

Infinitives and Raising in St’át’imcets*

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Abstract: Only two out of 23 Salish languages, St’át’imcets (Lillooet) and Ntəʔkepmxcín (Thompson River Salish), both of the Northern Interior branch, have genuine infinitives. In this paper, I take a closer look at one class of non-finite clauses in St’át’imcets: those involving the raising predicate *ćila* ‘like, sort of’. I show that the infinitival complements of *ćila* closely resemble finite (nominalized) complement clauses, differing only in lacking the nominalizer and associated possessive subject clitics, but allowing suffixal subject agreement, lexical (DP) subjects, and a full range of tense marking. I then examine subject-to-subject raising with *ćila*, which takes the form of movement-type raising in infinitives, but also surfaces in nominalized finite clauses in the form of copy raising. The latter turns out to have a broader distribution both in St’át’imcets and more widely in the Salish family, since it is not dependent on the presence of an infinitival complement. Nevertheless, it must still be lexically specified for individual predicates.

Keywords: St’át’imcets, Salish, infinitives, raising, copy raising

1 Introduction

I had originally intended this paper to cover the full range of infinitival structures in St’át’imcets (a.k.a. Lillooet; ISO 639-3: lil), which are rare and understudied in Salish. However, in the process of writing the paper, I have come to two conclusions which have made me shift its focus:

- (i) *There is variation in the structure as well as the interpretation of infinitival complements.*
- (ii) *(Subject-to-subject) raising in St’át’imcets is not confined to infinitives.*

Accordingly, I have decided to limit the current paper to a discussion of raising infinitives in St’át’imcets, leaving a broader treatment of the other types of infinitive for another occasion.

Happily, this enables me to do more justice to another understudied phenomenon in Salish, but this time, one that is not necessarily confined to one or two languages, since it is not dependent on infinitival syntax. The putative existence of ‘copy raising’ constructions in Salish has been noted in passing before: for example, Kroeber (1999:170), citing Kuipers (1967:184), gives the following Squamish example involving the predicate *ʔəskʷáy* ‘impossible’.

- (1) **čn** ʔəskʷáy k^w=n=s=tólʔ-nəx^w-an.
1SG.SUBJ impossible C/D=**1SG.POSS**=**NMLZ**=know-LCT-**1SG.ERG**
‘I cannot figure it out.’¹

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¹ This particular example is complicated by the fact that aside from the copy-raising construction, which copies a pronominal from the subordinate clause onto the matrix predicate, there is also copying *within* the

Here the subject clitic in the matrix clause bears no thematic relation to the matrix predicate, but instead appears to have been copied from the complement clause: the structure thus partially resembles ‘classic’ subject-to-subject raising, but differs in two ways: first, the subordinate clause is finite, and second, rather than movement (copy-and-delete), the configuration involves copying without deletion.

In this paper, I examine both movement raising and copy raising in St’át’imcets. The former is confined to infinitives, as in English, and has a very restricted distribution, being limited to the infinitival complements of a single (though extremely common) predicate, *ćila* ‘like, be alike, resemble’. The latter has a broader distribution, being possible with a number of impersonal predicates which take nominalized complement clauses, though copy raising must still be listed as a lexical property of particular predicates.

The paper is structured as follows. I begin in Section 2 by reviewing arguments for the existence of a distinctive class of infinitival clauses in St’át’imcets, and then provide a brief survey of the three major classes of infinitive-selecting predicate in the language. In Section 3, I give some background on the raising predicate *ćila*, before turning in Section 4 to examining the structure of raising-type infinitives in more detail. Section 5 gives the core data on movement raising in infinitives and its copy raising analogue in finite (nominalized) complement clauses. Section 6 concludes.

2 An overview of infinitives in St’át’imcets

Infinitives are rare in Salish: in fact, as far as we know, only two languages, *nleʔkepmxcín* (Thompson) and St’át’imcets (Lillooet), close relatives in the Northern Interior sub-branch of the family, possess ‘infinitive-like’ constructions (the term is from Kroeber 1999). To my knowledge, the brief remarks in Kroeber (1999:220–221) constitute the only published report of infinitives in *nleʔkepmxcín*. The situation is slightly better for St’át’imcets: following up on Davis and Matthewson (1996), where infinitives were first identified, Matthewson (2005b) discusses non-finite clauses as part of her argument for the existence of syntactically represented Tense (and associated nominative Case) in the language.

In this section, I review the evidence that St’át’imcets has genuine infinitives by comparing them with the two principal types of (non-relative) finite subordinate clause in the language (subjunctive and nominalized). I show that infinitives form a distinct third type, related to and probably derived from nominalized complement clauses, but crucially lacking the two crucial ingredients of finiteness: the nominalizer and an associated possessive subject clitic.

