THE NON-LEXICAL BASIS FOR A TSAMOSAN BRANCH OF SALISH

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Introduction

Tsamosan has been recognized as a distinct branch of the Salishan language family at least since 1950, when Swadesh set up an Olympic branch of a Coast Division based on lexicostatistical calculations. Swadesh's subgrouping of Salish has been generally accepted ever since, even by those who are not convinced by lexicostatistical evidence. The major challenge to Swadesh's Olympic branch was from Dyen (1962), who suggested that the evidence did not support Olympic as a natural subgroup within Salish. Elmendorf (1969) then adduced geographical contiguity to explain the closer lexicostatistical relations between Twana and Southern Lushootseed and the Tsamosan languages, and concluded that Swadesh was correct in setting Olympic apart. The matter has essentially remained there, with the recognized status of Tsamosan based entirely on lexical evidence. Those who have familiarity both with Tsamosan and other Salishan languages have challenged this classification based on lexicon only to the extent of setting Tsamosan off as a branch coordinate with Central Salish, Interior Salish, etc., because it has appeared to them, even on casual acquaintance with Tsamosan, that this branch differs from Salish in *all* aspects of the languages. It is the purpose of this essay to elucidate the non-lexical distinctiveness of Tsamosan, drawing evidence from phonology, morphology, syntax, and discourse structure. Not all features to be treated are of equal weight in marking distinctiveness, and some traits to be discussed have congeners elsewhere in Salish, although either in a limited or distinctive way or they are found in a non-contiguous region. Wherever possible an explanation will be given of how the Tsamosan forms developed from Proto-Salish.

A name for this branch of Salish has long been a problem. Swadesh called it Olympic, presumably because of its geographic location. The designation is not particularly appropriate, however, because of the four languages in question, only Quinault, the Satsop dialect of Upper Chehalis, and some northern dialects of Lower Chehalis can be said to be on the Olympic Peninsula. Most of Lower Chehalis and Upper Chehalis, and all of Cowlitz were spoken to the south of the Olympic Peninsula, in southwestern Washington—along the lower Cowlitz River, along nearly the entire Chehalis River and its tributaries, and along the outer Washington Coast from Willapa Bay to just north of the Queets River. This region has no general designation that can be adapted to a name for the branch. Sometime in the mid-1970s vocabulary items which occurred only within this branch were sought to come up with a more suitable name. Elsewhere distinctive words for numerals have been used: Penutian from *pen* and *uti*, 'two' in various languages of the phylum, and Mosan, based on words for 'four' in Wakashan, Chemakuan, and Salish. Following this precedent, Tsamosan was agreed upon; *cámus* is the word for 'eight' in these four, and only these four, Salishan languages. It is an old compound of *cám* 'two' and *mús* 'four'.

History of the Study of Tsamosan Languages

The Tsamosan languages have been unequally studied. The first ones to be contacted by Europeans were those along the coast, Quinault and Lower Chehalis; the latter language is documented in several early word lists and contributed significantly to Chinook Jargon. However, it is the two inland languages that are best known today. None of the four had more than one or two speakers remaining by 1990, and the prospects of collecting more data by that date were extremely slim. Boas was responsible for one of the earlier major collections of Tsamosan vocabulary. He arranged for Homer E. Sargent of Pasadena,

California to pay James A. Teit to collect artifacts for Sargent and linguistic material for Boas. Teit collected extensive word lists of all the Tsamosan languages, often from more than one dialect.

By far the best records of a Tsamosan language are of Upper Chehalis. The first lengthy word list is one collected by Myron Eells in 1885 for the Powell survey (Eells 1885). Boas spent much of two months of the summer of 1927 collecting data on this language, and wrote down several hundred pages of texts and grammatical and lexical information (Boas 1927). One of his students, Thelma Adamson, had been out from Columbia University the preceding summer (and was there again in 1927) collecting folktales in Cowlitz, Upper Chehalis, and Lower Chehalis. She later published these tales (Adamson 1934), and left a manuscript of extensive ethnographic notes on Cowlitz and Upper Chehalis (Adamson 1926-1927). She may well have had systematic linguistic materials as well, although any such materials have long since disappeared. Boas published part of one text in Upper Chehalis (Boas 1934), and added extensive footnotes outlining (quite accurately) the grammar of the language. Thomas Lee Collard collected data in 1958 from Silas Heck for an M.A. thesis (Collard 1959), and the same informant served as the major source of all later material collected and used in publications on this language (Kinkade 1963-1964, 1966, 1967a, 1976, 1981, 1983, 1984, 1987, 1989, 1990, 1991, to appear).

Information on Cowlitz comes mainly from field notes collected in the summer of 1967 (Kinkade 1967b). This language had been thought to be extinct for twenty years before this, and no attempt had been made to find speakers. However, two sisters were found living in the vicinity of Yakima, and both remembered much of the language, although neither knew traditional texts, and it was not possible to collect much textual material of any sort. (Ironically their mother, Frances Northover, had died at 105 only in 1963, and an older sister who had cared for the mother died in 1966.) The only other significant source of data on Cowlitz was collected by Harrington (1942), obtained from Emma Luscier at Bay Center; Mrs. Luscier was also the source of his data on Lower Chehalis. Harrington was interested exclusively in vocabulary and phonetics, and his materials give virtually no information about grammar. He also collected a very small amount of Quinault and Upper Chehalis.

In 1967 and 1968 Charles T. Snow collected data on Lower Chehalis for an M.A. thesis (Snow 1969). Kinkade also collected data on Lower Chehalis over a period of several years (1967, 1978-79), and was able to obtain a small amount of grammatical information, which was sketched out in Kinkade (1979). In 1882 Myron Eells collected a small amount of vocabulary and a text (Eells and Boas 1882, 1890); Boas checked and corrected this text in 1890. Leon Metcalf tape recorded a Lower Chehalis text in 1952, although no one has yet attempted to transcribe it; he also recorded a small amount of Lower Chehalis and Quinault vocabulary (Metcalf 1952).

The best Quinault data are again field notes, this time of James A. Gibson (Gibson 1963); these served as the basis of an M.A. thesis on Quinault phonology (Gibson 1964). Beginning in 1965, Ruth H. Modrow began working with the Quinaults to prepare a dictionary and teaching materials (Modrow 1967, 1971); these were published locally by the Quinault Tribe, and were not made available to outsiders. In any case, Modrow's transcriptions are inadequate and difficult to use. Kinkade also collected incidental vocabulary while attempting to find Lower Chehalis speakers. Earlier the Quinaults had been the basis of a major ethnographic study by Ronald L. Olson (1936); this work contains a small amount of poorly transcribed language material.

Tsamosan Developments

Evidence for the Tsamosan branch will be given beginning with phonology, and working up through morphology to syntax and discourse structure. Nearly all this evidence will be from Upper Chehalis and

Cowlitz, simply because less is known about the structure of Lower Chehalis and Quinault. Little material has even been collected in Lower Chehalis, and it is not likely that more can be learned about this language; enough is known, however, to include some of its patterns in this discussion. More Quinault data exist, although only the phonology has had anything like adequate analysis, making it necessary to leave Quinault out of discussion at this time. This should not constitute a problem, however, since Quinault is at the western end of this chain of languages, and Quinault speakers would have had less contact with the rest of Salish than the other three Tsamosan languages, and may have innovated in yet other ways. In examples the languages will be indicated by the abbreviations Ch for Upper Chehalis, Cz for Cowlitz, Lo for Lower Chehalis, and Qn for Quinault.

1. The most obvious phonological characteristic of Tsamosan is the presence of *k k' x* in some of the languages. Otherwise this retention is found only in Bella Coola and Interior Salish; all other Salishan languages on the coast have shifted them to *č č' š*, although there is often some residue of the velar series. Quinault, Lower Chehalis, and the two downriver dialects of Upper Chehalis (Satsop and Oakville Chehalis) have undergone the sound shift, and are thus not distinctive from other coastal languages. However, the upriver dialect of Upper Chehalis (Tenino Chehalis) retained the unshifted velar series throughout, although Boas's notes indicate that the series was quite palatalized. Silas Heck, one of the last sources of Upper Chehalis, consistently spoke the Oakville dialect, although he used a few Tenino dialect words (e.g. he consistently used *k'é(?)c* for 'small, little', where Boas recorded *x*ʷél* from speakers of this dialect). Heck's mother (Mary) and an older brother (Peter) provided texts and vocabulary for Boas and Adamson, and both spoke Tenino Chehalis; the fact that Silas Heck was much younger than Peter, and was sent off to boarding school as a child probably accounts for his dialect shift.

Cowlitz is often cited as the only coastal Salishan language, apart from Bella Coola, to retain *k k' x*. This is somewhat misleading, however, given that Tenino Chehalis also retained them, and that Cowlitz did in fact undergo only a partial shift. Both the *k k' x* and the *č č' š* series are phonemic in Cowlitz. They sometimes contrast, as in (1a), and they are sometimes in morphophonemic alternation, as in (1b).

(1a) *č'ayáš* 'grease' *vs. k'ayáxʷ* 'sour'
      xáš 'bad' *vs. xáx* 'house'
      máxčən 'head-louse' *vs. máykən* 'horns'

(1b) *tínx* 'muscle, sinew' *vs. tíniši* 'his muscle, his sinew'
      syálxʷtk 'brother-in-law' *vs. syálxʷtači* 'his brother-in-law'

Kinkade (1973) shows that this shift from velar to alveopalatal occurred before front vowels and *n* and in a few cases by preventive dissimilation (to keep velars from occurring too close to uvulars); other cases cannot readily be accounted for, and the shift seems to have been spreading through the vocabulary. Thus not only is the presence of the velar series of obstruents unusual in coastal Salish, but Cowlitz's having both the velar and the alveolapalatal series as other than marginal segments is unique within Salish.

2. Patterns of vowel retention and loss in Upper Chehalis and Cowlitz are quite unlike those in other Salishan languages. Elsewhere it is common to retain only the stressed vowel and either delete other underlying vowels or change them to schwa. Upper Chehalis and Cowlitz, however, keep or lose underlying vowels according to their occurrence in open or closed syllables, but in precisely the opposite

way that one would expect. Unstressed vowels are deleted from closed syllables (those where two consonants follow a vowel or where a non-syllabic consonant is word-final) and retained in open syllables (those where a vowel is followed by a CV or C-syllabic resonant sequence). Since the usual pattern is that perfective forms end in a consonant, a semi-concordial system results in which imperfective forms usually contain more vowels than the corresponding perfective forms, as in (2), where the final *n* is syllabic (*s-* marks imperfective aspect, *?it* marks perfective aspect; third person imperfective subject is *-n*, third person perfective subject is zero, third person imperfective object is *-t-*, third person perfective object is zero).

