. Semantically it is easy to see the connection between non-past prefixes and perfects. Both immediate future and perfect are connected with a currently relevant state or action in the present. Cross-linguistically, the concept of a perfect normally includes the notion of a currently relevant state (Payne 1997:239), and there are many examples in the Santiam corpus where a non-past verb is rendered in translation as a perfect, indicating that stativity may be, at least in some instances, part of the meaning of non-past prefixes. As for the narrative/habitual complex *dɛ-*, it is more appropriately considered aspectual, since it is not associated with placement along the time continuum. In terms of form and function, however, it does belong in the irrealis modality. Plural subject marking does not participate in the realis/irrealis distinction per se, since plural subjects are signaled by the co-occurrence of a subject prefix of position 1 and a plural prefix of position 9.

 The following diagram illustrates the way in which prefixes are grouped according modality, tense/aspect, and subject marking.

TAM/PERSON MARKING	FORM	FUNCTION
+REALIS +TENSE +SUBJECT	*č-*	Speech Act Participant (1st or 2nd Person) Subject Non-Past Realis
	∅-	3rd Subject Non-Past Realis
+REALIS +TENSE -SUBJECT	*g-*	Past Tense Realis
+IRREALIS -TENSE +SUBJECT	*du-*	1st Subject Irrealis
	n-	2nd Subject Irrealis
	g-	3rd Subject Irrealis
+IRREALIS +ASPECT -SUBJECT	*d-*	Narrative/Habitual Irrealis

Table 7. Prefix grouping

2.6.1. Realis subject marking
Third person marking
Third person singular realis subjects are indicated by the absence of any subject marking. Third person plural subjects (and objects) are marked in position 9, though with no associated modality value. For paradigmatic purposes, the absence of third singular marking is indicated in these examples by a zero (∅) morpheme. Except for the following examples, third person ∅'s will not be reproduced in glossing for the sake of simplicity. The following is an example of a third person subject realis non-past clause.

(92) *hɛš   lauʔ   ∅-u-m-bu-tquʔ*
      PROX now   **3RD**-REAL-FIN-2.SG.POSS-tail
      'here now is your tail'   P109 5

As shown in section 2.11.3, stative relative clauses are marked in the same way as non-past realis clauses.[17] These correspondences seem to indicate that part of the meaning of non-past realis morphology can include stativity (though there are numerous examples of clearly active clauses with non-past realis morphology). (93) shows a third person subject non-past realis clause which functions like a perfect and likely indicates the stativity of the event.

(93) *dinʔɛ·wi lauʔ   ∅-u-ŋ-k̓ʷa*   *guš   bu-wa·qiʔ*
      always   now   **3RD-REAL-FIN-take** DIST 2.SG.POSS-wife
      'he has taken your wife permanently now'   P109 7

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[17] It should also be noted that adjectives are similarly marked, as shown in section 1.2.1.

Third person and SAP realis marking can also occur in 'gap-strategy' relative clauses, as in (94).

(94) *an-tmuwak waʔ ∅-i-n-dɛ-bɛˑhaʔ*
      ART-fish   NEG   3RD-REAL-FIN-NEG-cook
      'uncooked fish' P18 2 (1)

SAP marking
The morpheme *č-* of position 1 is used to code either a first or second person participant with a grammatical relation of either A or S. It is therefore a marker of first or second person subjects. This morpheme also indicates that the tense of the clause it appears in is non-past and its modality is realis. Since it is used to code both first and second person as a single category, it is termed a speech act participant marker.[18] In the case of singular arguments, no distinction is made between the two categories of first and second person in conjunction with this morpheme. A plural non-past realis SAP argument is coded by this morpheme along with the plural prefix of position 9 specific to that person. (95)–(98) show that both first and second person subject categories are coded by this morpheme when the tense is non-past.

(95) *č-u-m-di-dub*   *taunʔɛ am-bɛšugʷa*
      SAP-REAL-FIN-give-2.IO   one   ART-blanket
      'I will give you one blanket' P112 9 (2)

(96) *nikɛˑ maʰ č-u-m-yuwa-di*
      what 2.SG **SAP**-REAL-FIN-follow-APPL
      'What are you waiting for?' P136 2

(97) *č-u-m-yuwa-čubu*   *maʰ*
      SAP-REAL-FIN-follow-APPL.2.SG.OBJ   2ND

      hɛš   n-a-m-i-haŋ-ġan
      PROX   2.IRR-IRR-FIN-SUB-PROX-pass
      'I am waiting for you when you pass along here' P136 2

(98) *č-i-n-du-bun-i*   *duˑ-dɷlɛba*   *hɛš an-q́laʔ*
      SAP-REAL-FIN-1.PL-make-TRAN   1.PL.POSS-feather   PROX ART-pitchwood
      'We will use this pitchwood as our feathers'   P 112–113 9 (5)

2.6.2. Irrealis subject marking
Position 1 contains a set of irrealis subject prefixes. As mentioned, the specific categories of the irrealis mode associated with this series are future, unrealized events and the lack of certainty of a proposition. Since it seems that immediate future is coded by means of

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[18] This morpheme was identified by Rude (1986) in his glossing as coding SAP.

the realis series, it may be the case that Santiam treats a state/event as real or certain when it is more connected to the present situation and unreal or uncertain when projected farther in the future, though there is probably some pragmatic latitude in this regard. The following are examples of future (99) and uncertain (100) irrealis clauses.

(99) *di·s* ***du·ma ʔnd***   ***g-a-m-i-hu ʔ-yu***[19]
          /du-m-mand/
      soon **1.IRR**-FIN-look   **3.IRR**-IRR-FIN-SUB-be-INCH
      'Pretty soon I will try tonight' P51 49 (1)

(100) *dɛ·=dɛ-mand-ad*   *gus a-mim ʔ*   *dɛ·=g-a-man-hu ʔ-yu*
       INDEF=TLOC-look-APPL   DIST ART-person   INDEF=**3.IRR**-IRR-FIN.CIS-be-INCH
       'Try (to see) what has become of that person' P51 49 (1)

In (101) and (102), irrealis marking is used to code future events, but the pragmatic effect appears to be an imperative.

(101) *lauṃdɛ ma*[h]   ***n-a-n-ɬɛlɛ ʔwa***   *čɛ-hau*
       then   2.SG   **2.IRR**-IRR-FIN-shout   ADV-across
       'and then you are to halloo across' P107 4 (5)

(102) *wa ʔ* ***n-a-n-dɛ-wiyɛbg*ʷ*a-n***   *dumi-mand-a ʔd*
       NEG   **2.IRR**-IRR-FIN-NEG-turn-DUR   PURP-look-APPL
       'You are not to turn to look at them' P107 4 (5)

(103) and (104) are examples of interrogative clauses with irrealis marking.

(103) *ma·d-fan=yɛ*   *guš* ***g-a-ni-du·l-u***
       all-ADV=INTER DIST **3.IRR**-IRR-FIN.3.PL-die-INTRAN

       g-w-a-du-či-yɛ ʔmp
       PST-REAL-ASRT-RELLOC-ABL-come
       'Have they not all died where you have come from?' P90 2 (2)

(104) *dɛ·*   ***g-a-man-di·-hu ʔ-yu***[20]
       INDEF **3.IRR**-IRR-FIN.CIS-be-be-INCH

       g-a-m-hɛ·li·b   *g-*ʷ*-a-di·-t*[h]*-wuq*
       3.IRR-IRR-FIN-sick   PST-REAL-ASRT-SUB-TLOC-arrive
       'What was the matter with him that he was ill when he got back?' P108 5 (6)

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[19] *Gamihu ʔyu·* is an idiomatic expression for 'tonight'.
[20] See section 1.2.3.4 for a description of stems involving the sequence *mandi*, as in example (104).

In (104) above, it seems that the uncertainty of the state in the first clause is extended to the state 'he was ill' in the second clause, which also appears as irrealis. Perhaps a more accurate translation of the second clause would be 'he seemed ill', but this is speculation. The third clause is a definite, witnessed event and is marked with the past realis assertive complex.

2.7. Plural marking
Plural subjects are coded by means of position 9 prefixes. In the absence of one of these morphemes, the clause is interpreted a singular. The following is a list of plural prefixes.

du- ~ di-   1st Pl Subject,
dup- ~ dip-   2nd Pl Subject,
ni-   3rd Pl Subject/Object[21]

The following are examples of these morphemes. In the case of the third plural morpheme, an argument with any grammatical relation can be referenced by this prefix, whether A, S, P or oblique. This situation has not been observed for other person prefixes in the texts.

(105) *waʔ gi-dɛ-**di**-yuku-n   ču   gi-du·-**du**-daʔc*
       NEG INF-NEG-**1.PL**-know-3.OBJ where   INF-RELLOC-**1.PL**-find
       'We did not know where to find him'   P52 50 (2)

(106) *mati   n-a-n-**dub**-ḱʔa   čɛ-miyaŋk*
       2.PL   2.IRR-IRR-FIN-**2.PL**-take   ADV-up
       'you are to take her up above'   P110 (3)

(107) *lauʔm̩dɛ guši·=wi·   d-ɛ-**ni**-daha-i*
       then   DIST=EMPH   HAB-IRR-FIN.**3.PL**-kill-3.OBJ?
       'And then they would indeed kill him there'   P22 1 (7) (3.Pl=A)

(108) *laum̩ʔdɛ d-ɛ-n-di-**ni**-ʔi   du·-pgiʔ*
       then   HAB-IRR-FIN-TLOC-**3.PL**-go OBL-water
       'Then they went to the stream'   P24 2 (3.Pl=S)

(109) *d-ɛ-m-ʔnak   dɛn-hu·pna   dinʔɛ·wi d-ɛ-di·-**ni**-hω·du*
       HAB-IRR-FIN-say 1.SG.POSS-heart   always   HAB-IRR-SUB-**3.PL**-see
       'Always I would say in my heart when I saw them'   P73 73 (2) (3.Pl =P)

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[21] The morpheme *ni-* is noted by Rude (1986) in his glossing, where he mentions that '*ni- can pluralize a 3rd person patient … Or … can mark a 3rd person transitive subject plural.*' The alternation of the vowel for first plural subject is conditioned by vowel fronting, as mentioned in section 1.1.2.2

(110) *či ʔ   č-i-**ni ʔ**-gam ʔy-ad-i*   *a-mim*
1.SG SAP-REAL-FIN.**3.PL**-help- APPL-3.OBJ ART-people

či ʔ   d-ɛ-di·-ma-min-ω·   *du-gudguma*
1.SG HAB-IRR-SUB-CIS-exit-INTRAN OBL-dawn
'I help the people when I come out in the early morning' P138 4 (1) (3.Pl = P)

2.8. Negative morpheme
Negated sentences are frequently constructed by means of the negative particle *wa ʔ* and the negative prefix *dɛ-* of position 6. Negated clauses in general appear to carry less finiteness than affirmative clauses, since many negated clauses appear with the infinitive prefix *gi-* and do not occur with the finite marker *m-*, as in (111) and (112).

(111) *a-ši ʔwa   wa ʔ gi-**dɛ**-ni-lak-hʷid   hɛ ʔlum d-ɛ-di-hu· ʔ-yu·*
ART-child NEG INF-**NEG**-3.PL-play-COLL outside HAB-IRR-SUB-be-INCH
'Children should not play outside when it gets dark' P76 77 (1)

(112) *wa ʔ lau ʔ maʰ g-**dɛ**-ma-gʷin-fa ʔ*
NEG now 2.SG   INF-**NEG**-CIS-take-1.OBJ
'You could never catch me' P136 2 (1)

However, it is not the case that all negated clauses are completely non-finite, since negated clauses with an SAP subject are also frequently marked with the SAP morpheme *š-*, which carries a non-past time reference.

(113) *wa ʔ š-**dɛ**-du-hu·k-n̩*   *hɛs   a-mu·ki ʔ*
NEG SAP-**NEG**-1.PL-eat-3.OBJ   PROX ART-deer
'We do not eat this (sort of) meat' P122 5 (9)

Negated irrealis clauses can also appear with the finite prefix *m-* in irrealis clauses, as in (114) and (115).

(114) *wa ʔ n-a-n-**dɛ**-wiyɛbgʷa-n*   *dumi-mand-a ʔd*
NEG 2.IRR-IRR-FIN-**NEG**-turn-DUR   PURP-look-APPL
'You are not to turn to look at them' P107 4 (5)

(115) *wa ʔ di-n-**dɛ**-t́ab-a ʔt*
NEG   1.IRR-FIN-**NEG**-step-APPL
'I will not step on it' P113 7 (3)

Negated clauses also occur with the finite marker in negated third person subject predication clause types.

(116) *din-hu·pna   wa ʔ   i-n-**d ɛ ʔ**-ala-dint*
       3.POSS-heart NEG REAL-FIN-**NEG**-die-DISTR
       'His heart is not dead' P73 72

Not all negated clauses occur with the negative prefix, however, as in the following example. The non-occurrence of this prefix is likely conditioned by unknown discourse pragmatic factors.

(117) *wa· ʔ   u-wɷg-ud   yi·kun   g-a-m- ʔala ʔ*
       NEG   REAL-arrive-APPL   maybe   3.IRR-IRR-FIN-die
       'He has not gotten back. Maybe he will die' P51 49 (1)

Finally, negated clauses can occur with the narrative/habitual morpheme, indicating the retention of aspect in some cases.

(118) *guš   am-pa·lkyɛ   pa ʔ   d-ɛ-di-ha ʔ-na·*
       DIST ART-shaman   so   HAB-IRR-SUB-PROX-do

       *wa ʔ   d-ɛ-**dɛ**-ni-da·bnɛ-di*
       NEG   HAB-IRR-**NEG**-3.PL-pay- APPL
       'when a shaman did like that they would not pay him' P72 70 5

2.9. Assertive
Position 3 contains the assertive prefix *a-*. This prefix has been observed in the texts to occur in two separate morphosyntactic environments. The first is termed the past realis assertive morpheme complex, which is comprised of the past tense prefix *g-*, the realis prefix *u-,* and the assertive prefix. The realis *u-* is transcribed in the texts as a labialization, with the result that most instances of this prefix complex have the form *gʷa-*, though there are instances where *ga-* also appears. In these cases, there is no irrealis sense to the clause, so it can be determined that this is not past tense plus irrealis prefix. It is not clear whether the difference in form represents an unknown morphophonological process or is a transcriptional issue. The second environment in which this morpheme occurs is relative clauses, where it functions as a means of contrasting or emphasizing the subject or the assertion of that clause. This later function will be discussed in 2.11.1.

      The term 'assertive' has been chosen for this prefix because it appears to integrate two illocutionary values in its use. When used with the past tense realis complex, it seems to signal an emphatic assertion that a past event did in fact occur and that the witness, speaker or grammatical subject of the event has personal knowledge of it, therefore having an evidential value. Its function as an assertive or emphatic can also be deduced from the observation that it occurs in contexts which are emotionally charged, as in (119) and (121)–(123), below.

The following clauses in (119) are direct quotes, indicating that the participant who reported these events had direct experience of them.[22]

(119) *či ʔ*   **g-ʷ-a-m-hω·du**   *g-ʷ-a-di-gu·dgumu*
       1ST   **PST-REAL-ASRT-FIN-see**   PST-REAL-ASRT-SUB-dawn

       du·-dɛ-wa·ʔya   *guš*   *aʔ-waṕya*
       OBL-1.POSS-dream   DIST   ART-child
       'I saw the child in my dream this morning'

       g-ʷ-a-ma-la·maʔ-yω-q   *du·-ma·*
       PST-REAL-ASRT-FIN.CIS-enter-INCH-PASS   OBL-fire
       'He was brought into the house' P53 2 (6)[23]

In the next example, the narrator of the story is reporting what he heard said by someone else.[24]

(120) *gʷauʔk*   *guš*   *ayu·-huʔ-yu·*   *aʔ-wa·qcɛt*   *guš*   **g-aʔ-nag-at**
       3.SG   DIST   old?-be-INCH   ART-woman   DIST   **PST-ASRT-said-APPL**
       'that elderly woman said this' P53 2 (6)

In the following stretch of discourse, the clauses in (122) and (123) are marked as assertives, and indicate that the speaker had knowledge of Coyote's intent and actions.

(121) *u-m-su*   *č-i-n-di-daha-i*   *lau*
       REAL-FIN-good   SAP-REAL-FIN-1.PL-kill-3.OBJ?   now
       'It is well that we have killed him now'. (referring to Coyote *J.B.*)

(122) *dɛʔ-waṕyɛʔ*   *gus*   **g-ʷ-a-n-dahaʔ-yuʔ-q**
       1.SG.POSS-child   DIST   **PST-REAL-ASRT-FIN-kill-INCH-PASS**
       'My child will be killed' (was to be killed, i.e. coyote was going to kill it *J.B.*)

(123) *gʷauʔk*   *pɛš*   **g-ʷ-a-maʔ-na**   *hɛš*   *a-šniʔ*
       3RD   such   **PST-REAL-ASRT-FIN.CIS-do**   PROX   ART-coyote
       'Coyote himself here is the cause of this' (Coyote did this, i.e. stealing the child
       J.B.) P110–111 7 (7)

In the next stretch of discourse, the asserted clause in (125) functions as an evidential referring to the subject's knowledge of where an object is placed.