2.1 Finite subordinate clauses

There are two main types of non-relative finite subordinate clause in St’át’imcets. *Subjunctive clauses* occur as interrogative complements and as conditional, temporal, and locative adjuncts. They are generally introduced by the complementizers *t=* or (in past tense temporal adjuncts only) *?i=*, though they may also occur as main clauses with the force of weak imperatives, with or without an accompanying circumstantial modal (see Matthewson 2010).

subordinate clause. The latter is a peculiarity of subject inflection in nominalized subordinate clauses in Squamish and is unconnected to copy-raising: see Davis (1999, 2000).

As their name suggests, subjunctive clauses are characterized by subjunctive (a.k.a. ‘conjunctive’) inflection, realized as subject enclitics that attach immediately after the first prosodic word in the clause, which may either be an auxiliary (if one or more are present) or the main predicate (if not). Typical examples are given in (2–4):²

- (2) saw-ən-cál-itas [(t=)nkáʔ=as [t=wáʔ=an skʷul]].
 ask-DIR-1SG.OBJ-3PL.ERG [(COMP=)where=3SJV [COMP=IPFV=1SG.SJV go.to.school]]
 ‘They asked me where I went to school.’ (Alexander et al. *in prep.*)
- (3) ʔáma=ka [t=kih=ás ta=skʷúkʷmiʔt=a], plan waʔ ʔílal.
 good=IRR [COMP=get.put.on.lap=3SJV DET=child=EXIS] already IPFV cry
 ‘It would be good if the baby was picked up and put on somebody’s lap, it’s crying.’
 (Alexander et al. *in prep.*)
- (4) ǰəp-xál=łkaxʷ [t=cúkʷ-alc=axʷ].
 stack-ACT=2SG.SUBJ [COMP=finish-food=2SG.SJV]
 ‘Stack the dishes when you finish eating.’ (Alexander et al. *in prep.*)

In (2), we see a subjunctive interrogative complement to the verb *sáwən* ‘ask’, optionally introduced by the complementizer *t=*; the embedded WH-predicate *nkaʔ* ‘(be) where’ in turn takes another subjunctive complement, again headed by *t=*, with the subjunctive subject enclitic attaching to the pre-predicative imperfective auxiliary *waʔ*. The example in (3) involves a subjunctive conditional *t=* clause subordinated to the modalized adjective *ʔáma=ka* ‘it would be good’, and the example in (4) features a subjunctive temporal adjunct, again introduced by *t=*.

Nominalized clauses, introduced by the proclitic nominalizer *s=*, occur exclusively in subordinate environments. Most types of complement clause are nominalized, as are certain kinds of clausal adjunct, including purpose and rationale clauses. In both argument and adjunct positions, nominalized clauses are usually introduced by the complementizer-like elements *kʷ(u)=* and *t(a)=* (the latter in factive contexts).³ These elements are diachronically related to but probably synchronically distinct from the homophonous determiners *kʷu=* and *ta=/ti=*; I have labeled them

² Examples are given in the NAPA as employed in the Salish literature. All unattributed examples are from original fieldwork by the author. Unless explicitly mentioned, all examples are from the Upper (Northern) dialect of the language. Glossing abbreviations are as follows: ABSN = absent, ACT = active intransitive, AUT = autonomous intransitive (lexical reflexive), CAUS = causative transitivizer, CHA = characteristic, COMP = complementizer, CON = compound connective, COP = (equational) copula, CRED = consonant (C[̇]) reduplication, D/C = determiner-complementizer, DEM = demonstrative, DET = determiner, DIR = directive transitivizer, EPIS = epistemic modal, ERG = ergative (transitive subject suffix), EXCL = exclusive, EXIS = existential enclitic, FRED = final (V̇C) reduplication, INCH = inchoative, INS = instrument, INTS = intensifier, IPFV = imperfective, IRR = irrealis modal, LCT = limited control, LOC = locative, MID = middle, NEG = negation, NMLZ = nominalizer, NTS = non-topical subject marker, OBJ = object suffix, PASS = passive, PL = plural, POSS = possessive, PROS = prospective aspect, QUOT = quotative, RDR = redirective (applicative) transitivizer, REM = remote in time, RLT = relational (applicative) transitivizer, SJV = subjunctive (‘conjunctive’) subject clitic, SUBJ = indicative subject clitic, TRED = total (CVC) reduplication. An affix is marked with a hyphen (-), a clitic with an equal sign (=), an infix with angled brackets < >, a reduplicant with a bullet (•), and unsegmentable morpheme combinations with a plus sign (+).

³ Immediately preceding the clausal nominalizer *s=*, *kʷu=* usually reduces to *kʷ=* and *ta=* to *t=* (Davis & Matthewson 1996).

D/C here.⁴ Nominalized clauses are also common without D/C elements in ‘clause chaining’ contexts, where they are introduced by the equational copula *nił*; clause chaining creates sequences of temporally or logically ordered clauses across a discourse, and is particularly common in narratives.