(2) *s-?íkʷtaqi-t-n* 'he is stealing it'
     ?it ?íkʷtaq-n 'he stole it'
     s-?íkʷtaq-n 'he is stealing'
     ?it ?íkʷtq 'he stole'

To complicate matters, all imperfective subject suffixes (and a few other suffixes) are treated as if they are open syllables, even when they contain a consonant cluster. Forms in (3) show the same vowel retention/deletion patterns as in (2), even though these imperfective subject suffixes contain consonant clusters.

(3) *s-?íkʷtaqi-t-anš* 'I am stealing it'
     s-?íkʷtaqi-t-stawt 'we are stealing it'

These emphasize the effect of a system of concord, with morphemes agreeing according to aspect. Paradigmatic pressure, on the analogy of third person forms in *-n* (which would be the most frequently occurring subject), may have created this concord system out of a straightforward morphophonemic alternation based on syllable shape.

Most affixes end up appearing to have two shapes, one with vowels and one without, although the forms without vowels are predictable if a closed syllable is the cause of the deletion. Subject markers, however, have different shapes according to aspect, and the two sets (perfective and imperfective) are mostly not directly related. There are also vowel deletions at an earlier stage of derivation that skew these retention/deletion patterns, although it is these automatic patterns which are particularly striking in these two languages.

3. Loss of a different sort characterizes Lower Chehalis. In this language there is a general pattern of truncation, analogous to what is found in the dialects of Kalispel, although apparently not as extensive. It is common for Lower Chehalis to lose entire final syllables, as in (4), where Lower Chehalis forms are contrasted with Upper Chehalis or Quinault cognates.

(4) Lo *máqs* 'nose'   Ch *máqsn*
     Lo *čá?t* 'three'   Ch *čá?ti, čá·ti*
     Lo *?úlq'* 'snake'   Qn *?úlq'a?*
     Lo *qáx?* 'dog'   Ch *qáxa?*

Such loss does not always occur, however, as in (5). The conditions under which loss does or does not occur is unclear.

(5) Lo čšíxʷn 'black bear'   Ch sčšíxʷn'
     Lo p'áḷx̣'ʼas 'fly'   Qn p'áx̣'ʼas

4. Another characteristic of vowels in all four Tsamosan languages is that there is a contrast between short and long vowels. Length contrasts do occur elsewhere in Salish (Chilliwack Halkomelem, Bella Coola), although they are not common. Length in Upper Chehalis and Cowlitz most commonly has morphemic status, and is the usual way of creating diminutives, as in the Upper Chehalis examples in (6).

(6) spatáḷn 'rock'   spatá·ḷn 'little rock'
     ʔalašík 'turtle'   ʔalašé·k=iɬ 'baby turtle'
     x̣ʷúmat 'paddle-wheel'   x̣ʷó·mt 'paddle, oar'
     sčšíxʷn' 'black bear'   sčétxʷn' 'small black bear'

This diminutive lengthening of vowels varies freely with a glottal stop inserted after the stressed vowel, as in (7).

(7) mús 'four'   móʔs 'four (dimin.)'
     sčátqɬm' 'grizzly bear'   sčáʔtqɬm' 'little grizzly bear'

The glottal stop that may occur in these forms is likely the origin of vowel length indicating diminutive; the usual articulation of a long vowel is length plus a sharp drop in pitch and accompanying creakiness. The amount of creakiness varies, from little to full glottal closure. Although this diminutive marking is here said to be length, it can be seen from the examples in (6) that length is only part of what happens. With the low vowel *a*, only length is involved. The two high vowels, however, are both lengthened and lowered, changing *i* to *e·* (phonetically usually [e] and [æ·]) and *u* to *o·* (phonetically usually [o] and [ɔ·]). The mid central vowel *ə* undergoes yet a different change. When the diminutive morpheme applies to *ə*, the result is a short low front vowel [æ]. This development may not be as odd as it seems; it has to do with the nature of *ə* in these languages. This issue will be considered further below.

Length in Quinault and Lower Chehalis does not appear to mark diminutives, although it is nevertheless contrastive (Gibson 1964, Snow 1969), as in (8).

(8) Qn míyu 'sand'   mí·yu 'bee'
         nám 'complete'   ná·m 'ahead'
     Lo ʔíɬ 'eat'   ʔí·ɬʼas 'tomorrow'
         mús 'four'   mú·səm 'sleep'

Vowel length does not cause lowering in these two languages, and applies only to *i*, *a*, and *u*; *ə* does not lengthen.

5. A minor development in Upper Chehalis is the frequent loss of *l* before another (non-syllabic) consonant, sometimes with compensatory lengthening of the preceding vowel. This rule is quite pervasive in the language, and can be seen by contrasting Upper Chehalis with Cowlitz forms, as in (9).

(9) Ch qá·ʔ 'water'   Cz qálʔ
     Ch ʔá·mq' 'he waited'   Cz ʔálmq

The loss of *l* also shows up morphophonemically or in free (or dialectal) variation with its retention in Upper Chehalis, as in (10).

(10) ʔiƚ x̣ix̣áq'=ɬnal'-n 'he argued'   ʔiƚ x̣ix̣áq'=ɬna-tuw'š 'they argued (recip.)'
     s-yá·l-n 'he is going by'   ʔiƚ yá·ʔ 'he went by'
     ʔiƚ t'úl-ɬ 'he arrived'   ʔiƚ t'ú-xʷ 'he brought it'
     s-x̣'á·-mal-n' / s-x̣'ál-mal-n' 'he is looking for (something)'

This loss of *l* does not always occur as expected, although alternation within some morphemes (such as =ɬnali- 'mouth') is consistent.

6. A common phenomenon throughout much of Salish is the devoicing of *l* in word-final position or when it occurs before a voiceless obstruent. This also happens in Tsamosan, and in Upper Chehalis and Cowlitz there is frequent morphophonemic alternation between *l* and *ɬ*. This comes about as a result of the vowel retention patterns discussed in **2** above and because third person imperfective forms end in a syllabic *n*; both these conditions leave the *l* in a voiced environment. The alternation can occur in roots (as in 11a) or in suffixes (as in 11b; all examples in 11 are from Upper Chehalis).

(11a) s-ʔupál-n 'he is eating it'   ʔiƚ ʔúpɬ 'he ate it'
      s-tawál-n 'he is leaving him'   ʔiƚ tawáɬ 'he left it'
      cúlis-s 'his foot,leg'   cúɬ 'foot, leg'

(11b) s-tún-mal'-n 'he is pushing (it)'   ʔiƚ tún-m'ɬ 'he pushed (it)' (-maɬ- 'detransitive')
      s-c'áč=ɬnal-n 'he is smothering'   ʔiƚ c'áč=ɬnɬ 'he smothered' (=ɬnali- 'mouth')
      s-ʔáq̓ʷt=ul-n 'he is paddling'   ʔiƚ ʔáq̓ʷt=ɬ 'he paddled' (=uwili- 'canoe, container')

Other resonants do not undergo such voicing alternations, although the alternation of the causative suffixes -stw-/-xʷ and the development of the reflexive suffix as -cš apparently have their origin in a devoicing of final *w*.

7. In a number of instances, Proto-Salishan *xʷ* has become unrounded in Tsamosan (except apparently Quinault), and appears as *x* in Cowlitz and palatalizes to *š* in Upper and Lower Chehalis. Although this is not a widespread development, it is quite striking in that it affects a few common roots and some basic pronominal markers. Examples in roots are given in (12) and in affixes or clitics in (13).

(12) Cz qšnx, Ch qšnš, Lo qšnš 'mouth' (cf. Qn qšnxʷ, Lushootseed qšdxʷ)
     Cz támx, Ch támš, Lo tám'əš 'earth' (cf. Qn támixʷ 'sky', Twana təbíxʷ 'earth')

(13) Cz -walx, Ch -wš 'reciprocal (perfective aspect)' (cf. Thompson, Columbian -wáxʷ)
     Cz -cx, Ch -cšt-/-cš, Lo -cəš 'reflexive' (cf. Qn -cixʷ)

The reflexive in Cowlitz also appears as -cš before third person possessive -i. The second person singular subject can be reconstructed as Proto-Salishan *-xʷ; in imperfective forms, this appears in Cowlitz as -axʷ, and in Upper Chehalis as -š (the relevant Lower Chehalis form is not recorded).

When various Tsamosan developments delineated here combine within a single word, the relationship of that word with other Salishan languages becomes considerably obscured. For example, Upper Chehalis stíámš 'man' is directly cognate with Lushootseed ʔácitalbixʷ and Clallam ʔactláyŋəxʷ 'person, Indian'; however, this is apparent only when the Tsamosan developments of vowel syncope (2), l-loss (5), and the change of xʷ to š (7) are recognized (different prefixes are probably involved, with a replacement of *ʔac- by s- in Upper Chehalis).

8. A possibly related development is of *kʷu to či in Upper Chehalis in at least four morphemes. One is a particle and two are lexical suffixes found scattered throughout Salish, and the fourth is a suffix known only from Upper Chehalis and Cowlitz. All four show kʷu in Cowlitz, and one showing ča rather than či in Upper Chehalis may be reshaped. Other potential instances of this shift lack obvious cognates. The relevant morphemes are given in (14).

(14) Ch ači 'quotative'; Cz ʔakʷu (cf. Thompson ekʷe, Shuswap əkʷe, Lushootseed kʷaʔ)
      Ch =či 'water'; Cz =kʷu (cf. Columbian =(at)kʷ, Coeur d'Alene =kʷeʔ)
      Ch =čapi- 'fire, firewood'; Cz =ikʷup- (cf. Columbian =atkʷp, Lushootseed =čup)
      Ch -tači 'non-control passive, get-passive'; Cz -kʷu (see 34 below)

The Shuswap and Lushootseed cognates of the quotative particle have slightly different glosses in the sources, and the forms are slightly different; however, the Thompson and Cowlitz cognates clearly reflect the original shape.

The Lushootseed suffix for 'firewood' (=čup) suggests that at least some of these morphemes go back to *ku rather than *kʷu. In most cases the k became rounded under the influence of the following u, thus blocking palatalization, but this Lushootseed suffix clearly palatalized before rounding attached (note that Coeur d'Alene also regularly shifted unrounded k to kʷ in this environment, and the Coeur d'Alene cognate for this suffix is given as -kup 'fire, fuel'; Reichard 1938:602). If these all go back to *ku, then Upper Chehalis must have palatalized the k before rounding became attached, then fronted the vowel as well.