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[22] The narrative is about a boy who slipped into a stream and drowned.
[23] The phrase *gʷadigu·dgumu* 'this morning' is an idiomatic expression which has incorporated the assertive morpheme, probably as an evidential, i.e. witnessing the dawn. *du·ma·*, 'at the fire', is an idiomatic expression for 'house'/'home'
[24] This is an example of the *ga-* form of the past realis assertive.

(124)   *lauʔm̩dɛ   tauʔnɛ=yu·   d-ɛ-n-t-pi·́*   *din-di·b*
        then   one=also   HAB-IRR-FIN-TLOC-lie   3.POSS-camas

        pɛš   dinʔɛ·wi   g-i-niʔ-na-hai…
        such   always   PST-REAL-FIN.3.PL-do-3.OBJ?
        'Now then another put in her raw camas. That is the way they always did'

(125)   *lauʔm̩dɛ   madfan   niʔ-yuku-n*
        then   all   3.PL-know-3.OBJ

        ču   g-ʷ-a-du·-ni-pi·́   *dini-di·ʔp*
        where   PST-REAL-ASRT-RELLOC-3.PL-lie   3.PL.POSS-camas
        'Now then they all knew where they had placed their raw camas' P19 1 (5)

2.10. Adverbial subordination

The subordinator prefix occupies position 7 among the prefix positions. It has two syntactically determined forms; *di-* for realis subordinate clauses and *i-* for irrealis subordinate clauses. Also, realis subordinate clauses are non-finite, having neither first position non-past prefixes nor the finite prefix *m-* and they occur with the infinitive prefix *gi-*. Irrealis subordinate clauses, however, receive finite morphology including irrealis person marking and the finite prefix. A possible explanation for this division in morphological coding in Santiam is that in order to explicitly mark a clause as irrealis, irrealis person marking must be used (i.e. the irrealis thematic prefix *a-* does not occur without person marking, except in the case of the narrative/habitual, which does not indicate the subject of the clause). Since person marking is used in irrealis subordinate clauses and person marking tends to occur in conjunction with finite clauses, the clause was analyzed as finite and marked with the finite prefix. Additionally, the presence of the finite morpheme in irrealis subordinate clauses may have phonologically influenced the reduction of the subordinator prefix from *di-* to *i-* (*di > i / m__*). This in turn may have been analyzed as a syntactic constraint on the form of the subordinator (as opposed to a strictly phonological constraint), since the two forms of the subordinator prefix always occur in separate syntactic environments.

Both realis and irrealis subordinate clause types appear to be syntactically dependent on a main clause, with the possible exception of resultative subordinate clauses, described in 2.10.1 below. Subordinate clauses only rarely occur in isolation and, as mentioned, in the case of realis subordinate clauses, they do not have first position subject prefixes or finite morphology, both of which can be indicators of syntactic independence.

It should be noted that a form of the translocative prefix of position 8 has an allomorph *di-* which is identical in form to the realis subordinator prefix, as shown in (126).

(126)   *g-i-n-**di**-ni-hɛ·k*
       PST-REAL-FIN-**TLOC**-3.PL-leave
       'they went on' P118 7 (1)

This can be contrasted with the following example which contains both the subordinator (which does not occur with the finite prefix) and the translocative morpheme in a resultative adverbial clause:

(127)   *gi-**di**·-d-ni-hɛ·k*
       INF-**SUB**-TLOC-3.PL-leave
       'So (then) they went on' P118 7 (1)

Noting this morphological distinction helps to discern between potentially confusing instances of the translocative morpheme and the subordinator morpheme.

2.10.1. Adverbial realis subordination

The main function of subordinate realis clauses as observed in the texts is to indicate a sequential temporal adverbial relationship to a main clause. Using the terminology from Thompson and Longacre (1985), these are temporal sequence clauses which can be substituted by a single adverb, as, for instance, where the entire adverbial clause could be replaced by a word such as 'then' or 'yesterday'. In Santiam, these dependent clauses combined with a main clause are usually rendered in translation as 'when x occurred, y occurred'. This type of embedding seems to have the effect of characterizing a background scene upon which the event of the main clause is foregrounded.

      Another possible adverbial clause type associated with the realis subordinate morpheme is a resultative construction. Resultative clauses are related to the more commonly occurring temporal sequence adverbial clauses in that they similarly focus on the sequencing of events, though in this case, the focus is specifically on the resulting effect.

The following are examples of the temporal sequencing function of realis subordinate clauses.

(128)   **gi-di·-ma-wuʔk**   *g-u-m-hω·d-n̩*   *wanʔ* *a-šiʔwa*
       INF-SUB-CIS-arrive PST-REAL-FIN-see-3.OBJ   five   ART-child
       'when she came back she saw five children.' P117 6

(129) *guš   du·-yu·ɫma   d-ɛ-mˀ-umhɛˀ-nɛ·*
       DIST 3.POSS-dreampower HAB-IRR-FIN-send-3.OBJ?

      d-ɛ-di-huli   *dumiˀ-yuˀku*
      HAB-IRR-SUB-want   COMP-know

      a-mimˀ   dɛ·=ni·-fi   waˀna   an-uwa
      ART-person   INDEF=3.PL-do?   another ART-place
      'He sends out his dream-power when he wants to know what people are doing at
      some different place.' P51 49

(130) *čii-pgam   g-a-ni-hi-mimˀ   winhɛ **d-ɛ-di·-niˀ-i***
       ADV-long ago   3.IRR-ASRT-3.PL-be-people   some   **HAB-IRR-SUB-3.PL-go**

      du·-mɛfuˀ   dini-yuˀwɛl
      OBL-hill   3.POSS-hunt

      d-ɛ-ni-ḱʷa   a-ma·
      HAB-IRR-FIN.3.PL-take   ART-fire
      'Long ago when some of the people went to the mountains to hunt, they carried
      fire with them.' P32 24

(131) is an example of two dependent clauses with the subordinator prefix, both
describing a sequence of events, leading up to the focused event of the main clause.

(131) *lauˀm̩dɛ* **gi-di·-wuˀq**
       then   **INF-SUB-arrive**

      lauˀm̩dɛ **gi-di·-ni-mam-fuˀ**
      then   **INF-SUB-3.PL-eat-TRAN**

      lauˀm̩dɛ g-i-ŋ-gɛˀč   duŋ-ḱʷa-fa
      then   PST-REAL-FIN-make   3.POSS-take-NOM('pack')

      u-čagal-u·   a-mu·ki
      ADJ-dry-INTRAN   ART-deer
      'Then when he got back, and they were through eating, now he prepared his packs
      of smoke-dried meat.' P104 1 (7)

(132) and (133) are examples of what appear to be resultative clauses and are coded with
the realis subordinator. The presence of the discourse particle *lauˀm̩dɛ* 'then' may
indicate that these clauses, though marked with the subordinating morpheme, do not have
the same degree of syntactic dependence on a higher clause that temporal sequence

clauses do. It may be that the extension from temporal sequencing to a more specifically resultative function influenced a syntactic shift away from clause embedding to a more independent type of clause in this case.[25]

(132) *lauʔm̩dɛ   g-i-n-di-ni-hɛ·k*
      then   PST-REAL-FIN-TLOC-3.PL-leave

      g-i-n-di-niʔ-niš-ni   *guš*   *q̓ʷasq̓ʷas*
      PST-REAL-FIN-TLOC-3.PL-say-3.OBJ   DIST   crane

      'a-šayum   *u-m-yuʔwa-fω·'*
      ART-grizzly   REAL-FIN-follow-1.PL.OBJ

      lauʔm̩dɛ   **gi-di·-d-ni-hɛ·k**
      then   **INF-SUB-TLOC-3.PL-leave**
      'Now they went on, they told the crane, "Grizzly is pursuing us". **So they went on.**' P118 7 (1)

(133) *lauʔm̩dɛ   guš   duŋ-ḱʷa-fa=yu·*
      then   DIST   3.POSS-take-NOM('pack')=also

      g-i-n-di-niʔ-idib   *hupun*
      PST-REAL-FIN-TLOC-3.PL-jump   behind

      lauʔm̩dɛ   **gi-di·-di-ni-hɛ·k**   **a-mu·lugʷa**   **du·-du·-ma**
      then   **INF-SUB-TLOC-3.PL-leave**   **ART-whale**   **OBL-3.POSS-fire**
      'Now those packs of his also jumped (ashore) behind (them). **And so they went on to whale's house**.' P104 2 (3)

2.10.2. Adverbial irrealis subordination
Subordinate clauses can also be coded as irrealis by means of the irrealis subordinator *i-* of position 7. Irrealis subordinate clauses typically code conditional clauses. In terms of Thompson and Longacre (1985), the types of conditionals observed in the texts are unreal-imaginative-hypothetical and unreal-predictive clauses. It is not surprising that these types of conditional clauses would be coded by as irrealis, since the irrealis mode in main clauses is used to code both unreal/imaginative events and future events. Irrealis subordinate clauses code events which serve as a contextual backdrop, usually an unreal condition, upon which a main clause event is focused.

      Examples (134) and (135) show predictive conditional clauses (translations are also given in bold for clarity).

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[25] Resultative clauses are given in bold for clarity.

(134) **n-a-m-i-t-q́up**   **gus   an-tkʷililɛk   du-mućɛl**
       2.IRR-IRR-FIN-SUB-TLOC-cut   DIST ART-blackberry   3.POSS-rope

       di·s   du-ŋ-gʷin-fub
       soon   1.IRR-FIN-take-2.SG.OBJ
       '**If you cut that blackberry rope,** I will get you directly'   P136 2 (2)

(135) **n-a-m-i-huli   dumi-wu·ʔ**
       2.IRR-IRR-FIN-SUB-want   COMP-get

       yi·kun   guš   g-a-m-su
       maybe   DIST 3.IRR-IRR-FIN-good

       g-a-m-i·-ni-daʔc   guš   a-waṕya
       3.IRR-IRR-FIN-SUB-3.PL-find   DIST   ART-child
       '**If you go get them (if you want to get them *J.B.*),** it might perhaps be good
        if they do find the child'. P53 2 (1)

(136) is an example of a hypothetical conditional which is coded as a dependent irrealis
clause.

(136) *n-a-mʔ-alaʔ   aŋ-ḱapyiʔ*
       2.IRR-IRR-FIN-die   ART-body

       *maʰ   **n-a-m-i-ṕi·-ni   hɛš***
       2.SG   **2.IRR-IRR-FIN-SUB-lie-3.OBJ   PROX**
       'Your body would die **if you had this**' P114 1 (3)

2.11. Relativization

Relative clauses are quite frequent in the texts. There are a number of ways in which
relative clauses are coded depending upon several factors. Locative relative clauses are
overtly marked by the relative locative prefix of position 4. This morpheme will be
discussed in section 2.13.4. Relative clauses can also be marked with the assertive prefix
a- and may function to contrast or put emphasis on the relative clause. Also, it appears
that relative clauses which are incidental or backgrounded are marked with the
subordinator morpheme *di-*. Relative clauses which describe actions are marked as
infinitives with *gi-*, whereas those which describe states are coded as realis clauses.

2.11.1. Contrastive/asserted relative clauses

Relative clauses can be marked with the assertive morpheme *a-* of position 3. It is not
known what the exact function of this morpheme is in the context of relative clauses,
though in some instances it appears to indicate that the subject of the relative clause is
contrasted with other participants in the discourse, as in examples (137)–(139) below. In

other instances, it seems to indicate emphasis on the proposition of the relative clause, as in (140).

In (137), the subject of the relative clause, 'the people' (who bought the child), is contrasted with the participant 'the father of the child' in the immediately preceding discourse (included in translation). This contrasting function may also be the origin of the resumptive third person plural pronoun *gwini ʔk*, and may indicate that the relative clause, in addition to being in contrast, also receives a degree of focus.

(137)   'When they purchased a woman, the man whose child she was had nothing
        whatever to say (further) to his child.'

      gus   a-mimʔ   **g-a-niʔ-yandɛ**
      DIST ART-people   **PST-ASRT-FIN.3.PL-buy**

      gwiniʔk d-ɛ-ni-ṕi·-niʔ   *guš a-waʔiwaʔ dinʔɛ·wi*
      3.PL   HAB-IRR-FIN.3.PL-keep-3.OBJ DIST ART-woman always
      'The people who had bought her were the ones who kept that woman for all time.'
           P45 4

In (138), the relative clause marked with the assertive prefix appears to indicate that the subject of the relative clause 'we' is contrasted with the participant 'the whites' in the following clause, which is also marked with the contrasting clitic/particle *t́ɛ*.

(138)   *gɛ·mi am-bašdin*   *g-i-ni-maʔ-yamp*   ·
      two   ART-white person PST-REAL-FIN.3.PL-CIS-come

      sdω   č-ɛ-n-du·-kʷau-ni   *a-nuwa   čam-igidi*
      1.PL   **SAP-ASRT-FIN-1.PL-call-3.OBJ** ART-place   LOCNOM-?
      'Two whites arrived from the place we call *tcamigidi*'

      lauʔ t́ɛ·   am-bašdin   čɛʔ-Salem
      now CONTR ART-Boston   LOCNOM-Salem
      'and (which) the whites now (call) Salem. P52 50 (3)[26]

In (139), the subject of the asserted relative clause 'those people of mine' is contrasted with the first person narrator.

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[26] The term 'white people' is derived from the place-name 'Boston'.

(139) *hεš   či ʔ   du-m-i-ʔalaʔ*
       PROX 1SG   1.IRR-FIN-SUB-die

       *guš   mad-fan   dε-mimʔ   **g-a-ni-du·l-u·***
       DIST all-ADV 1.POSS-person   **3.IRR-ASRT-FIN.3.PL-die-INTRAN**

       du-m-hω·du
       1.IRR-FIN-see

       guš   di-n-dεʔ-wuʔk
       DIST   1.IRR-FIN-EMPHTLOC-arrive
       'When I here shall die, all those people of mine who have died, I will see when I
       reach there.' P 73 73 (1)

In (140a), two emphatic clauses occur immediately before (140b) in the discourse, which
contains an asserted relative clause. I suggest that in this case the asserted relative clause
is coding the emphatic sense of this stretch of discourse.

(140a) *gεʔč   du-maʔ-i*
       do   INDEF?-CIS-go
       'Done! Come here!

(140b) *hεsi·   u-m-pu·nuk   **č-ε-ŋ-ḱʷεʔ-ni***
       PROX   REAL-FIN-little   **SAP-ASRT-FIN-carry-3.OBJ**
       This is only just a little that I have left' P97 4 (4)

Example (141) shows that morphology of these types of relative clauses can be identified
as assertive and not irrealis. In this example, the subject of the relative clause is first
person, indicating that *ga-* can not be identified as third person irrealis subject + irrealis
theme (which would be formally identical), but is instead past assertive.

 (141) *dε=wiʔliʔyε   dεŋ-gawacεʔt*
       INDEF=return   1.POSS-valuables

       guš   čiʔ   g-a-ŋ-gawi
       DIST   1SG PST-ASRT-FIN-throw
       'Give me back my valuables, which I threw (paid)' p44 40 2 (2)

2.11.2. Backgrounded relative clauses
Just as subjects of relative clauses can be coded with the assertive morpheme to indicate
contrast or emphasis, it appears that subjects of relative clauses can also be
backgrounded. This function is coded by means of the subordinator prefix of position 7.

In (142), the relative clause (whose subject is in contrast with the participant 'relatives', i.e. 'his people') is coded with the assertive, whereas the subject of the second relative clause appears in the previous discourse (given in translation).

(142) 'However should there be another man who should want the woman, then he would purchase her.'

*guš   an-ʔuihi   **g-a-ni-ʔala ʔ**[27]*
DIST   ART-man   **PST-ASRT-FIN.3.PL-die**

gʷau ʔk   du·-mim ʔ   d-ɛ-ni-gʷin   guš   aŋ-ga·wacɛ ʔt
3RD   3.POSS-people   HAB-IRR-FIN.3.PL-take   DIST   ART-money

*guš   an-ʔuihi   **di ʔ-yanda   wai ʔwa ʔ***
DIST   ART-man   **SUB-buy   woman**
'It was the relatives of the man who had died (**asserted**) who took the valuables, from the man who purchased the woman (**backgrounded, already mentioned**).'
P45 (2)

In (143), the fact that the man's wife had been stolen was already established in the immediately preceding discourse, therefore the relative clause pertaining to this event is coded as a backgrounded relative clause.

(143) *guš   t́ɛ·   ta·fɷ-dint   guš   anʔ-uihi   **di·ʔ-lɛcʰwaʔ-yɷʔ-q**   du·-wa·qiʔ*
        DIST CONTR one-DISTR DIST ART-man **SUB- steal-INCH-PASS** 3.POSS-spouse

d-ɛ-m ʔ-i
HAB-IRR-FIN-go
'then once in a while rather the man whose wife had been stolen would go'
P 44 40 2

In (144), the asserted relative clause may indicate that the focus is upon the name of an object already referred to, whereas the backgrounded relative clause may indicate that the function of that object is incidental to the discourse.

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[27] The asserted verb stem *g-a-ni-ʔala ʔ* contains the third person prefix *ni-* which references the plural subject of the main clause *du·-mim ʔ* 'his people'.