In intransitive nominalized clauses, subject agreement takes the form of possessive clitics; in transitive nominalized clauses, possessive clitics alternate with and sometimes co-occur with transitive subject suffixes, depending on the presence of an auxiliary and the person features of the clitic (see Section 4.1 below). The nominalizer and its associated possessive subject very frequently fuse with the imperfective auxiliary *waʔ* to yield special contracted forms whose components are not readily separable: see Kroeber 1999:115). Typical examples of nominalized clauses are given below:

- (5) ʔá•ʔ•z-át=łuʔ [k^w=n=s=zəwát-ən k^wu=sámʔ-ac
 NEG•CRED-INTS=EXCL [D/C=1SG.POSS=NMLZ=know-DIR DET=white.person-mouth
 pinániʔ], nił [səs ʔawt-əc-xi[t]-cal-ítas].
 then] COP [NMLZ+IPFV+3POSS behind-mouth-RDR-1SG.OBJ-3PL.ERG]
 ‘I didn’t know any English at all in those days, so they interpreted for me.’
 (Alexander et al. *in prep.*)
- (6) ʔil-q-ám=łkan [k^w=n=s=x^wuʔ ʔilən].
 set.down-bottom-MID=1SG.SUBJ [D/C=1SG.POSS=NMLZ=PROS eat]
 ‘I sat down to eat.’
 (Alexander et al. *in prep.*)
- (7) wáʔ=łkał ʃáł-miñ-əm [k^wəłkál n-kál-s-tum
 IPFV=1PL.SUBJ want-RLT-PASS [D/C+NMLZ+IPFV+1PL.POSS LOC-follow-CAUS-PASS
 ta=łák-mən-s=a ʔi=s-kəl•kəlaʔ-łkał=a].
 DET=go-INS-3POSS=EXIS PL.DET=NMLZ-TRED•first-1PL.POSS=EXIS]
 ‘We want to follow the path of our ancestors.’⁵
 (Alexander et al. *in prep.*)

In (5), a negative predicate ((*x^w*)ʔáʔazát) takes a nominalized subordinate clause containing a transitive predicate marked by the first person possessive proclitic subject *n=*; this is followed by another nominalized clause, this time introduced by the copula *nił*, containing a contracted combination of nominalizer, imperfective auxiliary, and third person possessive subject (*səs*), doubling third person plural ergative marking (*-ítas*) on the embedded main verb. In (6), we see a

⁴ Though it is tempting to treat D/C elements as ‘clausal determiners’, as in Davis and Matthewson (1996) and Arregui and Matthewson (2001), there are by now reasonably strong arguments that they should be classed as a separate functional category. These come from two sources. First, the range of determiner-like elements which introduce clauses is restricted in a way that cannot be entirely explained by the semantic differences between clauses and noun phrases: for example, it is unclear why ‘absent’ determiners, which assert the existence of a referent no longer present in the speech situation, cannot apply to events/situations as well as entities: see Kroeber (1999:126–127) for arguments along these lines. Second, the external distribution of DPs is different from that of D/CPs; for example, as Thompson (2012:163–164) points out, CPs in Salish (including D/CPs) can never occupy transitive subject positions, unlike DPs (in St’át’imcets, including those referring to events/situations).

⁵ Passive morphology is used for first person plural transitive subjects in St’át’imcets, as in most other Interior Salish languages; however, it is possible to disambiguate passive from first person plural when an auxiliary is present by adding a first person plural subject clitic, as here.

- (17) **ǰáǰ** [k^wu=máys ʔi=kéç-ałwíl-tən=a].
hard [D/C=get.fixed PL.DET=cross-vessel-thing=EXIS]
 ‘The cross-pieces are hard to fix’ (literally: ‘get fixed’). (Alexander et al. *in prep.*)
- (18) **ǰáǰ-s=kan** [k^wu=záʔzəw], kan q^wál-aǰan.
hard-CAUS=1SG.SUBJ [D/C=dip.net] 1SG.SUBJ ache-arm
 ‘I have a hard time dip-netting, my arm hurts.’ (Alexander et al. *in prep.*)
- (19) **x^wʔit sʔalkst** [k^wa q^wəlaw-ən-táli ʔi=qáǰǰ^w=a].
 much work [D/C+IPFV pick-DIR-NTS PL.DET=hazelnut=EXIS]
 ‘Picking hazelnuts is a lot of work.’ (Alexander et al. *in prep.*)

