

Extracting Possessors in ʔayʔajuθəm (and Beyond)*

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Abstract: In this paper, we first examine possessor extraction strategies in ʔayʔajuθəm (Comox-Sliammon; ISO 639-3: coo), the northernmost Central Salish language, before comparing the ʔayʔajuθəm system to its five closest Salishan neighbours in the North Georgia region. We begin by showing that possessor extraction in ʔayʔajuθəm is highly restricted, occurring only with inalienably possessed body parts. In all other cases, in order to extract a possessor, the predicate *snaʔ* ‘be the owner of’, which takes the possessor as its direct (absolutive) argument, must be used. Curiously, *snaʔ* does not appear except in cases of possessor extraction. For all other cases of predicative possession (including extraction of the possessum), the nominal predicate *naʔ* ‘(one’s) own’ is used, which has an inverse argument structure: its direct (absolutive) argument is the possessum, while its possessor argument is realized in the form of a possessive affix, with or without an associated DP. While *snaʔ* and *naʔ* do not appear to be derivationally related, in other languages of the area, the counterpart of *snaʔ* is transparently derived from a denominal prefix with approximately the meaning of ‘have’ plus a possessive nominal predicate closely parallel to *naʔ*: this suggests a diachronic source for the *naʔ* ~ *snaʔ* alternation.

Keywords: ʔayʔajuθəm (Comox-Sliammon), extraction, possessor, syntax, Salish, North Georgia area

1 Introduction

In all the Salish languages where it has been investigated so far, Ā-extraction of the possessor argument of a DP seems to be either severely restricted or completely unavailable (see Kroeber 1999:282–283, 303), leading to alternative strategies for questioning, focusing, or relativizing a possessor. In this paper, we first examine possessor extraction in ʔayʔajuθəm (Comox-Sliammon; ISO 639-3: coo), the northernmost Central Salish language, before turning to a comparison of the ʔayʔajuθəm system with its Salishan neighbours in the North Georgia Strait region of British Columbia.

Watanabe (2003:134), the major grammatical reference for ʔayʔajuθəm, provides a single example of a relativized possessor:¹

* Our deepest gratitude goes to our generous and patient ʔayʔajuθəm consultants who make this work possible and so enjoyable, especially Elsie Paul, Betty Wilson, Freddie Louie, Joanne Francis, and the late Karen Galligos. Additional St’át’imcets (Lillooet) data came from Carl Alexander, to whom we are greatly indebted. We would also like to thank the other members of the ʔayʔajuθəm lab for comments and questions, and in particular Daniel Reisinger for first suggesting the comparison with Sechelt. We are also grateful to the Jacobs Research Funds for a group grant that supported this project, as well as SSHRC Insight grant #435-2015-1694 to Henry Davis. Authors’ e-mail addresses: Henry.Davis@ubc.ca, laurasegriffin@gmail.com, marianne.huijsmans@ubc.ca, gloria.mellesmoen@ubc.ca.

¹ We adopt Leipzig Glossing Rules throughout, with the additions of: AUX ‘auxiliary’, CLDEM ‘clausal demonstrative’, CLF ‘cleft particle’, CONJ ‘conjunction’, CTR ‘control transitivizer’, DPRT ‘discourse particle’,

- (1) kʷən-əxʷ-ul=č šə=tumiš [tih šə=məqsən-s].
see-NTR-PST=1SG.SBJ DET=man [big DET=nose-3POSS]
'I saw a man whose nose is big.'

As Watanabe (2003) points out, the morphosyntax of this example corresponds to a pattern also found in Squamish and Halkomelem, where the possessed noun retains its possessive affix, but otherwise the relative clause is identical in form to one involving extraction of the entire possessed argument.

- (2) swiʔqa [hií ta=məqsən-s]
man [big DET=nose-3POSS]
'(a) man whose nose is big' (Squamish: Kuipers 1967:177)
- (3) kʷθə=(swəy'qeʔ) [niʔ méʔkʷl kʷθə=stiqiw-s]
DET=(man) [AUX get.hurt DET=horse-3POSS]
'the man whose horse got hurt' (Downriver Halkomelem: Suttles 2004:78)
- (4) nówə [ni ʔá:t-ʔe:n θə=ʔən-stáʔləs].
2SG.INDP [AUX call-CTR-1SG.ERG DET=2SG.POSS-wife]
'You are the one whose wife I called.' (Island Halkomelem: Gerdts 1988:76)²

Similar examples are attested in Sechelt:

- (5) tí=št kʷənam-t-at tə=s-təm~tumiš [tí məl
AUX=1PL.SBJ help-CTR-1PL.ERG DET=NMLZ-PL~man [AUX sink
tə=snəxʷil-it].
DET=boat-3PL.POSS]
'We helped the men whose boat sank.' (Sechelt: Beaumont 2011:528)

However, even when possible, the pattern illustrated in (1–5) is severely restricted. In Squamish (and Sechelt, as far as we can tell) relativization of a possessor is only possible from the subject of an intransitive predicate.³ In Island Halkomelem, it is also apparently possible from the object of a

EXIS 'existential enclitic', FRED 'final reduplication', INFR 'inferential', REM 'remote in time', RLT 'relational', STAT 'stativizer', MD 'middle', NCTR 'noncontrol transitivizer'.

² In this example, second person possessor agreement matches the phi features of the independent pronoun in initial position, a distinctive property of Island Halkomelem. (Evidently, Downriver Halkomelem speakers judged such forms as substandard, at least according to Suttles 2004:88, preferring forms where the gap in the relative clause is zero-marked.)

³ Indirect evidence for the restriction of possessor extraction to intransitive subjects in Sechelt is provided by the fact that in the relevant dictionary entry in Beaumont (2011:528), potential cases of possessor extraction from an object and a transitive subject are avoided by extracting the whole possessive DP, as shown in (i) and (ii), respectively:

- (i) nólh tə=mána-s ləʔácxa slánay [tí kʷónám-t-axʷ].
COP DET=child-3POSS DEM woman [AUX help-CTR-2SG.ERG]
'That's the woman whose son you helped.'
(Literally: 'It is the son of that woman who you helped.'

transitive verb, as in (4), but no Central Salish language permits possessor extraction from the subject of a transitive verb.⁴

Our findings for ʔayʔajuθəm are similar. For our consultants, possessor extraction of the type illustrated in (1–5) is generally disallowed, except with some inalienably possessed elements, namely body parts, as in (1). However, even here, our consultants prefer forms with somatic lexical suffixes: that is, instead of producing the equivalent of ‘the man whose nose is big’, as in (1), they will employ a construction closer to ‘the big-nosed man’.

In order to relativize, question, or focus a possessor in all other contexts, a different strategy is used: consultants employ the intransitive predicate *snaʔ*, (roughly translated as ‘be the owner (of)’) which takes a possessor argument as its subject, allowing direct extraction, with its possessum argument realized as a non-agreeing object. Curiously, however, *snaʔ* is *only* used in extraction contexts; when no extraction takes place, or when a possessum argument is extracted, possession is instead expressed with the nominal predicate *naʔ* ‘(one’s) own’. The two predicates show inverse argument structures: while *snaʔ* takes the possessor as its subject, *naʔ* takes the possessum, with its possessor argument realized by possessive affixes and associated DPs.