(144) *guš*   *u·ʔ-nikε·*   **di·-ni-suʔ-nɛn-di-ni**   *dini-mε·* ......
       DIST   REAL-INDEF   **SUB-3.PL-good-CAUSE-APP-3.OBJ**   3.PL.POSS-fire .....

     waʔ *š-dεʔ-yuku-n*   *guš*   *duŋ-qʷat*
     NEG SAP-NEG-know-3.OBJ   DIST   3.POSS-name

     nikε·   *g-a-ni-qʷau-ni.*
     INDEF   PST-ASRT-FIN.3.PL-call-3.OBJ
     'The thing that they fixed their fire with....I do not know its name
     that they called it.' P 17 1 (4)

2.11.3. Stative/active marking

In Santiam, it appears that relative clauses which are not asserted/emphatic can receive varying morphology depending upon whether they code actions or states. If a non-asserted relative clause encodes an action, it is marked with the infinitive *gi-*, whereas if it encodes a state, it is simply marked as a realis clause. Example (145) contains a relative clause whose verb is an action and therefore marked as an infinitive. (146) has a stative verb in the relative clause and is marked as realis.

(145) *guš* *d-ε-di·-t-gʷin*   *guš* *a-šayum*
       DIST HAB-IRR-SUB-TLOC-hold   DIST ART-grizzly

     yε·ʔ **gi·-gʷin-hi**   *aʔ-wadak*
     who **INF-hold-3.OBJ?**   ART-stick
     '…when the grizzly seized the person who held the pole' P22 (6)

(146) *guš*   *yε·ʔ* **u·ʔ-yuku-n**
       DIST   who   **REAL-know-3.OBJ**

     dumi-gʷin *guš* *aʔ-wadak*
     COMP-hold DIST ART-stick
     'The one who knew how to hold the pole.' P22 (7)

Other examples of this stative/active distinction in relative clauses are (147) and (148).

(147) *lauʔm̩dε* *guš* *an-ʔuihi* **gi·-ʔwai-ni**   *guš*   *aʔ-waiʔwa*
       then   DIST ART-man   **INF-lie-3.OBJ**   DIST   ART-woman

     d-ε-m-wu·ʔ-yωʔ-q
     HAB-IRR-FIN-get-INCH-PASS
     'And then the man who had had sexual intercourse with the woman was fetched.'
     P44 1

(148) *guš   an-ʔuihi   **u-ti**   dinʔ-a·naʔ*
       DIST ART-man   **REAL-be** 3.POSS-daughter
       'The man who had a daughter…' P46 (1)

In (149), the verb in the relative clause at first glance appears to be an active verb, though it is marked with the stative strategy for relative clauses. I suggest that this is a perfect construction and is therefore marked as stative in keeping with the stativity of perfect constructions.

(149) *lauʔm̩dɛ guš   a-mimʔ   **uʔ-yɛndɛn** guš am-bi·ni*
       then   DIST ART-people **REAL-buy** DIST ART-girl

       d-ɛ-ni-gʷin   guš   am-bi·ni
       HAB-IRR-FIN.3.PL-take DIST ART-girl
       'Now then the people who had purchased the girl, they would take the girl.'
       P46 (7)

2.12. Complements, purposives, and switch reference

Complement and purposive clauses share a number of morphological coding features. Both complements and purposives are frequently coded by means of the polymorphemic prefix complex *dumi-*. It is not certain what the specific diachronic morphological structure of this complex is. A couple of suggested analyses are given here, though they remain speculative at this stage. The first analysis of the prefix complex shown below includes the relative locative prefix of position 4, the finite prefix of position 5, and one of the roots 'to be', with a loose translation of its diachronic meaning.

dumi-
du-m-i
RELLOC-FIN-be
'at the place where there is'

Santiam has several roots 'to be'. An example of the root shown above is (150).

(150) *lauʔ čiʔ   č-u-m-**i**-wayufna*
       now 1st   SAP-REAL-FIN-**be**-disease
       'Now I will be a disease' P90 2

I suggest here that a relative locational clause (see section 2.13.4) involving the verb 'to be' was grammaticalized into a purposive construction associated with motion verbs. A possible example of this type of structure is shown in (151).

(151) *maičuʔ madfan d-ɛ-niʔ-i   guš   **du·-m-i-ni-gɛ·wu***
       morning all   HAB-IRR-FIN.3.PL-go   DIST **RELLOC-FIN-be-3.PL-gather**
       'the next day they all went away to where they were assembling' P33 25 (4)

Based on the translation, it looks as if the lower clause is a relative locational clause. However, it is also possible that this is simply another example of a purposive construction with *dumi-*, in which case a more appropriate translation would be *"the next day they went away in order to assemble there."* This interpretation depends on the reference of the subject of the lower clause. If the subjects of both clauses are the same, then it is more likely that this is in fact a purposive clause. If the subjects are different, then it is possibly a relative structure. Unfortunately, the discourse context around this sentence does not help to clarify this and both interpretations are possible.[28]

The second diachronic analysis of the underlying structure of *dumi-* includes the first irrealis prefix, the finite prefix, and the subordinating prefix:

dumi-
du-m-i
1.IRR-FIN-SUB
'1st Irrealis Subordinate'

This second analysis simply states that purposive and complement structures developed out of a grammaticalized irrealis subordinate construction, in which the first person subject irrealis prefix became a grammaticalized element along with the finite and subordinating prefixes. As discussed below, *dumi-* is an indicator of same subject reference in both complements and purposives. Since first person subjects may be more likely than non-first subjects, for discourse-pragmatic reasons, to occur as continuing subjects across clauses, it follows that this is the person reference that would be grammaticalized. It is also easy to see why purposives would be associated with irrealis, since they inherently contain a sense of futurity or of a non-realized event.

2.12.1. Switch reference
The prefix complex *dumi-* is not the only morphological coding strategy associated with complements and purposive clauses. Both clause types can be prefixed with the infinitive marker *gi-* as well. Complements can also appear as fully finite clauses without any overt marking to indicate their syntactic function as sentential complements. The determining factor for the selection of *dumi-* vs. an infinitive/finite coding strategy for these clause types appears to be a system of switch reference. Complements and purposives which have the same subject as the main clause are coded with *dumi-*, whereas complements and purposives with a subject different from that of the main clause are marked either as an infinitive or as a fully finite clause. The choice between infinitives and finite clauses may depend upon the matrix verb. For instance, the complement-taking predicate 'to want' marks its complement with an infinitive for switch subjects, whereas other predicates seem to select finite forms in their complements.

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[28] As shown further below, however, the prefix *dumi-* is normally associated with a continuing subject, which would seem to indicate a purposive analysis for this example.

The following are examples of same-subject and different-subject marking of complement and purposive clauses, with clauses containing reference tracking morphology in bold.

2.12.2. Complements
Same subject complements
The majority of same-subject complements observed in the texts occur with the main verb 'to want', though a couple of other same-subject complement types have been found as well.

(152) *c-u-m-huli*   ***dumi-kanɛ***
       SAP-REAL-FIN-want   **COMP-cross**
       'I want to cross' P118 7(2)

(153) *g-i-ni-huli*   ***dumi-ni-yi·***
       PST-REAL-FIN.3.PL-want   **COMP-3.PL-go**
       'they wanted to return' P54 4

(154) *guš   an-ʔuihi   u-m-huli*   ***dumi-hω·du-cuf***
       DIST ART-man   REAL-FIN-want **COMP-see-APPL.2.OBJ**
       'that man wants to see you' P 81 91 (1)

(155) *guš   waʔ   gi-dɛ-ni-huli*   ***dumi·-ni-hu·k   duŋ-ḱapya***
       DIST NEG   INF-NEG-3.PL-want **COMP-3.PL-eat   3.POSS-flesh**
       'They did not like to eat its flesh.' P 23 4

(156) and (157) are same-subject examples of complement-taking predicates other than the verb 'to want'. Example (156) contains an adverbial clause, whose verb is a complement taking predicate. The embedded complement is marked as having the same subject as that of the adverbial clause

(156) *wa·ʔ gi-dɛ-wuʔk   guš   gi-di·ʔ-nag-at*   ***dumi·ʔ-wuʔk***
       NEG   INF-NEG-arrive DIST INF-SUB-say-APPL **COMP-arrive**
       'he did not come back at the time that he had said he would return.' P70 69 (1)

(157) *luiʔ   am-pa·lakyɛ   g-i-ni-mand-i*
       many ART-shaman PST-REAL-FIN.3.PL-look-3.OBJ

       dumi-ni-daha-i   am-bašdin
       COMP-3.PL-kill-3.OBJ? ART-white person
       'Many shamans tried to kill Americans'   P66 64 (1)

Different subject complements
Infinitives
Different-subject complements marked with infinitives typically are associated with the verb 'to want' as the complement-taking verb.

(158) *wa·ʔ š-dɛ-huli   ma **gi·-kani-nɛʔ-faʔ***
NEG   SAP-NEG-want   2ND **INF-cross-CAUSE?-1.OBJ**
'I do not want you to take me across' P110 (4)

(159) *č-u-m-huli   šni   du-wa·qiʔ   **gi·-kaniʔ-nɛ-faʔ***
SAP-REAL-FIN-want   coyote   3.POSS-spouse   **INF-cross-CAUSE?-1.OBJ**
'I want coyote's wife to get me across' P110 (4)

(160) *sdω   du-m-i·-di-huli   ma^h **gi·-wuʔq**   di-n-diʔ-niš-dumbui*
1.PL   1.IRR-FIN-SUB-1.PL-want 2.SG **INF-arrive** 1.IRR-FIN-1.PL-say-2ND.IO
'When we want you to come we will tell you.' P74 74

(161) *waʔ lau   d-ɛ-ni-huli   gʷauʔg **gi·-kʷiʔd**   u-duʔg   am-bgɛʔ*
NEG now HAB-IRR-FIN.3.PL-want 3.SG   **INF-drink** ADJ-cold ART-water
'And they didn't want her to drink cold water' P43 (5)

Finite complements
The following different-subject, finite-marked complements are associated with the verbs 'to say' and 'to know'. In the examples below, the finite complement clauses include examples of habitual (162), non-past realis (163), and asserted (164) clause types.

(162) *tauʔnɛ-dint g-i-niʔ-nak-wid*
one-DISTR   PST-REAL-FIN.3.PL-say-COLL

  pu·nuk gus a-la·la   d-ɛ-n-d-niʔ-yɛšʔ-ni
  little   DIST ART-poison HAB-IRR-FIN-TLOC-3.PL-hurt-3.OBJ
  'Once in a while, they would say, the fatal-poison-power would hurt them a little bit' P66 64 1

(163) *g-a-m-i·-hi·c   n-ɛ-n-dub-yuʔku-n*
3.IRR-IRR-FIN-SUB-fall 2.IRR-IRR-FIN-2.PL-know-3.OBJ

  lauʔ   u-m-dahaʔ-nɛ-faʔ
  now   REAL-FIN-kill-CAUSE-1.OBJ
  'When it falls down you will know she has killed me then.' P116 2 (2)

(164) *č-i-n-diʔ-yuku-n=wi·   **g-a-m-hi·c**   du·-pgiʔ*
SAP-REAL-FIN-1.PL-know-3.OBJ = EMPH **PST-ASRT-FIN-fall** OBL-water
'We do know he fell in the water.' p54 3 (3)

2.12.3. Purposives

It appears that purposives are also coded in terms of having the same or different subject from that of the matrix clause. This is not surprising, since purposives and complements are marked with the same morphology and obviously come from the same diachronic source. As with complements, same-subject purposives are marked with *dumi-*, where as different-subject purposives are marked with the infinitive *gi-*.

The following examples of purposives may indicate that the morphological analysis of *dumi-* as a grammaticalization of first person subordinate irrealis marking is the correct historical derivation. In the texts, most same-subject purposive clauses occur with a first person subject, whereas all observed different-subject purposives occur with third person subjects. There is no logical or communicative restriction on first person switch-subject or third person same-subject, rather it appears that specifically with regards to purposive constructions, discourse pragmatics favor first person same-subject and third person different-subject.

Same subject purposives

(165) *maičʉ   du-m-ʔi   **dumi-hɷ·du***
       morning   1.IRR-FIN-go   **PURP-see**
       'I will go tomorrow to see' P128 2 (3)

(166) *čiʔ du-m-k̓ʷɛ-ni   guš din-dɷ·lɛba*
       1SG 1.IRR-FIN-take-3.OBJ   DIST 3.POSS-feather

       dumi-hɛ·k   *ču ͪ*   *du-hɛŋ-gɛ·wu-fiʔt*
       COMP-go away   where   RELLOC-PROX-gather-COLL
       'I will take those feathers of his for myself, in order to go on to where there is an assemblage.' P99 (8)

(167) *lauʔ čiʔ yi·kun   č-u-mʔ-yɛ·či-i*
       now 1ST maybe   SAP-REAL-FIN-almost-go

       *guš   du·-wɛ·qiʔ din-uwa   **dumiʔ-alaʔ***
       DIST   OBL-bone   3.POSS-land **PURP-die**
       'Now I myself am perhaps gone on to the land of the dead people to die'
       P73 73 (3)

(168) *waʔlauʔ   gi-dɛ-ma^h-da·b*   **dumi-wiyɛbg-wa**
       NEG NOW   INF-NEG-CIS-stand   **PURP-look back-TRAN**

       gi·-hⲱ·du   mə-nikɛ·   u-n-uidzga-fub
       INF-see   EMPH-INDEF   REAL-FIN-scare-2.SG.OBJ
       'You never stop in order to look back, to see what has scared you.' P133 (1)[29]

Different subject purposives
(169)–(171) are examples of different subject purposives marked as infinitives.

(169) *lauʔm̩dɛ   d-ɛ-ni-di·-d   tauʔnɛ   anʔ-uihi*
       then   HAB-IRR-FIN.3.PL-give-3.IO   one   ART-man

       gi·-k^wa   *gu·   du-waʔna   a-mimʔ   du·n-uwa*
       INF-take   DIST   OBL-other ART-person 3.POSS-place
       'and they would give them to one man to take them there to the place of some other people' P33 25

(170) *ta·fⲱ·-dint   ḱⲱn-fan   d-ɛ-ni-ḱub-i·   duŋ-k^wilɛ·k*
       once-DISTR   only-ADV   HAB-IRR-FIN.3.PL-cut-TRAN   3.POSS-eye

       gus   a-mimʔ   **gi·-ni-hⲱ·du**
       DIST ART-person   **INF-3.PL-see**

       guš   gi-du·-haŋ-ḱub-i·-ʔk
       DIST   INF-RELLOC-PROX-cut-TRAN-PASS
       'Sometimes they might cut his face, so that the people would see where he had been cut.' P44 40 (3)

(171) *waʔ lauʔ ma^h gi-dɛ-t-g^w̩in   aʔ-wadak*
       NEG now 2.SG INF-NEG-TLOC-hold   ART-stick

       lauʔm̩dɛ   g-i-n-čʔulcʔ-at   guš   a-sayum
       then   PST-REAL-FIN-poke-APPL   DIST ART-grizzly

       gi·-ma-lalaḱ-ya   *guš   a-sayum*
       INF-CIS-angry-INCH?   DIST ART-grizzly
       'You could not wield a pole, and be poking at the grizzly to make that grizzly angry.' P22 7 (7)[30]

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[29] In this example, *gi-hⲱdu* is apparently not a second purposive and is marked as a participle-like infinitive.

(172) and (173) are a couple of examples which, on the surface, seem to contradict the above hypothesis regarding switch reference. If (172) is interpreted as a purposive, one would expect the form *dumi-* to be used, since there is a continuing subject.

(172) *č-u-maʔ-i*   ***č-i-ni-gaw-ad***
       SAP-REAL-FIN.CIS-go   **SAP-REAL-FIN.3.PL-visit-APPL**
       'I will go see them' P130 5

It is possible, however, that (172) is not a purposive construction in the sense of 'going in order to see them'. It could be that this is a highly integrated event sequence and is coded as such by means of a serial verb construction.

In (173), we might also expect to find the complement coded with *dumi-* as opposed to the infinitive, since there is a continuing subject.

(173) *waʔ gi-dɛ-di-yuku-n*   ***ču***   ***gi-du·-du-daʔc***
       NEG INF-NEG-1.PL-know-3.OBJ   **where**   **INF-RELLOC-1.PL-find**
       'We did not know where to find him'   P52 50 (2)

Example (173) however, is also syntactically different from other complement clauses described above and appears to be an indirect question. In Santiam, it seems that indirect questions are syntactically and functionally akin to relative clauses and, in fact, in (173) the relative locative prefix occurs on the lower verb. It therefore could be that in this case the morphology is operating along the lines of a relative clause structure as opposed to complement structure.[31] Since the verb in the lower clause is an action, this may explain the choice of an infinitive as a coding device, since, as discussed above, relative clauses which describe actions are coded as infinitives.

Subject complements
(174) and (175) are examples of subject complements.

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[30] A more accurate English translation may be, "so that that grizzly became angry". This would of course mean that 'grizzly' is the subject of the purposive clause.
[31] Keenan and Hull (1973) note a number of cross-linguistic morphosyntactic similarities between relative clauses and indirect questions.