(iii) *Approximative predicates:*

- (20) **ćila=łkan=ǰu?** [k^wa ǰak ka-n-zəx^w-xn-a
like=2SG.SUBJ=EXCL [D/C+IPFV continue CIRC-LOC-stumble-foot-CIRC
 l=k^wəl=s-ǰət•ǰətəq] ʔi=x^wəłəłp-an-cáləm=as.
 in=PL.INV.DET=NMLZ-hole•TRED] when.PAST =ghost-DIR-1SG.PASS=3SJV
 ‘It felt like I kept stepping into holes when I got ghosted.’ (Alexander et al. *in prep.*)
- (21) **ǰák=kan** matq, nił s=**ćila**=s [k^wu=s-ǰ^wəl•ǰ^wúl
 continue=1SG.SUBJ walk COP NMLZ=**like**=3POSS [D/C=STA-rut•TRED
 ta=tmíx^w=a].
 DET=ground=EXIS]
 ‘I kept walking, and then it was like the ground was rutted.’
 (Alexander et al. *in prep.*)
- (22) **ćila** [k^wu=ka-qáy-ləx-a ta=n-sq^wəq^wəl=a], ǰu?
like [D/C=CIRC-jump-AUT-CIRC DET=1SG.POSS-story=EXIS but
 x^wúy=łkan=ǰu? pənt.
 PROS=1SG.SUBJ=EXCL return
 ‘My story has kind of run away, but I’ll get back to it.’ (Jackson *in prep.*)
- (23) wa? q^wc•əc-ləc **ćila** [k^wu=cwás-əm] ʔi=w•əwp-łíc? =a.
 IPFV move•CRED-AUT **like** [D/C=measure-MID] PL.DET=hairy•CRED-skin=EXIS
 ‘Caterpillars wriggle around like they’re measuring something.’
 (Alexander et al. *in prep.*)

While the infinitival complements to these three classes of predicate all share the same basic design (they are all introduced by *k^wu=* and all obligatorily lack a nominalizer and subject clitic morphology), they otherwise differ both syntactically and semantically. At this point, I set aside the first two classes to focus on the third, which contains the single ‘approximative’ predicate *ćila* ‘like, kind of, sort of’. Before returning specifically to infinitives, however, I take a slight detour to provide some general background on *ćila*.

3 The approximative predicate *ćila*

In both its semantic flexibility and syntactic versatility, *ćila* resembles English ‘like’. Its core meaning is ‘be alike, be the same as’, as shown in (24–25). In this function, it is syntactically intransitive, but requires two semantic arguments: its semantic requirement may be satisfied either by a plural subject, which typically induces (CVC plural) reduplication on the predicate, as in (24), or by a subject and an overt (but non-agreeing) object, as in (25).

(24) **ćəl•ćila**=**lkáł=łu?**
TRED•like=1 PL.SUBJ=EXCL
 ‘We are alike.’ (Alexander et al. *in prep.*)

(25) **ćila**=**lkán=łu?** **ta=n-sqácəz?**=**a.**
like=1 SG.SUBJ=EXCL DET=1 SG.POSS-father=EXIS
 ‘I am just like my father.’ (Alexander et al. *in prep.*)

In addition, *ćila* is often employed as a quasi-prepositional element, as in (26). In this role, it acts as an adjunct predicate, and signals a relation of approximate semantic equivalence between its argument and the subject of the main predicate.

(26) **wa?** **láti?** **s-lə̀k** **l=ta=n-ŋwúyt-tən-s=a** **ćila**
 IPFV there STAT-flop.down on=DET=LOC-sleep-INS-3POSS=EXIS **like**
k^wu=lə̀nkaya.
 DET=cast.iron.pot
 ‘He’s lying in his bed motionless, like a cast-iron pot!’ (Alexander et al. *in prep.*)

Again, like English ‘like’, *ćila* is also very frequently employed as an adverbial qualifier with the meaning ‘sort of, kind of’.

(27) **kə̀ł-q** **ćila** **ʔi=sikil-s=a** **níl=łu?** **səs**
 come.off-bottom **like** PL.DET=bark-3POSS=EXIS COP=EXCL NMLZ+IPFV+3POSS
ki?-ən-ás.
 peel-DIR-3ERG
 ‘The bark sort of came off at the bottom and then she peeled them (the hemp stalks).’
 (Mitchell *in prep.*)

(28) **kałás** **s=qə̀mp=s** **wi=cúlaka?** **máqa?** **k^wə̀nswá** **k^wúk^wpi?**,
 Three NMLZ=ten=3POSS plus=seven snow D/C+1 SG.POSS+NMLZ+IPFV chief
plán=łkan **qa<ʔ>ə̀z -mín** **ćila.**
 already=1 SG.SUBJ tired<INCH>-RLT **like**
 ‘I was chief for thirty-seven years, and then I got tired of it, sort of.’
 (Edwards et al. *in prep.*)

Of most direct interest to us, however, *ćila* often appears with clausal complements. To start with, it is standardly used in equative constructions, where its direct argument is a nominalized clause denoting the target of comparison, and its oblique argument (introduced by the preposition *ʔə̀=*)

denotes the standard of comparison (see Davis & Mellesmoen 2019 on comparative syntax and semantics in St’át’imcets).