The paper is structured as follows. In Section 2, we present evidence demonstrating that ʔayʔajuθəm largely lacks possessor extraction of the type illustrated in (1–5) above, except for marginal cases with body parts. In Section 3, we examine the syntax of *snaʔ*, showing that it is used uniquely in possessor extraction contexts, and in Section 4 we turn to *naʔ*, which is used in other possessive contexts. In Section 5, we examine the ʔayʔajuθəm system in a comparative context. Section 6 concludes.

2 Direct possessor extraction

In this section, we show that at least some ʔayʔajuθəm speakers do permit direct extraction of the possessor argument of a DP, but only in one very restricted context. Note that though we refer to ‘direct extraction’ of the possessor, extraction here does not refer to \bar{A} -movement of the relativized, focused, or questioned constituent itself; rather, following much previous work in Salish syntax, we assume that all \bar{A} -dependencies involve operator movement within a relative clause which bears a predication relation to the questioned, focused, or relativized constituent.⁵ See Kroeber (1997,

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- (ii) $n\acute{o}lh$ $t\acute{o}=m\acute{o}na-s$ $l\acute{o}ʔ\acute{a}xa$ $sl\acute{a}nay$ [$t\acute{o}$ $k^w\acute{e}n\acute{a}m-t-ci$].
 COP DET=child-3POSS DEM woman [AUX help-CTR-2SG.OBJ]
 ‘That’s the woman whose son helped you.’
 (Literally: ‘It is the son of that woman who helped you.’)

⁴ Possessor extraction is even more restricted in the Northern Interior: it is impossible in Lillooet (Matthewson & Davis 1995) and Shuswap (Gardiner 1996), and allowed only with (a subset of) intransitive subjects in Thompson (Davis, Gardiner, & Matthewson 1993).

⁵ While this view of \bar{A} -dependencies is broadly accepted and has considerable empirical support across the Salish family, it does gloss over potential differences between types of \bar{A} -movement. With respect to possessor extraction, for example, it predicts that questioning a possessor will be exactly as hard as relativizing a possessor, since the latter forms a component of the former. This is not entirely true, however: many Salish languages (including ʔayʔajuθəm) have strategies for questioning possessors that are not available for relative clauses. One of the most common is to use the WH-word for ‘where’ or ‘which’, as in the example in (iii) below:

1999), Davis (2010), Davis and Matthewson (2009), Koch (2008), Koch and Zimmermann (2009), Lyon (2013), amongst others.⁶

As shown in (6–7), direct possessor extraction is permitted for inalienably possessed body parts, at least by some speakers.⁷

- (6)

ye:χátčx ^w ?ot yaχ-át=čx ^w =?ut remember-CTR\STAT=2SG.SBJ=EXCL ‘You remember the one that has long hair.’	<table style="border: none; width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">hɛł</td> <td style="width: 15%;">ʃɛ λaqt</td> <td style="width: 15%;">maqəns.</td> </tr> <tr> <td>hił</td> <td>ʃə=λaqt</td> <td>maqin-s</td> </tr> <tr> <td>COP</td> <td>DET=long</td> <td>hair-3POSS</td> </tr> </table>	hɛł	ʃɛ λaqt	maqəns.	hił	ʃə=λaqt	maqin-s	COP	DET=long	hair- 3POSS
hɛł	ʃɛ λaqt	maqəns.								
hił	ʃə=λaqt	maqin-s								
COP	DET=long	hair- 3POSS								

 (vf)

- (7)

ye:χátačx ^w yaχ-át=a=čx ^w remember-CTR\STAT=Q=2SG.SBJ ‘Do you remember the one with a big nose?’	<table style="border: none; width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">hɛł</td> <td style="width: 15%;">ʃɛ tih</td> <td style="width: 15%;">məqsəns?</td> </tr> <tr> <td>hił</td> <td>ʃə=tih</td> <td>məqsən-s</td> </tr> <tr> <td>COP</td> <td>DET=big</td> <td>nose-3POSS</td> </tr> </table>	hɛł	ʃɛ tih	məqsəns?	hił	ʃə=tih	məqsən-s	COP	DET=big	nose- 3POSS
hɛł	ʃɛ tih	məqsəns?								
hił	ʃə=tih	məqsən-s								
COP	DET=big	nose- 3POSS								

 (vf)

However, even in these contexts, speakers tend to prefer using a lexical suffix, as in (8), rendering possessor extraction unnecessary: cf. (6).

- (8)

yeχatčx ^w ?ot yaχ-át=čx ^w =?ut remember-CTR\STAT=2SG.SBJ=EXCL ‘You remember the long-haired man.’	<table style="border: none; width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">hɛł</td> <td style="width: 15%;">ʃɛ λaqtɛq^wən</td> <td style="width: 15%;">tumiš.</td> </tr> <tr> <td>hił</td> <td>ʃə=λaqt-iq^wən</td> <td>tumiš</td> </tr> <tr> <td>COP</td> <td>DET=long-hair</td> <td>man</td> </tr> </table>	hɛł	ʃɛ λaqtɛq ^w ən	tumiš.	hił	ʃə=λaqt-iq ^w ən	tumiš	COP	DET=long- hair	man
hɛł	ʃɛ λaqtɛq ^w ən	tumiš.								
hił	ʃə=λaqt-iq ^w ən	tumiš								
COP	DET=long- hair	man								

 (vf)

For anything other than inalienably possessed body parts, possessor extraction is disallowed, as shown in (9–12).

- (9)

*get gət who	k ^w čənos k ^w =čənu-s DET=dog- 3POSS	k ^w ni?unšum? k ^w ni<?i>nš-əm DET=swim<PL>-MD
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 ‘Whose dog is swimming?’ (sf)

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- (iii)

hɛk ^w čɛ	k ^w astas	tihayɛ	[k ^w ɔłox ^w ɔłax ^w]?
hi+k ^w +ča	k ^w asta-s	tihaya	[k ^w ɔł-əx ^w -uł-ax ^w]
COP+DET+where	cup-3POSS	tea	[spill-NCTR-PST-2SG.ERG]

 ‘Whose cup of tea did you spill?’ (Literally: ‘Where/which cup of tea is it that you spilt?’)

While it is unclear how exactly to obtain a possessor interpretation for cases like these, it is clear that they do not involve \bar{A} -movement of the possessor argument: the bracketed relative clause component in (i) has a gap in object position corresponding to the entire possessed DP, not the possessor. We set aside these cases for the purposes of this paper, though they would obviously make an interesting study in their own right.

⁶ Davis (2010) argues that operator movement inside relative clauses is in fact determiner movement, with a pro-NP pied-piped along with the \bar{A} -moved D. Nothing here hinges on whether or not we adopt this hypothesis.

⁷ For the ?ay?ajuθəm examples, the first line is in the community orthography, the second line is a phonemic representation with morpheme breaks in the standard version of the NAPA used by Salishanists, the third line provides a gloss, and the fourth line is the translation; in addition, ‘vf’ marks forms volunteered by consultants, while ‘sf’ marks forms suggested by the researchers. For examples from other languages, we employ a standard three-line format, without the community orthography line.

(10) * get k^w čuýs k^w λ̣o:χ^wét?
 gət k^w=čuy-s k^w=λ̣ux^w<i>t
 who DET=child-**3POSS** DET=cry<STAT>
 ‘Whose child is crying?’ (sf)

(11) * heł tə sałtx^w k^w guguhum tə č̣eño.
 hił tə=sałtx^w k^w=gu~guh-um tə=čaņu-s
 COP DET=woman DET=IPFV~bark DET=dog-**3POSS**
 ‘She is the woman whose dog is barking.’ (sf)

(12) * ye:χátčx^w ?ot heł še tat^θem ?atnopels.
 yax-át=čx^w=?ut hił šə=tat^θim ?atnupil-s
 remember-CTR\STAT=2SG.SBJ=EXCL COP DET=red car-**3POSS**
 ‘You remember the one that has the red car.’ (sf)

3 Possessor extraction with *sna?*

Given that direct possessor extraction is largely ungrammatical in ?ay?ajuθəm, the question immediately arises as to how the language *does* question, focus, or relativize a possessor. This is where the possessive predicate *sna?* (roughly, ‘be the owner (of)’) comes in.