(174) *hɛš   mɛ·n-fan   u-m-su*
       PROX much-ADV REAL-FIN-good

       *čiʰ   **gi·-ṕi·-niʔ***   *hɛš*
       1SG   **INF-lie-3.OBJ**   PROX

       guš   an-ʔuihi   u·-ṕi·-ni
       DIST ART-man REAL-lie-3.OBJ
       'It would be extremely good if I had this that the man possesses' P114 (2)

(175) *guš   u-m-su*
       DIST REAL-FIN-good

       dumi-ni-ṕi·-yɛ·di   *du·-ṕyaus*
       COMP-3.PL-lie-story?   OBL-winter
       'It is good to tell myths in the wintertime' P51 48 (1)

In (174) and (175), the difference in marking on the complement clauses may be explained in terms of a specific vs. non-specific subject. In (175), there is no definite subject, and in fact a non-referring third plural prefix occurs on the verb. It is possible that this indefinite subject in the complement conditions the choice of *dumi-* on the verb. This may be further indication of the irrealis source of this prefix complex, i.e. an indefinite subject may have been coded as irrealis at an earlier stage of the language.

2.13. Spatial prefixes

Several spatial prefixes occur on the verb stem in Santiam. Position 4 contains the relative locative *du-* which occurs only in relative clauses and is likely connected diachronically to the oblique noun prefix *du-*. Position 8 contains the translocative prefix, position 10 the cislocative and proximal prefixes and position 11 the ablative. The translocative and cislocative prefixes also seem to be involved in coding aspectual distinctions in addition to spatial meanings. The most likely direction of grammaticalization for the cislocative and translocative is the metaphorical extension from spatial affix to aspect, cf. Hopper and Traugott (1993). The proximal prefix frequently co-occurs with the relative locative in relative clauses, though it can occur independently as well. Its exact spatial function is less clear than that of the translocative and cislocative.

2.13.1. Cislocative

The cislocative prefix, identified by Rude (1986) in his glossing, is found in position 10 and has the forms *ma-* ~ *maN-*. It is unclear what the conditioning factors are for the appearance of the nasal on the cislocative. The nasal often appears in transcription as assimilated in place of articulation to a following bilabial or velar consonant. The basic form of the nasal appears to be [*n*], since this appears when no assimilation is indicated.

Spatial function

The primary spatial function of the cislocative as observed in the texts is to code motion in the direction of a discourse-established reference point. Often the term 'cislocative' is used to refer to motion towards the speaker, and this appears to be one of the functions of the cislocative in Santiam. However, the most frequent use in the texts is to indicate motion towards some deictic center other than the speaker specifically. The following example contrasts this function of the cislocative with the opposite directional value of the translocative.

In (176), the deictic center is the scene already established by the discourse. The cislocative is used to indicate that the participant appears on the scene, coming from an 'outer' direction.[32]

(176) *lauʔm̩dɛ tauʔnɛ a-šayum   g-u-**ma**-min-ω·*
                                      */g-u-m-**ma**-min-ω·/*
       then   one   ART-grizzly PST-REAL-FIN-**CIS**-come out-INTRAN
       'and then one grizzly appeared' P119 8 (2)

An identical verb stem containing a translocative appears in (177). In this example, the deictic center is associated with an noun phrase which is located externally to the current scene, necessitating the use of the translocative.

(177) *lauʔm̩dɛ an-t́ω·faq   g-i-n-**t**-min-ω·*
       then   ART-mudfish PST-REAL-FIN-**TLOC**-come out-INTRAN

       dumi-wuʔq guš   a-mu·kiʔ
       PURP-get   DIST ART-deer
       'So mudfish went outside to get the meat'   P105 3 (4)

Additional examples of the spatial function of the cislocative are (178) and (179). (178) shows the cislocative as it functions to reference motion towards the speaker.[33]

(178) *ču^h   č-u-**man**-či-yɛmʔp*
               */č-u-m-**man**-či-yɛmʔp*
       where SAP-REAL-FIN-**CIS**-ABL-come
       'Where have you come from' P97 4 (3)

In (179), the cislocative is used to indicate that the direction of the fall is at a previously established deictic center, specifically the area where the elk emerged.

(179) *lauʔ guš paʔ an-hui   nɛ   an-tqaʔ g-u-**ma**-hic*
       now DIST so   ART-be   like ART-elk PST-REAL-FIN.**CIS**-fall
       'Now the thing that was just like an elk fell' P 129 3 (2)

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[32] As shown in the glossing in (176), the finite prefix assimilates to the cislocative.
[33] The ablative references the original location, the cislocative motion towards the current deictic center.

Aspectual functions
The main aspectual notion associated with the cislocative is stativity. As part of the
concept of stativity, it also seems at times to have the inchoative meaning of entry into a
state. This function of the cislocative may have arisen from a metaphorical extension of
the notion 'movement towards the speaker' to '(metaphorical) movement into a state',
from which the general sense of stativity may have emerged.

In addition to stativity, in certain cases this prefix also appears to indicate
durativity. Stativity and durativity may have an underlying semantic link. States are often
viewed as having an extended temporal duration (perhaps the prototypical
conceptualization of a state), whereas punctual events may be more likely to be
conceived of as actions. Also, the concept of complementary spatial values associated
with the translocative and cislocative prefixes may have, by functional analogy, been
transferred to the complementary aspectual values of punctuality for the translocative and
stativity/durativity for the cislocative.

As an indicator of stativity, it frequently occurs on a root 'to be', of which there are
several. In the following examples, the finite marker and the cislocative coalesce to form
[*man-*], glossed as FIN.CIS.

(180) *pɛši·*   *g-a-**man**-hui*
         that way   3.IRR-IRR-FIN.**CIS**-be
         'That is how it shall be (in all future time).' P137 3 (3)

(181) *dɛ·=lauʔ*   ***man**-hu·ʔ-yu*   *a-nuwa*
         INDEF=now   FIN.**CIS**-be-INCH   ART-place
         'What's the matter with this countryside now?' P98 1 (8)

(182) *wi·naš=wi·*   *g-u-m-pí·-diʔt*
         indeed=EMPH   PST-REAL-FIN-lie-DURLOC

         *paʔ g-u-**man**-hui*   *nɛʔ*   *a-mu·ki*
         so   PST-REAL-FIN.**CIS**-be   like   ART-deer
         'And sure enough it lay there, it was just like a deer.' P109 6 (3)

Interestingly, this stative function seems to have been extended to function as a
predicator, as in (183).

(183) *waʔ   mɛ·n-fan   s-dɛʔ-yuku-n*
       NEG   much-ADV   SAP-NEG-know-3.OBJ

      *ču   guš   **man**-din-uwa   guš   anʔ-uihi*
      where DIST FIN.**CIS**-3.POSS-place DIST ART-man
      'I do not quite know just where that man's place was' P53 2 (3)[34]

(184) shows the cislocative in its durative function.

(184) *nɛ·   d-ɛ-n-t-waʔ-yu·=wi·   din-hu·bna*
       like NARR-IRR-FIN-TLOC-NEG-INCH=EMPH 3.POSS-heart

      *d-ɛ-di-**ma**-q́aud   gus   aŋ-q́aud-ɛ*
      NARR-IRR-SUB-**CIS**-sing DEM ART-sing-NOM?
      'It was as if he were indeed not in his heart when he sang the song.' P58 (7)

When the cislocative occurs on a verb stem which references entering into a state, it often appears with the inchoative suffix *-yu*, as in (185).

(185) *lauʔm̩dɛ d-ɛ-**ma**-putput-ω·ʔ-yω·   guš   dini-ḱwa·na-fin*
       then   HAB-IRR-FIN.**CIS**-boil-INTRAN-INCH DIST 3.PL.POSS-eat-NOM
       'Then their food would boil' P17 1 (2)

Examples of the cislocative representing entrance into a state have also been observed without the inchoative suffix, as in (186). This indicates that the stative meaning of the cislocative may, in some instances, be extended to include entering into a state, probably by virtue of the frequent co-occurrence with the inchoative suffix.

(186) *lauʔm̩dɛ d-ɛ-di·-**ma**-maiču ʔ*
       then   NARR-IRR-SUB-**CIS**-morning
       'and now when it became morning.' P58 (9)

2.13.2. Translocative

The translocative prefix occupies position 8. This prefix was identified by Rude (1986) in his glossing. This morpheme appears to have two separate forms, a neutral and an emphatic form. The neutral form is represented by *d- ~ t- ~ di-*. The factors which condition the choice between these forms are not presently known.[35] When the translocative is realized as *di-,* it is identical in form to the subordinator prefix of position 7, however their synchronic status as independent prefixes is confirmed due to their

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[34] An alternative analysis of (183) above could be that *man-* references the deictic center and is not a stative/predicator.
[35] It is possible that the metrical structure of the verb stem is a factor, though there seems to be a good deal of inconsistency in this regard.

observed co-occurrence on the verb stem (example (192)). The emphatic form of the translocative is represented by *dɛ-* ~ *dɛN* (with an assimilating nasal) and occurs when the deictic point of reference is emphasized and explicitly expressed in the clause by the distal demonstrative *guš*.

Spatial Function
Complementary to the cislocative, the translocative may have as its core function the notion of motion away from the speaker. However, many spatial examples of this prefix reference motion away from or motion towards a newly established deictic center. It may also function in terms of coding motion towards a reference point more distant from one already established in the discourse.

The first example shows the translocative as it codes motion away from an established deictic center.

(187) *dinʔɛ·wi g-i-n-t̓-i*   *wa·ʔ   gi-dɛ-ma-yi·*
       always   PST-REAL-FIN-**TLOC**-go   NEG   INF-NEG-CIS-go
       'He continued on, he never came back.' P 100 2 (10)

In (188), the translocative is coding motion towards a deictic center, but away from a previously established center

(188) *lauʔm̩dɛ guš   a-mim*   *g-i-ni-t̓ak-fʷid*
       then   DIST ART-people   PST-REAL-FIN.3.PL-play-COLL

       lauʔm̩dɛ a-šni·   *g-i-n-t-wuk*   *či-lɛ*
       then   ART-coyote   PST-REAL-FIN-**TLOC**-arrive   ADV-near
       'Now those people were playing shinny, and then coyote got near to there.'
       (i.e. where they were playing. *J.B.*) P101 3 (2)

(189) shows the translocative in its emphatic form. This form has always been observed to co-occur with the demonstrative '*guš*', which immediately precedes the verb stem and references the spatial deictic center (in (189) 'where the grizzly lay').

(189) *lauʔm̩dɛ an-t̓iʔš*   *guš   g-i-n-dɛ-wuʔk*
       then   ART-sapsucker there PST-REAL-FIN-**EMPHTLOC**-arrive

       gus   a-sayum   gi-dɛ-hɛm-p̓i·-did
       DEM ART-grizzly INF-RELLOC-PROX-lie-DURLOC
       'Then sapsucker got to there where the grizzly lay.' P125 9 (2)

(190) shows a verb stem with an emphatic translocative (and a contrastive clitic) occurring next to a verb stem with a neutral translocative.

(190) *lau ʔm̥dɛ a-šni   guš=t́i   g-i-n-**dɛ**-la·m-ω·*
       then   ART-coytote there-CONTR PST-REAL-FIN-**EMPHTLOC**-enter-INTRAN

       *gi-di·-**t**-ła·m-ω·   g-u-m-nak ...*
       INF-SUB-**TLOC**-enter-INTRAN   PST-REAL-FIN-say
       'Then coyote entered it now, when he went inside he said…..' P102 4 (1)

Example (191) indicates that an additional function of the emphatic translocative is to reference the deictic center at which an event occurs, as opposed to its more common function of referencing motion relative to a deictic center. This is indicated at the end of the narrative where the deer accidentally hangs himself on a trap.

(191) *guš   d-ɛ-ni-ṕi·-ni*   *guš   paʔ an-hui a-mutćɛl*
       DIST HAB-IRR-FIN.3.PL-lie-3.OBJ   DIST so   ART-be ART-rope

       guš   d-ɛ-ni-qaʔlt   *du-mu·ḱiʔ daŋ-gauni*
       DIST   HAB-IRR-FIN.3.PL-hang   OBL-deer   3.POSS-trail

       guš   a-mu·ḱiʔ   d-ɛ-dɛ-haŋ-ġan
       DIST ART-deer   HAB-IRR-RELLOC-PROX-pass

       guš   d-ɛ-n-t́-mui-čɛ   *duŋ-gʷa .....*
       DIST HAB-IRR-FIN-TLOC-put in-REFL   3.POSS-head

       *lauʔm̥dɛ guš   d-ɛ-n-**daŋ**-q́i·q́a-či*
       then   DIST   HAB-IRR-FIN-**EMPHTLOC**-choke-REFL
       'They placed that kind of rope, they hung it on a deer trail, where deer went by, there he would put his head through it……Then he would choke himself.'
       P31 22 (2)

(192) shows that, though at times identical in form, the translocative and the subordinator prefix are in fact distinct, since both occur on the verb stem in the first clause. In this example, the deictic center is a specified location relative to the participants in the scene as opposed to the location of the participants themselves. This is demonstrated in the second and third clauses, where the equivalents to the English verbs 'push' and 'pull' both occur with the translocative, as opposed to a translocative/cislocative opposition.

(192) *lauʔm̩dɛ gi-di·-di-ni-la·m-i*
       then   INF-SUB-**TLOC**-3.PL-enter-TRAN

       a-šni   g-i-n-t́-uig-ni
       ART-coyote   PST-REAL-FIN-**TLOC**-push-3.OBJ

       guš an-t́ω·faq   g-i-n-t-wu-di
       DIST ART-mudfish PST-REAL-FIN-**TLOC**-get-APPL
       'Then when they took it in, coyote pushed, mudfish pulled' P109 6 (4)

Aspectual functions

The main aspectual notion associated with the translocative appears to be punctual aspect. As the cislocative and the translocative display a spatially oriented opposition, it is interesting to note that a similar aspectual opposition exists between the two, namely, punctuality versus stativity/durativity. The translocative in (193) clearly has no spatially oriented function since it appears on the epistemic verb 'to know'. In this instance, it seems that the translocative is coding what might perhaps be rendered in English as 'suddenly realize', i.e. a punctual aspect of the state of knowing. This use of the translocative with the root *yuku* is in contrast with the frequent occurrence of the same root in the texts without the translocative to indicate an ongoing state of knowing.

(193) *guš   d-ɛ-di·-łu·kʷa*   *dɛn-hu·pna*
       DIST HAB-IRR-SUB-awaken   1.POSS-heart

       či·ʔ lauʔ d-ɛ-di·-tʔ-yukuʔ   *gi-ni-du·l-u·*
       1SG now HAB-IRR-SUB-**TLOC**-know   INF-3.PL-die-INTRAN
       'It is when my heart awakens that I now know that they have died.' P73 73 (3)

The following is another example of the punctual aspect of the translocative.

(194) *guš   yu·ʔ gi·-huli·   aʔ-wagaʔ*
       DIST who INF-want ART-slave

       lip-fʷan   g-i-n-t-yanda
       quick-ADV   PST-REAL-FIN-**TLOC**-buy
       'And further should he want a slave, he could buy (one) quickly.' P47 42 (1)

Another possible aspectual distinction of the translocative is a sense of totality or completion. In (195), the translocative may be indicating the totality of the proposition. The concept of totality may be a semantic extension of punctuality in that something that is punctual is often a totally completed and contained event.

(195) *nε· d-ε-n-**t**-wa ʔ-yu·=wi·*   *din-hu·bna*[36]
      like NARR-IRR-FIN-**TLOC**-NEG-INCH=EMPH 3.POSS-heart
      'It was as if he were indeed not in his heart.' P58 (7)

2.13.3. Proximal

The proximal prefix is found in position 10 and has the form *hε-* ~ *hεN-*. This prefix possibly originates from the incorporation of the proximal demonstrative *hεš* as a verbal prefix. The term proximal is used for this prefix since part of its function is to code a spatial location which seems to be judged within the discourse as proximate or near a deictic center. However, as to be expected, other functions appear to have arisen out of its core function. In the texts, it is most commonly used to code the location at which an event/state occurs. In this function, it usually co-occurs with the relative locative *du-* of position 4 in relative clauses. It also appears to have the non-spatially oriented discourse function of reference to an action, much like a pro-verb.

     In (196), the proximal is coding the proximity of the action to the current deictic center of the discourse. Also, the presence of the proximal demonstrative *hεš* in this example is analogous to the occurrence of the distal demonstrative *guš* with emphatic translocative clauses, and may indicate that this is also an emphatic construction.

(196) *č-u-m-yuwa-čubu*   *ma*[h]
      SAP-REAL-FIN-follow-APPL.2.SG.OBJ 2ND

      *hεš n-a-m-i-**haŋ**-ġan.*
      PROX 2.IRR-IRR-FIN-SUB-**PROX**-pass
      'I am waiting for you when you pass along here.' P136 2

(197) and (198) are examples of the use of the proximal in relative clauses with the relative locative prefix *du-*. These examples apparently code a static location at which an event takes place.