9. The reflexive suffix has developed in Tsamosan into shapes that no longer bear much resemblance to reflexives in other Salishan languages. The available Tsamosan forms are given in (15).

(15) Cz -cx (also -ics, -acx, and, before -i, -cš) (perfective), -čit- (imperfective)
      Ch -cš (perfective), -cšt- (imperfective)
      Lo -cəš (perfective aspect)
      Qn -cx̌ʷ

Elsewhere in Salish one finds uniformly -cut or -mut, or the regular developments of these (i.e. some languages have changed the c to θ, or changed the vowel to ə, a, or i, and Twana has reduced the suffix to -t). These other languages would suggest that the reflexive in Proto-Salish was *-t-stú (-t- is the transitive marker), but the Tsamosan forms suggest rather *-t-sáwt, with devoicing of the w to xʷ. The stages of this

development in Tsamosan would have been *-t-sáwt → *-cáwt → *-cáxʷt → *-cxʷt → *-cxʷ(t-) or *-cxʷ → -cx(t-) → -cš(t) (cf. Kinkade 1981). Lower Chehalis apparently kept the original vowel. The final t of the original suffix has been reanalyzed as a transitional element that is regularly added between a stem-final s or š and imperfective subject suffixes.

10. Cowlitz and Upper Chehalis supply the evidence necessary to understand the development of one of the Proto-Salishan forms for the number 'one', which appears variously with kʷ or č (two additional roots for 'one' can be reconstructed). Rounding of a velar blocks palatalization in Salish, so this is not an expected correspondence. Several of the forms are given in (16) (the list is not complete).

(16) Coeur d'Alene nékʷeʔ; Spokane nkʷúʔ; Shuswap nekʷúʔ; Squamish nčúʔ; Chilliwack Halkomelem lóc'ə; Cowichan Halkomelem nóc'aʔ; Saanich nət'ᵊəʔ; Clallam nóc'uʔ; Snohomish dčúʔ; Tillamook nač-iš.

The cognate forms in Cowlitz are nák'- or nak'-aw- and in Upper Chehalis náč'- or nač-aw- (in both languages these are the bound forms of 'one'; the independent forms are Cowlitz ʔúc's, Upper Chehalis ʔó·c's). These show -aw- as an independent and separable extender; this suffix also occurs with kán- (Upper Chehalis čán-), the bound form of 'three'. Forms of 'one' with and without this extender are given in (17).

(17) Ch nač'-áw'-stq 'one fire'; nač'-áw=s 'one dollar'
      Ch náč'-s=qʷš 'one day'; náč'=ušn 'once'
      Ch nač'-áw=ixʷ or nač-íxʷ 'one fathom'
      Cz nák'-aw=l's 'one dollar'; nak'-áw-santi 'one week'
      Cz nák'-x=panxʷ 'one year old'; nákʷ=ušn 'once'

The function of this extender is not clear, although in Cowlitz and Upper Chehalis it is clearly a separable element.

11. The causative suffix has undergone some changes in Cowlitz and Upper Chehalis that make its forms and their use different from other Salishan languages. Interior Salishan languages generally have -stu- (often reduced to -st- or -s-), Bella Coola has -(s)tu(·)-, and Central Salishan languages have a variety of forms usually developed from -stax. These point to a reconstructed Proto-Salishan *-stáw, with devoicing of the final w on the coast. The Tsamosan cognates (Lower Chehalis forms are lacking) also derive directly from this reconstruction. However, Cowlitz and Upper Chehalis have assigned the developments differently so that a final -xʷ (also -x in Cowlitz) is used only in perfective aspect forms and only for a third person object. Otherwise -stw- (or -stu-, -tw-, or -tu-) is used, that is, whenever another morpheme follows. Because of some reanalysis of pronominal paradigms within these two languages such that third person objects are always indicated, and never zero as in other languages, this -xʷ takes on the appearance of being a third person object suffix. Corresponding imperfective third person object forms have -stw-, and -stw- (or some variant of it) precedes object suffixes for all other persons. The -xʷ, however, has been extended to another paradigm, one which does not use -stw- at all, and has -y- for the imperfective third person object (otherwise this paradigm has object suffixes with m rather than the usual c). Boas (1934:105, note 12) simply identifies -xʷ as 'him', although he recognizes that it occurs in

causative paradigms. It is the splitting of a single original causative suffix into two morphemes, and reassigning the functions of -*x*ʷ that make this development unusual in Tsamosan.

12. Reduplication patterns in Tsamosan are quite different from those in other Salishan languages, and reduplication is used less. Only CVC- (see **20** below) and a kind of -C₂ (see **21**) reduplication occur in Cowlitz and Upper Chehalis, and their functions are not the usual ones. Indeed, what appears to be -C₂ reduplication is not that at all, but is a stress-oriented reduplication, like that of diminutive reduplication in Shuswap, Thompson, and Lillooet, where the stressed vowel and a following consonant are repeated (with loss of the remaining unstressed vowel). This sort of stress-oriented reduplication is reported only for these few Salishan languages, three in the northern Interior, and these two in Tsamosan. Thus the Upper Chehalis forms in (18) repeat different parts of the words because stress falls in different places in the two aspects.

(18) *ʔit yáƛ'-ɬ / s-yƛ'á·-w-n* 'he went home / he is going home'

   ʔit yáƛ'aƛ' / s-yƛ'á-waw-n 'he went home slowly / he is going home slowly'

This reduplication looks at first like simple -C₂ reduplication because stress most commonly falls on the first vowel of the root; however, enough examples like 'he is going home slowly' occur to indicate that it is location of stress, and not root shape, that determines what is repeated. The functions of this reduplication pattern will be taken up below.

13. Second person singular possessive is regularly indicated in Salishan languages by a prefixed vowel often followed by a nasal; *ʔ* often occurs preceding (or sometimes following) this marker (except in Bella Coola, Comox-Sliammon, and Lillooet, where new suffixes have been developed). The usual cognate of this prefix in all of Tsamosan is *ʔa-*. However, Upper Chehalis has a variant *la* which occurs cliticized to *ƛ'a* 'future' and *ta* 'past', and infixed into *q'aɬ* 'modal' and *ʔaɬ* 'when, if'. Examples are in (19).[1]

(19) *cílaʔs ɬ máqʷm ƛ'a-la s-pan=áqʷ-m. . .* 'five prairies for you to cross. . .'

   [five INDEF prairie FUT-2sPOSS s-cross=prairie-MDL]

   . . .n ɬ t'a-kʷxʷá-w-s čá· ta-la wí-n=m. '. . .and you will get back where you live.'

   [and FUT again-get.to-INTR-3POSS where past-2sPOSS COP-n=instrument]

   ʔac-ʔí ɬ q'alaɬ s-taɬ'íč-c. 'Could you help me?'

   [ST-question INDEF MOD+2sPOSS s-help-1sOBJ]

   ʔám u ʔalaɬ ɬ'áqʷ-n. . . 'When you find him. . .'

   [when just when+2sPOSS find-TR]

Available data do not indicate if this variant occurs elsewhere in Salish, and its origin is unclear, since if there was a consonant associated with this morpheme in Proto-Salish it would have been *n*.

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[1] Grammatical abbreviations used in glosses are: CAUS 'causative', COP 'copula', DEF 'definite', FUT 'future', IND 'indirective', INDEF 'indefinite', INTR 'intransitive', MDL 'middle voice', MOD 'modal', OBL 'oblique', PASS 'passive', PERF 'perfective aspect', PL 'plural', REL 'relational', ST 'stative aspect', SUBPASS 'subordinate passive', TO 'topical object', TR 'transitive'. For person marking, 1, 2, 3 are used for number, s or p for singular or plural, and SUBJ, OBJ, or POSS for subject, object, or possessive, respectively. = sets off lexical suffixes.

14. Reference was made above in **2** to the semi-concordial nature of aspect in Cowlitz and Upper Chehalis. Some of this system was present in Lower Chehalis as well, although the extent of it there is unclear. Triggered in part by vowel-deletion rules, forms in imperfective and perfective aspects may be quite different, with imperfective forms generally retaining underlying vowels and perfective forms losing them. This part of the variation is essentially automatic, with vowel loss triggered by closed syllables (remembering that imperfective subject suffixes act as if they were open syllables). However, some morphemes simply have different shapes, depending on which aspect is used. Pronominal object suffixes, subject suffixes and enclitics, some transitive markers, and two intransitive markers are so distinguished. Aspect is further distinguished by what precedes the predicate: *s-* for imperfective (*ʔi-* in Lower Chehalis), and (usually) *ʔit* for perfective; in addition, unrealized aspect replaces *s-* with *ɬ* and stative aspect replaces *ʔit* with *ʔac-* (while retaining the respective suffixes). This means that there will be agreement between a prefixed or procliticized aspect marker and the specific shape of object/subject markers, etc., and the choice of the subject markers determines whether or not vowels will be deleted. No attempt is made to give paradigms of all these features here (Upper Chehalis paradigms can be found in Kinkade 1991); some illustrative constructions are given in (20) for Cowlitz and in (21) for Upper Chehalis.

(20) *s-ʔílan'-anx* 'I am singing' / *ʔit ʔíln kn* 'I sang'

   s-múxʷ-stu-mal-n 'he is punishing me' / *ʔit múxʷ-st-mx* 'he punished me'

   s-ƛ'á·xn-mit-stawt 'we are hunting' / *ʔit ƛ'á·xan-m kɬ* 'we hunted'

   *s-qátxa-w-ax*ʷ 'you are getting angry' / *ʔac-qaɬáx-ɬ k* 'you are angry'

(21) *s-ʔíl'an-anš* 'I am singing' / *ʔit ʔíl'n čn* 'I sang'

   s-ƛ'á·l'-stu-mal-n 'he is looking for me' / *ʔit ƛ'á·l'-st-mš* 'he looked for me'

   s-yə́qʷ=patq-mi-stawt 'we are walking' / *ʔit yə́qʷ=pataq-m čɬ* 'we walked'

   s-máya-w-š 'you are coming in' / *ʔit máy-ɬ č* 'you came in'

A likely origin of this aspectual split is from a difference in independent and dependent clauses. It is common in Salish for dependent clauses to be marked by a prefixed *s-*, and in Thompson and Shuswap there is a special set of subject suffixes for use in dependent clauses. Tsamosan must have adapted dependent clause structure to imperfective aspect, and then used these in independent clauses to contrast with the older perfective aspect forms. This would account for the regular marking of Tsamosan imperfectives with *s-*.[2] Other features of the imperfective/perfective split are taken up in the next two sections.