The crucial property of *sna?* that allows extraction is that it is a (formally) intransitive predicate whose absolutive subject is a semantic possessor; since absolutive subjects may always be directly extracted, extraction of the possessor is permitted.^{8,9}

(13) get k^w **sna?** tə č̣eño?
 gət k^w=**sna?** tə=čaņu
 who DET=**be.owner** DET=dog
 ‘Whose is the dog?’ (vf)

⁸ We have also recorded an additional form *snaħa*. From what we have recorded, there is no clear semantic difference between *snaħa* and *sna?*. Speakers who use *snaħa* also accept *sna?* in the same contexts with no discernable difference in interpretation. We leave this variant aside for future investigation.

⁹ It is interesting to note that *sna?* **cannot** be used when extracting the possessor of an inalienably possessed body part:

(iv) a. # heł tə sna? tə λ̣aqt maqen.
 hił tə=sna? tə=λ̣aqt maqin
 COP DET=be.owner DET=long hair
 ‘He’s the one with long hair.’ (sf)

Consultant’s comment: You own your hair, so [sna? is] not necessary, unless it’s a wig.

b. heł tə λ̣aqt maqens.
 hił tə=λ̣aqt maqin-s
 COP DET=long hair-**3POSS**
 ‘He’s the one with long hair.’ (vf)

It appears to give rise to an odd reading where the body part is not inalienably possessed, as indicated by the comment accompanying (iv.a).

(14) hɛl̩ č̣ɛ šɛ gaʔč̣ɛqʷən tumiʃ ʔə **snaʔ** tə č̣ɛno.
 hiɪ=č̣a šə=gaʔč̣iqʷən tumiʃ ʔə=**snaʔ** tə=č̣aɲu
 COP=INFR DET=bald man CLF=**be.owner** DET=dog
 ‘It must be the bald man who owns the dog.’ (vf)

(15) get (kʷ) **snaʔ** tə taʔ⁰ɛm ʔatnɔpɛl?
 gət kʷ=**snaʔ** tə=taʔ⁰im ʔatnupil
 who DET=**be.owner** DET=red car
 ‘Who owns the red car?’ (sf)

(16) hɛl̩ θɛʔɛ saltxʷ (kʷ) **snaʔ** tə taʔ⁰ɛm ʔatnɔpɛl.
 hiɪ θiʔi saltxʷ kʷ=**snaʔ** tə=taʔ⁰im ʔatnupil
 COP DEM woman DET=**be.owner** DET=red car
 ‘It’s this woman who owns the red car.’ (sf)

As can be seen in all the examples in (13–16), an overt possessum argument can (and frequently does) appear following *sna*. Though this second argument is not marked as oblique,¹⁰ it does not behave as a direct (agreement-marked) argument either, since it cannot be extracted:

(17) * tam **snaʔ** Gail?
 tam **snaʔ** Gail
 what **be.owner** Gail
 ‘What is Gail’s?’ (sf)

(18) * hɛl̩ tə ʔəpəm kʷaɪt **snaʔ** Gail.
 hiɪ tə=ʔəpəm kʷaɪt **snaʔ** Gail
 COP DET=deep plate **be.owner** Gail
 ‘The bowl is Gail’s.’ (sf)

It is also important to note that the initial *s* of *snaʔ* is not a nominalizer. If it were, we would expect to find the subject/possessor marked with possessive morphology. Not only is this not obligatory, as shown in (13–16) above, it is in fact ungrammatical, as illustrated in (19–20) below.

(19) * get (kʷ) **snaʔs** tə=taʔ⁰ɛm ʔatnɔpɛl?
 gət kʷ=**snaʔ=s** tə=taʔ⁰im ʔatnupil
 who DET=**be.owner=3POSS** DET=red car
 ‘Who owns the red car?’ (sf)

¹⁰ Oblique marking is frequently elided in ʔayʔajuθəm, but where it is underlyingly present, it can generally be reinserted in follow-up elicitation. The insertion of oblique marking preceding the possessum of the predicate *snaʔ* is judged ungrammatical, however (this judgement is stronger for some speakers than others):

(v) * get kʷ **snaʔ** ʔə tə č̣ɛno?
 gət kʷ=**snaʔ** ʔə=tə=č̣aɲu
 who DET=**be.owner** **OBL=DET=dog**
 ‘Who owns the dog?’ (cf. 13)

We do not currently have an explanation for the absence of oblique marking here.

- (20) * hɛl̩ θɛʔɛ saltx^w (k^w) snaʔs tə ta⁰ɛm ʔatnopel.
 hiɪ θiʔi saltx^w k^w=snaʔ=s tə=ta⁰im ʔatnupil
 COP DEM woman DET=**be.owner=3POSS** DET=red car
 ‘This is the woman that owns the red car.’ (sf)

Finally, *snaʔ* cannot be used when the possessor is *not* extracted. As far as we know, this behaviour is unique in the language.

- (21) * **snaʔ** tə gaʔčɛq^wən tumiʃ tə čɛno.
snaʔ tə=gaʔčiq^wən tumiʃ tə=ča⁰nu
be.owner DET=bald man DET=dog
 ‘The bald man owns the dog.’ (sf)

- (22) * **snaʔ** θiθa saltx^w tə ta⁰ɛm ʔatnopel.
snaʔ θəy⁰θa saltx^w tə=ta⁰im ʔatnupil
be.owner DEM woman DET=red car
 ‘This woman owns the red car.’ (sf)

The restriction of *snaʔ* to possessor extraction contexts naturally raises a further question: how does ʔayʔajuθəm handle possession in non-extraction contexts, or where the possessum is extracted? This is where the nominal predicate *naʔ* comes in.

4 Possession with *na*

In order to express possession without possessor extraction, or where extraction of the possessum takes place, ʔayʔajuθəm employs the nominal predicate *naʔ* ‘(one’s) own’. Its argument structure is almost inverse to that of *snaʔ*: its absolutive subject is the possessum, with its possessor argument marked by possessive affixes and optionally by associated possessor DPs.

- (23) *Context: I find a coat left at the lodge. Daniel is notorious for forgetting his coat.*
naʔs čɛ **Daniel.**
naʔ-s=ča **Daniel**
own-3POSS=INFR **Daniel**
 ‘It must be Daniel’s.’ (vf)

- (24) **ʔəθ naʔa?**
ʔəθ=naʔ=a
2SG.POSS=own=Q
 ‘Is it yours?’ (vf)

- (25) **ʔət⁰ naʔ** ta⁰ nux^wɛl.
ʔət⁰=naʔ ta⁰ nəx^wɪɪ
1SG.POSS=own DEM canoe
 ‘That canoe is mine.’ (vf)

(26) **naʔs** **Eric** šε x^wuʃumayε.
naʔ-s **Eric** šə=x^wuʃumaya
own-3POSS **Eric** DET=store
 ‘The store belongs to Eric.’ (vf)

(27) **naʔs** č̣ε **tə gaʔč̣εq^wən** **tumiš** tə č̣εno.
naʔ-s=ča **tə=gaʔč̣iq^wən** **tumiš** tə=ča^onu
own-3POSS=INFR **DET=bald** **man** DET=dog
 ‘The dog must belong to the bald man.’ (vf)

(28) **naʔs** **θiθa** **sałtx^w** tə ta^oem ʔatnopel.
naʔ-s **θəy^oθa** **sałtx^w** tə=ta^oim ʔatnupil
own-3POSS **DEM** **woman** DET=red car
 ‘The red car belongs to that woman.’ (sf)

Possessor marking is obligatory on *naʔ*; it must be accompanied by a possessive affix indicating the possessor.

