# Central Salish from a Nooksack Perspective* 

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#### Abstract

Lhechalosem/Nooksack is a sleeping Central Salish language whose last fluent speaker, Sindick Jimmy, passed away in 1977. Documentary work, largely carried out in the 1950s by Paul Fetzer and Pamela Thorsen Amoss, left a fragmentary but invaluable record of the language; the late Brent Galloway was in the process of turning this material into a grammar when he passed away in 2014. This paper reports on a continuation of Galloways' grammatical work, which yields insight not only into the structure of Nooksack itself but also into its connections with its Central Salish relatives and neighbours. The key findings are first of all that Nooksack constitutes a fully independent grammatical system in its own right, and second that beneath a recent layer of obvious influence from Halq'eméylem/Upriver Halkomelem, it shows strong morphosyntactic affinities with Skwxwu7mesh/Squamish, with suggestive clues of even earlier influence from Northern Interior Salish (in particular, nłe?kepmxcín/Thompson River Salish).


Keywords: Lhechalosem /Nooksack, Central Salish, comparative morphosyntax, historical Salish

## 1 Introduction

In 2017, Strang Burton and I took on the task of completing the late Brent Galloway's work on the sleeping Central Salish language Lhechalosem ~ Lhechelesem/Nooksack, henceforth NK), whose last fully fluent speaker, Sindick Jimmy (SJ), passed away in 1977.

Primary documentation of the language had been carried out in the 1950s with fluent speaker George Swanaset (GS), initially by University of Washington graduate student Paul Fetzer, and after Fetzer's untimely death in about 1952, by Pamela Thorsen Amoss, who worked with both GS and SJ, and wrote her (1961) University of Washington MA thesis on the phonology of the language. Fetzer left an extensive collection of file cards, and Amoss left file cards, field notes, and - of critical importance - some three or four hours of audio recordings from both speakers, which have now been digitized.

GS passed away around 1960; subsequently, additional fieldwork was carried out with SJ and semi-fluent speaker Louisa George (LG) by linguists Barbara Efrat, Laurence C. Thompson, and finally Brent Galloway himself, each of whom left further field notes, largely focused on vocabulary and phonology. All of this material is now archived in the Pacific Northwest Collection at the University of Washington Libraries, distributed over several individual bequests.

Galloway had originally conceived of his NK project as consisting of three components: a grammar, a set of illustrative texts, and a classified word list. Before his death in 2014, he had more or less completed the phonetics/phonology part of the grammar, and together with community members George Adams and Catalina Renteria had transcribed, translated, and published two texts (Galloway et al. 2004; Adams et al. 2005). Adams and Galloway had also made substantial progress on a draft of the classified word list.

[^0][^1]This still left a lot of work to do. In particular, the morphology and syntax sections of the grammar consisted of about 20 pages of fragmentary notes and examples. I undertook the task of expanding and revising these sections, and ended up with a 170-page grammatical sketch, drawing on examples from the texts and the word list as well as Galloway's previously published work on the language (Galloway 1984b/1993b and particularly 1997).

One of Galloway's goals in writing the phonetics/phonology section of the grammar had been to establish NK once and for all as a language in its own right. The reason why this had been cast into doubt in previous scholarship on Central Salish was the peculiar status of NK in the $20^{\text {th }}$ century. Due to language attrition and the small size of the original speech community compared to those of neighbouring Central Salish languages, as well as extensive out-marriage, NK had ended up by the early part of the century as nobody's first language. ${ }^{1}$

More specifically, GS was an L1 speaker of, Halq'eméylem/Upriver Halkomelem (henceforth UH) and SJ and LG were both L1 speakers of the Upper Skagit dialect of Lushootseed (henceforth LU). Though all three had learned NK from older relatives who were L1 speakers, and had used the language quite extensively earlier in their lives, it was suspected that their NK might be a partially re-lexified version of their own L1s rather than constituting a fully independent grammatical system.

In the phonetics/phonology section of his grammar (based largely on Galloway 1983/1984a), Galloway distinguishes two varieties of NK: a "Halkomelemized" version characteristic of the speech of GS, which he terms Lhechelesem, and a (presumably) more conservative version used by SJ and LG, which he terms Lhechalosem. (In reality, phonological traits of UH appear in the speech of all three speakers, but more prominently in that of GS, whose intonation in particular shows obvious influence from the distinctive tonal system of UH.)

As the foremost authority on UH, Galloway was in a particularly good position to recognize intrusions from UH into NK, and therefore to reconstruct an "unadulterated" phonology of NK. His conclusion bears repeating:

It [Nooksack] forms a coherent system, distinct in many ways from Halkomelem and its other neighbors. There is no doubt now that Nooksack is a distinct language from Halkomelem. The Upriver, Downriver and Island dialect groups of Halkomelem (often called Chilliwack, Musqueam and Cowichan after their principal dialects) all share a number of phonological structures and rules which Nooksack lacks or organizes in different ways. The authentic features of the Nooksack phonemic system can be established through comparison of the idiolects of different speakers, which contrast with HL and neighboring languages and their patterns of sound correspondences.
(Galloway 1984a:39)
However, since his work on the morphology and particularly the syntax of NK was less developed than his work on phonetics and phonology, Galloway was not in as strong a position to support these conclusions using other components of the grammar (though see Galloway 1997 on

[^2]a comparison of pronouns and transitivity in NK and neighbouring languages). This is one of the two main goals of this paper.

The second goal is to explore the question of what NK grammar tells us about the history of related Central Salish languages, in particular Halkomelem (HL) and Skwxwu7mesh/Squamish (SQ). Here I am particularly interested in disentangling traits which NK may have borrowed from neighbouring languages from those that it may have inherited from Proto-Central Salish or its South Georgia subbranch. This involves looking at grammatical properties which are either shared with a subset of neighbouring languages, or which are unique to NK. On the other hand, properties which are shared by all Central Salish languages tell us less.

The paper is structured as follows. In Section 2, I set NK within its geographical and historical context, before turning in Section 3 to detailed comparison of a set of 16 grammatical traits across seven out of the ten original Central Salish languages. The traits were chosen specifically because they are all instantiated in NK and vary across the rest of Central Salish. Section 4 summarizes the findings, and Section 5 explores their consequences both for NK itself and for its Salish neighbours and relatives. Section 6 concludes.

## 2 Nooksack in a Central Salish context

In Salish historical linguistics, the ten Central Salish (CS) languages are usually divided into three main sub-branches, with further sub-divisions within the South Georgia subbranch, as shown in Figure 1.

2


Figure 1: Central Salish

[^3]The division in Figure 1 places NK at the heart of CS: appropriately, since Kinkade (1990) situates the Salish homeland between the Fraser and Skagit rivers, which is exactly the location of NK territory. However, the current linguistic geography of CS does not always correspond to the historical relationships represented in Figure 1: For example, LU is in a separate sub-branch from NK, but is its immediate southern neighbor, while SQ is genetically close to NK, but separated from it geographically by UH to the north.

This gives us the opportunity to examine the question of whether properties shared by NK and other CS languages are due to geographical contact or historical relationship: for example, if NK shows affinities with LU which are not shared across CS, they are likely to result from contact rather than shared ancestry, while the converse is true of traits shared with SQ but not UH.

This is precisely the strategy I will pursue in the following sections, where I undertake a systematic comparison of selected grammatical traits in seven out of the ten CS languages, using NK as the basis of comparison. ${ }^{4}$

## 3 Grammatical variation between Nooksack and other Central Salish languages

In this section, I compare 16 grammatical traits across seven CS languages. These traits have been selected on the basis of two criteria: first, there must be sufficiently detailed documentation across all seven languages to allow for a robust comparison; and second, there must be significant variation between NK and at least some of its CS relatives. The comparison is therefore unabashedly Nooksack-centric, and as such cannot by itself be used as a more general guide to the comparative morphosyntax of CS, though I hope it will be taken as a contribution towards that larger enterprise.

The grammatical traits surveyed are the following:
(i) Imperfective marking (3.1)
(ii) Subject marking (3.2)
a. Distribution of ergative marking (3.2.1)
b. Person hierarchy effects (3.2.2)
c. Promotional versus non promotional passive (3.2.3)
(iii) Oblique marking (3.3)
a. Presence of oblique proper noun determiner (3.3.1)
b. Loss of oblique-marking preposition (3.3.2)
(iv) The distribution of overt DPs (3.4)
a. Pre-predicative subjects (3.4.1)
b. Post-verbal DPs (3.4.2)

[^4](v) The transitivity system (3.5)
a. Intransitive markers (3.5.1)
b. Transitivizers (3.5.2)
c. Applicatives (3.5.3)
(vi) Form of clausal negation (3.6)
(vii) Independent pronouns and clefts (3.7)
a. Invariant versus alternating independent pronouns (3.7.1)
b. Free use of independent pronouns as arguments (3.7.2)
c. Form of the clefting predicate and the third-person independent pronoun (3.7.3)

In each case, I will present relevant examples from the NK grammar, but for reasons of space, will not always illustrate the traits in other CS languages, since they can readily be found in the sources cited.

### 3.1 Imperfective marking

While perfect is uniformly unmarked in CS, as in the rest of the family, there is significant variation in the form of imperfective marking, as shown in Table 1. (The table also shows which markers are progressive as opposed to general imperfective, at least as far as I have been able to ascertain.)

Table 1: Imperfective marking across Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{C}_{1}$ reduplication | - | - | - | - | PROG | PROG (?) | PROG |
| 'actual' | - | - | IPFV | IPFV(?) | - | - | - |
| auxiliary | - | IPFV | - | - | IPFV | - | - |
| prefix/proclitic | PROG | - | - | - | - | - | - |

There are four patterns.
(i) The northern languages (the North Georgia sub-branch plus SQ) employ $\mathrm{C}_{1}$ - ('initial') reduplication, which marks progressive aspect (at least in SQ and CX: the situation in SE is not as clear).
(ii) HL and SS (including KL) have a distinct and very complex system of alternations involving reduplication, ablaut, and glottal infixation, known as the actual in the literature: at least in HL, the actual marks general imperfectivity rather than the progressive.
(iii) The aspectual system of the Puget Sound sub-branch (LU plus TW) employs a set of verbal prefixes which include a progressive marker. ${ }^{5}$

[^5](iv) Two languages (NK and SQ) have an imperfective auxiliary; in both languages, this auxiliary marks general imperfectivity, leading to a distinction between the progressive and the imperfective in SQ (see Bar-el 2005). Other languages seem to have either progressive or general imperfective, but not both.