15. Other Salishan languages have at least two sets of subject markers; they are divided between transitive and intransitive constructions (as in Interior Salish) or between independent and dependent clauses, with both distinctions made in the northern interior. These sets are ordinarily closely related, with one set suffixed to the predicate and the other formed with the same endings attached to *k* (or *w* for the northern Interior dependent set), creating a set of pronominal clitics. The Tsamosan division is different; the two sets of subject markers there are divided according to aspect, and the sets are not necessarily

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[2] This prefixed *s-* is ubiquitous in elicited data, where it occurs without fail in imperfective constructions. In texts, however, it is most commonly absent, although all the other imperfective marking is present.

related. These sets are given in (22); the data are defective for Lower Chehalis, and Quinault appears to have only one set. In each set the imperfective suffix is given first, then the perfective enclitic.

(22)

	Cowlitz	Upper Chehalis	Lower Chehalis
1 sg.	-anx / kn	-anš / čn	-ən'š / čən
2 sg.	-ax^w / k	-š / č	? / č
3 sg.	-n / ∅	-n / ∅	-n / ∅
1 pl.	-stawt / kł	-stawt / čł	
2 pl.	-alapt / kp	-alp / čalp	
3 pl.	-itł / -i-umx	-itł / yamš	

The origin of the imperfective forms is unclear. Second person singular and plural forms certainly have their origin in the suffixed forms for those persons found elsewhere in Salish (second person singular perfective forms have simply unrounded the original -x^w and then merged the result with the k or č). The first person singular imperfective forms may be in part derived the same way from -n, although the final x and š are unexplained, and no source is known for first person plural -stawt. The third person imperfective -n derives from a transitive marker (discussed further in 16). The third person plural perfective markers are derived from the lexical suffix for 'people', while the source of imperfective -itł is unknown; third person plural markers are not reconstructible in Salish in any case.

There are also two sets of object suffixes distinguished by aspect. Here the differences are not as great and their development is more transparent. Besides this aspectual split, there are pairs distinguished by the initial consonant of the suffixes, t or m; the choice of these pairs is now lexically determined. These sets with t and m also occur in Central Salish languages to the north, and so do not distinguish Tsamosan, as the aspectual split does. The suffixes are given for Cowlitz and Upper Chehalis in (23).

(23)

	Cowlitz	Upper Chehalis
1st sg.	-cal-, -mal- / -c, -mx	-cal-, -mal- / -c, -mš
2nd sg.	-ci-, ? / -ci, -mi	-ci-, -mi- / -ci, -mi
3rd sg.	-t-, -y- / -n, -x(^w)	-t-, -y- / -n, -x^w
1st pl.	-taw-, ? / -tawł, -mułt	-tul-, -mul- / -tułt, -mułt
2nd pl.	?, ? / -tawł, ?	-tul-, -mul- / -tułt, -mułt

Third person plural forms are created from the third person singular forms plus -awmx in Cowlitz and yamš in Upper Chehalis. For Lower Chehalis, the third person suffixes are -ət- / -ən; otherwise only perfective first person singular, first person plural, and second person plural forms have been recorded. For the most part, the first and second person object suffixes in Tsamosan go back to Proto-Salish, with some analogy operating to create -mal- and regular vowel reduction to derive -c for first person singular forms; the final t on the plural perfective forms is unexplained.

16. The third person forms are more interesting. As discussed above in 11, -x^w derives from the causative suffix. The -t- and -n are reinterpretations of old transitive markers, and cognates for these are found throughout Salish. These, as well as -y- and -x^w (as well as other third person object suffixes not given here) appear to serve a dual function as both transitive marker and as third person marker. The latter function has developed analogically in order to give overt shape to third person object (which is most

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commonly zero elsewhere in Salish). This overt shape fills out the paradigm, and is needed in any case in perfective forms with a third person subject marked by zero (otherwise they could be indistinguishable from intransitive forms). Note that the original -n- 'transitive' has produced both the perfective object suffix and the imperfective subject suffix.

17. It was noted in 15 that Tsamosan retains both a c and an m set of object suffixes; this retention is shared with Central Salish, Tillamook, and Bella Coola, although the m set has been lost in Interior Salish. Tsamosan also retains the transitivizer -min 'relational', but has reshaped it so that it most frequently appears as -mis- or -ms- (-mən appears in Lower Chehalis, although there are very few examples; data for Quinault are lacking). Again there is a difference between imperfective and perfective forms. The paradigms with object suffixes following 'relational' are given in (24).

(24)

	Cowlitz	Upper Chehalis
1st sg.	-mi-cal- / -mi-c	-mi-cal- / -m-c
2nd sg.	-mi-ci- / -mi-ci	-mi-ci- / -mi-ci
3rd sg.	-mis- / -mn	-mis- / -mn
1st pl.	? / -mi-tawł	-mis-ul- / -mis-ułt
2nd pl.	? / ?	-mis-ul- / -mis-ułt

As with the other transitivizers, the relational suffix itself serves as the third person object marker. The use of relational forms is quite common in Cowlitz and Upper Chehalis, as it is in Interior Salish.

Cowlitz and Upper Chehalis have yet another transitivizer, -tas-. It is used more widely in Cowlitz than in Upper Chehalis, where it occurs only with q'iw- 'call, invite' and q^wanú- 'fear, afraid'. How it differs semantically from other transitivizers is unclear, largely because it does not occur with many stems. Paradigms with following object suffixes are given in (25).

(25)

	Cowlitz	Upper Chehalis
1st sg.	-ts-mal- / -ts-mx	-ts-mal- / -ts-mš
2nd sg.	-ts-mi- / -ts-mi	-ts-mi- / -ts-mi
3rd sg.	-tas- / -tas	-tas- / -ts
1st pl.	? / -ts-mułt	-ts-mul- / -ts-mułt
2nd pl.	? / ?	-ts-mul- / -ts-mułt

Note that while -min- is followed by t object suffixes, -tas- requires the m set.

18. On the other hand, Tsamosan has lost, or nearly lost, certain suffixes common elsewhere. (a) Tsamosan has completely lost the -nun-/-nax^w inflection which is pervasive throughout all the rest of Salish. This suffix is variously glossed as 'non-control transitive', 'success', 'accidental', or the like, and indicates that a subject accomplishes something without actually exerting control over the outcome. The widespread use of this suffix in all other Salishan languages suggests that the function of the suffix (and the meaning expressed by it) is important to Salishan speakers. Tsamosan is therefore distinctive in having lost all traces of this suffix. Two suffixes are somewhat suggestive in form as cognates: -tux^wt- 'indirective' and -tw- or -tu- 'causative'. Neither fits, however, either phonologically or semantically. A change of n to d and then on to t at word boundaries is possible in Lushootseed, but no change of n to t, directly or

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indirectly, is attested for Tsamosan. Constructions involving the Upper Chehalis indirective -*tux*ʷ*t*- consistently have indirective meanings, but nothing compatible with meanings associated with the non-control transitive of other languages; thus one finds glosses in Upper Chehalis such as 'show (it) to', 'take (it) away', 'stick (it) on', or 'bring (it) to'. Similarly, this alternate causative -*tw*- (see 11 above) has meanings compatible with 'causative' rather than 'non-control': 'feed', 'take in, put in', 'grow, raise', 'end'.

(b) Suffixes glossed variously 'purposive', 'effort', 'happen to do', 'manage to do', and the like have been identified for several Central Salishan languages and Tillamook. These mostly turn up with a final *s*, but actually must represent two separate suffixes, one that would derive from *-*ax*, the other from *-*nas* (for a careful discussion of the Tillamook reflex, see Egesdal and Thompson n.d.). There is no obvious cognate for either of these in Tsamosan, although the anomalous -*tas*- transitivizer discusses above in 17 could be related (its occurrence with only a very limited number of roots makes it difficult to demonstrate a certain connection). Egesdal and Thompson (n.d.) suggest that the Tillamook relational suffix -*awi* (from *-*mi*-) can be followed by -*as* 'purposive'; the Upper Chehalis and Cowlitz relational suffix also has forms with -*s* (see 17), and this could have the same source as the Tillamook endings.

(c) There is also a suffix -*il* in several Central Salishan languages (and possibly Tillamook) glossed variously 'inherent change' (Lushootseed), 'state, condition' (Sechelt), 'go, come, get, become' (Chilliwack) that is distinct from reflexes of Proto-Salish *-*ilx* 'autonomous'. Tsamosan has the latter (see 32), but not the former.

19. Two roots in Upper Chehalis and Cowlitz are irregular in not taking any kind of transitive suffix before object suffixes. For these two roots, the third person object is zero, with none of the ambiguity in third person object marking found with various transitivizers. Both roots end in *l*, and this *l* devoices when word final. Otherwise these roots require the *m* series of object suffixes. Because object suffixes in Tsamosan are fully specified (see the paradigms), the absence of suffixes on these two roots is unexpected; this led Boas (1934:105) to identify -*l*- and -*t* as the object suffixes in these cases. The paradigm of *tawáli*- 'leave' (*tawála*- in Cowlitz) is given in (26) to illustrate the irregularity.

(26)	Ch	s-*taw'á-mal-n*	*ʔit taw'á-mš*	'he is leaving/left me'
		s-*taw'á-mi-n*	*ʔit taw'á-mi*	'he is leaving/left you (sg.)'
		s-*taw'ál-n*	*ʔit taw'át*	'he is leaving/left him/her'
		s-*taw'á-mul-n*	*ʔit taw'á-mult*	'he is leaving/left us/you (pl.)'
	Cz	s-*tawála-mal-n*	*ʔit tawála-mx*	'he is leaving/left me'
		s-*tawál-n*	*ʔit tówt*	'he is leaving/left him/her'

The deletion of *l* before *m* in Upper Chehalis (see 5 above) makes the *l* and *t* look even more like independent elements; however the presence of the *l* in derived forms such as *taw'al*-*úl*-*aqp* 'leave word' and its retention in the perfective passive form *taw'ál-m* 'he was left' (where the *l* is retained because the *m* is syllabic) show that the *l* belongs to the root. The other root in question is *ʔupál*- 'eat (trans.)'; however, non-third person object suffixes with this root are considered awkward. This particular distinction in Tsamosan is, obviously, very minor, although it is of considerable historical importance in Salish. It turns out that cognates of these (and only these) two roots are irregular in Thompson in lacking transitive

suffixes in third person forms; see 27 for relevant forms from Thompson and Thompson (1992:68; note that **l* has become *y* in Thompson).