(29) a. ***naʔ** **tita** **tumiš** tə č̣εno.
 naʔ **təy^ota** **tumiš** tə=ča^onu
 own **DEM** **man** DET=dog
 ‘The dog belongs to that man.’ (sf)

b. **naʔs** **tita** **tumiš** tə č̣εno.
 naʔ-s **təy^ota** **tumiš** tə=ča^onu
 own-3POSS **DEM** **man** DET=dog
 ‘The dog belongs to that man.’ (sf)

(30) ***naʔ** **θiθa** **sałtx^w** tə ta^oem ʔatnopel.
 naʔ **θəy^oθa** **sałtx^w** tə=ta^oim ʔatnupil
 own **DEM** **woman** DET=red car
 ‘The red car belongs to that woman.’ (cf. 28) (sf)

Since the possessum is the direct argument of *naʔ*, it can be extracted:

(31) *Context: I’m at the store looking at different tools and I know Gail is really happy with the one she has. I want to get one like it, but I’m not sure which kind it is.*
 tam č̣ε ga k^w **naʔs** **Gail?**
 tam=ča=ga k^w=**naʔ-s** **Gail**
 what=INFR=DPRT DET=**own-3POSS** **Gail**
 ‘I wonder what Gail has?’ (vf)

(32) *Context: There was a gathering at the gym and some cooking ware got left behind. I know some of it is Gail's, but I'm not sure which.*

a. hək^wčə naʔs Gail?
 hi+k^w+ča naʔ-s Gail
 COP+DET+where own-3POSS Gail
 'Which belong to Gail?'

b. hɛl tə ʔəpəm k^walt k^w naʔs.
 hiɫ tə=ʔəpəm k^walt k^w=naʔ-s
 COP DET=deep plate DET=own-3POSS
 'The bowl belongs to her.' (vf)

In contrast, since the possessor is not a direct argument, it cannot be extracted:¹¹

(33) #gət k^w naʔs tə ʔəno?
 gət k^w=naʔ-s tə=ča^onu
 who DET=own-3POSS DET=dog
 'Whose is the dog?' (sf)

(34) #gət (k^w) naʔs tə ta^oem ʔatnopel?
 gət k^w=naʔ-s tə=ta^oim ʔatnupil
 who DET=own-3POSS DET=red car
 'Whose is the red car?' (sf)

(35) #hɛl təʔe tumiʃ (k^w) naʔs tə ʔəno.
 hiɫ tiʔi tumiʃ k^w=naʔ-s tə=ča^onu
 COP DEM man DET=own-3POSS DET=dog
 Intended interpretation: 'It's this man that owns the dog.'
 Actual interpretation: 'The dog owns this man.' (sf)

A further argument that the possessor is not the subject of a *naʔ* predicate comes from embedding. In a subjunctive environment, the third person subjunctive subject clitic =*as* may co-occur with the 3rd person possessive suffix -*s* on *naʔ* (36).

(36) *Context: We're cleaning up the gym after a gathering and I ask someone to check if a kitchen utensil belongs to Gail.*

ho ga gayet Gail ga naʔsas təʔe.
 hu=ga gay-at Gail ga naʔ-s=as tiʔi
 go=DPRT ask-CTR Gail if own-3POSS=3SBJV DEM
 'Go ask Gail if this belongs to her.' (vf)

¹¹ The sentences in (33) and (34) were judged impossible, but are probably semantically anomalous rather than ungrammatical, meaning something like: 'Who belongs to the dog?' and 'Who belongs to the car?', respectively, where the extracted argument is the possessum. This is parallel to the semantically odd interpretation given for (35), for instance. The fact that such an interpretation was not offered for (33) and (34) probably reflects the fact that these odd interpretations are particularly strange in questions.

Two subject agreement markers cannot co-occur on the same predicate in ʔayʔajuθəm; subject agreement can be doubled, but only in transitive third person subordinate clauses where there is a preceding auxiliary to host the subject clitic, allowing the third person ergative suffix to surface on the main predicate (see, e.g., Kroeber 2002:20–21, Watanabe 2003:105, 107, 113, 115).¹² This means that the 3rd person possessive -s in (37) is not marking clausal subject agreement, but rather forms part of the nominal predicate. A similar construction is found with ʔaʔ ‘want/desire’, which patterns in a parallel fashion in embedded contexts.

- (37) q^wolsəmt qamɛn ga ʔaʔ^ssəs.
 q^wəl=səm=ʔut qamin ga ʔaʔ-s=as
 come=FUT=EXCL come.along COMP **want-3POSS=3SBJV**
 ‘She can come along if she wants.’ (vf)

Before leaving this section, we note that *naʔ* also appears as a nominal modifier of arguments, meaning ‘one’s own’ (38–39), and in argument position (40).

- (38) *Context: Daniel is painting houses for a summer job. Today it’s the weekend, and you ask me what he’s up to. I tell you, ‘He’s painting his own house.’*
 ʔik^wt k^wa k^w naʔs ʔaʔe.
 ʔə~y^k-t=k^wa k^w=naʔ-s ʔaʔa
 IPFV~paint-CTR DET=**own-3POSS** house
 ‘He’s painting his own house.’ (sf)

- (39) *Context: I wanted to have my own awl for weaving and I finally bought one.*
 čk^wa maʔamʔit ʔət⁰ naʔ ʔ^woʔ^wp̄.
 č=k^wa maʔ-ʔəm-ʔiyt ʔət⁰=naʔ ʔ^wux^wp̄
 1SG.SBJ=CLDEM get-NCTR-PRF 1SG.POSS=**own** awl
 I got my own awl. (vf)

- (40) *Context: We are sitting around the table and Betty finished up her basket, but we’re still getting started.*
 k^wi hoynom Betty ʔe naʔs ʔi četšt ʔot
 k^wi huy-nu-m Betty ʔə=naʔ-s ʔiy čaʔat=št=ʔut
 CLDEM finish-NCTR-PASS Betty DET=**own-3POSS** CONJ now=1PL.SBJ=EXCL
 ʔəʔʔayin.
 ʔə~ʔʔayin
 IPFV~begin
 ‘Betty already finished hers and we’re just starting.’ (vf)

Where *naʔ* is an argument modifier, the possessive clitics attach to *naʔ* and cannot instead attach to the following noun.

¹² Subject clitics also sometimes double ergative suffixes in main clauses where the predicate is transitivized with the noncontrol transitivizer (see Watanabe 2003:2018, fn. 186 concerning the use of ergative subject suffixes in main clauses with the noncontrol transitivizer); however, in order for this doubling to take place, the clitics must be hosted pre-predicatively by another element, usually a clausal demonstrative.