NK has the simplest system, consisting simply of an imperfective auxiliary (Pay). ${ }^{6}$

| (1) | Ay | ílal(7) | tsíya. |
| :--- | :--- | :--- | :--- |
| 2ay=Ø | Rílal | cíya |  |
|  | IPFV $=$ 3sUbJ | cry | FEM.DEM |
|  | 'She is crying.' |  |  |

(2) Ay núkwenas te kw'eláns.

Tay núkw-ən-Ø-as ta=kw ${ }^{\text {w }}$ lán-s
IPFV move-CTR-3OBJ-3ERG DET=ear-3POSS
'S/he is wiggling her ears.'

| Ilh | ay | asísta | ta selátsos | lhiyá |
| :--- | :--- | :--- | :--- | :--- |
| Pil= | Pay | Pəs-(R)ísta | ta=[s-]səlá-t-su[t]-s | liyá |
| AUX=3SUBJ | IPFV | STAT-resemble | DET=[NMLZ-]do-CTR-RFLX-3POSS | PROX.DEM |
| xwelitem... |  |  |  |  |
| X $^{\text {wolítəm }}$ |  |  |  |  |
| white.person |  |  |  |  |
| 'It's like what these white people do...' |  |  |  |  |

Galloway speculates that Pay descends from an intransitive aspectual verb Pe:y which he glosses in UH as 'keep on going' (Galloway 2009:22). Suttles (2004:39) gives the following DH example involving what appears to be an auxiliary use of the same verb:

[^6](4) $\quad \mathrm{Pi}=\mathrm{cn} \quad \mathbf{P e}: \mathbf{y} \quad \mathrm{k}^{\mathrm{w}} \mathrm{uk}^{\mathrm{w}} \ldots$

AUX $=1$ SG.SUBJ continue cook
'I continued to cook...'
Assuming the NK form was borrowed from HL, the question arises as to what it replaced. There are no relics of $\mathrm{C}_{1}$ progressive or actual marking in NK, which suggests that it may always have employed an auxiliary, but has re-lexified it with a borrowing from HL. This hypothesis is indirectly supported by the fact that the NK prospective auxiliary ${ }^{\prime} u \check{x}^{w}$, derived from the verb 'go', is also borrowed, this time from LU.

The only other CS language with an imperfective auxiliary is SQ (though its imperfective marker wa has cognates in all three Northern Interior (NIS) languages, rather than being unique, like NK Pay). ${ }^{7}$ Assuming re-lexification, this suggests that the auxiliary marking of imperfective aspect is not innovative in NK, but a retention of a conservative pattern it shares with $\mathrm{SQ} .{ }^{8}$

### 3.2 Subject marking

In this section, I examine three areas of variation centred around subjects: ergative (transitive) subject agreement (Section 3.2.1), person hierarchy effects (Section 3.2.2), and the distinction between promotional and non-promotional passives (Section 3.3.3).

### 3.2.1 Ergative marking

Table 2 gives the distribution of third-person transitive subject (ergative) markers across clause types.

Table 2: Third person transitive subject marking across Central Salish

|  | LU | NK | UH | SS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| main clause | = $\varnothing$ | -as | -as | -s | -as | -as | -as |
| subordinate clause | $=\varnothing$ | -as | -as | -วs | -as | -as | -as |
| subjunctive clause | =as | =as | $\begin{gathered} =\mathrm{as} \\ (+-\mathrm{as}) \end{gathered}$ | -əs | $\begin{gathered} =\mathrm{as} \\ (+-\mathrm{as}) \end{gathered}$ | $\begin{gathered} =\mathrm{as} \\ (+-\mathrm{as}) \end{gathered}$ | $\begin{gathered} =\mathrm{as} \\ (+-\mathrm{as}) \end{gathered}$ |
| nominalized clause | =s | $\begin{gathered} =s \\ (+-\mathrm{as}) \end{gathered}$ | $\begin{gathered} =\mathrm{s} \\ (+-\mathrm{as}) \end{gathered}$ | =S | $\begin{gathered} =\mathrm{s} \\ (+-\mathrm{as}) \end{gathered}$ | =s | $\begin{gathered} =\mathrm{s} \\ (+-\mathrm{as}) \end{gathered}$ |

Four types of clause are shown here: (indicative) main clauses; (indicative) subordinate clauses (comprising object-centred relative clauses and clefts); subjunctive clauses; and nominalized clauses. As can be seen in the table, no Central Salish language marks transitive subjects separately in all four types. There are several different patterns and sub-patterns, falling into three main groups (see Davis 1999, 2000; Kroeber 1999 for details and analysis).

[^7](i) In LU all subject suffixes have been lost, and so has the distinction between subject marking on transitive and intransitive verbs: the zero third-person clitic marks all indicative subjects, and =as marks all subjunctive subjects, regardless of transitivity. ${ }^{9}$
(ii) In the second pattern, exemplified by the majority of CS languages, the third-person transitive suffix -as is retained in both main and subordinate indicative clauses, but surfaces only in subjunctive and nominalized clauses when an auxiliary is present to host the subjunctive or possessive subject clitic, leading to a distinctive "subject doubling" construction, indicated in Table 2 with parentheses around the subject suffix. ${ }^{10}$ There is further variation within this pattern: NK has lost the ergative suffix completely in subjunctive clauses, while SE has lost it in nominalized clauses.
(iii) The third pattern is exemplified by SS (NSS and KL). Here the subjunctive clitic has merged with the subordinate transitive suffix, leading to a single subordinate suffix -as undifferentiated for transitivity, contrasting with the main clause transitive suffix $-s$. In nominalized clauses, on the other hand, third-person possessive $=s$ has completely replaced the transitive suffix (as in SE). The result is that only indicative main clauses distinguish intransitive from transitive subjects.

Within this picture, NK groups with UH/SQ/SE/CX in pattern (ii), but has simplified the system in transitive subjunctive clauses, where the subjunctive clitic has completely replaced the ergative suffix and, therefore, subject doubling no longer takes place, as shown in (5).

| ...qay | ílhas | ni | asísta(s)txw | $\tan$ |
| :---: | :---: | :---: | :---: | :---: |
| qәу | 2íl=as | ni | Pos-[?]ísta-tx ${ }^{\text {w- }-Ø ~}$ | $\mathrm{ta}=\mathrm{n}$ |
| CONJswál | AUX=3SJV | AUX | STAT-be.like.that-CAUS-3OBJ | DET=1SG.POSS |
|  | swáley. |  |  |  |
| s-wáləy |  |  |  |  |
|  | Z-pay.paren |  |  |  |
| '...if my | pay parents | gree to |  |  |

Note that in this single respect NK resembles LU, which has lost ergative suffixes completely. Otherwise, however, the two systems are very different.

### 3.2.2 Person hierarchy effects

A second area of variation in subject marking involves person hierarchy effects: more specifically, a ban on the co-occurrence of third-person transitive subject (ergative) suffixes with second-person object suffixes ( $* 3>2$ ).

[^8]Evidence for the $* 3>2$ ban in NK is necessarily indirect, since it involves an ungrammatical pattern and therefore cannot be induced directly from the corpus. The absence of examples in the corpus with third-person ergative marking and second-person object marking provides indirect negative evidence, together with the presence of sentences exemplifying typical avoidance strategies employed by other CS languages with the $* 3>2$ ban. The most common of these is the use of passives with second-person patients, as shown in in (6) (see (8b) below for a parallel UH example).
(6) Ílha chaxw kwá7atem?

جíl=a=čax $\quad k^{w}$ wáp-at-əm
AUX=Q=2SG.SUBJ let.go-CTR-PASS
'Did he let you go?' ('Were you let go?')

A second strategy, confined to NK and UH , involves the use of second-person independent pronouns instead of object suffixes: see Section 3.7.1 below and Wiltschko and Burton (2004) on parallel structures in UH.
(7) Ilh lhqw'ósenamines tenuwí tsemetl'ú
?í1 łq̉-ús-ən-Ø-amən-as tə+nəwí ca+ma+交ú
AUX slap-face-CTR-3OBJ-DES-3ERG DET+2SG.INDP FEM.DET+so+be.that
'She wants to slap you in the face., ${ }^{12}$
The distribution of the $* 3>2$ ban across CS is given in Table 3 .
Table 3: $* 3>2$ in Central Salish ${ }^{13}$

|  | LU | NK | UH | NSS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $* 3>2$ | no | yes | yes | yes | yes | yes | no |

Here NK is part of a core block of CS languages extending from SE in the north to SS in the south, but excluding CX at the northern and LU at the southern peripheries. Given that the geographically peripheral languages do not show person hierarchy effects, it seems likely that the * $3>2$ ban is an innovation originating in the South Georgia region, which includes NK.

### 3.2.3 Passives

There are two patterns of passive marking in CS:
(i) The more conservative pattern (also characteristic of Interior Salish) is nonpromotional: the agent is demoted to oblique status, but the patient argument is still

[^9]marked by object suffixes on the passivized verb. ${ }^{14}$ Examples are given below from UH (Galloway 1993a:187). ${ }^{15}$
(8)
a. lə méy-өと̀ləm.

AUX help-CTR+1SG.PASS
'Somebody helped me.' / 'I was helped.'
b. lə méy-Өà:m.

AUX help-CTR+2SG.PASS
'Somebody helped you.' / 'You were helped.'
(ii) The more innovative pattern (absent in Interior Salish) is promotional: the agent is demoted and the patient gets marked as the subject of the passivized verb, as in the SQ examples below from Kuipers (1967:89).
(9)
a. čən č̉áw-at-əm.
1SG.SUBJ
help-CTR-PASS
'I was helped.'
b. čəxw č̉ ćáw-at-əm.