(27) *twéy-ne* 'I leave him'
*twéy-x*ʷ 'you leave him'
twéy-s 'she leaves him'
twéy-t-m 'we leave him'
twéy-t-p 'you (pl.) leave him'

This special treatment of these two roots must therefore be a very old feature of Salish, and it is striking that it shows up in such disparate languages as Upper Chehalis and Thompson, but not the languages between. Cognates for these two roots do occur elsewhere in Salish (those for *tawáli*- are particularly common), although there usually appears to be no irregularity in their use; at least Lillooet and Shuswap have analogically added -*n*- to third person forms, resulting in *twél-n-s*, which is completely regular.

20. CVC reduplication occurs in Upper Chehalis and Cowlitz, although it is not common. Elsewhere this pattern marks plurality, but the function has shifted in Tsamosan to mean 'frequentative' or 'repeated activity'. A few examples are given in (28).

(28) Ch *ʔit wák*ʷ*wak*ʷ*s* 'he went again and again'
Ch *s-t'śq't'q'x*ʷ-*t-n* 'he is slapping it over and over'
Ch *s-mśt'mat'-mit-n* 'it is aching'
Ch *ʔac-yśmyamx*ʷ-*t* 'bumps'
Cz *múx*ʷ*mux*ʷ*i-c* 'he paid me over and over'
Cz *s-x*ʷ*ó·ʔx*ʷ*uʔ-mit-n* 'he is howling'
Cz *ʔit t'śq't'q'x*ʷ-*cx* 'he kept slapping himself'
Cz *s-x'śmx'amx-cal-n* 'he keeps poking me'

The pattern is not unusual for Salish, although the changed function is. Plural formation is important in Tsamosan, and there are multiple means of marking plurality (see 26 below), although reduplication is not one of them.

21. Reduplication of C_2 of roots is general in Interior Salish to indicate a variety of out-of-control notions; this type of reduplication is far less common on the coast. C_1 reduplication is used widely on the coast to indicate diminutives, and it also has this function in southern Interior languages. Northern Interior languages, however, create diminutives by the typologically unusual means of reduplicating the stressed vowel and following consonant, wherever this stressed vowel may occur in the word—whether in the root or in a suffix. It is this last pattern that turns up in Upper Chehalis, although its function is not to mark diminutive; rather it serves a variety of functions, such as 'slow, gradual activity', 'superlative', 'persistent, frequent', 'while going', 'become a color' or 'by oneself', and it occurs in some counting forms. Upper Chehalis examples of these functions are given in (29). Unstressed vowels are deleted from these forms according to closed/open syllable structure (see 2 above), although there are many exceptions ('by oneself' forms show -aC, and 'become a color' forms show no deletion, although both classes are small).

(29) s-yx̌'á-waw-n / ʔit yáx̌'ax̌' 'he is going home slowly / he went home slowly'
      sx̌ʷ-q'ʷíc'c'-s 'dirtiest'
      s-t'anápap-n 'it gets darker and darker'
      sák̓ʷk̓ʷ-mit-n 'he is whispering while going along'
      č̓s-q̓ʷúx̌ʷux̌ʷ 'it is very white, whiten'
      náw'awi 'you by yourself'
      cəm-túmum=ayqs 'twenty of a kind'

Further details of this reduplication can be found in Kinkade (1985). Cowlitz seems also to have had this reduplication pattern, although examples are rare in the data available. Cowlitz s-ʔáx̌x̌-t-n / ʔit ʔáx̌x̌-n 'examine, read', from s-ʔáx̌-t-n / ʔit ʔóx̌-n 'see, look (at)' is such a case, however.

22. C₁ reduplication, common in Central Salish, Tillamook, Bella Coola, and southern Interior Salish, and present but less common in northern Interior Salish, is completely absent from Upper Chehalis and Cowlitz.

23. Except in Tsamosan, diminutives are formed throughout Salish by reduplication. Except in the three northern Interior languages, this reduplication is of C₁, with or without a vowel (when there is a vowel, it may copy the root vowel, or it may be i or u). The three northern Interior languages do have this type of reduplication, used in a function clearly related to diminutive notions, but use a stress-oriented VC reduplication as the productive diminutive construction. Tsamosan languages have two patterns for diminutive: Lower Chehalis and Quinault suffix -uʔ to the form (and other glottalization may appear within the word), and Cowlitz and Upper Chehalis lengthen the stressed vowel. Examples from Lower Chehalis and Quinault are given in (30) and from Cowlitz and Upper Chehalis in (31).

(30) Lo s-x̌ʷáy'əs-uʔ (from s-x̌ʷáy'əs) 'little hat'
      Lo x̌áʔš-uʔ (from x̌áš) 'little house'
      Lo kapúʔ-huʔ (from kapú) 'little coat'
      Qn k̓ʷamíʔətuʔ (from k̓ʷamít) 'little daughter'
      Qn tušáʔnuʔ (from tušán) 'little raven'
      Qn s-x̌ʷáʔək̓ʷuʔ (from s-x̌ʷák̓ʷ) 'little star'

(31) Cz qá·ʔx̌aʔ (from qáx̌aʔ) 'little dog'
      Cz qé·l'im (from qílim) 'elk calf'
      Cz ʔé·mx̌k̓ʷu (from ʔómx̌k̓ʷu) 'small cedar-root basket'
      Ch s-x̌asé·ʔl-n' (from s-x̌asíl-n') 'it is raining a little'
      Ch có·t (from cút) 'little foot'
      Ch latá·m (from latám) 'little table'

The vowel length in Cowlitz and Upper Chehalis varies to some extent with glottal stop (see **4** above). The origin of these Tsamosan diminutive markers is unclear.

24. Indirective suffixes are used throughout Salish to advance an oblique argument to direct object status, while moving the original direct object into oblique status or omitting it entirely. Most languages

have two or three of these suffixes, with a few southern Interior languages (e.g. Columbian) having three or four. Upper Chehalis has four (-ši-, -tux̌ʷt-, -ni-, -tmi-), and three have been recorded for Cowlitz (-ši-, -tux̌ʷt-, -ni-). The first of these (-ši-) has cognates elsewhere in most Salishan languages; -ni- has cognates in Lushootseed (on two roots only), Nooksack, Cowichan, Sechelt, and Squamish (where it is common); and -tmi- may be cognate with an indirective suffix in Sechelt and Comox-Sliammon. I know of no cognates for -tux̌ʷt-. An example of each, contrasted with a form with bare transitive marking, is given in (32) from Upper Chehalis, using primarily third person forms.

(32) s-láq-ši-t-n 'he is buying it from him' (cf. s-láq-t-n 'he is buying it')
      s-cíx̌-tx̌ʷt-n 'he is showing it to him' (cf. s-cíx̌i-t-n 'he is showing it')
      s-ʔáx̌-ni-t-n 'he is looking at/after him' (cf. ʔit ʔáx̌x̌-tux̌ʷt 'he examined it for him', ʔit ʔax̌-án 'he saw it')
      ʔit čó·ya-tmi-x̌ʷ 'he loaned it' (cf. ʔit čó·ya-n-n' 'he borrowed it', ʔit čó·ya-c 'he lent me')

It is both the number of indirective suffixes and the lack or limited number of cognates for some of them that set these two languages apart.

25. Two very common suffixes found in Cowlitz, Upper Chehalis, and Lower Chehalis are -w- (imperfective; -w'- in Lower Chehalis) and -t (perfective). Their grammatical function appears to have been lost, other than to mark intransitivity. They are restricted in occurrence, however, by root shape, occurring only following biconsonantal roots or CəRC roots (where R is any resonant; Cowlitz often has -t following other triconsonantal roots as well), and they never occur after any other root-shape. Some CəCC roots can also appear in perfective forms as CaCáC—and do so regularly in Cowlitz—and -t may appear after this shape. With a handful of exceptions, all such roots *must* be followed by these suffixes in intransitive forms, except that -t is not used regularly in Lower Chehalis. Examples of the suffixes are given in (33), and the most common exceptions in (34).

(33) Cz s-púla-w-n / ʔit púl-t 'it is growing / it grew'
      Cz s-páyx̌ʷa-w-n / ʔit payáx̌ʷ-t 'it is crumbling / it crumbled'
      Ch s-máya-w-n / ʔit máy-t 'he is coming in / he came in'
      Ch s-pálx̌ʷ-w-n / ʔit pálx̌ʷ-t 'he is getting well / he got well'
      Lo ʔi-qíč-w'-n / qíč 'he is playing / he played'
      Lo ʔi-tál'k̓ʷ-w'-n / tə tal'ók̓ʷ 'he is falling / he fell'
(34) Cz s-ʔís-n / ʔit ʔís 'he is coming / he came'
      Ch s-č̓ís-n / ʔit č̓ís 'he is coming / he came'
      Ch s-yús-t-n / ʔit yús 'he is working / he worked'

There is no obvious phonological constraint that would require this extra segment, so it must be the remainder of a morpheme whose function has been lost. Even the phonological connection between the two forms of the suffix is unclear.

26. Since Upper Chehalis and Cowlitz no longer use CVC reduplication for pluralization (see **20** above), some other marking had to be developed. This was done with a vengeance, and there is a plethora

of pluralizing devices in Upper Chehalis (the smaller number in Cowlitz may have to do with the limited data available). Furthermore, there is an enormous amount of variation both of the various plural markers and the stems to which they attach. Two of the Upper Chehalis and Cowlitz plural markers are restricted to certain classes of words: kin terms (and a few others) use a prefix nš- (or ns-; nx- in Cowlitz) and a suffix -tn (also -tan and -tn' in Cowlitz; see examples in 35), and descriptives and their derivatives take the suffix -ti (-tiʔ in Cowlitz; see examples in 36, where the extra -a- is another plural marker).

(35) Ch néʔsči / nš-néʔsči-tn 'younger brother/s'
       Ch ʔímc / nš-ʔímc-tn 'grandchild/children'
       Cz káyʔ / nx-káyʔ-tn 'grandmother/s'
       Cz x̣ʷát, x̣ʷáʔt / nx-x̣ʷáʔt-tn 'older sibling/s'

(36) Ch ʔáy / ʔéy-ti 'good / good ones'
       Ch tó·m-t / tó·m-a-t-ti 'short / short ones'
       Cz x̣'áq-t / x̣'áq-a-t-ti 'long / long ones'
       Cz ʔac-náw-t / ʔac-náw-a-t-tiʔ 'old person/s'

The restricted use of the -ti suffix suggests that adjectives might be considered a separate word class or subclass in Cowlitz and Upper Chehalis.