(41) *Context: Same as (38).*

*jik ^w t k ^w a	k ^w naʔ	ʔaʔɛs.	
ǰə~yk ^w -t=k ^w a	k ^w = naʔ	ʔaʔa-s	
IPFV~paint-CTR	DET= own house- 3POSS		
‘He’s painting his own house.’			(sf)

(42) *Context: Same as (39).*

*čk ^w a	maʔamʔit	naʔ	ʔət⁰ χ ^w oχ ^w ḗ.
č=k ^w a	maʔ-ʔəm-ʔiyt	naʔ	ʔət⁰ =χ ^w uχ ^w ḗ
1SG.SBJ=CLDEM	get-NCTR-PRF	own	1SG.POSS=awl
‘I got my own awl.’			(sf)

We also predict that *naʔ* should be possible as a predicate modifier in the complex nominal predicate construction (see Watanabe 2003:96) but have not yet had a chance to test this.

5 The comparative syntax of possession in Salish languages of the North Georgia area

The curious division of labour between *snaʔ* and *naʔ* in ʔayʔaʃuθəm raises the issue of how the system developed, and whether it has any analogues in neighbouring languages. In this section, we compare the ʔayʔaʃuθəm system to its counterparts in Sechelt, Pentlatch, Squamish, and Halkomelem, as well as the nearest neighbouring Northern Interior language, Lillooet.

5.1 Sechelt

Sechelt is ʔayʔaʃuθəm’s closest relative: its territory borders that of the Sliammon to the south-east, on the mainland side of the Georgia Strait.

The Sechelt cognate of (*s*)*naʔ* is *səná* (first person singular *cəná*, first/second/third person plural *səná(n)*). Its syntactic behaviour mirrors that of *naʔ*, not *sna*: its absolutive (direct) argument denotes the possessum, with the possessor obligatorily encoded by possessive affixes, supplemented optionally in the third person by possessor DPs. The distribution of *səná* also resembles that of *na*: it can occur in predicate position (43–44), in argument position (45–46), as a predicate modifier (47), or as an argument modifier (48):

(43) [səná-s]	[ləʔáʃa tə=sčənu].	
[own-3POSS]	[DEM DET=dog]	
‘The dog is hers/her own.’		(Sechelt: Beaumont 2011:212)

(44) [səná-s	lən	sqíʃ]	[tə=piš].
[own-3POSS	F.DET+1SG.POSS	younger.sister]	[DET=cat]
‘The cat belongs to my younger sister.’			(Sechelt: Beaumont 2011:42)

(45) [slánay piš]	[lə=səná-s].	
[female cat]	[F.DET=own-3POSS]	
‘She’s got a female cat. (A female cat is hers/her own.)’		(Sechelt: Beaumont 2011:212)

- (46) ʔút [sčónu] [šən cóna], xʷá=čán čásx-ém=an.
 if [dog] [DET+1SG.POSS 1SG.own] NEG=1SG.SBJ afraid-MD=1SG.SBJV
 ‘If I had a dog, I wouldn’t be afraid.’ (If a dog were my own...)
 (Sechelt: Beaumont 2011:206)
- (47) [səná-s s-cíciy-ím] ʔə=šə=yáw-ałtən.
 [own-3POSS NMLZ-work-MID] OBL=DET=wake.up-INTR
 ‘It’s his job to wake them up.’ (Sechelt: Beaumont 2011:508)
- (48) nəl [tə=səná-(?)ít snóxwíł]
 COP [DET=PL.own-3PL.POSS canoe]
 ‘That’s their own canoe.’ (Sechelt: Beaumont 2011:5)

Furthermore, just like *naʔ*, *səná* is used when a possessum is relativized:

- (49) tí łóm-nóx^w-as [šə=səná-s-ul tə=snóxwíł].
 AUX forget-NCT-3ERG [DET=own-3POSS-PAST DET=canoe]
 ‘He forgot whose boat it was.’ (Sechelt: Beaumont 2011:538)
- (50) hák^w-át=a=čx^w [šə=səná-s-ul yáyəłúlmix^w tí
 remember-CTR=Q=2SG.SBJ [DET=own-3POSS-PAST car AUX
 látsəm-át-ax^w?
 fix-CTR-2SG.ERG
 ‘Do you remember whose car (it was that) you fixed?’ (Sechelt: Beaumont 2011:538)

However, Beaumont (2011) gives no examples with *səná* involving relativization of a possessor: this is unlikely to be an accidental gap, which means that in all probability *səná* is exactly like *naʔ* in its syntax.

Furthermore, Sechelt seems to lack any functional equivalent of *snaʔ*: where possessor extraction is possible at all, it seems to employ the direct extraction strategy, as noted in Section 1 (see in particular footnote 3).

5.2 Pentlatch

Pentlatch, the earliest Salish language to succumb to colonization in Canada, was spoken directly opposite the Georgia Strait from Sechelt and to the south of Comox territory on Vancouver Island. It is poorly documented; the information given here comes from unpublished notes by Kinkade (1980), who re-transcribed and annotated Boas’s original field notes, hand-written in German.¹³

As originally transcribed by Boas, the Pentlatch equivalent to possessive *naʔ* and *səná* is *t^huwá* ~ *cuwá* ~ *čuwá* ~ *suwá*, with the alternate forms depending on the person of the possessive affix which attaches to the possessive root: *t^h-* ~ *c-* in the first person, *č-* in the second, and *s-* in the

¹³ Our interpretation of Boas’s transcription differs from that of Kinkade, however, and is closer to the original.

third.¹⁴ These forms show a remarkable resemblance to the possessive predicate *cúwaʔ* in Lillooet: see Section 5.5 below.

(51) **cuwá** **c-kʷiš** **nə** Tim.
1SG.POSS+own **1SG.POSS-name** **be** Tim
‘My name is Tim.’¹⁵ (Pentlatch: Kinkade 1980)

(52) **(ʔa)ćuwá** **ć-ćínu?**
2SG.POSS+own **2SG.POSS-dog**
‘Is this your dog?’ (Pentlatch: Kinkade 1980)

(53) **suwá** **sćínu**
3POSS+own **dog**
‘his dog’ (Pentlatch: Kinkade 1980)

Note in (451) and (52) that the possessive person marking on the possessive predicate is doubled in first and second person on the possessed noun. This doubling is also found in Squamish and Halkomelem: see Sections 5.3 and 5.4 below.

5.3 Squamish

Squamish territory lies adjacent to that of the Sechelt along Howe Sound. Kuipers (1967), the major source for the language, gives some information on possessive *swaʔ*, the equivalent of *naʔ* and *səná*. Like its ʔayʔajuθəm and Sechelt equivalents, *swaʔ* takes two arguments: its direct (absolute) argument denotes the possessum, while obligatory possessive affixes mark the possessor. Kuipers gives data showing that *swaʔ* may be used as a predicate (54), an argument (55), a predicate modifier (56), and an argument modifier (57):

(54) [**swáʔ-s** **kʷa=n-mán**] [ta=lám].
[**own-3POSS** **DET=1SG.POSS-father**] [DET=house]
‘The house is my father’s.’ (Squamish: Kuipers 1967:145)

(55) [ʔə(s)-sáq] [**kʷi=ʔə-swáʔ**].
[STAT-split] [DET=2SG.POSS-own]
‘Half is yours.’ (Squamish: Kuipers 1967:145)

¹⁴ The special first person form of the possessive predicate in Sechelt (*cəná* versus *səná*) likely represents a relic form of the same stem alternation,

¹⁵ In both Boas’s original and Kinkade’s re-transcription, the *c-* possessive prefix at the beginning of the possessed noun is split into an unexplained *-t* suffix on *cuwá* and a nominalizing prefix on the noun, i.e. *cuwá-t s-kwiš* rather than *cuwá c-kwiš*. However, Boas gives a complete paradigm for the possessive predicate without a *-t*, which is also missing in the example in (53) with a third person possessor, supporting the re-analysis proposed here.