2SG.SUBJ help-CTR-PASS
'You were helped.'
NK is a promotional passive language, like SQ but unlike UH: see (6) above and (10) below:

| Ilh chalh | swenátem | kwtha laplítchalh. |
| :--- | :--- | :--- |
| Pí=čat | [Pə]s-wən-át-əm | $\mathrm{k}^{\mathrm{w}} \theta \mathrm{a}=$ laplít-čał |
| AUX=1PL.SUBJ | STAT-invite-CTR-PASS | ABSN.DET=preacher-1PL.POSS |
| 'We're invited by our missionary.' |  |  |

The distribution of promotional and non-promotional passive across CS is shown in Table 4.
Table 4: Passive in Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| non-promotional <br> promotional | $-\sqrt{ }$ | $-\sqrt{ }$ | $\sqrt{ }$ | $\overline{\sqrt{n}}$ | $\overline{\sqrt{\prime}}$ | $\sqrt{ }$ | $\sqrt{ }$ |

HL is exceptional amongst the South Georgia languages in retaining a non-promotional passive: other non-promoting languages (including PT as well as SE and CX) are from the North Georgia branch. I return to this distributional pattern in Section 5.1 below.

[^10]
### 3.3 Oblique marking

In this section, I deal with two related parameters concerning oblique marking. The first is the distribution of the oblique determiner, discussed in Section 3.3.1; the second, the loss of the general-purpose oblique marker/preposition, discussed in Section 3.3.2.

### 3.3.1 The oblique determiner

A subset of CS languages in the South Georgia area have developed a special oblique determiner, whose form is generally $\dot{\lambda}=$. Except in NSS, this determiner is confined to proper nouns. A NK example with an oblique-marked passive agent is given in (11).

| Ilh | xétl'enem | tl' John | ta sqwemáy |
| :---: | :---: | :---: | :---: |
| २il=Ø | x̌ว̇へ̇-ən-əm | $\chi$ J John | ta=sq*əmáy |
| AUX=3SUBJ | bite-CTR-PASS | OBL.DET=John | DET=dog |
| 'The dog wa | bitten by John.' |  |  |

Table 5 shows the distribution of the oblique determiner across CS.
Table 5: Distribution of the oblique determiner across Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ergative proper noun subjects | - | - | $\sqrt{n}$ | $\overline{ }$ | - | - | - |
| oblique proper noun subjects | - | $\sqrt{ }$ | $\sqrt{ }$ | $(\sqrt{ })$ | $\sqrt{ }$ | - | - |
| oblique common noun subjects | - | - | - | $(\sqrt{ })$ | - | - | - |

As can be seen in the table, the distribution of the NK oblique determiner most closely resembles that of SQ. UH, on the other hand, has extended the distribution of its proper noun determiner from oblique arguments to ergative subjects (thus marking passive and active transitive proper noun agents identically: see Galloway 1993a:390). ${ }^{16}$ The NSS oblique $t l=\sim \dot{x}=$ determiner is distinct in a number of ways: aside from being present on common as well as proper names, it seems to be more generally optional, unlike its counterparts in the other languages (see Montler 2018:676 on SENĆOTEN/Saanich).

### 3.3.2 Loss of the oblique marker/preposition

Most CS languages have a "catch-all preposition" (the term is from Gerdts 2010) which introduces oblique arguments of all kinds, including antipassive objects, passive agents, instruments, and locations. In most of CS, the oblique marker is $(P)_{z=}=$, but in SQ it is $t=$, the form used in most Interior Salish languages. ${ }^{17}$

[^11]Because schwa is notoriously evanescent, the oblique marker is frequently dropped even where it is underlying present: but two languages (UH and NK) have lost it completely, meaning it never surfaces and cannot be restored. (A third, CX, is also well on the way to losing it, as documented in Davis and Huijsmans 2017.)

As with the $* 3>2$ ban, negative evidence is required to show that the oblique marker is definitively absent, and since such evidence is not available in the NK corpus, we must rely on two types of indirect evidence: first, there are no attested cases of oblique $P_{a}=$, and second, where we would expect it to occur (e.g., on passive agents), it is absent, as shown in (12).

| Ilh | $\underline{\text { xétl'enem }}$ | te John | ta sqwemáy. |
| :---: | :---: | :---: | :---: |
| Pił= ${ }^{\text {a }}$ | x̌ว̀え̇-ən-əm | ta=John | ta=sqwəmáy |
| AUX=3SUBJ | bite-CTR-PASS | DET=John | DET $=$ dog |
| John was | by the dog. |  |  |

The form and distribution of the general oblique marker across CS is given in Table 6.
Table 6: The general oblique marker/preposition across Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| oblique marker | $P_{\partial}=$ | - | - | $\rho_{\partial}=$ | $t=$ | $\rho_{\partial}=$ | $\left(P_{\partial}=\right)$ |

As the table shows, loss of the oblique marker is a local development, confined to NK and UH (and in fact, there is variation within HL, with IH retaining it and DH showing an intermediate pattern). It seems most likely that NK lost oblique marking under UH influence; however, there is no evidence against the change going in the other direction.

### 3.4 The distribution of overt DPs

In this section, I discuss two parameters of word order variation. The first is the possibility of prepredicative subjects (i.e., $\mathrm{SV}(\mathrm{O})$ order), discussed in Section 3.4.1; the second concerns post-verbal word order variation in transitive clauses with two overt DPs, discussed in Section 3.4.2.

### 3.4.1 Pre-predicative subjects

The distribution of pre-predicative subjects in CS is given in Table 7.
Table 7: Pre-predicative subjects in Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{SV}(\mathrm{O})$ | - | $\sqrt{ }$ | $\sqrt{ }$ | - | $\sqrt{ }$ | $\sqrt{ }$ | - |

As the table shows, subject-initial clauses are well-attested in a block of contiguous languages from NK to SE; they are either highly marked or absent elsewhere. ${ }^{18}$

[^12]SVO is in fact the most common word order in the NK corpus for transitive clauses with two DP arguments, as illustrated in (13). ${ }^{19}$ (Notice also that this example shows a non-oblique proper noun subject in an active transitive clause: this would be impossible in HL.)

| (13) | Tsa Mathilda | ilh | ílenas | te schatl' | tl' Sammy. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ca=Mathilda | Pi1 | ?íl-ən-Ø-as | ta=s-čáđ | $\dot{\lambda}=$ Sammy |
|  | FEM.DET=Mathilda | AUX | hide-CTR-3OBJ-3ERG | DET=NMLZ-toy | OBL.DET=Sammy |
|  | 'Mathilda hid the toy | m | my.' |  |  |

### 3.4.1 Postverbal DPs

Table 8 shows the distribution of post-verbal DPs in active transitive clauses across CS.
Table 8: Distribution of post-verbal DPs in Central Salish

| LU | NK | UH | NSS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | VOS | VSO | VSO | VSO | VSO | $\ldots$ |

There are three attested patterns. First, two languages at the periphery of CS, LU in the south, and (contemporary) CX in the north, simply do not permit a subject DP in active transitive clauses. (TW appears to be identical to LU in this respect.) Passive is triggered in both languages to allow the expression of an overt DP agent, which may then surface as an oblique: see Davis and Huijsmans (2017) and references therein.

Second, a bloc of languages from SS to SE show unmarked verb-subject-object (VSO) order, with verb-object-subject (VOS) also permitted as a marked order when no ambiguity arise.

And finally, NK alone shows the opposite pattern, with a clear preponderance of VOS over VSO clauses. Though the overall number of such clauses in the NK corpus is very small (reflecting the generally marked status of clauses with two overt DPs throughout the family), the proportion of VOS to VSO clauses is $6: 1$ : this is unlikely to be accidental and is quite different from any other CS language. (Unmarked VOS is much more widespread in IS, where it is almost as common as VSO, with several languages showing dialect splits.) An example of VOS order in NK is given in (14); see also (7) above.

|  | ta sqwemáy | qe | ta pus | tsa q ámay |
| :---: | :---: | :---: | :---: | :---: |
| $n-[n] \partial x^{w}-\emptyset$-as | ta=s-qwəmáy | qə | =pus | $\mathrm{ca}=$ qámay |
| see-LCT-3OBJ-3ERG | DET=NMLZ-dog | CONJ | DET=cat | FEM.DET=g |

'The girl saw the cat and the dog.'

### 3.5 The transitivity system

In broad outline, both the form and function of intransitive and transitive marking in NK are very much in line with other CS languages; however, within the larger picture, there are a number of interesting points of comparison between NK and other languages and subgroups.

In the following subsections, I examine intransitive markers (Section 3.5.1), transitivizers (Section 3.5.2) and applicative markers (3.5.3).

[^13]
### 3.5.1 Intransitive markers

Table 9 compares intransitive markers across CS.
Table 9: Intransitive Markers across Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| active intransitive | -alik ${ }^{\text {w }}$ | -áls ~-als | $-a \cdot l s \sim-\partial l s$ | -als | -im | -جวт | -Pam |
| developmental | -il | -iĺ |  |  |  |  | - |
| autonomous | -agwil | -(w)il | -il $\sim-a l$ | $-i l l$ | $-i ?$ | -il ~-al | -iyiš |
| middle | -b | -m | -m | $-\eta$ | -m | -m | -m |

All of the intransitive markers in NK have counterparts throughout CS, but not all of them have the same shape.