(197) *wa ʔ či ʔ g-ʷ-a-n-di-hω·-cubu*
      NEG 1ST   PST-REAL-ASRT-FIN-TLOC-see-APPL.2.SG.OBJ

      *guš či ʔ g-ʷ-a-**du-hεn**-t́εšdu·*
      DIST 1ST PST-REAL-ASRT-**RELLOC-PROX**-sit
      'I did not see you there where I was (sitting)' P140 (3)

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[36] This example also shows that the negative particle *wa ʔ* can act as a verb root.

(198)   *lauʔm̥dɛ g*ʷ*ini·ʔk g-i-ni-ʔi=yu·*
        then   3.PL   PST-REAL-FIN.3.PL-go=also

        *guš   gi-**du·-hɛŋ**-gɛ·wu-fid   a-mimʔ*
        DIST   INF-**RELLOC-PROX**-meet-COLL   ART- people
        'and so they went too to there where the people were meeting together.'
        P139 5 (1)

Examples (199) and (200) demonstrate the proximal's pro-verb-like function in
conjunction with the verb 'to do'. In these examples, the proximal is referring to a past
action which is still active within the scope of the discourse.

(199)   *guc am-pa·lkyɛ   paʔ d-ɛ-di-**haʔ**-na·*
        DIST ART-shaman so   HAB-IRR-SUB-**PROX**-do

        waʔ d-ɛ-dɛ-ni-da·bnɛ-di
        NEG   HAB-IRR-NEG-3.PL-pay-APPL
        'when a shaman did like that they would not pay him' P72 70 5

(200)   *micniʔ guš pɛš u·-**hɛʔ**-na-faʔ*
        coyote   DIST so   REAL-**PROX**-do-1SG.OBJ
        'It is coyote who did it to me' P96 6

2.13.4. Relative locative
The relative locative occupies position 4. Its most frequent form, and presumably the
basic form, is *du-*, though it has also been observed as *dɛ-*. This prefix is very likely
related to the nominal oblique prefix *du-*. Its specific function on the verb stem appears to
be to indicate a relativized static location (though its nominal oblique counterpart has a
much wider semantic range). This prefix has only been observed to occur on verb stems
in relative clauses and is therefore termed relative locative. The following are examples
of this prefix.

(201)   *lauʔm̥dɛ mad-fan niʔ-yuku-n*
        then   all-ADV   3.PL-know-3.OBJ

        *ču   g-*ʷ*-a-**du·**-ni-ṕi·   dini-di·ʔp*
        where PST-REAL-ASRT-**RELLOC**-3.PL-lie   3.POSS-camas
        'Now then they all knew where they had placed their raw camas.' P19 1 (5)

Section 2.13.3 shows the relative locative as it often co-occurs with the proximal.
Example (202) shows that it also can occur with the ablative.

(202) *g-i-n-t^h-wuʔk*   *guš   či-lɛ*
       PST-REAL-FIN-TLOC-arrive   DIST   ADV-near

     guš   a-fbiʔ   *gi-**du·-ču**-min-u-fid*
     DIST   ART-gopher   INF-**RELLOC-ABL**-come out-INTRAN-COLL
     'He got close to where the gopher came out.' P 115 3

(203) shows the relative locative realized as the form *dɛ-*. This may be due to a system of vowel harmony in conjunction with the surrounding syllables.

(203) *d-ɛ-ni-qaʔlt*   *du-mu·kiʔ daŋ-gauni*
       HAB-IRR-FIN.3.PL-hang   OBL-deer   3.POSS-trail

     *guš   a-mu·kiʔ d-ɛ-**dɛ**-haŋ-ġan*
     DIST ART-deer   HAB-IRR-**RELLOC**-PROX-pass
     'they hung it on a deer trail, where deer went by.' P32 22 (3)

Under one analysis, the relative locative may also appear in the purposive/ complementizer prefix complex *dumi-*. This is discussed in section 2.12.

2.13.5. Ablative

The ablative prefix occupies position 11, the final prefix position, and has the forms *ču ~ čɛ*. This prefix was identified by Rude (1986) in his glossing, and is the source from which I first acquired the functional identification of this prefix as an ablative. The term ablative is normally associated with nominal case marking to indicate the spatial notion of 'from a deictic point'. The term 'ablative' is used here in a similar way, though this prefix only occurs as a verbal morpheme in Santiam. The basic function of the ablative is to indicate motion from a deictic center, though it has also been observed to indicate other spatial relations, such as placement opposite a deictic center.
    The following is an example of the prototypical function of this prefix.

(204) *waʔ   ņ-dɛ-hɛ-huʔč*   *guš   u-**čiʔ**-i·-did*
       NEG   FIN-NEG-be-panther   DIST   REAL-**ABL**-go-DURLOC
      'It's not panther that is coming' P108 5 (6)

In (205), the ablative co-occurs with the cislocative. In this case, it appears that the ablative codes the center from which a participant has moved and the cislocative codes the speaker as a deictic center.

(205) *čuʔ   ma^h   č-u-man-**či**-yɛmp*
      where 2.SG   SAP-REAL-FIN.CIS-**ABL**-come from
      'where did you come from?' P131 2 (1)

Finally, the ablative appears to also code the spatial notion 'opposite to'. In (206), the ablative likely codes the placement of the participant opposite to the deictic center 'the woman' and the cislocative codes the motion of the participant relative to a separate deictic center in the discourse.

(206)   *lauʔm̥dɛ gus   a-waiʔwa   g-u-m-yu·*
        then   DIST   ART-woman   PST-REAL-FIN-sit

        lauʔm̥dɛ guš a-šni   hɛ   g-u-man-či-yu·
        then   DIST ART-coyote here PST-REAL-FIN.CIS-**ABL**-sit
        'and the woman sat down, and coyote sat over here (opposite her).' P107 5

3. Suffixal morphology

This section provides a brief description of some of the more commonly occurring suffixes on the Santiam verb stem. For a number of these suffixes, only suggestions are given as to their meaning and function, due to a greater degree of uncertainty about Santiam suffixes in general. This work seeks to provide a preliminary introduction to suffixes in Santiam with the hope that further work will provide a more elaborate description. Though the most frequently occurring suffixes are mentioned in this section, it is likely that there are additional suffixes in Santiam which do not receive mention, due to their infrequent occurrence or to uncertainty in their identification.

3.1. Transitive/intransitive suffixes

Position 1 contains a number of suffixes which apparently code the transitivity of the verb stem. It may be the case that oppositional pairs of transitive and intransitive suffixes are lexically specified by the verb root or by a type of class membership (further research is need to confirm this). Transitive suffixes appear to add a causative meaning to the verb stem. However, at this stage of research on Santiam it seems most appropriate to consider these suffixes as transitive as opposed to causative, since they occur in opposition to intransitive suffixes and, as shown in section 3.6, a separate causative suffix has been identified (which actually co-occurs with (at least) one of the transitive suffixes). Kendall (1997), reproduced in Mithun (1999:433), glosses the morpheme *-u* as an intransitive suffix, and this is the source from which the identification and analysis of this particular suffix originated. The identification and analysis of other transitive/intransitive suffixes is my own. In order to describe these suffixes clearly, they will be presented in terms of oppositional pairs occurring on the same verb root.

-ω ~ -u   **Intransitive**
-wa   **Transitive**

In (207), the root *cagalʔ* 'to dry' occurs with the intransitive suffix *-u* and the transitive suffix *-wa*.[37]

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[37] It is possible that *-a* is a phonological variant of the transitive suffix *–wa*.

(207a) *lau ʔm̩dɛ d-ɛ-di·-čagʔal-**u**·-yu·*
        then   HAB-IRR-SUB-dry-**INTRAN**-INCH
        'And when it had become dry' P36 30

(207b) *d-ɛ-ni-wu·   d-ɛ-ni-čagalʔ-**wa**-ni*
        HAB-IRR-FIN.3.PL-get HAB-IRR-FIN.3.PL-dry-**TRAN**-3.OBJ
        'they got it (and) dried it.' P36 30

The same opposition occurs for the root *wilwil,* loosely translated as 'be round'

(208a) *guš d-ɛ-ni-p̓i·ʔ=yu·*
        DIST HAB-IRR-FIN.3.PL-lie=also

        *guš   u·-čagalʔ-u·   guš   u·ʔ-wilʔwil-**ω**·*
        DIST ADJ-dry-INTRAN DIST ADJ-round-**INTRAN**
        'they applied that dried round thing there likewise' P36 30 (2)

(208b) *lau ʔm̩dɛ d-ɛ-niʔ-wilʔwilʔ-**wa**-ni*
        then   HAB-IRR-FIN.3.PL-round-**TRAN**-3.OBJ
        'they made it into round balls.' P36 30 (1)

-∅   **Intransitive**
-wa   **Transitive**

The opposition -∅/-*wa* occurs with the root *hɛk* 'to leave'.

(209a) *lau ʔm̩dɛ gus   tgu·b   lauʔ g-u-m-hɛ·k*
        then   DIST skunk   now   PST-REAL-FIN-go on
        'Now skunk went on.' P142 (6)

(209b) *č-u-m-hɛ·g-ʷa-čuf*
        SAP-REAL-FIN-go on-**TRAN**-APPL.2.SG.OBJ
        'I will leave you.' P121 (3)

-u ~ -ω   **Intransitive**
-i   **Transitive**

In (210a), the verb root *dul* 'die' occurs with the intransitive suffix -*u.*

(210a) *lauʔ č-i-n-di-du·l-**u**   aŋ-k̓apyiʔ*
        now SAP-REAL-FIN-1.PL-die-**INTRAN** ART-body
        'Indeed now we have been dying in body. (we have been starving)' P34 28 1

In (210b), the same verb root occurs with *-i*, with the meaning 'to kill'.

(210b) *pɛs   n-a-m-i-hɛʔ-na-hai*   *mad-fan   n-ɛ-ni-du·l-**i**ʔ*
        so   2.IRR-IRR-FIN-SUB-PROX-do-3.OBJ?   all-ADV 2.IRR-IRR-FIN.3.PL-die-**TRAN**
        'If you do it like that, you can kill them all.' P121 (5)

Examples (211a and b) show the root *lam* 'enter' with intransitive and transitive suffixes.

(211a) *lauʔm̥dɛ g-u-ma-la·m-**ω***   *a-šni*
        then   PST-REAL-FIN.CIS-enter-**INTRAN**   ART-coyote
        'and now coyote came in.' P106 4

(211b) *ma-la·m-**i**   guš   a-mu·ki u·-wug-i*
        CIS-enter-**TRAN** DIST ART-deer REAL-arrive-TRAN
        'Bring inside the meat that he has brought back.' P105 3 (4)

-Ø   **Intransitive**
-i   **Transitive**

(212a and b) show the root *wuk* 'to arrive' with intransitive and transitive counterparts.

(212a) *lauʔm̥dɛ yɛ·či   gi-di·-t-wuʔk*
        then   almost INF-SUB-TLOC-arrive
        'Now when he had nearly gotten to him.' P141 2 (2)

(212b) *ma-la·m-i   guš   a-mu·ki u·-wug-**i***
        CIS-enter-TRAN DIST ART-deer REAL-arrive-**TRAN**
        'Bring inside the meat that he has brought back.' P105 3 (4)

-fu   **Transitive**

Finally, the suffix *-fu* may function as a transitivizing suffix. It occurs in opposition to other types of suffixes, such as the applicative in the next example and, in the following section, a nominalizer. This may indicate that its status is somewhat different than the suffixes shown above.

(213a) *č-i-n-diʔ-u·-**fu**ʔ*   *aŋ -q́laʔ*
        SAP-REAL-FIN-1.PL-search-**TRAN**   ART-pitchwod
        'Let us look for pitchwood'   P112 9 (5)

For contrast the following clause is given, where the applicative references the third person animate object.

(213b) *g-i-n-dʔi-u·-di*   *guš   du·-pgiʔ*
      PST-REAL-FIN-1.PL-search-APPL   DIST OBL-water
      'We sought him there in the water.' P52 50 2

Example (214b) below also shows this suffix in opposition to the nominalizing suffix shown in (214a).

3.2. Nominializers

The following suffixes possibly occur in position 1, but this is uncertain since they have not been observed to co-occur with other suffixes in the texts. Both suffixes appear to function as nominalizers.

-fin   **Nominalizer**

(214a) *gus   aʔ-waiʔwa   g-i-ŋ-gɛʔč-ni*   *ḱʷa·nɛ-**fin***
      DIST ART-woman PST-REAL-FIN-make-3.OBJ   eat-**NOM**
      'and the woman prepared their food.' P103 5 (3)

Compare (214a) with the (214b), where the same root occurs with a transitive suffix.

(214b) *g-i-ni-ḱʷa·nɛb-**fuʔ***
      PST-REAL-FIN.3.PL-eat-**TRAN**
      'They ate.' P106 4 (2)

In (215), the nominalizer *-fa* occurs with the verb root *kʷa* 'to take' in a possessed noun phrase. In this example, the same root also occurs in the predicate of the clause.

-fa   **Nominalizer**

(215) *g-u-m-ḱʷa*   *g-u-waʔn*   *guš   duŋ-ḱʷa-**fa***
      PST-REAL-FIN-take PST-REAL-five DIST 3.POSS-take-**NOM**
      'He had five such packs.' P104(7)

3.3. Reflexive

The suffix *-či ~ -čɛ ~ -cɛ* functions as a reflexive and indicates that the subject is the same participant as the object. It is unknown what position this suffix occupies.

(216) *guš   g-u-maʔ-mui-**či***
      DIST PST-REAL-FIN.CIS-put-**REFL**
      'he got inside that.' P111 8 (2)

(216) can be contrasted with (217), where the same root appears without the reflexive suffix.

(217)   *d-ɛ-ni ʔ-mui*   *du·-dini-bu ʔc*
       HAB-IRR-FIN.3.PL-put OBL-3.PL-mouth
       'they put it in their mouth.' P36 30

Another example of the reflexive suffix is (218).

(218)   *guš   d-ɛ-n-dɛŋ-q́i· q́a-**či***
       DIST HAB-IRR-FIN-EMPHTLOC-hang-**REFL**
       'he would choke himself .' P32 (3)

This suffix can apparently also be used to code a middle-like participle. Since both middle and reflexive constructions have decreased valency, it follows that they would receive the same morphological coding.

(219)   *i·-sdu-fad*   *u-plaqɛ-**cɛ***   *a ʔ-wa ʔdik*
       ADJ-small-COLL ADJ-split-**REFL** ART-tree
       'small split sticks' p72 71 (2**)**

3.4. Inchoative
The inchoative suffix *-yu ~ -yω* codes a participant's entrance into a state of being. No explicit cause or volitional instigator of the resultant state is indicated. It is not known what position this suffix occupies, though it does occur after the intransitive suffix and before the passive suffix in the suffix complex *-yu-q* (see 3.6 below). In (220) and (221), the same verb root is shown with and without the inchoative suffix.

(220)   *lau ʔm̩dɛ   d-ɛ-di·-čag ʔal-u·-**yu·***
       then   HAB-IRR-SUB-dry-INTRAN-**INCH**
       'And when it had become dry' P36 30

(221)   *d-ɛ-ni-wu·*   *d-ɛ-ni-čagal ʔ-wa-ni*
       HAB-IRR-3.PL-get   HAB-IRR-3.PL-dry-TRAN-3.OBJ
       'they got it (and) dried it.' P36 30

In (222), the root *uq* 'be hot' occurs both with and without the inchoative suffix.

(222)   *gus   d-ɛ-ni-ṕi·*   *u ʔ-u ʔq   an-da....*
       DIST   HAB-IRR-FIN.3.PL-lie   ADJ-hot   ART-rock

       *lau ʔm̩dɛ   gus   an-da   d-ɛ-m ʔ-uq-**yω***
       then   DIST   ART-rock   HAB-IRR-FIN-hot-**INCH**
       'There they put the hot rocks…….the stone would become hot again.'
       P40 4 (3), 4 (4)

The next example shows that it can also occur on verb stems with a non-third person subject.

(223) *yiꞏkun   n-a-m-suʔ-**yuꞏ***
      maybe   2.IRR-IRR-FIN-good-**INCH**
      'you might get well.' P36 4

3.5. Passive

The passive suffix *-q ~ -k* regularly co-occurs with the inchoative *-yu* in the suffix complex *-yuq*. I have observed only one instance of it occurring without the inchoative. As a passive marker, it indicates that the subject of the clause is the semantic patient. Overt agents are not expressed in passive constructions.

      The co-occurrence of the passive and inchoative suffixes may indicate that in many cases passive constructions in Santiam code not only the topical prominence of the patient but also a resultant state, since the inchoative itself codes entrance into a state. However, since an example of a passive without the inchoative has been observed, it can not be categorically stated that all passive constructions in Santiam are stative.

      In (224), the first clause is active and has a direct object which appears as the passivized subject in the immediately following second clause.

(224) *yiꞏkun   duꞏ-dɛ-waya   gʷadiguꞏdgumu   g-ʷ-a-m-hɷꞏdu.*
      maybe   OBL-1.POSS-dream   this morning   PST-REAL-ASRT-FIN-see

      *g-ʷ-a-ma-laꞏm-aʔ-yu-**q***
      PST-REAL-ASRT-CIS-enter-TRANʔ-INCH-**PASS**
      'Maybe I did see him in my dream this morning. He was brought inside'
      P54 4 (2)

(225) shows a passive clause whose subject is within a relative clause.