Besides these two suffixes, Upper Chehalis has four ways of creating plurals, with zero marking for a small number of stems making a fifth way; two of these are not attested in Cowlitz. The differences among these various plural markers are not entirely clear; there is a tendency for one or another to occur with a given stem. Boas (1927) did elicit a few contrasting sets in Upper Chehalis; two of these are given (with his glosses) in (37) and (38).

(37) tačís 'star, stars'
      ʔi-tačís 'all stars'
      tačís-aʔ 'stars singly'
      tačís-qʷl̓š 'all the stars, one group of stars'
      tačís-umš, ʔi-tačís-umš 'all the stars mixed up in one place, some stars'

(38) wít 'canoe'
      wít-aʔ 'canoes'
      wít-qʷl̓š 'crowd of canoes'
      wít-aʔ-qʷl̓š 'fleet of canoes'
      wít-umš 'canoes close to each other in a bunch'

The plural marker -aʔ frequently occurs with other plural markers, as in (38) and (36). In spite of apparent inconsistencies in usage, the following distinctions may hold for these plural markers:

        ʔi- 'all of a class or members of a family'
        -aʔ 'distributive, multiple individual entities'
        -qʷl̓š 'collective, a cohesive group'
        -umš 'partitive, an aggregate (not cohesive)'

The first two of these plurals occur frequently in Boas's data, although they were little used by the last speakers of the language from 1960 onwards. The partitive form -umš (with over twenty variations, including -amš, -yamš, -mš, -áwmš) is derived from the lexical suffix for 'people, person', and the kinship plural constructions with nš-[stem]-tn is also found in Central Salishan languages; the origin of the other affixes is unknown.

The -aʔ form is not strictly a suffix, but occurs after C₂ of the stem, regardless of whether that consonant is final or not. When it precedes another consonant, ʔ may either drop out or attach to an adjacent resonant. This affix occurs readily with transitive as well as intransitive forms, as in the Upper Chehalis forms of 'turn over, turn around, roll over' in (39). The intransitives have a plural subject, the transitives a plural object.

(39) s-p'ólč'-w-n / ʔit p'ólč'-t *singular intransitive*
      s-p'álač'-w-n / ʔit p'álač'-t *plural intransitive*
      s-p'ólč'-t-n / ʔit p'ólč'-n *singular transitive*
      s-p'álač'-t-n / ʔit p'álač'-n *plural transitive*

(The vowel changes here are regular; ó becomes í in the plural in a CóC root and á in a CóRC root.)

27. Cowlitz has a third person possessive unlike anything else found in Salish. This is generally one of the stablest morphemes in Salish, appearing everywhere as -s. Cowlitz does have -s; it is used only in subordinate clauses for a possessed predicate. Otherwise Cowlitz uses -i. Since this creates a word ending in an open syllable, underlying vowels may be retained in the rest of the word (although these vowel deletion rules do not operate in Cowlitz entirely as they do in Upper Chehalis). Examples in (40) contrast possessed and unpossessed forms.

(40) kayíʔ-i / káyʔ 'his,her grandmother / grandmother'
      súps=n'č-i / súps=n'k 'its tail / tail'
      kálaw-i / kálx 'his/her hand, arm / hand, arm'
      latám-i / latám 'his,her table / table'

An origin for this suffix is unknown.

28. Inchoative formations are common in Salish, although ways of marking inchoative are extremely diverse. Cowlitz and Upper Chehalis use the suffix -aw- followed by the middle voice suffix (which may then be transitivized with causative suffixes); this suffix is always stressed in Upper Chehalis. The Lower Chehalis suffix is -y'əq-. Examples are given in (41).

(41) Ch s-x̣'iš-áw-mit-n / ʔit x̣'iš-áw-m 'it is getting cold / it got cold'
       Ch s-x̣'iš-áw-m-stw-n / ʔit x̣'iš-áw-mi-xʷ 'he is making it cold, he made it cold'
       Cz s-ʔáy's-u-mit-n / ʔit ʔáy's-aw-m 'he is getting sick / he got sick'
       Lo x̣ás-y'əq-n 'it is getting spoiled'

Upper Chehalis has a number of lexical suffixes resembling the Lower Chehalis inchoative suffix, although it is difficult to see how any of them could have developed an inchoative meaning (although a development from one meaning 'inside' is conceivable). The origin of -aw- is unknown.

29. Cowlitz, Upper Chehalis and Lower Chehalis use a special suffix to detransitive a transitive form. The resultant form is usually translated as 'do something', with an object implied but not expressed directly. If it is expressed, it must be done in an oblique phrase. The underlying shape of the suffix in all three languages is -mal-; vowel reduction or loss and devoicing of the l result in differences in surface forms. This morpheme is frequently accompanied by glottalization, which is best considered an infixed glottal stop; it attaches to the l if the vowel is kept, and to the m if the vowel is deleted because the l is devoiced in word-final position. Examples are in (42).

(42)　Ch s-ʔíƚp-mal-n / ʔit ʔíƚp-mƚ 'he is shooting / he shot (an arrow)'

　　　Ch s-túṇ-mal'-š / ʔit túṇ-m'ƚč 'you (sg.) are pushing / you pushed (something)'

　　　Cz s-kʷʼə́n-ml-anx / ʔit kʷʼə́na-m'ƚ 'I was counting / I counted (something)'

　　　Lo ʔi-cíqʷ-m'əƚ-n 'he was digging (something)'

　　　Lo hílu nə-s-ʔə́x̣-m'əƚ 'I can't see'

The m of this suffix may ultimately be related to -m 'middle voice'; if so it is not clear what the rest of the form comes from.

30. Tsamosan has two forms of the middle voice suffix, distinguished as usual by aspect (see 43).

(43)　Lo yuláʔq'-mət-n / yuláʔq'-m 'she is telling lies / she told lies'

　　　Lo ʔi-púp-mət-n 'it is boiling'

　　　Ch s-qʷát-ƚna-mit-n / ʔit qʷát-ƚnal-m 'there is lightning / there was lightning'

　　　Ch s-mə́qʷʼ-mit-n / ʔit maqʷʼ-ə́m 'he is swallowing / he swallowed'

　　　Cz s-ƛ'á·x̣an-mit-stawt / ʔit ƛ'á·x̣an-m kƚ 'we are hunting / we hunted'

　　　Cz s-túqʷ-mt-n / ʔit túqʷ-m 'it is thundering / it thundered'

Middle forms in Salish are generally marked by a suffixed -m (or a regular development of *m), although Thompson has -əme, -me- or -m, and Straits (Saanich) has both -əŋ 'control middle' and -naŋət 'non-control middle' (Montler 1986:178-179). It is not impossible that the Tsamosan -mit- is cognate with the last part of this Straits form.[3]

31. Comparative and superlative forms created by inflection seem to be infrequent in Salishan language. However, Upper Chehalis has both grades, and Cowlitz expressed both by using preposed particles. Examples are given in (44).

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[3] Other Central Salishan languages have suffixes somewhat like this Saanich non-control middle suffix, and they are analyzed as being the reflexive suffix built on the m paradigm (e.g. Clallam -úŋət; cf. Thompson and Thompson 1971:284), just as the usual reflexive is built on the c paradigm. However, this Saanich suffix is not translated as a reflexive, but usually as 'finally', so it may not be the same as the m paradigm reflexives after all.

(44)　Ch čt ƚə́č, sxʷ-ƚə́čč-s 'sharper, sharpest'

　　　Ch čt mayə́n, sxʷ-mayə́nn-st 'newer, newest'

　　　Ch čt ʔə́y, sxʷ-ʔə́yi-s 'better, best'

　　　Cz tk ʔí·, t'im ʔí· 'better, best'

　　　Cz tk lílʔ 'further'

　　　Cz t'im x̣ə́š 'worst'

The differences between the Upper Chehalis and Cowlitz constructions are surprising, given the closeness of these languages. They may result either because these constructions are relatively new or because the Cowlitz speakers were unclear about them (none of the last speakers of Cowlitz had used this language much for many years). The Upper Chehalis superlative construction is a complex one, requiring a prefix, reduplication, and a suffix (the adjective plural suffix precedes the superlative suffix, as in sxʷ-ʔə́yi-ti-s 'the best ones').

32. A common suffix in Interior Salish is -ilx (and its regular developments); it is found in all seven of those languages, and has been labelled 'autonomous', among other things. It occurs with most roots indicating motion, and sometimes with others. Cognates occur in Central Salish (and apparently Tillamook and Bella Coola), although with varying degrees of productivity and different functions. There are also cognates in Tsamosan; the suffix is fairly common in Cowlitz, but strictly residual in Upper Chehalis, where it has been found with only six roots. Examples are given in (45), although these do not indicate the actual range of variation found in these suffixes.

(45)　Ch s-tukʷlí-lit-anš / ʔit túkʷlí-š čn 'I am dreaming / I dreamed'

　　　Ch siqʷʼ-ílit-n / ʔit síqʷʼ-š 'he is turning off / he turned off (a road)'

　　　Cz síqʷʼ-lt-n / ʔit síqʷʼ-lx 'he is turning off / he turned off (a road)'

　　　Cz s-táľš-ľt-n / ʔit táľš-ľs 'he is following him / he followed him'

The major difference in this suffix from the rest of Salish is that it again appears in two forms, one for each aspectual category; the final x (or š) appears only in the perfective forms (with l lost before š in Upper Chehalis; see 5 above), and the imperfective form usually has a t following the l (with expected vowel variations).

33. Upper Chehalis allows a construction that appears to consist only of the stative aspect prefix ʔac- and a lexical suffix, with no root between them. An alternative analysis would be to treat ʔac- as a root indicating location (an idea supported by an alternative form of the morpheme, ʔac'-, because the stative prefix is not otherwise attested with c'), although then it would be peculiar in never occurring with aspect markers, or any kind of diathesis affixes. The resultant constructions are, in fact, locative constructions, and can often be translated as nouns in English. Whatever analysis they are given, they are odd constructions, and possibly unique to Upper Chehalis. Examples are given in (46).