(56) [ʔən-swáʔ ʔən-sqʷəmáʔ] tí.
 [1SG.POSS-own 1SG.POSS-dog] DEM
 ‘This is my (own) dog.’ (Squamish: Kuipers 1967:145)

(57) haʔl [ta=ʔə-swáʔ ʔ(ə)-lám].
 good [DET=2SG.POSS-own 2SG.POSS-house]
 ‘Your (own) house is good.’ (Squamish: Kuipers 1967:145)

A quirk of the Squamish possessive system (shared by Pentlatch and Halkomelem) is that in cases where *swaʔ* acts as a modifier, as in (56) and (57), the possessor is marked both on *swaʔ* and on the head noun.

5.4 Halkomelem

Halkomelem was historically spoken throughout the Fraser Valley in the Lower Mainland, bordering Squamish to the north, and on the southeast coast of Vancouver Island, bordering Pentlatch to the north. The Halkomelem possessive predicate *sweʔ*, glossed by Suttles (2004:336) as ‘one’s own’, seems to behave very similarly to its Squamish cognate. In the examples below, it appears as a predicate (58), a predicate modifier (59), an argument (60), and an argument modifier (61):

(58) *sweʔ-s ʔéltən.*
 own-3POSS 3PL
 ‘It’s theirs.’ (Downriver Halkomelem: Suttles 2004:336)

(59) [nə-swéʔ nə-sqʷəméʔ].
 [1SG.POSS-own 1SG.POSS-dog]
 ‘It’s my (own) dog.’ (Downriver Halkomelem: Suttles 2004:336)

(60) ʔi c-telə ʔə=[kʷθə=sweʔ-s].
 AUX have-money OBL=[DET=own-3POSS]
 ‘She has her own money’. (Island Halkomelem: Gerdts and Hukari 2008:499)

(61) xʷəm kʷə=s=tál-ləxʷ=s wə=stém=əs [kʷθə=sweʔ-s
 fast DET=NMLZ=get.understood-NCT=3POSS COMP=what=3SJBV [DET=own-3POSS
 sʔélyə] kʷθeʔ məstóyəxʷ.
 vision] DEM person
 ‘They immediately knew what kind of vision that person had.’
 (Downriver Halkomelem: Suttles 2004:400)

Note the doubling of the first person singular possessive prefix on *sweʔ* and the head noun in (59), as in the Squamish examples in (56) and (57).

Suttles also gives one case of a relativized possessum with *sweʔ*:

(62) tə=słiłqəł [sweʔ-s θə=sáʔsəqʷt mánə]
 DET=child [own-3POSS DET=junior child]
 ‘the boy who was the son of the younger sister’ (Downriver Halkomelem: Suttles 2004:81)

As expected, there are no attested cases of possessor extraction with *sweʔ*. However, Halkomelem also uses its productive denominal prefix *c-* ‘have, get, make’ with *sweʔ* to derive a stative verb *c-weʔ* meaning ‘be the owner (of)’ (the *s* in *sweʔ* deletes).¹⁶ This denominal verb resembles *ʔayʔajuθəm snaʔ* rather than *na*: its direct (absolutive) argument denotes the possessor, with the possessum optionally present as an oblique-marked object. Interestingly, all the cases we have been able to find involve possessor extraction, just as with *ʔayʔajuθəm sna*: we do not currently know if this is an accidental or systematic gap.

- (63) *čəx^wléʔ=čəʔ ʔəy̆ nem háyeʔ tə=[c-wéʔ (ʔə)=tə=léləm̄].*
 sometimes=QUOT and go leave DET=[**have-own** (OBL)=DET=house]
 ‘Sometimes the owner of the house went away.’
 (Downriver Halkomelem: Suttles 2004:420)

- (64) *nił t⁰ə=słəntəniʔ [c-weʔ c-yays k^w=s=nem=s ʔəlxe:m*
 COP DET=women [**have-own** have-work DET=NMLZ=go=3POSS collect
ʔə=t⁰ə=spe:nx^w.
 OBL=DET=camas
 ‘It’s the ladies who have the job of collecting the camas.’
 (Island Halkomelem: Gerdts and Hukari 2008:499)

5.5 Lillooet

Though it is a member of the Northern Interior branch, Lillooet borders on four out of the five other languages considered here (from north to south: *ʔayʔajuθəm*, Sechelt, Squamish, and Halkomelem). It has also been heavily influenced lexically and morphologically by Squamish and to a lesser extent by Halkomelem and Sechelt, so its inclusion is justified as a member of the ‘North Georgia Salish subgroup’ under discussion here.

Like *ʔayʔajuθəm* and Halkomelem, Lillooet has two related possessive predicates. The more basic one is *cúwaʔ*, which shows the typical properties of the *naʔ / cəná ~ səná / cuwá ~ cúwa ~ suwa / swaʔ / sweʔ* group; note in particular the strong phonological resemblance to the Pentlatch forms, which is surprising but unlikely to be coincidental.

Like other members of this group, *cúwaʔ* is a nominal predicate which takes two arguments, an absolutive-marked possessum and a possessive-marked possessor. Its distribution also mirrors that of its counterparts: it occurs as a predicate (65), an argument (66), and as either a predicate (67) or an argument (68) modifier. (All examples are from Alexander et. al *in prep.*)

- (65) [**lan waʔ cúwaʔ=łkał**] l=cʔa ta=tmíx^w=a.
 [**already IPFV own-1PL.POSS**] at=here DET=land=EXIS
 ‘This land here is already ours.’ (Lillooet)

¹⁶ Gerdts and Hukari (2008) provide evidence from Island Halkomelem that *c-* is in fact a proclitic (*c=*): it attaches to prenominal adjectival modifiers in NP, for example:

- (vi) *ʔi=ʔə=č ʔəw̄ c=plət pəq̄ swetəʔ*
 AUX=Q=2SG.SBJ LINK **have**=thick white sweater
 ‘Do you have a thick white sweater?’ (Island Halkomelem: Gerdts and Hukari 2008:496)

Since it takes scope over the entire NP, it should perhaps preferably be classified as a “phrasal affix”.

(66) pq-am ta=n=kapúh=a ləl=[**ta=cúwaʔ-sw=a**].
 white-er DET=1SG.POSS-coat=EXIS from=[**DET=own-2SG.POSS=EXIS**]
 ‘My coat is whiter than yours.’ (Lillooet)

(67) xʷʔaz kʷásu xʷʔaz-áʔ-a(m)-min
 NEG D/C+NMLZ+IPFV+2SG.POSS NEG-pretend-MD-RLT
 ʔi=kəñ~ñ-alqʷ-mín-axʷ ta=káh=a, [**cúwaʔ-su száyʔən**].
 PST=bump~FRED-log-RLT-2SG.ERG DET=car=EXIS [**own-2SG.POSS business**]
 ‘Don’t pretend to forget about the time you crashed the car, it was your own fault.’
 (Lillooet)

(68) nskázaʔ (ta)=n-sqáxʔ=a, ʔaz kʷas čáqʷ-an-as
 stuck.up (DET)=1SG.POSS-dog=EXIS NEG D/C+NMLZ+IPFV+3POSS eat-DIR-3ERG
 [**ʔi=cúwaʔ-s-a sʔfən**].
 [**PL.DET=own-3POSS=EXIS food**]
 ‘My dog is stuck-up, he won’t eat his own food.’ (Lillooet)

Note that unlike in Pentlatch, Squamish, and Halkomelem, there is no doubling of possessive morphology on the head noun when *cúwaʔ* acts as a modifier: *cúwaʔ* alone is always marked with possessive affixes.