To start with, there is a notable split in active intransitive marking between the three northernmost languages represented here (including SQ as well as SE and CX ) and the more southerly languages, including NK. The former use a suffix probably originally derived from a glottalized version of the middle suffix -(ว) $m$, while the latter all have a suffix beginning with [al], realized as -als $\sim-\partial l s$ in NK and its neighbours HL and NSS (as well as KL); the extra increment $\left[i k^{w}\right]$ in LU is unaccounted for. Here NK shows the same pattern as all its immediate neighbours; an example is given in (15).

| (15) | Ay | qw'oyáls | ta mósmos. |
| :--- | :--- | :--- | :--- |
| Pay $=\varnothing$ | q́wy-áls | ta=músmus |  |
| IPFV=3SUBJ | die-ACT | DET=cow |  |
|  | 'He's butchering a cow.' |  |  |

The autonomous and developmental suffixes have a complex distribution across Salish (see Kinkade \& Kiyota 2004). They are most clearly distinguished in IS, where the autonomous takes the form -ilx $\sim-l a x$ and has a lexical reflexive meaning, while the developmental is realized as a lexically stressed (strong) suffix -wilx and has an inchoative ('become') meaning. In CS, these two suffixes have partially or completely merged in most languages (and the autonomous suffix has partially been supplanted by reflexives); however, in NK and LU, a phonological difference between the two can still be detected, based on the presence of an initial $[w] \sim\left[g^{w}\right]$ in the autonomous suffix which is missing in the developmental suffix. ${ }^{20}$ NK examples of the autonomous and developmental suffixes are given in (16) and (17), respectively. This is one of the few places where NK and LU pattern together in opposition to the rest of CS, though it is unclear whether the resemblance is due to contact or to shared history. ${ }^{21}$

[^14]| (16) | Mi lha | tesewíl | xwemí | tl’a ánats! |
| :--- | :--- | :--- | :--- | :--- |
| mí=ta | tos-wíl | x $^{\text {w}}$-əmí | $\dot{\lambda}+$ Pánac |  |
| come=IMP | close-AUT | DIR-come | OBL.DET+1SG.INDP |  |

'Come close to me!'
(17)

| Ilh | thatí17 | ta tsoxátsot. |
| :---: | :---: | :---: |
| 2il=Ø | $\theta a t-1{ }^{\text {l }}$ | ta=cux̌ácut |
|  |  |  |

'The sun grew dark (as in an eclipse).'

### 3.5.2 Transitivizers

Table 10 shows the basic (non-applicative) transitivizers in Central Salish.
Table 10: Transitivizers across Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| control | $-t$ | $-\boldsymbol{t}, \boldsymbol{- n}(\boldsymbol{t})$ | $-t$ | $-(\partial) t$ | $-t,-n t$ | $-t$ | $-t$ |
| limited control | $-d x^{w}$ | $-\boldsymbol{n a \boldsymbol { x } ^ { w }}$ | $-l \partial x^{w}$ | $-n a x^{w}$ | $-n \partial x^{w}$ | $-n \partial x^{w}$ | $-(n) x^{w}$ |
| causative | $-t x^{w}$ | $-\boldsymbol{t \boldsymbol { x } ^ { w }}$ | $-s t \partial x^{w}$ | $-t a x^{w}$ | $-s$ | $-s t x^{w}$ | $-s x^{w}$ |
| (transitive) | - | $(-\boldsymbol{n s})$ | $(-l a s)$ | $-n \partial s$ | - | - | - |
| (purposive) | - | $\left(-\boldsymbol{a s} \sim \boldsymbol{a} \boldsymbol{x}^{y}\right)$ | $\left(-\partial x^{y}\right)$ | $-a s \sim-\partial s$ | - | $(-a \check{s} \sim i s ̌)$ | $(a \check{s} \sim i \check{s})$ |

Of the five transitivizers shown in the table, the first three are "core" transitivizers which derive the vast majority of transitive verbs in all CS languages; the other two (parenthesized) are relic forms that attach to a small, finite set of roots.

As with intransitive markers, a comparison of core transitivizers in NK with those of its CS relatives is more striking for its similarities than for its differences. In fact, beyond regular phonological correspondences $(*[n]>[1]$ in UH, $*[n]>[d]$ in $\mathrm{LU}, *[\check{s}]>[\mathrm{s}], *[\mathrm{u}]>[\mathrm{a}]$ in HL and NSS), there are only two points of variation, both of which include NK.

The first is the presence of an $-n(t)$ variant of the control transitivizer, which has a counterpart in SQ but nowhere else in CS. A NK example is given in (18).
(18) Ilh xáykw'anas.

२ił x̌áyk ${ }^{\text {w }}-$ an- $\varnothing$-as
aUX dry-CTR-3OBJ-3ERG
'He dried it.'
In IS, $-n$ is a standard component of control transitives: for example, in TH and SH, $-n$ acts as a pre-transitivizer, yielding a systematic -n-t pattern, while in LI, $-t$ has been reanalyzed as part of the system of object pronouns, and the control transitivizer is simply $-n$. In this respect the NK

[^15]system, like SQ, is conservative relative to the rest of CS, and distinct from its immediate neighbours. ${ }^{22}$

The second difference involves the deletion of [s] in the causative suffix *-strxw. Here NK patterns with LU and NSS (and contra UH) in deleting [s]; since deletion is presumably innovative, local influence from the south and west is likely here. (SQ has undergone a distinct reduction of *-stax ${ }^{w}$ to $-s$, an innovation it shares with LI and other NIS languages to the east.) An example of causative - $t x^{w}$ in NK is given in (19).
(19) T'ókw'txwas.
túkw-tx"w-Ø-as
go.homeward-CAUS-3OBJ-3ERG
'She took it home.'
The relic transitivizers are of chief interest for their geographical distribution: *-nas is confined to the South Georgia languages HL, NK, and NSS (excluding SQ) while the distribution of the purposive transitivizer *-ǎs ~-iš also includes the North Georgia languages, and thus is likely to be of greater antiquity, with local losses in SQ and LU. ${ }^{23}$ NK examples of $-n(\partial) s$ and the purposive transitivizer are given below in (20) and (21), respectively.

| (20) | Ilh chaxw | tl'ínsem. |
| :---: | :---: | :---: |
|  | 2íl=čax ${ }^{\text {w }}$ | 入̀íns-əm |
|  | AUX=2SG. | like/want |
|  | 'You are li | wanted.' |

(21) Ilh ay kwálxes.

Pił Pay $\mathrm{k}^{\mathrm{w}} \mathrm{a}^{1}-\mathbf{x}^{\mathrm{y}}-\varnothing$-as
AUX IPFV hide-PUR-3OBJ-3ERG
'He is hiding it.'

### 3.5.3 Applicatives

There are three main applicative transitive combinations in CS, shown in Table 11. (For a detailed look at applicatives across the family, see Kiyosawa and Gerdts 2010, whose labeling conventions I adopt here.)

[^16]Table 11: Applicatives across Central Salish ${ }^{24}$

|  | LU | NK | UH | NSS | SQ | SE | CX |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| redirective | $-y i-t$ | $-s ̌ i-t \sim-\boldsymbol{x}^{y} \boldsymbol{i}-\boldsymbol{t}$ | $-\partial t c-t,(-\partial s-t)$ | $-s i-t,-a s-t$ | $-s ̌ i-t$ | - Pam-t | - -Pam-t |
| relational | - mid | - | $-m \partial-t$ | $-\eta i-t$ | $(-m i n-t)$ | $-m i-t$ | $-m i-t$ |
| indirective | $(-d i d)$ | $-n i-t$ | - | $(-n i-t)$ | $-n i-t$ | $(-n i-t)$ | $(-n i-t)$ |

Looking first at the redirectives, NK patterns with LU (and TW), NSS (and KL), and SQ in using reflexes of Proto-Salish $*_{-x i-t}$ as their redirective markers. The distribution of these forms is widespread, indicating that it was the original pattern, supplanted locally by innovative forms in the North Georgia region (-Pวm-t) and HL (-ətc-t, -əs-t: for the latter, see Gerdts 2010). This hypothesis is confirmed when we look further afield: reflexes of $*$-xi-t are found in all major branches of the family, and it is the only redirective applicative which can be clearly reconstructed to Proto-Salish (Kiyosawa \& Gerdts 2010). A NK redirective is given in (22).

## (22) Óxwshits. <br> ?úx̌w-šit-s <br> go-RDR-1SG.OBJ <br> 'Go get it for me.'

Turning to the relationals, the most significant variation is the absence of reflexes of the ProtoSalish relational suffix *-min $(-t)$ in NK. This is tied to the fact that NK makes much more extensive use of indirective *-ni-t than most other CS languages, where it is generally confined to a very few stems (around 6 in SE and 2 in CX, for example). A NK example is given in (23):
(23) Oxxw chewáxnitas.
?ux̌ ${ }^{\text {w }}$ čəwax ${ }^{\text {y }}$ nit- Ø-as
go wife-IND-3OBJ-3ERG
'He went to get her for a wife.'

The only other CS language with an appreciable number of ni-t forms is SQ , where, significantly, -min- $t$ is also marginal: Kuipers (1967:78) reports only three stems with min- $t$, one of them representing a less usual alternate of -ni-t. NK/SQ thus represents the inverse of the situation in the rest of CS.

Looking further afield, $*_{-n i-t}$ is confined to Coast Salish (including Tsamosan as well as the Central branch), whereas *-min( $-t$ ) is widespread both in Interior and Coast Salish, again including the Tsamosan branch. The most likely explanation for the present distribution involves competition between *-ni-t and *-min-t at an earlier stage of Coast Salish, with -min-t winning out except in NK and $S Q$.

[^17]
### 3.6 Clausal negation

Clausal negation shows significant variation across CS. ${ }^{25}$ In NK, it follows a pattern known as "Type B" in the classification of Davis (2005), characterized by subjunctive subject marking on the complement to the negative predicate, with a "doubled" subject clitic attached to the negative predicate itself, as shown in the NK example in (24) below.

```
Ów7a chan t'iliman.
?ว́w`ว=čan tíl-im=an
NEG=1SG.SUBJ sing-MID=1SG.SJV
'I did not sing.'
```

Type B is attested in five CS languages: HL, NK, SE, CX, and PT. In other CS languages, the negative predicate either: (i) takes a nominalized subordinate clause ("Type A"), as in LU, and also as a secondary pattern in NSS, KL, HL, and probably TW; ${ }^{26}$ (ii) acts as an auxiliary, as in NSS, KL, and TW ("Type C"); or (iii) in the case of SQ, shows a distinct subjunctive pattern ("Type B'"), introduced by the irrealis complementizer $q=$.

The distribution of these patterns is shown in Table 12.
Table 12: Clausal negation across Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type A | primary | - | secondary | secondary | - | - | - |
| Type B | - | primary | primary | - | - | primary | primary |
| Type B' | - | - | - | - | primary | - | - |
| Type C | - | - | - | primary | - | - | - |

The distribution of Type B is disjoint, encompassing the South Georgia languages NK and HL and the North Georgia branch, including PT as well as SE and CX, separated by SQ in the middle. I explore the significance of this distribution in Section 5.1 below.