(225) *guš   t́ɛꞏ   taꞏfɷ-dint*
      DIST   CONTR   one-DISTR

      *guš   anʔ-uihi   diꞏʔ-lɛcʰwaʔ-yɷʔ-**q**   duꞏ-waꞏqiʔ*
      DIST   ART-man   SUB- steal-INCH-**PASS**   3.POSS-spouse

      d-ɛ-m-ʔi
      HAB-IRR-FIN-go
      'then once in a while rather the man whose wife had been stolen would go'
      P44 40 2

Another example of a passive construction is (226).

(226)   *hɛʔ   g-u-mam-ṗi·ʔ-yuʔ-**q***   *an-tgu·b*
        PROX   PST-REAL-FIN.CIS-lie-INCH-**PASS**   ART-skunk
        'skunk was placed on this side' P139 5 (2)

The following is the only known example of the passive occurring without the inchoative
suffix. In this example, the fact that the passive occurs on an infinitive clause may
explain why in this case the inchoative does not occur. Since it is an infinitive, aspect,
specifically stativity, is not overtly expressed.

(227)   *ta·fω-dint   ḱωn-fan   d-ɛ-ni-ḱub-i·*   *duŋ-kʷilɛ·k*
        once-DISTR   only-ADV   HAB-IRR-FIN.3.PL-cut-TRAN   3.POSS-eye

        gus   a-mimʔ   gi·-ni-hω·du
        DIST   ART- person   INF-3.PL-see

        *guš   gi-du·-haŋ-ḱub-i·ʔ-**k***
        DIST   INF-RELLOC-PROX-cut-TRAN-**PASS**
        'Sometimes they might cut his face, so that the people would see where he had
        been cut.' P44 40 (3)

3.6. Causative

The causative suffix occurs in suffix position 2. It appears in the texts as the forms
-na ~ -nɛn. This morpheme is very similar in form to the verb root *na* 'to do' and very
likely developed as the grammaticalization of that root into a causative function. The
grammaticalization of 'to do' as a causative morpheme is well attested cross-
linguistically, cf. Heine and Kuteva (2002:117). (228) is an example of the verb root *na*
'to do'.

(228)   *məʔ-nikɛ·   guš   paʔ   u-**na**-fɛbu*
        EMPH-what   DIST   SO   REAL-**do**-2.SG.OBJ
        '(to see) what is making you like that' P57 second line

(229)–(231) are examples of the causative suffix. In (229), the verb root *su* 'be good'
occurs with the causative. This has the effect of deriving the lexical stem 'to prepare',
which is semantically 'to make good'.

(229)   *guš   u·ʔ-nikɛ·   di·-ni-suʔ-**nɛn**-di-ni*   *dini-mɛ· ......*
        DIST   REAL-INDEF   SUB-3.PL-good-**CAUSE**-APPL-3.OBJ   3.PL.POSS-fire
        'The thing that they fixed their fire with…' P17 1 (4)

In (230), an intransitive root is transitivized by means of a transitive suffix and
causativized with the addition of the causative suffix. This appears to indicate that
transitivizing and causativizing processes, though syntactically related (they both indicate
an increase in valency), are distinct in Santiam

(230) *an-t́au*   *d-ɛ-ni-cagalʔ-wa-**na***
         ART-eel   HAB-IRR-FIN.3.PL-dry-TRAN-**CAUSE**

         d-ɛ-di-hu·g   *d-ɛ-di-·ṕyaus*
         HAB-IRR-SUB-eat   HAB-IRR-SUB-winter
         'They dried eels which they ate in wintertime.' P20 4 (2)

3.7. Applicative

The applicative suffix occurs in suffix position 3. This is a derivational suffix that adds a semantic instrument, location, time, or goal to the set of core arguments of the verb. The core status of these arguments is confirmed by the observation that nominals in these constructions are not marked with the oblique nominal prefix *du-*. The applicative has two main allomorphs which appear on the verb stem; *-di* and *-ad*. It is unclear at this time which of these forms could be considered the basic form.[38] The allomorph *-di* occurs after vowels and the fricatives [s] and [š]. The allomorph *-ad* occurs after other consonants. Additionally, an epenthetic [l(a)] has been observed to occur in certain instances before *-ad* and *-di,*
though the phonological process by which this appears is unknown. Both allomorphs can be followed by a third person direct object suffix. In the case of *-di,* the applicative plus third person direct object combination is realized as *-dini,* whereas
-ad followed by the third person direct object suffix yields the sequence *-adi.*

The existence of applicatives in Kalapuya was identified by Rude (1986). He identified the segments *-dini* as, in his terminology, an "instrumental (oblique) suffix" and described its function as "advancement or promotion" of an oblique participant to direct object which is not marked by the oblique nominal prefix *du-*. In section 3.13.3 below, I analyze *-ni* as the third person direct object suffix. Since Rude considered the sequence *-ni* to be part of the form of the applicative morpheme, some of the examples he gives of applicative constructions are, under my analysis, not applicatives at all since those particular examples in the texts contain only the sequence *-ni* and do not include the suffix *-di*. Rude (1986) mentions that the noun phrase which this suffix indexes is regularly marked with the article *an-*. He also recognizes that nouns cannot occur with other prefixes in addition to this article. In applicative constructions, the fact that arguments indexed by the applicative suffix appear without the oblique prefix *du-* and either appear with the article *an-* or without any prefix indicate that they are operating syntactically as core arguments of the verb.

The following examples illustrate the correlation between the occurrence vs. absence of the oblique nominal prefix *du-* and non-applicative/applicative clauses. Example (232) is a non-applicative clause and the peripheral nominal is case-marked with the oblique prefix *du-*.

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[38] The analysis of the sequence of segments *-ad* as an applicative was first suggested to me by Marianne Mithun (p.c.). The analysis of *-di* and *-ad* as allomorphs of the same morpheme is my own.

(232) *lauʔm̩dɛ   d-ɛ-ni-cagalʔ-wa-ni*   ***du*-*ma·***
       then   HAB-IRR-FIN.3PL-dry-TRAN-3.OBJ   **OBL**-fire
       'and they dried them on the fire'   P20 4 (2)

In (233), the nominal 'my heart', which is a semantic location, is not case marked with the oblique prefix *du-* and the verb stem takes the applicative suffix.[39]

(233) *waʔ   d-ɛ-n-dɛʔ-nag-**at***   *dɛn-hu·pna*   *gʷinik gi-ni-du·l-u·*
       NEG   HAB-IRR-FIN-NEG-say-**APPL**   1.SG.POSS-heart 3PL   INF-3PL-die-INTRAN
       'I do not say in my heart that they have died.' P73 73 (2)

In (234a and b), an non-applicative clause is contrasted with an applicative clause with the same verb root. In the applicative example (234b), the participant that is 'shot at' is semantically the goal of the action.

Non-applicative

(234a) *tauʔnɛ an-t́ausak   n-a-m-ṕlac-niʔ*
       one   ART-arrow   2.IRR-IRR-FIN-shoot-3.OBJ
       'Shoot one arrow.' P121 (5)

Applicative

(234b) *dinʔɛ·wi   gʷauʔg   u-m-ṕlɛc-**ad-i***   *guš aŋ-gʷinhi*
       always   3RD   REAL-FIN-shoot-**APPL-3.OBJ**   DIST ART-gambling bones
       'he also always shot at the gambling-bones.' P50 47 (3)

Another verb root which commonly occurs with the applicative is *nak/niš* 'to say'; indicating that the participant to which the utterance is directed is grammatically a core argument.

Non-applicative

(235a) *lauʔm̩dɛ   g-i-niʔ-nak*
       then   PAST-REAL-FIN.3PL-say
       'and they said' P110 (3)

Applicative

(235b) *an-tfaʔfi   g-u-mʔ-niš-**di**-ni*
       ART-pile   PST-REAL-FIN-say-**APPL**-3.OBJ
       'He said to the piles' P100 (12)

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[39] There are examples of the oblique prefix *du-* co-occurring with possessive prefixes.

The applicative/non-applicative distinction can apparently also derive stems with idiomatic meanings. In (236a), the root *yuwa* 'to follow' occurs without the applicative.

Non-applicative

(236a) *a-šayum*   *u-m-yuʔwa-fȧ*
ART-grizzly   REAL-FIN-follow-1.PL.OBJ
'Grizzly is pursuing us.' P118 7

In (236b), this same root occurs with the applicative and has the effect of deriving the stem 'to wait for'.

Applicative

(236b) *guš*   *n-a-ma-yuwa-**di***
DIST   2.IRR-IRR-CIS-follow-**APPL**
'You wait for it there.' P129 first line

The next example may be a 'time' applicative, where the applied argument is the implied time reference.

(237)   *wa·ʔ gi-dɛ-wuʔk*   *guš*   *gi-di·ʔ-nag-**at***   *dumi·ʔ-wuʔk*
NEG   INF-NEG-arrive DIST   INF-SUB-say-**APPL** COMP-arrive
'he did not come back at the time that he had said he would return.' P70 69 (1)

Instrumental applicatives
Several examples of instrumental applicatives have been observed in the texts. Example (238) shows the applicative suffix occurring on a causativized verb stem and referencing the semantic instrument of the event.

(238)   *guš*   *u·ʔ-nikɛ·*   *di·-ni-suʔ-nɛn-**di**-ni*   *dini-mɛ·* ......
DIST   REAL-INDEF   SUB-3.PL-good-CAUSE-**APPL**-3.OBJ   3.PL.POSS-fire

waʔ š-dɛʔ-yuku-n   *guš*   *duŋ-qʷat*   *nikɛ·* *g-a-ni-qʷau-ni.*
NEG SAP-NEG-know-3.OBJ DIST   3.POSS-name what PST-ASRT-3.PL-call-3.OBJ
'The thing that they fixed their fire with....I do not know its name
that they called it.' P 17 1 (4)

Other instrumental applicative examples are (239b), (240b) (perhaps a comitative applicative), and (241). In these examples, an epenthetic [l(a)] appears before the applicative suffix, as described above.

Non-applicative

(239a) *guš   či·-pgam   gi-di·-ni-gau-fu   a-mɛʔnma*
DIST   ADV-long ago   INF-SUB-3.PL-to fish-TRAN   ART-people
'Long ago when people fished' P18 3

Applicative

(239b) *g-i-ni-gau-fuʔ-**lad**-iʔ   guš am-ba·dafi*
PST-REAL-FIN.3.PL-to fish-TRAN- **APPL**-3.OBJ   DIST ART-trout
'They fished trout with it' P18 3 (i.e. talking about fishing with a special device)

Non-applicative

(240a) *lauʔm̩dɛ   n-a-m-culʔ-wa*
then   2.IRR-IRR-FIN-have diarrhea-TRAN
'and then you will have diarrhea.' P17 2

Applicative

(240b) *laga   n-a-ma-culʔ-wa-**lat**   aʔ-yu*
maybe 2.IRR-IRR-FIN.CIS-have diarrhea-TRAN-**APPL** ART-blood

n-a-m-i-malkʷa
2.IRR-IRR-FIN-SUB-defecate
'Possibly you might have diarrhea of blood when you defecate.' P18 first line

(241) *gʷauʔk hɛš   i-n-duŋ-kʷilɛ·k   č-i-n-du·-t́ak-ʰʷiʔ-**lɛd**-i*
3.SG PROX   REAL-FIN-3.POSS-eye   SAP-REAL-FIN-1.PL-play-COLL-**APPL**-3.OBJ
'This here is his own eye with which we are playing shinny' P101 3 (2)

Applicatives and person marking
Example (242) shows a first person object as the argument indexed by the applicative. As shown in section 3.13, the applicative suffix frequently occurs with object suffixes, creating certain morphophonemic changes.

(242) *yɛ·ʔ=naʔg   u-m-yuʔwi-**lɛc**ʰʷa-n*
                               */u-m-yuʔwi-**lad**-i-fa-n/*
WHO=WONDER   REAL-FIN-talk-**APPL**-3.OBJ-1.SG.OBJ-DUR
'Wonder who is talking about me!' P78 84

Example (243a) shows applicatives as they occur without the third person object suffix. This can be contrasted with (244a) where the applicative does occur with the third person object suffix. Also, (244b) is a non-applicative clause with the same verb root *t́ab ~ daʔb*

as the applicative clause in (244a). The difference between these two clauses appears to be that in (244a) the location associated with the verb i.e. 'foot', is construed as an argument of the clause, whereas in (244b) the location is a deictic reference point and in this case is not considered an argument. A similar opposition may also hold for the root *mand* 'to try' 'to look', as shown in (243a and b).

(243a) *lauʔm̥dɛ guš am-pa·lakyɛ d-ɛ-m-t̓ab-**ad*** *gus u-ʔuq an-da…*
        then   DIST   ART-shaman HAB-IRR-FIN-stand-**APPL** DIST ADJ-hot ART-rock

        *d-ɛ-mand-**ɛd***   *(d) u-faʔ*
        HAB-IRR-FIN.look-**APPL**   3.POSS-foot
        'Now then shaman would step on the hot rocks .... he would look at his feet.'
        P18 4 (1)

(243b) *di·s du·-maʔnd gamihuʔyu·*
        soon   1.IRR-FIN.look   tonight
        'Pretty soon I will try tonight' P51 49 (1)

(244a) *lauʔm̥dɛ gi-di·-ni-yi·*
        then   INF-SUB-3.PL-go

        *lauʔm̥dɛ a-šayum g-u-m-t̓ab-**ad-i*** *du-fa an-t̓iʔš*
        then ART-grizzly PST-REAL-FIN-step-**APPL-3.OBJ** 3.POSS-foot ART-sapsucker
        'Then when they went back, now grizzly stepped on sapsuckers's foot'
        P124 8 (5)

(244b) *lauʔm̥dɛ gus an-t̓iʔš gʷauʔ g-i-n-t-hɛ·k či-ma*
        then   DIST ART-sapsucker 3.SG   PST-REAL-FIN-TLOC-go away ADV-forward

        guš g-i-n-dɛn-daʔb
        DIST   PST-REAL-FIN-EMPHTLOC-stand
        'and the sapsucker himself went out in front, he stood there' P124 8 (2)

Discourse influence
In (245a and b), the root 'to search for' occurs with the applicative suffix in contrast to (245c), where the same root is marked with the transitive suffix *fuʔ*. The difference in marking appears to be motivated by discourse factors. It appears that participants already introduced into the discourse (245a and b) are more likely to be coded with the applicative, as opposed to participants which are first mentioned in the discourse, as in (245c). In (245a), the applied goal of the clause 'food' is non-specific and has been introduced in the immediately preceding discourse as more specific items, as shown below.

(245a) 'The men go to hunt, and the women go to dig camas. Some of them go for berries.'

> *mad-fan   d-ε-ni-ʔu·-**di***   *dini-ƙʷa·nε-fin*
> all-ADV   HAB-IRR-FIN.3.PL-search for-**APPL**   3.PL.POSS-eat-NOM
> 'They all go to look for food' P139 2nd line

In (245b), the participant which is indexed by the applicative is the unexpressed third person object and not the location 'water', since the latter retains the oblique prefix. In this example, the applied argument is a specific and highly topical participant and has been previously introduced into the discourse (the narrative is about this participant who fell off a bridge and drowned).

(245b) *g-i-n-dʔi-u·-**di***   *guš   du·-pgiʔ*
        PST-REAL-FIN-1.PL-search for-**APPL**   DIST OBL-water
        'We sought him there in the water.' P52 50 2

The above examples can be contrasted with (245c), where the root 'to search for' is suffixed with a transitive morpheme and not the applicative. The direct object 'pitchwood' is first mentioned in this clause, as shown by the immediately preceding discourse given with the example.

(245c) 'And they were saying to one another, "What shall we do now? We cannot warm up."'

> *č-i-n-diʔ-u·-**fuʔ***   *aŋ−q́laʔ*
> SAP-REAL-FIN-1.PL-search for-**TRAN**   ART-pitchwod
> 'Let us look for pitchwood' P112 9 (5)

Diachronic source?
Finally, there is evidence that the applicative suffix may have developed from the verb root *di* 'to give'. In the following example, the verb 'to give' is suffixed with the third person indirect object suffix *-d*.