The second Lillooet possessive predicate is *ʔəs-cúwaʔ*, ‘be the owner (of)’. It is derived via prefixation of denominal *ʔəs-*, ‘have’ to *cúwaʔ*. Though originally *ʔəs-* may have been identical to the stative prefix (*ʔə*)*s-* (as assumed by Burton & Davis 1996), it is now partially phonologically distinct and, like Halkomelem *c-* (see footnote 17), behaves like a proclitic rather than a prefix in attaching to the first prenominal modifier rather than the head noun of a complex NP:

(69) waʔ [ʔəs-xzum-qʷ qʷəxqʷíx-qʷ čqáxaʔ] kʷ=s-Pikáʔa.
 IPFV [**have-big-head black-head horse** DET=NMLZ-Pikáʔa]
 ‘Pikáola has a big black horse.’ (Lillooet)

Like *ʔayʔajuθəm snaʔ* and Halkomelem *c-weʔ*, the absolutive argument of *ʔəs-cúwaʔ* is the possessor, with the possessum generated as an optional non-agreeing object:¹⁷

(70) nił ʔaył s-Alexander [ta=waʔ ʔəs-cúwaʔ látiʔ ʔi=wagon=a].
 COP then NMLZ-Alexander [DET=IPFV **have-own** there PL.DET=wagon=EXIS]
 ‘Well, it was Alexander who was the owner of the wagons there.’ (Lillooet)

(71) a. ʔəs-cuwaʔ=łkaxʷ=ha kʷu=sqáxaʔ?
have-own=2SG.SBJ=Q DET=dog
 ‘Do you own a dog?’
 b. iy, ʔəs-cúwaʔ=łkan.
 yes **have-own=1SG.SBJ**
 ‘Yes, I do.’ (Literally: Yes, I own.) (Lillooet)

¹⁷ Lillooet has lost oblique marking on non-agreeing objects.

While ʔəs-cúwaʔ permits extraction of the possessor, as shown in (70), crucially, it does not enforce it, as shown by (71). This means that \bar{A} -extraction is not a necessary property of possessive predicates with the argument structure of $\text{snaʔ} / \text{c-weʔ} / \text{ʔəs-cúwaʔ}$, but a parochial property of snaʔ (and possibly c-weʔ).

5.6 Summary

The table in (70) summarizes our comparison of possessive predicates in the six languages we have examined:

Table 1: Possessive predicates in six Salish languages

	<i>ʔayʔajuθəm</i>	<i>Sechelt</i>	<i>Pentlatch</i>	<i>Squamish</i>	<i>Halkomelem</i>	<i>Lillooet</i>
POSS 1	na	cəná~səná	c-/č-/s-uwá	swaʔ	sweʔ	cúwaʔ
(noun)						
<i>possessum</i>	subject	subject	(subject)	subject	subject	subject
<i>possessor</i>	possessor	possessor	(possessor)	possessor	possessor	possessor
POSS 2	sna	-	-	-	c-weʔ	ʔəs-cúwaʔ
(verb)						
<i>possessum</i>	(oblique)	-	-	-	oblique	(oblique)
<i>possessor</i>	subject	-	-	-	subject	subject

We can draw several conclusions from this survey, which helps to throw cross-Salishan light on the ʔayʔajuθəm system.

First, the basic possessive predicate in every one of these languages is a dyadic noun, whose subject (absolutive) argument denotes the possessum, while its possessor argument is obligatorily represented by possessive pronominals (with or without associated DPs).

Second, in half of the six languages under discussion, a process of denominal verb-formation takes the basic possessive noun and yields a predicate with an inverse argument structure: the possessor is realized by its subject (absolutive) argument, while the possessum is (optionally) generated as an unregistered object, marked oblique in Halkomelem, but unmarked in ʔayʔajuθəm and Lillooet (at least in the latter case, for independent reasons). In Halkomelem and Lillooet, the prefix/proclitic which derives the possessive verb is found on a wide range of nouns, and the process is compositional and productive; but in ʔayʔajuθəm , which completely lacks prefixes, the derivation is fossilized and limited to the $\text{naʔ} \sim \text{snaʔ}$ alternation.¹⁸

In each case, extraction is only possible from the absolutive (subject) argument of the possessive predicate: this means that only extraction of the possessum is possible from the nominal predicate, while only extraction of the possessor is possible from the denominal verb.

¹⁸ We have not yet addressed the important question of how denominal verb formation operates. While a full treatment is beyond the scope of this paper, the proposal in Burton and Davis (1996) provides a useful starting point. The basic idea behind their analysis is that nouns in general come with two arguments, a referential external one and a possessive internal one — in other words, exactly the argument structure we have been assuming for *na*-type predicates. Denominal verb-formation then suppresses the external argument (perhaps by existential closure) and promotes the internal (possessive) argument to the subject position of the derived verb, deriving a *sna*-type predicate.

Puzzles remain, however. One is the identity of the initial *s* (*c* in Lillooet and partially in Sechelt and Pentlatch) on the possessive nominal predicate. It is tempting to take it as the nominalizer (as Suttles 2004 and Kinkade 1980 do), in which case its absence on *naʔ* in *ʔayʔajuθəm* is explained by the systematic absence of prefixal nominalization in that language. However, if possessive predicates are nominalized, the question then arises as to what exactly they are nominalizations of. The most obvious answer is that the input to nominalization is the existential predicate ‘be (there)’, which has two forms in the languages under discussion: *ni(?))/ naʔ* in *ʔayʔajuθəm*, Sechelt, Pentlatch, Halkomelem, and Squamish, and *waʔ* in Lillooet, as shown in (71).¹⁹

Table 2: Possessive and (locative) existential predicates in six languages

	<i>ʔayʔajuθəm</i>	<i>Sechelt</i>	<i>Pentlatch</i>	<i>Squamish</i>	<i>Halkomelem</i>	<i>Lillooet</i>
<i>existential</i>	niʔ	ni	nə	naʔ	niʔ	waʔ
<i>possessive</i>	naʔ	cená~səná	cuwa~cuwa~s uwa	swaʔ	sweʔ	cuwaʔ

Interestingly, the input to the possessive predicate in Pentlatch, Halkomelem, and Squamish does not resemble the form which these languages employ as an existential predicate: this means that they either borrowed their possessive nominal predicates from Lillooet, or originally employed a version of *waʔ* as an existential predicate, before it was replaced by *ni(?) ~ naʔ*.²⁰

A couple of puzzles from *ʔayʔajuθəm* also remain unresolved. First, though we have explained why the possessive verb *snaʔ* only permits its possessor to be extracted (since the possessor is its only direct argument), we have not explained why it *must* be extracted. The fact that the equivalent Lillooet verb *ʔəs-cúwaʔ* does not force extraction (the Halkomelem facts are unclear) indicates that

¹⁹ It is worth mentioning here that nominalization does not straightforwardly derive a possessive predicate from an existential one. In fact, in Lillooet, regular nominalization of *waʔ* yields a nominal predicate *s-waʔ* meaning ‘x’s being (there)’, as in (vii):

- (vii) $xá\lambda=k^w u\? =tu\?$ **s-waʔ-s** $\?i=\?ux^walmix^w=a$ $pináni\?$
hard=QUOT=REM **NMLZ-be.there-3POSS** PL.DET=indigenous.person=EXIS around.then
‘The people had a hard time back then.’