SQ shows a unique Type B' pattern that, as discussed in Davis (2005), likely represents a precursor of Type B: however, this does not explain why Type B languages appear on both sides of it. In any case, Type B negation in NK is most likely borrowed from UH, which is the only of its neighbours to show this pattern.

### 3.7 Independent pronouns and clefts

Here, I discuss two parameters of variation for independent pronouns, and a third based on the form of the clefting predicate, which in most CS languages is formally identical to the third-person independent pronoun. The first parameter concerns the opposition between alternating and invariant pronoun systems (Section 3.7.1); the second, the use of first- and second-person independent pronouns instead of object agreement (Section 3.7.2); and the third, the form of the clefting predicate (Section 3.7.3).

[^18]
### 3.7.1 Alternating versus invariant independent pronouns

The distinction between invariant and alternating independent pronoun systems is introduced in Davis (2022): in invariant systems, the pronoun has the same form in both predicate and argument positions, whereas in alternating systems, including NK, a pronoun in argument position is introduced by a determiner (25a) which is missing in predicate position (25b).
a. Nestl',́́
tanowí.
nว-s-خ̀̀́= Ø
1SG.POSS-NMLZ-like/want=3SUBJ
ta+newí
'I like you.' ('You are my liking.')
$\begin{array}{llll}\text { b. } & \text { Oxw kwom } & \text { nowí } & \text { nswáqets. } \\ \text { Púx }{ }^{\text {w }}=\emptyset=k^{\text {w }} ə \mathrm{~m} & \text { nəwí } & \text { n-s-wáqəc } \\ \text { PROS=3SUBJ=FUT } & \text { 2SG.INDP } & \text { 1SG.POSS-NMLZ-husband } \\ & \text { 'You will be my husband.' ('It is going to be you who will be my husband.') }\end{array}$

The distribution of these systems is given in Table 13.
Table 13: Invariant and alternating independent pronoun systems in Central Salish

| LU | NK | UH | NSS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| invariant | alternating | alternating | alternating | alternating | alternating | invariant |

The pattern shown here clearly sets off the periphery of Central Salish territory (LU and CX) against its core (the other five languages). On well-established principles of diachronic change, this strongly suggests an older pattern at the edges being supplanted by an innovative one in the middle.

This conclusion is further supported by the fact that elsewhere in the family (e.g., in the Interior) the invariant pattern is the rule (see Davis 2022). NK, as a member of the South Georgian core, shares the innovative pattern.

### 3.7.2 Free use of independent pronouns as arguments

The second parameter concerns the use of first and second-person independent pronouns with third person object agreement as a freely available alternative to first and second-person object agreement. An example from NK is given in (26): see also (7) above and Wiltschko and Burton (2004) for UH.

| Ilh chan | xlhet | teweláp. |
| :--- | :--- | :--- |
| Píl=čan | x̆l-ət- $\emptyset$ | ta+waláp |
| AUX=1SG.SUBJ | hurt-CTR-3OBJ | DET+2PL.INDP |
| 'I beat you folks up.' |  |  |

The distribution of this pattern is given in Table 14.

Table 14: Use of $1^{\text {st }}$ - and $2^{\text {nd }}$ - person independent pronouns as arguments in Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| free use of independent pronouns as arguments | - | $\sqrt{n}$ | $\sqrt{ }$ | - | - | - | - |

As the table shows, this development is a local innovation shared between NK and UH, with UH the most likely source. ${ }^{27}$

### 3.7.3 The clefting particle and the third-person independent pronoun

All Central Salish languages make use of a special predicative particle to introduce the equivalent of an English cleft construction (referred to by Kroeber 1999:370 as an "introduced cleft"): this particle is probably best treated as an equational copula, as assumed in, e.g., Davis (2022).

In most CS languages (including NK), the clefting predicate is identical in form to the thirdperson independent pronoun. ${ }^{28}$ It is an open question, however, whether its syntax is distinct: see Davis (2022) and references therein. A NK examples of a cleft (27a) and a predicative third-person independent pronoun (27b) are given below.
$\begin{array}{ll}\text { a. } & \text { Tl' } \\ \lambda^{\prime} \mathbf{o} \\ \mathbf{c}=\varnothing\end{array}$
kw[7]áno ilh
yawán ha7lh. CLEFT=3SUBJ $\begin{array}{lllll} & \mathrm{k}^{w}[\mathrm{R}] \mathrm{a}-\mathrm{nu} & \text { Rif } & \text { yawán } & \text { ha } \\ \text { DEM-right }\end{array}$ AUX $\begin{array}{lll}\text { first } & \text { good }\end{array}$ 'That's the best.' ('It's that one (that) is the best.')
$\begin{array}{llll}\text { b. } & \text { Tl'o } & \text { an7ma } & \text { se7ásawot. } \\ \text { خ. } \mathbf{u}=\varnothing & \text { an=ma } & \text { soaásawət } \\ \text { 3INDP=3sUBJ } & \text { very=so } & \text { youngest.in.family } \\ & \text { 'He's the very youngest.' ('He is the one who is the very youngest.') }\end{array}$
Table 15 shows the form of the clefting predicate across CS, with the predicative form of the thirdperson independent pronoun for comparison. (Note that the three northernmost languages generally use demonstratives in place of third person independent pronouns, as indicated by DEM in the table.)

Table 15: Form of the clefting predicate and the $3^{\text {rd }}$-person independent pronoun in Central Salish

|  | LU | NK | UH | NSS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| clefting particle | dit | 俰u | ̇́a | nit | $n i t$ | $n i t$ | hit |
| $3^{\text {rd }}$-person independent pronoun | cadit | 效u | ̇́a | nit | (DEM) | nit (?) <br> (DEM) | (DEM) |

[^19]In the form of the clefting predicate, NK and UH differ from all the other languages represented here: whereas the latter all employ a reflex of PS *nit, NK and UH employ a predicative particle whose original form was likely $* \AA u$, with the subsequent $u \rightarrow a$ shift in HL yielding $\lambda a$. See Section 5.2 for discussion of the origin of this unusual form.

The relationship between the form of the clefting predicate and the third-person independent pronoun shows a three-way split. First, SQ, CX, and possibly SE (the data are not clear) do not use a reflex of PS *canit for the third-person independent pronoun: instead, they employ a demonstrative pronoun. Second, in NK, HL, and SS, third-person pronouns are identical to the clefting predicate when in predicate position, but are introduced by determiners in argument positions, since these languages have alternating pronoun systems (see Table 14). And third, LU (as well as TW) is conservative in maintaining a formal distinction between its third-person independent pronoun cadit and its clefting predicate dit.

## 4 Results

Table 16 summarizes the most salient grammatical differences which emerge from the comparison carried out in Section 3 between NK and its CS relatives and neighbours. NK is set to positive for each of the sixteen variables in the table.

Table 16: Grammatical variation across Central Salish from a NK perspective

|  | LU | NK | UH | NSS | SQ | SE | CX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| imperfective auxiliary | - | $\checkmark$ | - | - | $\checkmark$ | - | - |
| oblique proper noun determiner | - | $\checkmark$ | $\checkmark$ | ( $\sqrt{ }$ ) | $\checkmark$ | - | - |
| no oblique marker | - | $\checkmark$ | $\checkmark$ | - | - | - |  |
| 3 ergative suffix in indicative clauses | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ |
| no 3 ergative suffix in subjunctive clauses | $\checkmark$ | $\checkmark$ | - | - | - | - | - |
| 3 ergative suffix in nominalized clauses | - | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | - | $\sqrt{ }$ |
| *3>2 | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - |
| promotional passive | $\checkmark$ | , | - | $\checkmark$ | $\checkmark$ | - | - |
| $\mathrm{SV}(\mathrm{O})$ word order | - | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | - | - |
| unmarked VOS word order | - | $\checkmark$ | - | - | - | - | - |
| use of *-xi-t redirective | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\sqrt{ }$ | - | _ |
| use of -ni-t rather than -min-t | - | $\checkmark$ | - | - | $\checkmark$ | - |  |
| pattern B negation | - | , | $\checkmark$ | - | - | $\checkmark$ | $\checkmark$ |
| alternating independent pronouns | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - |
| free use of independent pronouns as arguments | - | $\checkmark$ | $\checkmark$ | - | - | - | - |
| use of $\hat{\chi} u / \hat{\lambda} a$ as clefting predicate | - | $\checkmark$ | $\checkmark$ | - | - | - | - |

### 4.1 Nooksack is an independent grammatical system

Of the 16 different parameters represented here, NK shares 10 with SQ and UH, 6 or 7 with NSS, 4 with SE, and 3 with LU and CX.

These results are striking in two ways. First, they clearly establish NK as a grammatical system in its own right, parallel to Galloway's findings for phonology. Though there is only a single trait which sets NK off against all other Central Salish languages (unmarked VOS word order), the maximum number of values which it share with any other single language is 10 (62.5\%).

Second, on the question of the relative influence of history over geography on the grammar of NK, a clear answer emerges. NK shares 10 traits with its close relative SQ, even though they are not neighbours (or at least, not in recent history). On the other hand, it shares only three traits with its more distant relative but immediate neighbour, LU: aside from CX, which is both historically and geographically distant, this is the lowest number of characteristics it shares with any other CS language.

This is particularly striking in view of the fact that two out of the three principal NK speakers represented in the corpus (SJ and LG) were first language speakers of the Upper Skagit dialect of LU. It is clear that these speakers maintained NK and LU as quite separate grammatical systems. ${ }^{29}$

## 5 Nooksack as a window into the history of Central Salish

What more can we learn from these results about the history of CS?
First of all, the high number of grammatical traits shared between NK and SQ (10) suggests that they must have been geographically contiguous at some point. This is further reinforced by the fact that, though NK also shares 10 traits with neighbouring UH, these are not always the same as those it shares with SQ. The overlap between the three languages is $60 \%(6 / 10)$, which means that $40 \%$ of the characteristics shared between NK and SQ "skip" UH. ${ }^{30}$

This means one of three things: either (i) SQ speakers moved across HL territory from the south to their current location, (ii) NK speakers moved in the opposite direction, or (iii) HL bisected SQ and NK. The third possibility seems much the most likely, which in turn suggests that UH arrived later in the area - and this in turn raises the issue of where it came from. There are really only two possible directions: from the east (the Upper Fraser Valley and Lower Fraser Canyon, adjacent to TH territory), from where it spread downriver to present DH territory and then across the Georgia Straight to current IH territory; or from the west, either from DH territory, or even further west, from IH territory across the Georgia Straight.