(246) *lauʔm̩dε   d-ε-ni-**di·-d***   *tauʔnε an²-uihi*
       then   HAB-IRR-FIN.3.PL-**give-3.IO**   one   ART-man

       gi·-ƙʷa   gu·   du-waʔna   a-mimʔ   du·n-uwa
       INF-take DIST OBL-other ART-person 3.POSS-place
       'and they would give them to one man to take them there to the place of some other people' P33 25

It is interesting to note that in (246) the dative recipient 'one man' is not marked with the oblique nominal prefix *du-*. This shows that in Santiam, as in many other languages,

indirect object recipients are grammatically core arguments. Since indirect objects are core arguments in Santiam and the form of one of the allomorphs of the applicative and the root 'to give' are identical [*di*], a possible diachronic connection may be indicated. Heine and Kuteva (2002:149, 153) give examples from other languages of the grammaticalization of the root 'to give' as a benefactive/dative marker. An example from Ewe (Kwa, Niger-Congo) cited in that work shows a very interesting parallel to a certain applicative structure in Santiam. Consider the following clauses in Ewe and Santiam:

Ewe (Heine and Kuteva 2002:153, from Heine et al. 1991:Ch.1)

É   gblɔ   e   ná   m
3:SG say   it   give me
'He told it to me.'

guš   č-u-m-yuwa-di   ***g-a-ni ʔ-niš-ti-ni-fa-i***
DIST   SAP-REAL-FIN-follow-APPL   **3.IRR-IRR-3.PL-say-APPL-3.OBJ-1.OBJ-?**
'I am waiting for them to tell me.' P74 (1)

If the applicative morpheme in the dependent clause ***gani ʔništinifai*** were an incorporation of the verb 'to give', then the Ewe and Santiam examples would have a one-to-one isomorphism of elements (excluding the irrealis marker, 3PL, and the unknown final element in the Santiam clause).[40]

3.8. Reciprocal

The reciprocal suffix *-da ~ -dai* indicates that multiple participants (grammatically the subject of the clause) are acting on each other. It frequently occurs with the collective suffix *-fʷid*. It is not known what position this suffix occupies, though it does occur after the collective suffix.

(247)   *lau ʔm̩dɛ   g-i-ni-lub-fʷi-da·*   *dini-t ʔsli ʔ*
        then   PST-REAL-FIN.3.PL-exchange-COLL-**RECIP**   3.PL.POSS-anus
        'So then they exchanged anuses.' P114 (3)

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[40] If there is a diachronic connection between the root 'to give' and the applicative in Santiam, it may have developed along a pathway similar to Ewe, perhaps (speculatively) by the analogical extension of coding a three-participant dative or benefactive clause to coding other types of three-participant clauses, such as clauses with an instrument. This could have eventually evolved into coding the third participant as a core argument, thereby increasing the valency of these clauses. Unfortunately, I cannot use evidence from benefactive expressions in support of this hypothesis, since I have been unable to locate any in the Santiam material.

(248) *yɛ·   u-m-dalq   hɛš   ma^h ti·*
       who REAL-FIN-strong PROX 2.PL

       *d-ɛ-di-dub-manč-^{hw}i-**dai***   *guš a-šayum   du·ʔ-waiʔ*
       HAB-IRR-SUB-2.PL-wrestle-COLL-**RECIP**   DIST ART-grizzly 3.POSS-children
       'Who is the stronger when you wrestle with the grizzly's children?' P116 2

(249) *g-i-niʔ-nič-h^w i-**da·***
       PST-REAL-FIN.3.PL-say-COLL-**RECIP**
       'they talked to one another.' P97 (7)

3.9. Collective

The collective suffix *-f^w id ~ -h^w i ~ -fid ~ -fit ~ -fa t ~ -wit* occurs in position 2 and
has always been observed to co-occur with either a plural prefix of position 9 or the
reciprocal suffix *-da* (with the exception of its occurrence on an adjective stem, as in
(252) below). Its exact semantic nature is not presently understood, though it appears to
represent a collective action on the part of multiple participants. The following are
examples of this suffix.

(250) *paš=wat   g-i-niʔ-na-hai   dinʔa·wi gi-di·-ni-lak-**wit***
       SO=HEARSAY PST-REAL-FIN.3.PL-do-3.OBJ always   INF-SUB-3.PL-play-**COLL**
       'That is the way they always did so they say when they played' P50 46(3)

(251) *lauʔm̥dɛ g-i-ni-da·p-**h^w it***
       then   PST-REAL-FIN.3.PL-stand-**COLL**
       'Now they stood (there).' P 93 (3)

(252) *i·-sdu-**fad**   u-plaqɛ-cɛ   aʔ-waʔdik*
       ADJ-small-**COLL** ADJ-split-REFL   ART-tree
       'small split sticks' p72 71 (2**)**

3.10. Distributive

The suffix *-dint ~ -dind* may function to code a sense of distribution. In (253), the number
one *tafω* is suffixed with *-dint* and is rendered in translation as 'sometimes'.

(253) *ta·fω·-**dint***
       one-**DISTR**
       'sometimes' P40 5

If this analysis is correct, it may explain why the distributive appears on the verb stem in
(254), i.e. it is coding an action which is distributed across multiple patients.

(254) *dinˀɛ·wi   č-u-m-hɛfi-**dind***
       always   SAP-REAL-FIN-gather firewood-**DISTR**
       'I will be gathering firewood all the time.' P104 (6)

This suffix can also appear on adjective stems, as in (255), where it seems to code distribution to multiple recipients.

(255) *lauˀm̩dɛ d-ɛ-m-ˀuki   a-mu·kiˀ   pu·nuk-**dint** guš a-mimˀ*
       then   HAB-IRR-FIN-give ART-deer   little-**DISTR** DIST ART-people
       'then he shared small pieces of the meat around among the people.' P23 8

This suffix can also occur in certain idiomatic expressions, as in (256) with the verb 'to die', where its distributive function is less discernable.

(256) *din-hu·pna   wa·ˀ   i-n-dɛˀ-ala-**dint***
       3.POSS-heart   NEG   REAL-FIN-NEG-die-**DISTR**
       'His heart is not dead' p73 72

3.11. Durative-locative
The suffix *-did* appears to function in the capacity of indicating a durative event or state which occurs at a particular location. It has not been determined what suffix position this morpheme occupies, since it has not been observed to co-occur with other suffixes. As shown in sections 2.13.1 and 2.13.2, other spatial morphemes in Santiam also indicate aspect in addition to spatial relationships. An indication of the function of this suffix as a locational morpheme is that it has always been observed to occur with verbs of location or movement. Evidence for its function as an indicator of durativity is that the verb of the clause in which it appears is usually rendered in English as a progressive verb. The aspectual function of this morpheme becomes apparent in clauses where the verb is marked with the past tense prefix *g-* and there is no other indication of aspect, as in (257).

(257) *g-ʷ-a-n-ti·c   guš   g-ʷ-a-di·-t́-i·-**did***
       PST-REAL-ASRT-FIN-fall   DIST   PST-REAL-ASRT-SUB-TLOC-go-**DURLOC**
       'I fell down when I was on my way to there.' P96 5 (6)

The following example clearly shows that this suffix is not an applicative morpheme, since the semantically oblique argument 'water' retains the oblique nominal prefix *du-*.

(258) *lauˀm̩dɛ guš a-li·fa   g-u-m-ṕi·-**did**   du·-bgɛˀ*
       then   DIST ART-log PST-REAL-FIN-lie-**DURLOC**   OBL-water
       'Now a log was there in the water' P107 5 (4)

Other examples of this morpheme are (259)–(261).

(259) *a-šni*   *g-u-ma-yem ʔp*   *du·-milaq*
     ART-coyote   PST-REAL-FIN.CIS-come   OBL-ocean

     lau ʔm̥dɛ   *g-u-m-ʔi·-**did***
     then   PST-REAL-FIN-go-**DURLOC**
     'Coyote was coming toward here from the ocean coast. Now he was going along'
          P96 4 1

(260) *guš*   *hɛ ʔlum*   *u-m-ṕi·-**did***
     DIST   outside   REAL-FIN-lie-**DURLOC**
     'It is lying outside' P96 6 (3)

(261) *g-i-n-t-hω·du*   *g-i-n-t́-i·-**did***   *či-mɛ*
     PST-REAL-FIN-TLOC-see   PST-REAL-FIN-TLOC-go-**DURLOC**   ADV-ahead
     'he saw him going along ahead.' P141 2 (2)

In the final example, the location referenced by this suffix is 'my dream'. This seems to indicate that this suffix can be used to refer anaphorically to a location previously mentioned but still active in the discourse.

(262) *g-ʷ-a-m-hω·d-n̥*   *ṕa·ɬiɬ du·-dɛ-wa· ......*
     PST-REAL-AST-FIN-see-3.OBJ   name   OBL-1.POSS-dream .....

     ṕa·ɬiɬ   *g-ʷ-a-ŋ-q́au-**did***
     name   PST-REAL-ASRT-FIN-sing-**DURLOC**
     'I saw *ṕa·ɬlɬ* in my dream..... *ṕa·ɬlɬ* was singing.' P81 91

3.12. Durative
Position 6 contains the suffix *-n* which appears to act as a durative marker, implying an ongoing action of extended temporal duration.

(263) *yi·kun*   *u· ʔ-yu ʔwa-**n***
     maybe   REAL-follow-**DUR**
     'Maybe it is that which is pursuing.' P112 first line

(264) *din ʔɛ·wi*   *u-m-ʔω·-dɛ-ch-ʷa-**n***
                /u-m-ʔω·-dɛ-di-fa-**n**/
     always   REAL-FIN-search for-ʔ-APPL-1.OBJ-**DUR**
     'She is continually seeking me out.' p116 2 (2)

3.13. Object marking
In Santiam, and Kalapuya in general, direct and indirect objects occur as verbal suffixes. In contrast to subject prefixes, object suffixes are less transparent morphemically and not as well identified at this stage. The fact that they occur much less frequently in the texts

than, for instance, subject prefixes compounds the difficulty in finding the underling forms and morphological processes associated with them. The following characterization of direct and indirect marking is offered as a suggested analysis based upon the available data. Direct object suffixes seem to be underlyingly monomorphemic, though additional morphemes do appear in conjunction with direct object marking. Indirect object marking appears to be polymorphemic, at least diachronically, and is characterized as a series of suffix complexes.

3.13.1. First and second person direct objects

Several suffixal forms occur in the texts corresponding to the categories of first and second person direct objects. I suggest that some of these forms are polymorphemic and represent a morphophonological fusion of the applicative suffix and person object forms. The basic (monomorphemic) forms of these suffixes occur in suffix position 5. Forms along with their examples are listed as well as suggested morphophonemic derivations.

The following is a table of attested 1st and 2nd person direct object marking.

	SINGULAR	PLURAL
FIRST PERSON	-fa[41] -ča ʔf -ch ʷa	-fω - ʷω -čh ʷω
SECOND PERSON	-fubu ~ -fub -čubu ~ -čub -čuf -yuf? -bu ? -yub ?	-fi -wi ~ -h ʷi

Table 8. Attested direct object marking

The following examples illustrate these forms.

1st person singular direct object

(265) *pɛʔ dinʔɛ·wi č-u-m-huli   dumi-hɷ·du guš   nikɛ· u-nuicgab-**faʔ***
        so   always   SAP-REAL-FIN-want COMP-see DIST   what   REAL-scare-**1.OBJ**
        'I always in that manner want to see what has frightened me' P133 (2)

(266) *g- ʷ-a-n-t-hɛ·g- ʷa-**čaʔf***
        PST-REAL-ASRT-FIN-TLOC-go on-TRAN-**APPL.1.OBJ**
        'he left me' P81 91 (2)

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[41] *-fa* is noted by Rude (1986) in his glossing as 1st direct object.

(267) *dinʔɛ·wi*   *u-mʔ-ω-dɛ-chʷa-n*
       always   REAL-FIN-search-?-**APPL.1.OBJ**-DUR
       'She is continually seeking me out.' P116 2 (2)

2nd person singular direct object

(268) *waʔlauʔ maʰ gi-dɛ-hu·dω   guš nikɛ· u-nuidzgab-fub*
       NEG NOT 2ND INF-NEG-see   DIST what REAL-scare-**2.OBJ**
       'you never see what has scared you' P133 (2)

(269) *di·s   du-ŋ-gʷïn-fub*
       soon   1.IRR-FIN-grab-**2.OBJ**
       'I will get you directly' P136 2 (2)

(270) *hɛš   aŋ-kʷa-fa   di·s g-a-ni-yuʔwa-fubu   hupun*
       PROX ART-take-NOM   soon 3.IRR-IRR-FIN.3.PL-follow-**2.OBJ** behind
       'These packs will follow directly behind you' P 107 4 (5)

(271) *g-a-m-i-ni-gamʔyɛ-čub*
       3.IRR-IRR-FIN-SUB-3.PL-help-**APPL.2.OBJ**
       'if they help you.' P121 (3)

(272) *č-u-ma-ya·nɛ-čubu*
       SAP-REAL-FIN.CIS-visit-**APPL.2.OBJ**
       'I have come to visit you.' P121 (4)

(273) *č-u-m-hɛ·g-ʷa-čuf*
       SAP-REAL-FIN-go on-TRAN-**APPL.2.OBJ**
       'I will leave you.' P121 (3)

(274) *yi·kun yiʔ guš   g-a-man-t́waʔ-yuf*
       maybe who DIST   3.IRR-IRR-FIN.CIS-hit-**2.OBJ**
       'Maybe somebody will strike you.' P 77 82

(275) *lauʔm̥dɛ di·s   du-maʔ-uku-bu*
       then   soon   1.IRR-CIS-give-**2.OBJ**
       'and then I will give them to you.' P131 2 (2)

(276) *hɛš   g-u-ma-wiʔliʔ-yub   hɛš   an-t́ausak*
       PROX PST-REAL-FIN.CIS-bring-**2.OBJ** PROX ART-arrow
       'Here I bring you back these arrows.' P125 9 (4)

1st person plural direct object

(277)   *a-šayum   u-m-yuʔwa-**fɷ**·*
        ART-grizzly   REAL-FIN-follow-**1.PL.OBJ**
        'Grizzly is pursuing us.' P118 7 (1)

(278)   *lauʔm̯dɛ   g-u-mʔ-ni-**čh̓ʷɷ**·*   *sdɷ*
                   */ g-u-mʔ-niš-**čh̓ʷɷ**· /*
        then   PST-REAL-FIN-say-**APPL.1.PL.OBJ**   1.PL
        'Now then he told us' P68 (6)

(279)   *waʔ lauʔ yɛ   pu·nuk   gi-dɛʔ-uk-**̓ʷɷ**·*
        NEG now   who   little   INF-NEG-give-**1.PL.OBJ**
        'Would you not give us a little food?' P97 (4)

2nd person plural direct object

(280)   *mə-sayum   guc u-du·lɛʔ-na-**fi**·*
        EMPH-grizzly DIST REAL-die -CAUSE?-**2.PL.OBJ**
        'It is grizzly who has been killing you (plural).' 121 (2)[42]

(281)   *sdɷ   lauʔ c-i-n-diʔ-lɛ·dg̓ʷa-nɛ-**fi**·*   *ma^hti*
        1.PL   now   SAP-REAL-FIN-1.PL-take care of-CAUSE?-**2.PL.OBJ**   2.PL
        'Now we are taking care of you.' P65 62

(282)   *gus   a-mimʔ   g-̓ʷ-a-niʔ-nuihin   gi-ni-huiš-**wi**·*
        DIST ART-people PST-REAL-ASRT-FIN.3.PL-be afraid INF-3.PL-smell-**2.PL.OBJ**
        'The people were afraid of smelling you.' P140 (5)

(283)   *g-̓ʷ-a-maʔ-uk-**h̓ʷi**·*   *ma^hti·*
        PST-REAL-ASRT-FIN.CIS-give-**2.PL.OBJ**   2.PL
        'I came to give it to you.' P96 6 (2)

As shown in the list above, a number of variations begin with the segment [č]. I suggest that this segment represents a separate morpheme from the direct object suffixes and that the most likely candidate is the applicative -*di*.[43] The basic forms of object suffixes can then be postulated as:

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[42] Jacobs includes in parenthesis that this is a plural object.

[43] All known examples of forms with [č] occur on the verb stem directly after vowels or the fricatives [s] [š], apparently motivating the use of the -*di* allomorph.

-fa   1SG Direct Object
-fubu ~ -fub   2SG Direct Object
-fω   1PL Direct Object
-fi   2PL Direct Object

In other terms, this construction with the applicative fused to first and second person object forms is analogous to applicative constructions involving third person objects with the forms *-dini ~ -adi* as shown in section 3.7. This morphophonological process appears to occur when the applicative *-di* is followed by a syllable beginning with the voiceless fricative [f], i.e   di → č/___ fV.

Also, as shown below in section 3.13.2, the suffix complexes *-tinifai* and *-dumbui* contain, respectively, first and second person object forms and include the applicative and the third person object suffixes as well. It is interesting to note that in these forms there is no palatalized segment [č], apparently because of the intervening third person object form between the applicative and the first or second person object forms.

The following examples demonstrate these correspondences. The underlying form given in example (285) demonstrates a one-to-one correspondence of suffixes with the verb stem in (284). This can be compared with (286), where the segment [č] does not occur, apparently due to the intervening third person object suffix.

(284)   *an-tfaʔi   g-u-mʔ-niš-**di-ni***
        ART-pile   PST-REAL-FIN-say- **APPL-3.OBJ**
        'He said to the piles' P100 (12)

(285)   *lauʔm̩dɛ   g-u-mʔ-ni-**čhʷω·***   *sdω·*
                    / *g-u-mʔ-niš-**di-fω·** /*
        then   PST-REAL-FIN-say-**APPL-1.PL.OBJ**   1.PL
        'Now then he told us' P68 (6)

(286)   *guš   č-u-m-yuwa-di*   *g-a-niʔ-niš-**ti-ni-fa-i***
        DIST   SAP-REAL-FIN-follow-APPL   3.IRR-IRR-3.PL-say-**APPL-3.OBJ-1.OBJ-?**
        'I am waiting for them to tell me.' P74 (1)

In (287) the root 'to follow' occurs with the applicative and has the derived meaning 'to wait for'.[44] This can be compared with (288) where the same root is also used in the sense of 'to wait for' and there is a second person object occurring with the palatalized segment [č].