- (29) **ćila**=łu? [s=záx-alqʷəm=s s-Bill] ʔə=s-Mary.
like=EXCL [NMLZ=tall-appearance=3POSS NMLZ-Bill] to=NMLZ-Mary
 ‘Bill is as tall as Mary.’ (‘the degree to which Bill is tall is the same as Mary’)
 (Alexander et al. *in prep.*)

Just as with individual arguments (29), both semantic degree arguments can be represented by the same (plural) syntactic argument, as in (30).

- (30) **ćal•ćila**=ká=wi?łu? [kʷ=s=pá!•pə!-t=ka!].
TRED•like=EPIS=EMPH=EXCL [D/C=NMLZ=stubborn•TRED-CHA=1PL.SUBJ]
 ‘We must have been just as stubborn as each other.’ (‘the degree to which we were
 stubborn was the same’) (Edwards et al. 2017:48)

Aside from equatives, *ćila* also takes a nominalized clausal complement when acting as an impersonal main predicate with an approximative meaning close to that of its adverbial usage:

- (31) **ćila**=łu? [kʷu=s=ptinus-mín-an=ʔiʔ ta=s=wá?=s=a=łu?
like=EXCL [D/C=NMLZ=think-RLT-1SG.ERG=those DET=NMLZ=IPFV=3POSS=EXIS=EXCL
 s-ʔúllus ʔi=ʔuxʷalmíxʷ=a skʷəm•kʷúkʷmiʔ].
 STAT-gather PL.DET=indigenous.person=EXIS TRED•child]
 ‘I kind of think of them as places where Indian children were gathered together.’
 (Matthewson 2005a:366)

- (32) **ćila**=kʷú?łu? [ta=s=plán=s=a=tu? ɬəl=cʔá wa? ʔayłám]
like=QUOT=EXCL [D/C=NMLZ=already=3POSS=EXIS=REM from=here IPFV recently]
 pičəm=kʷú?=ti? ta=twít=a.
 hunt=QUOT=that DET=professional.hunter=EXIS
 ‘Kind of not too long after this, this professional hunter went out hunting.’
 (Mitchell *in prep.*)

The use of *ćila* with nominalized complement clauses is very close if not identical in meaning to its use with infinitival complements. Syntactically, however the two differ in a now familiar fashion: as shown in (20–23) above, and (33–34) below, infinitives lack the nominalizer and associated possessive subject clitics.

- (33) **ćila** [kʷu=ʔús-[c]-tum] na=n-kʷúkʷ=a
like [D/C=get.thrown.out-[CAUS]-PASS ABSN.DET=1SG.POSS-grandmother=EXIS
 ki=nksáytkən-s=a na=n-spápəzʔ=a
 PL.DET=relative-3POSS=EXIS ABSN.DET=1SG.POSS-grandfather=EXIS
 ʔi=zúqʷ=as=tu?].
 when.PAST=die=3SJV=REM]
 ‘My grandmother was sort of thrown out by my grandfather’s relatives when he died.’
 (Matthewson 2005a:393)

- (34) $\acute{c}i\acute{l}a=\acute{\lambda}u?$ [k^wu=qíx̣-alus ?i=s-ník-xal-sw=a sḗams].
 like=EXCL [D/C=hard-material PL.DET=NMLZ-cut-ACT-2SG.POSS=EXIS firewood]
 ‘That firewood you cut looks like it’s hard to split.’ (Alexander et al. *in prep.*)

Infinitives with *ćila* test systematically as raising rather than control structures, as I will show in Section 5 below. However, they also show a number of correlated differences in the specification of tense and agreement features, which indicate that they may be syntactically ‘larger’ than the other two types of infinitive. I address these in the next section.

4 The structure of infinitives with *ćila*

In this section, I examine the structure of *ćila* infinitives in more detail. I show that the *only* way in which they are defective is in missing nominalization and associated subject marking: otherwise they may be fully specified for agreement (Section 4.1) and tense (Section 4.2). I give a tentative structure for *ćila* infinitives in Section 4.3.

4.1 Subjects in *ćila*-type infinitives

We have already seen that subject clitics are systematically absent in infinitives. However, it has been known since Davis (1999, 2000) and Kroeber (1999) that there are *two* subject agreement positions in St’át’imcets (as in most other Salish languages from the Central and Northern Interior branches of the family). The higher ‘outer’ subject is the one represented by the three series of subject clitics; the lower ‘inner’ position is confined to transitive clauses, and represented by ergative subject suffixes.