I want to suggest - tentatively - the last of these possibilities, drawing on the following lines of argumentation:
(i) There are some otherwise inexplicable connections between HL and the North Georgia languages - crucially excluding SQ. The only place where there is geographical contiguity between CX, PT, and SE on the one hand and HL on the other is in the Georgia Straight area.
(ii) SQ has had obvious and extensive morphosyntactic influence on its NIS neighbour LI. In contrast, UH has had very little grammatical influence on either LI or its other NIS neighbour nłe?kepmxcín/Thompson River Salish (TH), even though major trade and travel routes to the coast (via Harrison Lake in the case of the LI and the Fraser River in the case of TH) go right through UH territory in the Fraser Valley, and extensive contact has been documented in more recent historical times.

I elaborate on these points further in sections 5.1 and 5.2 , respectively.

[^20]
### 5.1 Halkomelem and the North Georgia languages

Two points of grammatical variation seem to indicate shared history between HL and the North Georgia languages.

The first is the retention of the non-promotional passive, shared by HL, CX, SE, and probably PT (see Section 3.2.3 above). It is of course conceivable that resistance to the (presumably innovative) promotional passive took place independently in HL and the North Georgia languages. However, it is less likely that the promotional passive developed independently in SQ from NK, NSS, and LU: passives in all of these languages share the same form, with the third-person passive $-m$ generalizing to all persons and supplanting the subordinate passive - $t$ (see Kroeber 1999:2628). If promotional passive is a shared innovation, then SQ must have been contiguous to NK at the time it took place, which suggests HL speakers were later arrivals in the Fraser Valley. And if HL originated in the Georgia Strait region, this would in turn make promotional passive-resisting languages into a contiguous block on either side of the Strait.

The second point involves the distribution of Type B negation, which is very unlikely to have developed independently in HL and the north Georgia languages, given its rather unusual profile, involving a main clause (indicative) subject clitic on the negative predicate doubling a subjunctive subject clitic on the negated predicate (see Section 3.6 above).

Type B languages include NK, HL, and the North Georgia branch, including CX, SE, and PT. NK almost certainly borrowed the pattern from UH, but where did the North Georgia languages get it? Once again, we are led to the conclusion that HL must have been in geographical proximity to CX, PT, and SE when it developed - and since SQ is not a Pattern B language (it has a distinct system of subjunctive negation), the only location which fits this description is the Georgia Strait region where IH is spoken.

### 5.2 Transmontane contact with NIS languages

Patterns of "transmontane" grammatical borrowing between CS and NIS suggest that SQ and NK have been in longer linguistic contact with LI and TH than UH has.

There has been extensive lexical borrowing from both SQ and HL into LI and TH (Kinkade 1995; Kuipers 2002; Pincott 2020). ${ }^{31}$ However, morphosyntactic influence on LI is confined to SQ. As has been documented extensively, beginning with Newman (1979a,b, 1980), the LI pronominal system has been partially borrowed from SQ; there is nothing like this scale of influence on LI from UH. ${ }^{32}$

As for TH, there seems to be no trace of CS influence from either SQ or HL on its grammar, even though the most important trade route from the interior to the coast went right down the Fraser River from TH territory through UH territory. This again suggests that HL speakers were later arrivals in the Upper Fraser Valley.

On the other hand, there are at least three apparent cases of grammatical borrowing by NK from TH, suggesting an earlier period of transmontane contact.

The first (noted by Galloway 1997:34) involves the non-control intransitive morpheme -nwéłan (present in TH and SH, but not in contemporary LI), which shows up in two CS languages: first, in

[^21]SQ as a 'limited control unergative' marker (Jacobs 2011:141), and second in NK (oddly) as the first-person plural object marker -watan, first recognized by Galloway (1997) and illustrated in (28) below.

| (28) | Ilh | ay | po7otxwálhanas | ta spo7ch. |
| :--- | :--- | :--- | :--- | :--- |
| Pił | Pay | puPu-tx $w+[w]$ áłən-as | ta=spúpč |  |
|  | AUX | IPFV | blow-CAUS+1PL.OBJ-3ERG | DET=wind |

'The wind was blowing on us.'
I have no idea why *-nwatzn ended up as an object marker in NK, but the existence of reflexes of this morpheme in NK and SQ, but not in HL, suggests an earlier period when TH was in contact with SQ and NK.

The second case involves the clefting predicate/third-person intransitive pronoun, which shows up as $\dot{\tilde{\tau}} u$ in NK and as $\dot{\tilde{~}} a$ in mainland HL (DH as well as UH): see Section 3.7.3 above. The phonological difference between the NK and HL forms suggests it was borrowed from NK into HL prior to the $u \rightarrow a$ shift which affected the latter, setting an upper time limit on the arrival of HL speakers into the Upper Fraser Valley. ${ }^{33}$ However, this does not tell us where * $\tilde{\prime} u$ came from in the first place.

There do not appear to be any obvious candidates in CS, but there are in NIS: specifically, the exclusive particle $\grave{\lambda}$ ? 'so, just, but, only' which is ubiquitous in both TH and LI. ${ }^{34}$ While it is not itself a clefting particle, $\grave{\star} u$ ? occurs predictably in both languages in the exclusive, ('only') construction, which is a type of cleft, involving the predicate $c u k^{w}$ 'finish' together with $\grave{\hbar} u$ ?.
cúk ${ }^{\mathrm{w}}=\AA$ えu?=we? $\quad$ e=kéyx $\quad e=$ wík-t- $\varnothing$-ne.
finish=EXCL=DEM DET=hand COMP=see-TRA-3OBJ-1SG.ERG
'I only see a hand there.' (literally 'It's only a hand that I see there.')
(TH: Koch \& Zimmermann 2009:242)
cúk ${ }^{\mathrm{w}}=$ 久̌u? láti? ta=skákst=a wa? Páčx̌-ən- $\varnothing$-an
finish=EXCL DEM DET=hand=EXIS IPFV see-TRA-3OBJ-1SG.ERG
'I only see a hand there.' (literally 'It's only a hand that I see there.')
This opens up the possibility that NK borrowed $\dot{\lambda} u$ ? , likely from TH, and reanalyzed it as clefting predicate, once again attesting to early contact between the two languages.

[^22]A third case of potential TH influence involves the ubiquitous NK auxiliary Pit (see examples (3), (5-7), (10)-(13), (17)-(18), (20)-(21), and (26)-(28) above). In his preliminary draft of the NK grammar, Galloway assumes that $3 i t$ must be derived from the common UH auxiliary $? i$ (also present in NK) plus a reduced version of the past tense enclitic $=u$. The problem with this hypothesis is that there is clearly no past tense component to Pit: it occurs readily in present tense contexts (31) and co-occurs with $=u t$ in past tense contexts (32):
(31) Ilh oxw á7axits.

2il=Ø $\quad$ ?ux̆ ${ }^{w} \quad$ Pá<?a>x̌ič
AUX=3SUBJ go lie.down<DIM>
'He's going off to lie down for a bit.'
(32) Iĺhalh tl'om?

2il=a+ul=Ø 文um
AUX $=$ Q + PST $=3$ SUBJ alright
'Was it alright?'
However, it turns out there is a plausible alternative source in NIS: the adverb ?eyt (TH) / Payt (LI), 'now, next', then', which is extremely frequent in both languages.

| $x^{w}$ úy $=$ kt=wi? | Peył |
| :--- | :--- |
| PROS=1PL.SUBJ=EMPH now | L-x́zéz-xən. |
| LOC-starve-foot |  |

(TH: Thompson \& Thompson 1996:7)

| xin | $\mathrm{k}^{\mathrm{w}}$ as |  |
| :---: | :---: | :---: |
| ong.time | DET+NMLZ+IPFV+3P | sick good-D |

'He was sick for a long time, now he has recovered.' (LI: Davis et al. in prep.)
The meaning of Payt/Reyt, which picks out the topic time of a discourse, is more compatible with the meaning of NK $P_{i t}$ than the $? i+u t$ alternative from UH, and the phonology is a good fit, particularly with the TH version, which is the most plausible IS source for the NK form. ${ }^{35}$

## 6 Conclusion

I hope to have shown here that the study of NK has a surprising amount to teach us about the history of CS, as well as being of obvious interest in its own right both to Salish linguistics and to the Lhechalosem speech community. The fact that a relatively coherent picture of its grammatical properties is now emerging also gives us grounds for optimism about how much information can be extracted from a small and fragmented, but nevertheless highly informative corpus. (It is difficult to estimate the exact size of the corpus, which is scattered across several collections and includes recordings which have not yet been transcribed, but it probably contains fewer than a thousand full sentences.)

[^23]Above all, however, the results reported here are testament to the dedication of the last fluent speakers of the language (George Swanaset, Sindick Jimmy, and Louisa George), as well as to the linguists who recorded them (Paul Fetzer, Pamela Thorsen Amoss, Barbara Efrat, Laurence C. Thompson, and Brent Galloway). And they are a particularly fitting tribute to the memory of Brent Galloway, who proudly bore a name given to him by the Nooksack Tribe, and who never lost his enthusiasm for the language over the 30 years that he dedicated to understanding and elucidating it.

## References

Adams, George, Brent D. Galloway, and Catalina Renteria. 2005. A Nooksack story from 1956: How to become an Indian Doctor. Papers for ICSNL 40:1-31.

Amoss, Pamela Thorsen. 1961. Nuksack phonemics. MA thesis. University of Washington, Seattle, WA.