(287)   *nikɛ· ma^h   č-u-m-yuwa-**di***
        what 2.SG   SAP-REAL-FIN-follow-**APPL**
        'What are you waiting for?' P136 2

---

[44] Example (132) shows this root without the applicative.

(288) *č-u-m-yuwa-**čubu***   *ma^h*   *hɛš*   *n-a-m-i-haŋ-ġan*
       SAP-REAL-FIN-follow-**APPL.2.SG.OBJ** 2SG PROX 2.IRR-IRR-FIN-SUB-PROX-pass
       'I am waiting for you when you pass along here'   P136 2

It is at this point unclear what the underlying motivation for the occurrence of the applicative morpheme in these instances is, but it seems probable that it is not a productive process. Verb stems with a first or second person object consistently select the same form of the object, whether the basic form or one which includes the fused applicative. This may indicate that, synchronically, selection of object form is lexically determined, though perhaps at an earlier stage in the language there was a semantic or pragmatic bases for the selection of applicatives with first and second person objects. For the above forms, the following suggested morphological derivations are given.

1st person singular

Basic form *-fa*

Derived form *-ča ʔf*[45]

     -di   + *-fa*   → *č + fa*   →   *ča ʔf*
     APPL +   1.SG.OBJ → PALATALIZATION → METATHESIS

Derived example *-ča ʔf*

(289) *g-^{w}-a-n-t- hɛ·g^{w}ača ʔf*
           hɛg-wa-di-fa   → *hɛg-wa-č-fa*   → *hɛg-wa-č-a ʔf*
       PREFIXES- leave-TRAN-APPL-1.SG.OBJ → PALATALIZATION → METATHESIS
       'he left me.' P81 91 (2)

Derived form *-ch^{w}a*

I suggest that this form acquires its shape in part due to the suffixation of the durative morpheme. In the following example, the transcribed element *ch* [c^h] is, I believe, identical to [č] in other examples with the applicative and object morphemes.

     -di   + *-fa*   + n   →   *ch + fa +* n   →   *ch^{w}an*
     APPL + 1.SG.OBJ + DUR   → PALATALIZATION → LABIALIZED

---

[45] The origin of the glottal stop is unknown.

Derived example *-chʷa*

(290)   *um ʔ-*   *ω·dɛchʷan*
                    ω-dɛ-di-fa-n   → *ω·-dɛ-ch-fa-n*   → *ω·-dɛ-ch-ʷa-n*
        PREFIXES-   search-?-APPL-1.SG.OBJ-DUR → PALAT.   → LABIALIZED
        'She is continually seeking me out.' P116 2 (2)

2nd person singular

Basic form *-fub ~ -fubu*

It is not known what the determining factor is for the occurrence vs. absence of a final [u]
in the basic form as well as in the derived form *-čub ~ -čubu*.

Derived form *-čuf*

        -di   +   *-fubu*   → *č + fubu*   → *č + fu*   → *čuf*
        APPL   +   2.SG.OBJ → PALAT.   → DELETION → METATHESIS

Derived example *-čuf*

(291)   *č-u-m-*   *hɛ·gʷačuf*
                    hɛg-wa-di-fub(u) → *hɛg-wa-č-fub(u)* → *hɛg-wa-č-fu* → *hɛg-wa-č-uf*
        PREFIXES-   leave-TRAN-APPL-2.SG.OBJ → PALAT. → DELET.   → METATH.
        'I will leave you.' P121 (3)

Derived form *-čub(u)*

        -di   +   *-fubu*   → *č + fubu*   → *čub(u)*
        APPL   +   2.SG.OBJ → PALAT.   → DELETION

Derived example *-čub(u)*

(292)   *gamini-*   *gam ʔyɛčub*
                    gam ʔyɛ-di-fub(u)   → *gamyɛ-č-fub(u)*   → *gamyɛ-č-ub*
        PREFIXES-   help-APPL-2.SG.OBJ → PALAT.   → DELET.
        'if they help you .' P121 (3)

Possible derivations for *-bu , -yub, -yuf* are not given since they are each observed to
occur only once in the corpus.

1st person plural

Basic form *-fω*

Derived form *-čh ʷω*

> *-di*   +   *-fω*   → *č + fω*   →   *čh ʷω*
> APPL   +   1.PL.OBJ → PALAT.   →   LABIALIZED

Derived example *-čh ʷω*

(293) *gum ʔ*   *-ničh ʷω·*
          -niš-di-fω   → *niš-č-fω*   → *ni-č-fω*   → *ni-č- ʷω*
        PREFIXES -say-APPL-1.PL.OBJ → PALAT.   → DELET. → LABIALIZED
        'he told us.' P68 (6)

2nd person plural

Basic form *-fi*

Derived form *-wi ~ -h ʷi*

Based on available data, the above derived form appears to be a labialized variant of the underlying form. This form appears to occur after voiceless fricatives, as in (294).[46]

(294) *gini-*   *huišwi·*
           huiš-fi   → *huišwi*
        PREFIXES- smell-2.PL.OBJ → LABIALIZED
        '(The people were afraid of) smelling you.' P140 (5)

3.13.2. First and second person indirect objects
First person singular and second person singular indirect objects are marked with what appear to be polymorphemic suffix complexes, though their internal composition is unknown. Indirect object marking has only been observed for first person singular, second person singular, and third person categories. Third person indirect object marking is described in section 3.13.4. The following forms are used for first singular and second singular indirect objects.

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[46] I have been unable to find any examples of a second person plural suffix occurring with the applicative on the verb stem.

-dɛd ~ -dɛʔt
'1st Person Singular Indirect Object'

-dub
'2nd Person Singular Indirect Object'

(295) through (297) are examples of these suffixes.

(295) *dɛ=ɬug-dɛʔt*   *haš*   *aʔ-wadaʔk*
       INDEF-dig-**1.SG.IO**   PROX   ART-tree
       'make a hole in this tree for me!' P99 (3)

(296) *hɛš*   *tauʔnɛ* *g-ʷ-a-ma-di·-dɛd*
       PROX one   PST-REAL-ASRT-FIN.CIS-give-**1.SG.IO**
       'he gave this one to me.' P92 4

(297) *č-u-m-di·-dub*   *wanʔ* *an-t̓ausaʔk*
       SAP-REAL-FIN-give-**2.SG.IO**   five   ART-arrow
       'I will give you five arrows.' P121 4

In addition to the above indirect object forms, other first person singular and second
person singular indirect object forms have been observed. These forms most commonly
appear with the root *niš* 'to say' and appear to be suffix complexes. In section 1.2.3.6, it
is suggested that these forms represent a combination of the applicative, first singular
indirect object or second singular indirect object forms and the third person object *-ni*.

(298) *guš*   *č-u-m-yuwa-di*   *g-a-niʔ-niš-ti-ni-fa-i*
       DIST SAP-REAL-FIN-follow-APPL   3.IRR-IRR-3.PL-say-**APPL-3.OBJ-1.OBJ-?**
       'I am waiting for them to tell me.' P74 (1)

(299) *lauʔ* *č-u-m-niš-dumbui*
           / č-u-m-niš-di-ni-bu-i /
       now   SAP-REAL-FIN-say-**APPL-3.OBJ-2.OBJ-?**
       'Now I will tell you.' P128 2

3.13.3. Third person direct objects
The frequently occurring suffix *-ni* of position 4 is analyzed as a third person direct
object marker. It has the possible variants *-na, -n, -n̩, -i*. This suffix has been observed to
occur both with and without an overtly expressed third person direct object noun
phrase.[47]

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[47] Additional support for the analysis of object suffixes as pronominal person indexing or 'cross-
referencing' morphemes is that first and second person direct object suffixes also occur whether or not the
referent is overtly expressed.

The first example shows the root *hꞷ·du* 'to see' without the suffix *-ni*. In this example, there is no tangible direct object (though there is a purposive clause).

(300) *maičᵤ   du-m-ʔi   dumi-hꞷ·du*
      morning   1.IRR-FIN-go   PURP-see
      'I will go tomorrow to see' P128 2 (3)

In (301), the same root appears with a referential, specific direct object. The verb stem carries a variant of the suffix *-ni*.

(301) *gi-di·-ma-wuʔk   g-u-m-hꞷ·d-ṇ   wanʔ   a-šiʔwa*
      INF-SUB-CIS-arrive   PST-REAL-FIN-see-**3.OBJ**   five   ART-child
      'when she came back she saw five children.' P117 6

In (302), the first clause contains an non-specific direct object and there is no object marking on the verb.

(302) *lauʔṃdε a-šni   g-u-m-huiʔš   nikε·*
      then   ART-coyote   PST-REAL-FIN-smell   what
      'Now then coyote smelled something.' P89 (3)

Example (303) shows the clauses immediately following (302) in the narrative. In the first clause, the object is still not identified, though there is an added degree of emphasis. This can be seen from the emphatic prefix on the indefinite pronoun and the assertive prefix on the verb. The addition of emphasis may trigger the occurrence of the third object marker in this instance. In the final clause, the object is identified and definite and the clause is marked with *-ni*.

(303) *'miʔ-nikε·=nak   č-ε-n-huiš-ni'*
      'EMPH-what=WONDER   SAP-ASRT-FIN-smell-**3.OBJ**'

      g-u-m-huiš-ni   dum-buq
      PST-REAL-FIN-smell-**3.OBJ** 3.POSS-neck
      'Wonder what it is I am smelling?' He was smelling his (turkey buzzard's) neck.'
        P89 (3)

Both (304) and (305) contain the root *geʔč* 'to make', though it is unclear what is conditioning the presence of the suffix *-ni* in (305). This may indicate that for Santiam presently unknown factors in discourse referentiality and/or pragmatics are involved in the occurrence of third object marking.

(304) *g-i-ŋ-geʔč   du-suqna   gus   an-a·fuʔ*
      PST-REAL-FIN-make   3.POSS-cane   DIST   ART-elderberry
      'He made his cane from the elderberry.' P90 2

(305) *a-šni*   *gʷauʔk*   *g-i-ŋ-gɛʔš-**ni***   *aʔ-waʔdak*
       ART-coyote 3RD   PST-REAL-FIN-make-**3.OBJ**   ART-tree
       'Coyote himself prepared wood.' P103 5 1

Finally, (306) and (307) illustrate that the form *-na* is apparently a variant of this suffix.

(306) *g-u-mʔ-u·tyɛʔ-**na***   *aʔ-luqu*
       PST-REAL-FIN-call-**3.OBJ**   ART-big black woodpecker
       'he called big-black-woodpecker.' P99 first line

(307) *č-u-maʔ-u·tyɛ-**ni***   *dɛŋ-ḱu·ni*   *aʔ-luqu*
       SAP-REAL-FIN.CIS-call-**3.OBJ**   1.POSS-brother   ART-big black woodpecker
       I will call my brother to come, big-black-woodpecker ' P98 2 (3)

The above examples are provided to illustrate the occurrence versus non-occurrence of this suffix. It is far from certain what the underlying motivations are for the appearance of this suffix on verb stems. However, the fact that it only occurs with third direct objects (with the possible exception of frozen, grammaticalized forms involved in indirect object marking, as shown in 3.13.2) likely indicates that it is in fact a third object suffix.

3.13.4. Third person indirect objects
Third person indirect objects are marked by the suffix *-t*. The position of this suffix is not known, since it has not been observed to occur with other suffixes. The following are examples of this suffix.

(308) *guš*   *a-mimʔ*   *yɛ·ʔ*   *gi·-di·ʔ-**t***
       DIST ART-person   who   INF-give-**3.IO**
       'The person to whom he had given it.' P59 first line

(309) *d-ɛ-ni-di·ʔ-**t***   *gus*   *a-mimʔ*
       HAB-IRR-FIN.3.PL-give-**3.IO** DIST ART-person
       'they would give it to that person.' P37 31 1

Rabbit and deadfall trap P136 2

gus *am-bun*   *d-ɛ-di-maʔ-i*   *guš*   *du-din-gauniʔ*
DIST ART-rabbit NARR-IRR-SUB-CIS-go DIST OBL-3.POSS-trail
'When rabbit came along on his trail,

lauʔm̩ɛ guš *d-ɛ-m-hω·du*   *an-t́a·da*
then   DIST NARR-IRR-FIN-see ART-trap
 and he saw deadfall trap,

lauˀm̥dɛ   d-ɛ-mˀ-niš-d-ni   *an-t́a·da,*
then   NARR-IRR-FIN-say-APPL-3.OBJ ART-trap
then he said to deadfall trap,

'nikɛ·   ma^h   č-u-m-yuwa-diˀ'
what   2ND.SG   SAP-REAL-FIN-follow-APPL
'What are you waiting for?'

'u·'   gus   an-t́a·da   d-ɛ-mˀ-nak,
DISC DIST ART-trap   NARR-IRR-FIN-say
'Oh,' the deadfall trap said,

'č-u-m-yuwa-čubu
SAP-REAL-FIN-follow-APPL.2SG.OBJ
'I am waiting for you

ma^h   hɛš   n-a-m-i-haŋ-ġan'
2.SG PROX   2.IRR-IRR-FIN-SUB-PROX-go by
when you pass along here.'

'u·'   gus   am-bun   d-ɛ-mˀ-nak
DISC DIST ART-rabbit NARR-IRR-FIN-say
'Oh,' the rabbit said.

'u·   čiˀ   guš   g-i-n-daŋ-ġan=wi·
DISC 1ST.SG DIST POT-REAL-FIN-EMPHTLOC-go by=EMPH
'Oh I can go right past there!'

waˀ lauˀ   ma^h   g-dɛ-ma-g^w in-faˀ'
NEG now   2.SG   INF-NEG-CIS-get-1SG.OBJ
You could never catch me.'

lauˀm̥dɛ guš   an-t́a·da   d-ɛ-mˀ-nak
THEN   DIST ART-trap NARR-IRR-FIN-say
Then deadfall trap said,

't́ɛ   ba·   dɛ=ġan
CONTR ?   INDEF=go by
'Well pass by then like that,

guš   dumi-daŋ-ġan'
DIST   PURP-EMPHTLOC-go by
to go by there!'

'di-n-t-q̓up   guš an-tkʷililεk   du-muc̓εl'
1.IRR-FIN-TLOC-cut DIST ART-blackberry 3.POSS-rope
'I will cut the blackberry rope.'

lauʔm̯dε guš an-t̓a·da   d-ε-mʔ-nak
then   DIST ART-trap NARR-IRR-FIN-say
Then the deadfall trap said,

'n-a-m-i-t-q̓up   gus an-tkʷililεk   du-muc̓εl
2.IRR-IRR-FIN-SUB-TLOC-cut DIST ART-blackberry 3.POSS-rope
'If you cut that blackberry rope,

di·s   du-ŋ-gʷin-fub'
soon 1.IRR-FIN-get-2.SG.OBJ
I will get you directly.'

lauʔm̯dε gus am-bun   d-ε-mʔ-nak
then   DIST ART-rabbit NARR-IRR-FIN-say
Now then the rabbit said,

'waʔ lauʔ maʰ g-dε-d-gʷin-faʔ
NEG now 2.SG INF-NEG-TLOC-get-1SG.OBJ
'You could not ever catch me!

gus g-i-n-dεŋ-ġan=wi·
DIST POT-REAL-FIN-EMPHTLOC-go by=EMPH
I can go right along there.

g-i-n-t-q̓up   guš an-tkʷililεk   du-muc̓εl'
POT-REAL-FIN-TLOC-cut   DIST ART-blackberry 3.POSS-rope
I will cut the blackberry rope.'

't̓ε·   ba· dε=gεč'
CONTR ?   INDEF=make
'Well then do that!'

wi·naš=wi· guš am-bun   g-i-n-t̓-idip
indeed=EMPH DIST ART-rabbit PST-REAL-FIN-TLOC-jump
Sure enough the rabbit jumped,

i-n-t-q̓a   *dini-di ʔ*   *guš*   *an-tkʷililɛk*   *du-muc̓ɛl*
REAL-FIN-TLOC-rip? 3.PL.POSS-teeth   DIST   ART-blackberry 3.POSS-rope
with his teeth he ripped through the blackberry rope,

lau ʔ gus   *an-t̓a·dɛ*   *d-ɛ-n-t-i·c*   *čɛ-miyaŋk*   *du·-bun*
now DIST   ART-trap   NARR-IRR-FIN-TLOC-fall ADV-above   OBL-rabbit
and then the deadfall fell down on top of the rabbit,

lau ʔm̩dɛ *d-ɛ-n-daha-i*   *guš*   *am-bun*
then   NARR-IRR-FIN-kill-3.OBJ? DIST   ART-rabbit
and it killed the rabbit.

gus *am-bun*   *d-ɛ-n-taq*
DIST ART-rabbit NARR-IRR-FIN-shout
The rabbit squealed

gus   *an-t̓a·da*   *d-ɛ-di-ma-hi·c*
DIST   ART-trap   NARR-IRR-SUB-CIS-fall
when the deadfall fell on him.

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