In transitive clauses with an auxiliary, a subject clitic (null in the indicative) may co-occur with a subject suffix, as shown in the subjunctive clause in (35) and the nominalized clause in (36).⁷

- (35) wa? qi?-sút-miñ-c-as ta=n-máw=a l=wá?=as
 IPFV suck.up-OOC-RLT-1SG.OBJ-3ERG DET=1SG.POSS-cat=EXIS COMP=IPFV=**3SJV**
 x̣áλ-miñ-as k^w=n=s=?áṃ-c-añ.
 want-RLT-**3ERG** D/C=1SG.POSS=NMLZ=feed-mouth-DIR
 ‘My cat sucks up to me when he wants me to feed him.’ (Alexander et al. *in prep.*)

- (36) cáma=λu? nił=λu? [s=x^wuy=s λx^wun-xi[t]-túmul-as
 after.a.while=EXCL COP=EXCL [NMLZ=PROS=**3POSS** win-RDR-1PL.OBJ-**3ERG**
 ?i=sám?=a ?i=n-q^walut-tən=łkál=a].
 PL.DET=white.person=EXIS PL.DET=LOC-speak-INS-1PL.POSS=EXIS]
 ‘After a while the white people began to suppress (literally, ‘conquer’) our languages.’
 (Edwards et al. *in prep.*)

⁷ If no auxiliary is present, either the subject clitic or the subject suffix is realized on the main predicate, but not both. As a rule, the subject suffix takes precedence over the subject clitic, except in the first person singular of nominalized clauses, where the possessive proclitic *n=* may be used as an alternative to suffixal *-an*.

which are systematically absent. This indicates that *ćila* infinitives are missing particular subject agreement features or their projections, rather than being radically subject-less.

This in turn raises the question of whether overt DP subjects are also permitted in *ćila* infinitives, on the general assumption that agreement is responsible for licensing argument DPs. The answer is yes, as shown in (41–42):

- (41) **ćila** [k^wa łap-en-ítas n-snək^w•núk^w?=a
like [D/C+IPFV get.forgotten-DIR-3PL.ERG 1SG.POSS-TRED•friend=EXIS
ta=cuw?-í=ha n-q^walút-tən].
DET=own-3PL.POSS=EXIS LOC-speak-INS]
‘It’s like my friends have forgotten their own language.’
- (42) **ćila**=łu? [k^wu=pápt wa? xík-ən-as k^w=s-Bill
like=EXCL [D/C=always IPFV miss-DIR-3ERG DET=NMLZ-Bill
?i=ćí?=a wa? q^wús-xi-tas].
PL.DET=deer=EXIS IPFV shoot-RDR-3ERG]
‘It’s like Bill always misses the deer he shoots at.’

In these examples, the subject of the infinitival is trapped inside the embedded clause by the object, precluding an alternative analysis where it can be construed as a main clause subject. This reinforces the conclusion we have reached on the basis of agreement: nothing is missing in *ćila* infinitives except nominalization and outer (clitic) subject agreement.

4.3 Tense marking in *ćila* infinitives

Cross-linguistically, infinitives are often associated with missing or defective tense; and indeed, Matthewson (2005b:34) specifically claims that St’át’imcets infinitives cannot bear independent tense marking. However, she did not consider *ćila* infinitives, which, it turns out, are fully specified for tense features.

The most reliable place to find tense marking in St’át’imcets is in the future, since the language has unmarked present/past tense, but is obligatorily marked for future tense (Matthewson 2006). Future may be marked by the modal enclitic =kəł, the prospective auxiliary x^wúž, or both. The following examples show *ćila* infinitives with the full range of future tense marking. (Note also the first person subject suffixes in 44.)

- (43) a. k^wá•k^wl-əm, **ćila** [k^wu=x^wúž k^wis].
stagger•CRED-MID **like** [D/C=PROS fall]
‘He staggered, like he was going to fall.’
- b. k^wá•k^wl-əm, **ćila** [k^wu=k^wís=kəł].
stagger•CRED-MID **like** [D/C=fall=FUT]
(same)
- c. k^wá•k^wl-əm, **ćila** [k^wu=x^wúž=kəł k^wis].
stagger•CRED-MID **like** [D/C=PROS=FUT fall]
(same)

- (44) a. ka-q^wáỵ-a ta=sqáǎʔ=a, **ćila**=łuʔ [k^wu=x^wúʔ cəw-q-án-an].
 CIRC-yelp-CIRC DET=dog=EXIS **like**=EXCL [D/C=PROS kick-bottom-DIR-1SG.ERG]
 ‘The dog yelped, like I was going to kick it in the butt.’
- b. ka-q^wáỵ-a ta=sqáǎʔ=a, **ćila**=łuʔ [k^wu=cəw-q-án-an=kəʔ].
 CIRC-yelp-CIRC DET=dog=EXIS **like**=EXCL [D/C=kick-bottom-DIR-1SG.ERG=FUT]
 (same)
- c. ka-q^wáỵ-a ta=sqáǎʔ=a, **ćila**=łuʔ [k^wu=x^wúʔ=kəʔ
 CIRC-yelp-CIRC DET=dog=EXIS **like**=EXCL [D/C=PROS=FUT
 cəw-q-án-an].
 kick-bottom-DIR-1SG.ERG]
 (same)

The existence of both tense and inner subject agreement marking in *ćila* infinitives provide important clues as to their structure, to which we turn next.