Bar-el, Leora. 2005. Aspectual distinctions in Skwxwúmesh. Ph.D. dissertation. University of British Columbia, Vancouver, BC.

Beaumont, Ronald C. 1985. She Shashishalhem, the Sechelt Language: Language, Stories and Sayings of the Sechelt Indian People of British Columbia. Penticton, BC: Theytus Books.
Beaumont, Ronald C. 2011. Sechelt Dictionary. Sechelt, BC: Sechelt Indian Band.
Beck, David. 2007. A taxonomy of Lushootseed valency-increasing affixes. Papers for ICSNL 52:28-88

Beck, David. 2018. Aspectual affixation in Lushootseed: A minor reanalysis. In L. Matthewson, E. Guntly, and M. Rochemont (eds.), Wa7 Xweysás i Nqwal'úttensa i Ucwalmícwa: He Loves the Peoples' Languages: Essays in Honour of Henry Davis. Vancouver, BC: UBCOPL, 597612.

Czaykowska-Higgins, Ewa and Janet Leonard. 2015. North Straits Salish syntax. In T. Kiss and A. Alexiadou (eds.), Handbook of Contemporary Syntax. New York, NY: Mouton de Gruyter, 1726-1764.

Davis, Henry. 1999. Subject inflection in Salish. In Marion G. Caldecott, Suzanne Gessner, and Eun-Sook Kim (eds.), Current Research on Language and Linguistics. Vancouver, BC: UBCWPL, 181-239.

Davis, Henry. 2000. Remarks on Proto-Salish subject inflection. IJAL 66:499-520.
Davis, Henry. 2005. On the syntax and semantics of negation in Salish. IJAL 71:1-55.
Davis, Henry. 2022. Are pronouns ever predicative in Salish? Papers for ICSNL 57:1-42.
Davis, Henry, Beverley Frank, Rose Whitley and the Upper St'át'imc Language Authority. In preparation. Nqwal'uttenlhkálha: An English-Upper St'át'imcets Dictionary. Ms., Upper St'át'imc Language, Culture and Education Society, Lillooet, B.C.

Davis, Henry and Marianne Huijsmans. 2017. Changes in the alignment of arguments in transitive clauses in PayPay̆u日əm (Comox-Sliammon). Papers for ICSNL 52:13-46.

Drachman, Gaberell. 1969. Twana Phonology. Columbus, Ohio: Department of Linguistics, Ohio State University.
Galloway, Brent D. 1977. A grammar of Chilliwack Halkomelem. Ph.D. dissertation, University of California, Berkeley.
Galloway, Brent D. 1983. A look at Nooksack phonology. Papers for ICSNL 18:80-132.
Galloway, Brent D. 1984a. A look at Nooksack phonology. AL 26(1):13-41.
Galloway, Brent D. 1984b. Nooksack reduplication. Papers for ICSNL 19:81-100.
Galloway, Brent D. 1993a. A Grammar of Chilliwack Halkomelem. Berkeley, CA: University of California Press.

Galloway, Brent D. 1993b. Nooksack reduplication. In Anthony Mattina and Timothy Montler (eds.), American Indian Linguistics and Ethnography in Honor of Laurence C. ThompsonMissoula, MN: UMOPL, 93-112.

Galloway, Brent D. 1997. Nooksack pronouns, transitivity, and control. Papers for ICSNL 32, 197243.

Galloway, Brent D. 2009. Dictionary of Upriver Halkomelem, Volumes I and II. Berkeley, CA: University of California Press.
Galloway, Brent D. 2012. Work on the Nooksack file slips of Paul Fetzer. Papers for ICSNL 47:1346.

Galloway, Brent D., George Adams, and Catalina Renteria. 2004. What a Nooksack story can tell us about morphology and syntax. Papers for ICSNL 39:149-168.

Gerdts, Donna B. 1988. Object and Absolutive in Halkomelem Salish. New York, NY: Garland Publishing.
Gerdts, Donna B. 1989. Object agreement in the Halkomelem Salish passive: a morphological explanation. In M. R. Key and H. M. Hoenigswald (eds.), General and Amerindian Ethnolinguistics: In Remembrance of Stanley Newman. New York, NY, and Berlin, Germany: Mouton de Gruyter, 185-199.
Gerdts, Donna B. 2010. Ditransitive constructions in Halkomelem Salish: a direct object/oblique object language. In A. Malchukov, M. Haspelmath, and B. Comrie (eds.), Studies in Ditransitive Constructions: A Comparative Handbook. Berlin, Germany: De Gruyter, 563610.

Hess, Thom. 1995. Lushootseed Reader with Introductory Grammar. Volume I: Four Stories from Edward Sam. Missoula, MN: UMOPL.
Hess, Thom. 1998. Lushootseed Reader with Intermediate Grammar. Volume 2: Four Stories from Martha Lamont. Missoula, MN: UMOPL.
Jacobs, Peter. 2011. Control in Skwxwu7mesh. Ph.D. dissertation. University of British Columbia, Vancouver, BC.
Jelinek, Eloise and Richard Demers. 1983. An agent hierarchy in some Coast Salish languages. IJAL 49:167-185.

Kinkade, M. Dale. 1990. Prehistory of Salish languages. Papers for ICSNL 25:197-208. Vancouver, B.C.

Kinkade, M. Dale. 1995. Transmontane lexical borrowing in Salish. Papers for ICSNL 30:28-46. Victoria, BC.

Kinkade, M. Dale and Masaru Kiyota. 2004. Changing state in Salishan languages. Papers for ICSNL 39:31-40.

Kiyosawa, Kaoru and Donna B. Gerdts. 2010. Salish Applicatives. Leiden, Netherlands: Brill Publishing.

Koch, Karsten and Malte Zimmermann. 2009. Focus-sensitive operators in Nłe?kepmxcín (Thompson River Salish). Proceedings of Sinn und Bedeutung 14:237-255.

Kroeber, Paul. 1999. Reconstructing Syntax: The Salish Language Family. Lincoln, NE: University of Nebraska Press.

Kuipers, Aert H. 1967. The Squamish Language: Grammar, Texts, Dictionary. Janua Linguarum, Series Practica 73. The Hague, Netherlands: Mouton.

Kuipers, Aert H. 2002. Salish Etymological Dictionary. Missoula, MN: UMOPL.
Montler, Timothy. 2015. Klallam Grammar. Seattle, WA: University of Washington Press.
Montler Timothy. 2018. SENĆOfEN: A Dictionary of the Saanich Language. Seattle, WA: University of Washington Press.
Newman, Stanley. 1977. The Salish independent pronoun system. IJAL 43:302-314.
Newman, Stanley. 1979a. A history of the Salish possessive and subject forms. IJAL 45:207-223.
Newman, Stanley. 1979b. The Salish object forms. IJAL 45:299-308.
Newman, Stanley. 1980. Functional changes in the Salish pronominal system. IJAL 46:155-167.
Pincott, Ethan. 2020. When did the $* k>{ }^{c} c ̌$ shift occur in Central Salish? Papers for ICSNL 55, 257-264.

Seaburg, William. 1999. Whatever happened to Thelma Adamson? A footnote in the history of Northwest anthropological research. Northwest Anthropological Research Notes 33(1):73-83.

Suttles, Wayne. 2004. Musqueam Reference Grammar. Vancouver, BC: UBC Press.
Thompson, Laurence C. and M. Terry Thompson. 1996. Thompson River Salish Dictionary: nte?kepmxcin. Missoula, MN: UMOPL.

Van Eijk, Jan P., Aert H. Kuipers, Henk F. Nater, and Jan A. Timmers. 1974. Lillooet-Sechelt lexical parallels. Papers for ICSL 9:22-25.

Watanabe, Honoré. 2003. A Morphological Description of Sliammon, Mainland Comox Salish, with a Sketch of Syntax. ELPR Publications Series AZ-040. Osaka, Japan: Osaka Gakuin University.

Wiltschko, Martina, and Strang Burton. 2004. On the sources of person hierarchy effects. CJL 49:51-71.


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[^2]:    ${ }^{1}$ This situation hampered earlier fieldwork on the language by Boas's student Thelma Adamson, who visited Nooksack territory in the summers of 1928 and 1932, and wrote to Boas that NK "has been entirely replaced by Halkomelem... and has been for some time." (cited in Seaburg 1999:79). Interestingly, in the same letter Adams mentions a promising NK informant, who turns out to be none other than GS, the very same consultant who provided all of Fetzer's and great deal of Amoss's NK material in the 1950s. Sadly, Adamson's own fieldnotes have never been retrieved: see Seaburg (1999) for an account of her life and work.

[^3]:    ${ }^{2}$ This classification is the same as in Kuipers (2002:ix), with the minor exception that I have grouped Lushootseed and Twana together in the Puget branch, whereas Kuipers assigns Twana to a separate Hood Canal branch. Since I do not discuss Twana here extensively, nothing hinges on this decision.
    ${ }^{3}$ Not all ten Central Salish languages are equally well described: aside from NK, material on Twana (TW) and particularly Pentlatch (PT) is scanty, due initially to the small number of speakers of these languages and subsequently to the comparatively early date when they ceased being used regularly. These two languages (neither of which had close contacts with NK) are omitted from the systematic comparisons below, though mentioned where relevant. I have also collapsed Klallam (KL) together with Northern Straits Salish (NSS) into Straits Salish (SS), since the Straits languages are largely identical in relevant respects; again, differences are noted where they are known to occur.

[^4]:    ${ }^{4}$ Principal sources are as follows: for LU, Hess (1995, 1998), Beck (2007, 2018); for TW, Drachman (1969); for KL, Montler (2015); for Northern Straits Salish (NSS), Jelinek and Demers (1983), Czaykowska-Higgins and Leonard (2015), Montler (2018); for HL, Gerdts (1988, 1989: IH), Suttles (2004: DH), Galloway (1977, 1993a, 2009: UH); for SQ, Kuipers (1967), Bar-el (2005), Jacobs (2011); for Sechelt (SE), Beaumont (1985, 2011); and for RayPayu $\theta$ əm/Comox-Sliammon (CX) Watanabe (2003), Davis and Huijsmans (2017).