Nominalization of existential ‘be’ to yield a possessive nominal predicate must involve an extra step, where the locative argument of ‘be’ (the ‘there’) is first reanalyzed as a possessor (as it is in languages such as Russian where ‘x is at y’ means ‘y has x’), and then mapped onto the possessor argument of the derived noun. It is unclear whether this is a plausible derivation, either synchronically or diachronically. It is also worth mentioning that in both *ʔayʔajuθəm* and Lillooet, transitivization of the existential predicate yields a stage-level predicate meaning ‘have’, as shown in (viii) and (ix), respectively:

- (viii) $nam-us-\?amin$ **niʔ-st-əm** Marianne.
be.like-face-INSTR **be.there-CAUS-PASS** Marianne
‘Marianne has a picture.’ (ʔayʔajuθəm)
- (ix) $wá\?=lkax^w=ha$ **wəʔ-án** $\?i=nəklíh-s=a$ $ta=káh=a\?$
IPFV=2SG.SBJ=Q **be.there-DIR** PL.DET=key-3POSS=EXIS DET=car=EXIS
‘Do you have the car keys?’ (Lillooet)

²⁰ In both Squamish and Pentlatch, *wa(?)* is present as an imperfective auxiliary (a role which it also employs in Lillooet). This gives some support to the idea that *wa(?)* was originally also an existential predicate in those languages, more recently supplanted (at least in Squamish) by *naʔ*.

this cannot be a general property of denominal possessive verbs but must be local to ʔayʔajuθəm; we currently have no non-stipulative solution to this problem.

Second, the shape of *snaʔ* remains problematic. As a general rule, ʔayʔajuθəm does not allow syllables with complex onsets: *snaʔ* is an exception. On the other hand, our analysis treats the initial *s* on *snaʔ* as a fossilized denominal prefix, rather than as the nominalizing prefix, which has been uniformly lost in the language; as pointed out by Kroeber and Watanabe (2004), there are a number of other *s*-initial words which violate the ban on initial consonant clusters, including *skʷaq* ‘the rest (of something)’, *snəq* ‘dear’, *skʷičiy* ‘bothersome’, and *stʰukʷ* ‘day’. So *snaʔ* is not that exceptional in its exceptionality.

6 Conclusion

In this paper, we have examined possessor extraction in ʔayʔajuθəm, expanding on the limited documentation available in Watanabe (2003:134). We showed that ‘direct’ possessor extraction is highly restricted in the language, occurring only with inalienably possessed body parts. In all other cases, in order to extract a possessor, the predicate *snaʔ* ‘be the owner (of)’ must be used. Since *snaʔ* takes the possessor as its direct (absolutive) argument, extraction is permitted, as for other absolutive arguments in the language. Curiously, *snaʔ* does not appear except in cases of possessor extraction. For all other cases involving possession expressed predicatively, the nominal predicate *naʔ* ‘(one’s) own’ is used.

In order to further explore the relation between *naʔ* and *snaʔ* and their possible diachronic sources, we conducted a cross-linguistic survey of five other Salish languages spoken in the same North Georgia region. We found that the basic possessive predicate in each of these languages is a dyadic noun like *naʔ*, which takes the possessum as its absolutive argument, with the possessor obligatorily expressed by possessive pronominals, optionally supplemented in the third person by possessor DPs. Several of the surveyed languages additionally allow a process of denominal verb-formation to apply to this predicate, yielding a *sna*-like predicate with inverse argument structure, having the possessor as its absolutive argument and the possessum optionally expressed by a non-agreeing DP. We speculate that the *naʔ* ~ *snaʔ* alternation represents a fossilized form of this derivational operation.

References

- Alexander, Carl, Henry Davis, Beverly Frank, Gertrude Ned, Desmond Peters Sr., Linda Redan, Rose Whitley. In preparation. *Nqwal’uttenlhkálha: An English-Upper St’át’imcets Dictionary*. Ms., Lillooet, BC.
- Beaumont, Ronald C. 2011. *Sechelt Dictionary*. Sechelt, BC.: Sechelt Indian Band.
- Burton, Strang, and Henry Davis. 1996. Stative aspect and possession in Salish. *Papers for ICSNL* 31, 13–22.
- Davis, Henry. 2010. A Unified Analysis of Relative Clauses in St’át’imcets. *Northwest Journal of Linguistics* 4.1:1–43.
- Davis, Henry, and Lisa Matthewson. 2009. Issues in Salish Syntax and Semantics. *Language and Linguistics Compass* 3/4: 1097–1166.

- Davis, Henry, Dwight Gardiner, and Lisa Matthewson. 1993. A Comparative Look at WH-questions in Northern Interior Salish. *Papers for ICSNL* 28, 79–96.
- Gardiner, Dwight. 1996. Determiner Phrases in Secwepemctsin (Shuswap). *Papers for ICSNL* 31, 175–184.
- Gerds, Donna? B. 1988. *Object and Absolute in Halkomelem Salish*. New York, NY: Garland Publishing.
- Gerds, Donna? B., and Thomas E. Hukari. 2008. Halkomelem Denominal Verb Constructions, *International Journal of American Linguistics* 74.4:489–510.
- Kinkade, Dale. 1980. Unpublished notes on Pentlatch. Northwest Collection in the University of Washington archives.
- Koch, Karsten. 2008. Some issues in the structure and interpretation of clefts in Nl̓eʔkepmxcin (Thompson River Salish). In: Christiana? Christodoulou and John Lyon (eds.), *Papers for ICSNL* 43. Vancouver, BC: UBCWPL, 97–120.
- Koch, Karsten, and Malte Zimmerman. 2009. Focus-Sensitive Operators in Nl̓eʔkepmxcin (Thompson River Salish). In: Martin Prinzhon, Viola Schmitt, and Sarah Zobel (eds.), *Proceedings of Sinn und Bedeutung* 14. Vienna, Austria: 237–255.
- Kroeber, Paul. 1997. Relativization in Thompson Salish. *Anthropological Linguistics* 39(3):376–422.
- Kroeber, Paul. 1999. *The Salish Language Family: Reconstructing Syntax*. University of Nebraska Press.
- Kroeber, Paul. 2002. Morphological interactions of 'clitics' in two Salish languages. *ICSNL* 37. Bellingham. Unpublished handout.
- Kroeber, Paul, and Honoré Watanabe. 2004. Word-initial developments in Northern Central Salish. In: Donna? Gerds and Lisa Matthewson (eds.), *Studies in Salish linguistics in honor of M. Dale Kinkade*. Missoula, MT: UMOPL, 257–278.
- Kuipers, Alert H. 1967. *The Squamish Language, Grammar, Texts, Dictionary*. The Hague: Mouton.
- Lyon, John. 2013. *Predication and equation in Okanagan Salish: the syntax and semantics of determiner phrases*. Doctoral dissertation, University of British Columbia: Vancouver, BC.
- Matthewson, Lisa, and Henry Davis. 1995. The Structure of DP in St'át'imcets. *Papers for ICSNL* 30th, 54–68.
- Suttles, Wayne. 2004. *Musqueam Reference Grammar*. Vancouver, BC: UBC Press.
- Watanabe, Honoré. 2003. *A morphological description of Sliammon, Mainland Comox Salish: With a sketch of syntax*. Osaka, Japan: ELPR.