4.4 A structure for *ćila* infinitives

The easiest way to approach the structure of *ćila* infinitives is to compare them directly to their closest finite analogues, nominalized subordinate clauses. Accordingly, I will begin by sketching a picture of the latter.

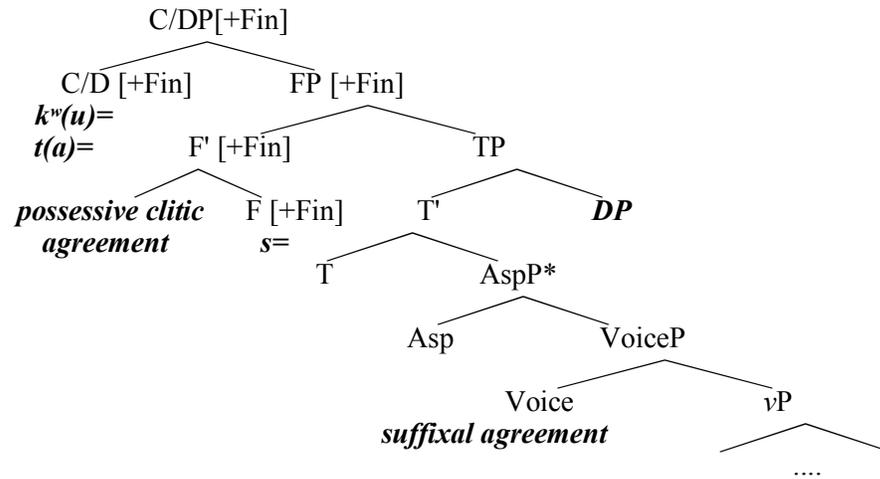
First of all, I assume that the D/C elements which introduce nominalized clauses are the head of a projection in the outermost layer of the C-domain. Next, I situate the clausal nominalizer *s=* in a *Finiteness Phrase (FP)* lower down in the C-domain (Rizzi 1997). I further assume that FP is selected by D/C, which for nominalized clauses is specified by the matrix predicate as [+Fin]. As we have seen, the presence of *s=* is correlated with the presence of outer subject agreement, in the form of possessive subject clitics. I assume the latter are generated as sets of phi-features on the [+Fin] head of FP, with post-syntactic morphological adjustments to derive their surface positions.

I further assume F selects for T, and that T in turn licenses an overt DP or *pro* subject in its specifier.

Below T, we find at least one and up to three aspectual projections, headed by aspectual auxiliaries, occupying the zone between T and Voice (the Asp* notation below is meant to express the variable number of aspect phrases). Following previous work (see, e.g., Davis 2019), I locate inner (suffixal) subject agreement in Voice. I assume that passive object agreement (in complementary distribution with suffixal subject agreement) is also generated in the Voice head; this means that in St’át’imcets, passive involves ‘partial’ promotion to Voice, but not to T.

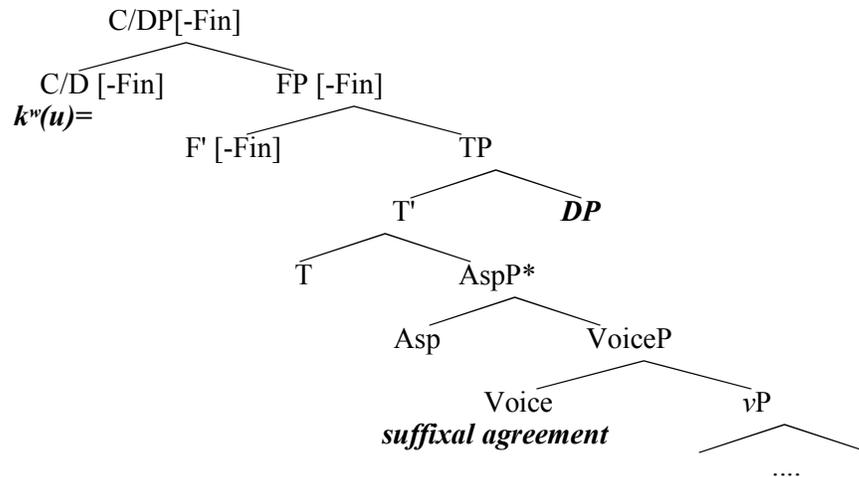
This results in the following structure for a finite (nominalized) clause:

(45) *Finite (nominalized) subordinate clause:*



Now, let us turn to *ćila* infinitives. As we have already seen, these differ very minimally from finite nominalized clauses: to be precise, they lack the nominalizer and possessive subject agreement, but are otherwise fully specified for tense and agreement. This strongly suggests that the difference between the clause types should be located in FP. There are two options for infinitives: we could generate FP with the value [-Fin], or we could leave it out altogether. I choose the first option here for *ćila* infinitives, mainly to distinguish them from the other two types of infinitival clause (see Section 2.3), which are more restricted in their tense and agreement possibilities, and importantly, do not allow overt DP subjects. If we assume F selects for TP, and DP subjects are licensed by T, then it follows that FP is present in *ćila* infinitives, leading to the structure in (46).