[^5]:    ${ }^{5}$ Beck (2018) argues that the LU progressive marker $l_{\partial}=$ is a proclitic, in contrast to the other viewpoint aspect markers, which are prefixes.

[^6]:    ${ }^{6} \mathrm{NK}$ examples are given in a four-line format. The first line is in the NK practical orthography designed by Galloway, based on his orthography for UH; the second is a phonemic transcription employing the North American Phonetic Alphabet (NAPA) in general use by Salish linguists, including morpheme breaks and zero morphemes; the third is a morpheme-by-morpheme gloss; and the fourth is an English translation. Abbreviations are as follows: $\mathrm{ABSN}=$ absent, $\mathrm{ACT}=$ active intransitive, $\mathrm{AUT}=$ autonomous intransitive, AUX $=$ auxiliary, CAUS $=$ causative transitivizer, CLEFT $=$ clefting predicate, $C O M P=$ complementizer, CONJ $=$ conjunction, $\mathrm{CTR}=$ control transitivizer, DEM $=$ demonstrative, $\mathrm{DES}=$ desiderative, $\mathrm{DET}=$ determiner, $\mathrm{DEV}=$ developmental, $\mathrm{DIR}=$ directional, $\mathrm{EMPH}=$ emphatic, $\mathrm{ERG}=$ ergative subject, $\mathrm{EXCL}=$ exclusive, EXIS = existential enclitic, FEM = feminine, FUT = future, IND = indirective transitivizer, INDP $=$ independent pronoun, IMP = imperative, IPFV = imperfective, LCT $=$ limited control transitivizer, LOC = locative, $\mathrm{MID}=$ middle marker, $\mathrm{NEG}=$ negation, $\mathrm{NMLZ}=$ nominalizer, $\mathrm{OBJ}=$ object, $\mathrm{OBL}=$ oblique, PASS $=$ passive, $\mathrm{PL}=$ plural, $\mathrm{POSS}=$ possessive, $\mathrm{PROS}=$ prospective aspect, $\mathrm{PROX}=$ proximal, $\mathrm{PST}=$ past tense marker, PUR = purposive transitivizer, $\mathrm{Q}=$ yes-no question marker, $\mathrm{RDR}=$ redirective applicative marker, RFLX $=$ reflexive, $\mathrm{SG}=$ singular, $\mathrm{SJV}=$ subjunctive subject clitic, $\mathrm{STAT}=$ stative, $\mathrm{SUBJ}=$ indicative subject clitic, TRA $=$ transitivizer. An equal sign (=) marks a clitic boundary, a hyphen ( - ) marks an affix boundary, and angled brackets ( $<\ldots>$ ) mark an infix (including reduplicative infixes); a plus sign ( + ) is used to mark instances where morpheme boundaries are unclear, for example where two or more morphemes are fused or contracted.

[^7]:    ${ }^{7}$ This is not quite true: though it is difficult to figure out its precise semantics, PT also clearly has a cognate of the SQ auxiliary wa, so it should be probably added to the short list of Central Salish languages with an imperfective auxiliary.
    ${ }^{8}$ Another possibility is that HL actually borrowed Pay from NK, though then it is harder to account for its use in UH exclusively as a main verb rather than an auxiliary.

[^8]:    ${ }^{9}$ The status of TW with respect to subject marking is unclear, though judging from the somewhat fragmentary evidence in Drachman (1969), it seems to behave largely like LU.
    ${ }^{10}$ Further variation is found with first- and second-person rather than third-person subjects: see Davis (1999, 2000), Kroeber (1999).
    ${ }^{11}$ Unfortunately, this is the only relevant example which has turned up in the NK corpus so far. This is not altogether surprising: crucial cases consist of a subjunctive clause containing a transitive verb with a thirdperson subject and a pre-predicative auxiliary, and such structures are unlikely to be numerous in a small corpus.

[^9]:    ${ }^{12}$ This example shows VOS word order, as discussed in Section 3.4 below.
    ${ }^{13}$ The Lummi dialect of NSS has a more extensive $* 1 / 2>3$ ban (see Jelinek \& Demers 1983). I do not include this in Table 3 since it is clearly a local development within NSS and does not affect NK.

[^10]:    ${ }^{14}$ The non-promotional pattern in CS is also characterized by differential passive marking in "main" and "subordinate" clauses (though main clause passive marking also surfaces in subordinate clauses with an auxiliary). See Kroeber (1999:26-28).
    ${ }^{15}$ As seems to be the rule for CS languages with non-promotional passives, HL shows a partially distinct passive object paradigm which cannot be transparently analyzed into sequences of object suffix + passive suffix. In addition, the control transitivizer and object suffixes in HL undergo "T-Obj fusion" (Gerdts 1989).

[^11]:    ${ }^{16}$ UH differs in this respect from DH, as described by Suttles (2004:49,52,348). In DH, proper names are simply prohibited from acting as the (ergative) subjects of active transitive predicates, which means that passive is always used with a proper name agent.
    ${ }^{17}$ This is curious, because the only Interior Salish language that borders SQ territory is St'át'imcets/Lillooet (LI), but LI's general oblique marker is $(?)^{2}=$, which is standard for CS, but not for IS, which generally uses $t=$. Furthermore, if LI borrowed $(\text { ( })_{z}=$ from UH, it would have had to do so prior to the latter losing it altogether.

[^12]:    ${ }^{18}$ It is worth mentioning that there is intra-language variation in Salish with respect to the availability of subject-initial clauses: see for example Davis and Huijsmans (2017), who document $\operatorname{SV}(\mathrm{O})$ order in a speaker of the Homalco dialect of CX, a language which otherwise prohibits pre-predicative subjects.

[^13]:    ${ }^{19}$ To be precise, I have found 14 instances of active transitive verbs with two overt DPs in the NK corpus; of these, half (seven) have SVO order, six have VOS order, and one has VSO order.

[^14]:    ${ }^{20}$ The difference between the autonomous and developmental is also clearly detectable in CX, but for a different reason. There, the developmental suffix is missing completely (its role is assumed by $\left.<\mathrm{C}_{2}\right\rangle$ reduplication), and the autonomous suffix has the shape -iyiš, with the [y] and [̌̌] clearly descended from the [1] and [x] in *-ilx, respectively.
    ${ }^{21}$ There is still a puzzle here, though: in IS, the developmental suffix comes with an extra [w], which is missing in the autonomous - in other words, the inverse of the situation in CS. This suggests a complex

[^15]:    historical picture, possibly with an originally undifferentiated $*$-wilx suffix which split separately into autonomous and developmental morphemes in the two main branches of the family.

[^16]:    ${ }^{22}$ TW has both a $-d$ transitivizer (descended from $-n$ by a regular sound change) and a $-t$ transitivizer (Drachman 1969). Both are usually deleted before a following C, making it hard to reconstruct their distribution, particularly given the sparsity of material on the language,
    ${ }^{23}$ All the examples of the purposive transitivizer in the NK corpus are from George Swanaset, and take the form -(a) $x^{y}$, as expected for "Halkomelemized" NK. We would predict a less UH-influenced version to be pronounced -(a)š.

[^17]:    ${ }^{24}$ For consistency, I have segmented each of these combinations into a pre-transitivizing applicative component and a transitivizer (as seems to have been the pattern in Proto-Salish): however, it is likely that in some languages, some or all combinations of the two components have fused.

[^18]:    ${ }^{25}$ I do not discuss negative existential predicates ('there is/are no...') here: they show a separate (though related) distribution. See Davis (2005).
    ${ }^{26}$ There is one example in the NK corpus where negation takes a nominalized subordinate clause, as in Type C languages.

[^19]:    ${ }^{27}$ There are scattered instances of this pattern in other languages (e.g., TW); however, particularly for languages such as TW where almost all available data were gathered at a point of severe language attrition, it is important to err on the side of caution in attributing such instances to the core grammar of the language, as opposed to a replacement effect triggered by the loss of agreement morphology.
    ${ }^{28}$ Historically, the third-person independent pronoun can be reconstructed to PS as *canit (Newman 1977), whereas the clefting particle nit is never realized with reflexes of an initial [c].

[^20]:    ${ }^{29}$ There are some minor influences of LU on the grammar of LG in particular: her grammar contains the "perfective" prefix wz-, clearly cognate with LU $u$-.
    ${ }^{30}$ The NK bias of the sample means it is not possible to generalize beyond these results on the basis of Table 16; a more comprehensive examination would include grammatical traits which distinguish other CS languages from each other, but not necessarily from NK.

[^21]:    ${ }^{31}$ The same is true to a somewhat lesser extent of borrowing from the North Georgia languages SE and CX into LI (van Eijk et al. 1974); trade routes to the coast are known to have existed from LI territory over the mountains and down the inlets into the Georgia Strait. 32

[^22]:    ${ }^{33}$ Another useful phonological marker for the time depth of the arrival of HL in the area is the partial palatalization of PS */k//k//x/ to $/ k^{y /} / k^{y /} / x^{y} /$ in mainland HL (DH and UH), in contrast to (nonHalkomelemized) NK and SQ, both of which have fully palatalized the Proto-Salish series to $/ \bar{c} / / \bar{c} / / \bar{s} /$. This suggests HL was originally more conservative than its CS relatives, with palatalization eventually spreading to IH but only partially to DH and UH, which in this respect alone makes HL the most conservative of CS languages. It also means that the arrival of UH speakers into their current territory must have predated the spread of palatalization to IH, setting an upper temporal bound for the migration. See also Pincott (2020) for evidence that palatalization must have taken place in CS after the branch had already started to diverge from Proto-Salish.
    ${ }^{34}$ It is just possible that * $\dot{\mathscr{L}} u$ is related to the oblique proper noun determiner $\dot{\tilde{t}}=$ found in both HL and NK as well as SQ. However, the more likely source for the latter is the oblique determiner $t=$ found in NSS: see Section 3.3.1 above.

[^23]:    ${ }^{35}$ Aside from its use as an auxiliary, $3 i t$ has two other functions in NK: as an existential verb 'be', and as a prepositional predicate 'be at/on/in', which is frequent in serial verb constructions. It is less easy to see how these uses are derived from TH Peyt.