(46)　ʔac-áwƚ 'be in a canoe'

　　　ʔác'-nuwt 'thought, mind, something inside the mind'

　　　s-ʔac-ílals 'inside'

　　　ʔác-ƚnƚ 'put something in the mouth, be in the mouth'

These constructions are usually used as arguments, and as such occur with articles. They may also be preceded by the *s-* prefix that indicates such notions as subordination, imperfective aspect, and nominalization. Further details of this construction can be found in Kinkade (1967a).

34. Passives indicated by *-tm* (or developed from *-tm*) occur everywhere in Salish. Some analysts prefer not to call these passives, although they certainly consistently do some of the things that passives traditionally do; in particular they demote an agent from subject status and promote a patient to subject status. This *-tm* is probably ultimately complex (and is so treated here), consisting of *-t-* 'transitive' and *-m*, which may be the same as *-m* 'middle voice'. Less widespread, but probably going back to Proto-Salish, is another passive marker *-t* used in subordinate clauses. This construction is still common in much of Central Salish and in Tsamosan. Various languages have rearranged pronominal paradigms using these passive components such that there may be only one passive form left (although the affixes themselves may be present, as in Interior Salish, where *-t* is part of active paradigms), or elaborated them (as in Bella Coola). Tsamosan keeps both these original suffixes and has added two more.

Upper Chehalis and Cowlitz have extended the perfective/imperfective aspectual split to passive suffixes in main clauses, although not to subordinate clauses. This results in three suffixes in complementary distribution according to aspect and clause type. The suffixes are given in (47).

(47)	Upper Chehalis	Cowlitz
imperfective	*-stš*	*-ctx*
perfective	*-m*	*-m*
subordinate	*-t*	*-t*

Although the perfective forms most commonly appear as *-tm*, the *-t-* here is clearly treated as the *-t-* 'transitive', because whatever transitivizer is called for semantically (*-stw-* 'causative', *-min* 'relational', *-tas-*, or zero) is what precedes *-m*, yielding the Upper Chehalis perfective passive forms given in (48). Imperfective passives are given as well to show how the transitivizer appears in these forms. Both types of forms are built on an imperfective stem.

(48) ʔit č'áči-t-m / s-č'áči-stš 'he was watched / he is being watched'
   ʔit ʔáyn-y-m / s-ʔáyn-i-stš 'he was avenged / he is being avenged'
   ʔit x̣'á·l'-st-m / s-x̣'á·l'-stu-stš 'he was looked for / he is being looked for'
   ʔit č'ís-mis-m / s-č'ís-mi-stš 'he was come after / he is being come after'
   ʔit q'íw-tas-m 'he was called, invited'
   ʔit taw'ál-m 'he was left'

The Cowlitz equivalent of *-stš* is *-ctx*. Examples of passives in Cowlitz are given in (49).

(49) ʔit tal'íči-t-m / s-tal'íči-ctx 'he was helped / he is being helped'
   ʔit ʔúx̣ʷ-ši-t-m / s-ʔúx̣ʷ-ši-ctx 'he was blamed / he is being blamed'

Available data make it clear that the forms in *-stš* and *-ctx* are passives, although they have one peculiarity that makes them look active. In perfective forms, the subject (expressing the patient) is indicated by usual perfective subject clitics, as in (50).

(50) ʔit táq-ši-t-m čn tq̓ʷcx̣ʷé. 'I was shut up by Witch.'
   [PERF close-IND-TR-PASS 1sSUBJ OBL Witch]
   tt yucá-y-m č. 'You shall be killed.' [FUT INDEF kill-TR-PASS 2sSUBJ]

In the imperfective forms, however, the subject (expressing the patient) is indicated by the *object* suffixes that would appear in the active form, as in (51).

(51) s-x̣ʷó·ʔx̣ʷuʔi-cal-stš. 'I'm catching cold.' [s-cold-1sOBJ-PASS]
   s-qakʷšl-yanisi-cal-stš. 'My teeth are chattering.' [s-chatter-tooth-1sOBJ-PASS]
   s-táss-mal-stš tt pəsaʔ. 'I am being pursued by a monster.'
   [s-chase-1sOBJ-PASS OBL INDEF monster]

Such forms are infrequent; however, paradigms and translations indicate that they are indeed passive. These three are, in fact, the only examples in available data; the first two were elicited, the second is from a text collected by Boas.

The subordinate passive is essentially like that found elsewhere in Salish, except that the form in Upper Chehalis may be either *-t* or *-tt*, as in (52).

(52) šán-x̣ t s-yáčapi-t t p'ayšk̓ʷ tac yá·yn'-s. 'There Bluejay was caught up to by his sister.'
   there-DEF INDEF s-catch-SUBPASS INDEF Bluejay OBL DEF older.sister-3POSS]
   mítta x̣'a s-ʔupál-tt ta mús tt s-q̓ʷay'á-yt. 'The eyes shall not be eaten by the children.'
   [not FUT s-eat-SUBPASS DEF eye OBL INDEF s-child]
   t'a-s-tłw-stu-t tp'ayšk̓ʷ ʔit x̣'ášx̣'š. 'The stick was taken off by Bluejay.'
   [again-s-remove-CAUS-SUBPASS OBL Bluejay DEF stick]

The agent in these examples is expressed in an oblique phrase marked by the preposition *t*.

The fourth passive in Tsamosan occurs in both Upper Chehalis (*-tači*) and Cowlitz (*-k̓ʷu*). This is a non-control passive (the others are all control passives), and is roughly equivalent to an English get-passive. It may passivize either transitive or intransitive forms. Examples are given in (53) for Upper Chehalis and (54) for Cowlitz. Note that native translations are often in the active voice, although the meanings make it clear that the subject markers used represent patients.

(53) c'ǝp'-tači čł. 'Water came in on us.' [overflow-PASS 1pSUBJ]
   s-x̣asíl'-tači-n-anš. 'I am getting rained on.' [s-rain-PASS-n-1sSUBJ]
   t'íc-tači-n-n tt sq'ax̣áy' ča t c'ax̣éʔs. 'Mud and sand splashed on him.'
   [splash-PASS-n-3SUBJ OBL INDEF mud and INDEF sand]

(54) ʔit q̓ʷíx̣-k̓ʷukn. 'It got dark on me.' [PERF dark-PASS 1sSUBJ]
   s-x̣asíłʔ-k̓ʷu-stawt. 'It is raining on us.' [s-rain-PASS-1pSUBJ]

Nothing like this non-control passive is reported for any other Salishan language, and attempts to elicit it elsewhere have failed. It is therefore a very unusual construction for Salish, and it is unclear how it developed in Upper Chehalis and Cowlitz.

35. The retention of the topical object suffix -wal-/-wali distinguishes the Tsamosan languages from neighboring languages. This suffix, which gives special marking to an object when the topic of discourse is direct object rather than in its usual subject status, is found in Tillamook and Columbian, both geographically separated from Tsamosan. It is also found in Lushootseed, although only marginally, and it seems clear that its use there has been declining markedly. On the other hand, it is quite common in Tsamosan, and occurs in most Upper Chehalis texts; instances can be found in the very few texts extant in Cowlitz and Quinault, although not in the one, short transcribed text available in Lower Chehalis (Eells and Boas 1882). This suffix is very important in Tsamosan discourse for keeping track of topics, and has an extended use in an agent hierarchy (see 37 below). Although the suffix can be elicited in its topical object function, it is most commonly found in texts, where it is important to keep track of topics. Examples of its use in Upper Chehalis are given in (55) and (56); both are from texts.

(55) *tiws x̌áwq'-mit-n t tə́q'ƛ'č* 'While Beaver talks [to her]'
[while talk-MDL-3SUBJ INDEF Beaver]
*ʔitu qins-ʔík*ʷ*-t-wali-n-n tit s-q*ʷ*ay'á-yt.* 'then the baby wants to go to him.'
[then want-fetch-TR-TO-n-3SUBJ DEF s-baby]

(56) *húy túl'ali-mit-n čsa t q*ʷ*cx̌*ʷ*é.* 'And then Witch starts out again.'
[and.then start.out-MDL-3SUBJ again INDEF Witch]
*k*ʷ*x̌*ʷ*á-w-n šat tit smáničí.* 'She gets to the mountain.'
[get.to-INTR-3SUBJ to DEF mountain]
*téx̌cu t x̌*ʷ*ənéx̌*ʷ*əne.* 'There is X̌ʷənéx̌ʷəne.'
[there INDEF X̌ʷənéx̌ʷəne]
ʔac-ʔá·maq'-t-wali. 'He is waiting for her.'
[ST-wait-TR-TO]

In (55) 'the baby' is subject of the second line, although Beaver is still the topic; this is expressed by the use of -wali. Otherwise 'he goes to him' would be *s-ʔík*ʷ*a-t-n.* In (56) Witch remains topic throughout the entire passage; even though X̌ʷənéx̌ʷəne is emphasized in the third line, he does not become topic, or the fourth line would be *ʔac-ʔá·maq'-n.* Further discussion of the topical object suffix in Salish can be found in Kinkade (1990).

36. Compounding of roots occurs throughout Salish only to a moderate degree, and some languages disfavor it strongly. Upper Chehalis, however, uses compounding extensively, even combining prepositions. Compounds are a phonological unit, with a single primary stress, and all further inflections or derivation occur outside the compounded morphemes. Examples of this compounding are given in (57), and that of prepositions in (58).

(57) *náw-santi, pən-náw-santi* 'Independence Day' (literally "time-big-Sunday")
tə́q'-šawt 'wide trail'
*s-ƛ'a-sx̌*ʷ*ás-t-n* 'she is looking for blackberries'

(58) *tu-t* 'for, to' (*tu* 'of, from'; *t* 'in, to, at')
š-ʔat, š-at 'to, into, on' (*š* 'to, into'; *ʔat* 'in, on, into, toward')

This last compound preposition can in turn be combined with a lexical root, as in (59).

(59) *š-ʔát-ən'ca-n-m* 'toward me' (*ʔánca* 'I, me'; -*m* MDL)
š-ʔat-máničí-n-m' 'toward the mountain' (*smáničí* 'mountain')

Particularly common are compounds with *qin-* 'want' (always with *s-* preceding the second part of the compound) or *nám-* as first element (see 60). The latter are commonly used to indicate past time.

(60) *qin-s-ʔáx̌-ci* 'she wants to look at me' (*ʔáx̌-* 'see')
ʔac-nám-šawt 'he is full grown' (*šəwál-* 'grow, raise')

Compounding is so extensive in Upper Chehalis that some roots take on the function of lexical suffixes (especially *wit* 'canoe', *x̌ás* 'house', and *ƛ'áč* 'belly') when used as second member of the compound.
Compounding appears to be similar in Cowlitz; however, the data are not extensive enough to know how similar the situation is there.

37. Agent hierarchies are reported for several Central Salishan languages (Jelinek and Demers 1983; Gerdts 1988), but do not seem to occur in Interior Salish. Upper Chehalis has two such hierarchies, and they are different from those that occur in Central Salish. One of these hierarchies is a prohibition on the co-occurrence of any second person object suffix with a first person plural subject. Instead, third person object suffixes must be used, and if the second person is expressed overtly it must be as a direct object complement coreferential with the third person object suffix, as in (61).

(61) *ʔit máy-x̌*ʷ* čt tit náwi* 'we took you (sg.) in' [PERF take.in-CAUS 1pSUBJ DEF you.sg]
ʔit ʔax̌-ə́n čt tit ʔilápa 'we saw you (pl.)' [PERF see-3OBJ 1pSUBJ DEF you.pl]
s-ƛ'á·l'-stu-stawt tit náwi 'we are looking for you (sg.)' [s-look.for-CAUS-1pSUBJ DEF you.sg]
ʔamu t c'áč-n čt tit náwi. . . 'and if we defeat you. . .' [if FUT win-3OBJ 1pSUBJ DEF you.sg]

The independent pronominal form (which is basically predicative) must be preceded by a definite article, like any other complement. The hierarchic restriction applies regardless of aspect.
The second hierarchy prevents a non-human from being subject when a human is direct object. The usual way to avoid this is to use a topical object suffix, implying that the object has greater topicality than the (non-human) subject.

(62) *ʔit x̌áy'-t-wali tat qáx̌aʔ* 'the dog growled at him' [PERF growl-TR-TO DEF dog]
s-ƛ'á·l'-st-wal-n tat qáx̌aʔ? 'the dog is looking for him' [s-look.for-CAUS-TO-3SUBJ DEF dog]

Such forms are readily elicited by having an animal as subject and a human as object. More extensive discussion of the agent hierarchies in Upper Chehalis can be found in Kinkade (1989).

38. Upper Chehalis and Cowlitz are unusual among Salishan languages in having a full-fledged copula. It is common in these languages to foreground a subject, and when this is done, it is followed by the copula *wi* and then the main predicate. Elicited sentences frequently use just this order, partly because it reflects the order of English. However, it is by no means unusual in texts to find a foregrounded subject followed by the copula. The Upper Chehalis sentences in (63) were elicited, those in (64) are taken from texts.

(63) *tit s-x'aq̓=úšut wi s-waq̓á-w-n* 'the door is opening'
      [DEF s-go.out=door COP s-open-INTR-3SUBJ]
      ʔánca wi ʔit sáwla-mi čn 'I asked you' [I COP PERF ask-2sOBJ 1sSUBJ]

(64) *tit s-q̓ít=ači wi siw tó·m-t.* 'The day is too short.'
      [DEF s-day=? COP too short-INTR]
      caniáwmš wi ʔay=ál̓iwn t čawat-úmš. 'They are pretty women.'
      [they COP good=appearance INDEF women-PL]
      ʔánca wi ʔáls čn. 'I am a chief.' [I COP chief 1sSUBJ]

The copula may also be used as a main predicate, just like 'be' in English, as in (65), and this predicative use can even follow its use as a copula, as in (66).

(65) *ʔit wí ʔac-xʷé·n-t* 'he got weak' [PERF COP ST-weak-INTR]

(66) *cáni wi ʔit wí c̓ap=ús* 'he got strong' [he COP PERF COP strong=face]

One of the major syntactic uses of the copula is in subordinate constructions, particularly following the negative *mítta*. In this use, *s-* 'subordinate, nominalizer, imperfective' is prefixed to the copula, which then takes possessive affixes as person markers; it can be preceded by *ta* 'past', *x̓a* 'future', or *q̓at* 'modal, conditional', or *t* 'unrealized, future' can replace *s-*. Another predicate follows this construction, and will have its own inflections. Examples are given in (67).

(67) *mítta t s-wi-ns ʔit kʷ'šč̓č-mn.* 'He didn't listen to them.'
      [not INDEF s-COP-3POSS PERF listen-REL]
      mítta t s-wi-ns ʔit nám-nax=nuwt čt. 'He disagreed with me.'
      [not INDEF s-COP-3POSS PERF done-promise=mind 1pSUBJ]
      mítta t n-s-wi s-ʔílan̓-n. 'I'm not singing.'
      [not INDEF 1sPOSS-s-COP s-sing-3SUBJ]
      q̓ačá· t s-wi-ns ʔac-wé·-x yamš. 'A long time they were there.'
      [how.long INDEF s-COP-3POSS ST-COP-DEF 3pl]

This construction is discussed in detail in Kinkade (1976).

An unusual feature of the copula is that can even be transitivized, and then means 'do, put' or, with a long vowel, 'have, own'. In these derivations, it does not differ from other predicates. Examples are given in (68).

(68) *ʔit wí-t-xʷ čn yánq.* 'I put it around my neck.' [PERF COP-TR-CAUS 1sSUBJ necklace]
      (cáni wi) ʔac-wé·-t-xʷ t qáxaʔ. 'He owns a dog.' [he COP ST-COP-TR-CAUS INDEF dog]

Another common derivation is with a stative aspect prefix, a lengthened vowel, and a suffixed -*x* 'definite' (with an imperfective counterpart *s-wé·-n-nax-n*). This form means 'have, live, be, stay'; examples are the last sentence in (67) and those given in (69).

(69) *(ʔa)c-wé·-x t yól̓kʷ-w-n x̌ʷáqʷ s-čá·-n-m.* 'There is rolling everywhere.'
      [ST-COP-DEF INDEF roll-INTR-3SUBJ all s-where-n-MDL]
      wé·-n-nax-n t cílačs s-q̓ít=ači. 'He stayed five days.'
      [COP-n-DEF-3SUBJ OBL five s-day=?]
      ʔac-wé·-x t čít̓-ns. 'He has an older brother.' [ST-COP-DEF INDEF older.brother-3POSS]

All these usages are common both in textual and elicited material in Upper Chehalis.

39. Deictic particles are numerous in Upper Chehalis and Cowlitz, and form elaborate paradigms. Definite and indefinite articles are required for virtually all syntactic arguments. The articles have both spatial and temporal implications (here-there, now-then). The most common ones with arguments are *t* 'indefinite', *tit* 'definite, proximate', and *tat* 'definite, distal'; *ʔit* 'definite, near/past' is less common in this role (all these have feminine gender counterparts, with *c* for the final *t*). This last one, however, is the usual mark of perfective aspect. This fits semantically, since perfective aspect usually refers to a completed (hence past) action. Other articles also turn up as perfective markers, although not as commonly as *ʔit*. Some examples from Upper Chehalis of *ʔit* and *tit* as aspect markers in (70) contrast with those same deictic particles in (71) functioning as definite articles.

(70) *ʔiyu ʔit xíxq̓ čt.* 'We will just gamble (race).'
      [just PERF gamble 1pSUBJ]
      ʔánca wi tit ʔáxt=kʷlš čn. 'As for me, I have received spirit power.'
      [I COP PERF ?=spirit.power 1sSUBJ]

(71) *sáʔa-t-stawt ʔit kʷás-t.* 'We'll make darkness.'
      [make-1pSUBJ DEF dark-INTR]
      kʷáxʷ-mis-n tit c̓skíyq. 'He arrived at the Ant's.'
      [get.to-REL-3SUBJ DEF Ant]

The use of deictic particles to mark aspect is not reported for other Salishan languages.

40. One common discourse feature that sets the Tsamosan languages off from neighboring Salishan languages is the use of five as a pattern number. This also occurs in neighboring Southern Lushootseed, and in the Interior in Columbian and sometimes in Colville and Spokane. This trait apparently spread northward from Sahaptin and Chinook, where five is also the pattern number. What makes the Tsamosan use of five different from other Salishan languages is the way it is emphasized. Persons and objects in Tsamosan texts are repeatedly said to occur in fives, and events are often pointedly counted. In the Interior languages, the use of a pattern number is much less overt.

41. Another discourse feature that may be peculiar to Upper Chehalis involves the distribution of the *s*- prefix. It was noted earlier (in **14**) that it is used to mark dependent clauses and nominalizations, as well as to indicate imperfective aspect in independent clauses. Footnote two points out that it is, however, commonly absent as a marker of imperfectives in texts. Its usage there is nevertheless systematic. The *s*- occurs regularly in all quoted speech in texts, but not in the narrative of the text. This formal marking of direct speech sets it off from the narrative, although it is the reverse of the marking of indirect speech typical of many of the languages of western Europe. Such marking is unreported for other Salishan languages.

Vocabulary

The distinctness of Tsamosan indicated by lexicostatistical studies is real. Comparative studies involving vocabulary in general, ignoring the notion of basic vocabulary, show that Tsamosan consistently stands apart from the rest of Salish. In set after set of etymologies, Tsamosan languages lack cognates with the rest of Salish, or correspond only with Interior Salishan languages, or match only Southern Lushootseed or Twana. There are frequent matches between Tsamosan and Tillamook alone as well. Naturally, there are many correspondences with Central Salish and Salish in general; however, the number of differences remains striking. Within Tsamosan there is a consistent split between the two western and the two eastern languages in vocabulary, although Lower Chehalis often corresponds with Upper Chehalis and Cowlitz, leaving Quinault alone distinctive. Cowlitz and Upper Chehalis match very closely in vocabulary, as well as in the rest of the structure of the languages; the similarities are so great that it would not be unreasonable to consider Satsop, Oakville Chehalis, Tenino Chehalis, and Cowlitz as a chain of dialects of a single language. However, Cowlitz speakers did not quite understand Upper Chehalis (at least its Oakville variety), and so they can be left as separate languages. In any event, Elmendorf (1969) is correct in considering the four Tsamosan languages as a language chain, and as a group distinct from the rest of Salish.

The predominant use here of examples from one language—Upper Chehalis—is not a problem. This is because only Upper Chehalis adjoins other Salishan languages, and any contact between other Tsamosan languages and non-Tsamosan Salishan languages would have been indirect and probably infrequent. Even though maps show Twana territory adjoining Quinault, contact was negligible because of difficult terrain (cf. Elmendorf 1969). Therefore Cowlitz, Lower Chehalis, and Quinault can be expected to have even more differences from other Salish than Upper Chehalis does because reinforcement and borrowing would not have occurred. If Upper Chehalis is as distinctive as it is, other Tsamosan languages are likely to be even more different from the rest of Salish.

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