(46) *ćila-type infinitival clause:*



The main claim embodied in (46) is that *ćila* infinitivals are almost identical in structure to finite nominalized clauses: the only differences spring from the feature value of [\pm Fin].

5 Raising

Classic subject raising predicates like ‘seem’ and ‘likely’ are mostly absent in St’át’imcets; their meaning is covered by modal adverbs (e.g., *sǎək* ‘maybe’) and second-position clitics (e.g., *=ká* ‘possibly, apparently’): see Rullmann et al. (2008). However, *ćila* is an exception: it allows both classic (‘movement’) raising out of an infinitival complement (Section 5.1) and ‘copy raising’ in finite complements (Section 5.2).

5.1 Movement raising with *ćila*

In the infinitives below, either a full DP subject (47–48) or a pronoun subject (49–50) appears in a position adjacent to *ćila*, outside the infinitive clause where it is thematically selected and whose boundary is delimited by the D/C element.

- (47) *níł=ǎu?* *s=ćila=s* *ta=kʷúkʷpi?əa* [*kʷu=ćá<?>x*].
 COP=EXCL NMLZ=like=3POSS DET=chief=EXIS [D/C=ashamed<INCH>]
 ‘Then the chief got kind of ashamed.’ (Jackson *in prep.*)

- (48) *ćila=ǎu?* *kʷu=n-məzác=a* [*kʷu=qʷáts-p*].
 like=EXCL DET=1SG.POSS-body=EXIS [D/C=shake-INCH]
 ‘My body felt like it was shaking.’ (Mitchell *in prep.*)

- (49) *ćila=łkán=ǎu?* [*kʷa* *matq* *l=kʷu=sǎ́ət•ǎ́ətq* *x.wał*].
 like=1SG.SUBJ=EXCL [D/C+IPFV walk on=DET=hole•TRED road]
 ‘It was like I was walking along a road full of potholes’. (Alexander et al. *in prep.*)

- (50) *níł=ǎu?* *ʔaył* *n=s=qʷacác,* *ǎ́əm-ən-cút,* *ćila=łkan*
 COP=EXCL then 1SG.POSS=NMLZ=leave fast-DIR-RFLX like=1SG.SUBJ
 [*kʷu=xʷúləl-min*].
 [D/C=run.away-RDR]
 ‘Then I left, in a hurry, I was kind of running away from it.’ (Mitchell *in prep.*)

These examples appear to be clear cases of (subject-to-subject) raising, directly parallel to raising in English with predicates such as ‘seem’ or ‘be likely’. However, there are a number of respects in which the constructions differ. Most obviously, raising in St’át’imcets takes place over a subordinating element (the C/D *kʷu=*); of course, subject-to-subject raising cases in English (and putatively, universally: see Landau 2013) never take place over a complementizer.

Second, and equally strikingly, raising in St’át’imcets infinitivals is optional, since as we have seen it is quite possible for subjects to remain inside the infinitival complements to *ćila* (see, e.g., 41–42 above). In this respect, St’át’imcets raising bears some resemblance to (A-type) scrambling, though unlike the latter, but like classic raising, it is sensitive to lexical properties of the raising predicate. A minimal pair with and without raising (equally grammatical, and with identical meaning) is given in (51a–b). In contrast, raised and non-raised subjects cannot both be present at once, as shown in (51c): i.e., copy raising is blocked.

- (51) a. **číla=łu?** [k^wa kam-án-ax^w ta=n-s-k^wúk^w=a].
like=EXCL [D/C+IPFV despise-DIR-2SG.ERG DET=1SG.POSS-NMLZ-cook=EXIS]
 ‘It’s like you despise my cooking.’
- b. **číla=łkax^w=łu?** [k^wa kam-án ta=n-s-k^wúk^w=a].
like=2SG.SUBJ=EXCL [D/C+IPFV despise-DIR DET=1SG.POSS-NMLZ-cook=EXIS]
 (same)
- c. * **číla=łkax^w=łu?** [k^wa kam-án-ax^w
like=2SG.SUBJ=EXCL [D/C+IPFV despise-DIR-2SG.ERG
 DET=1SG.POSS-NMLZ-cook=EXIS]
 ta=n-s-k^wúk^w=a].

However, it turns out that copy raising *is* possible with *číla* — just not in infinitives. We turn to this pattern next.

5.2 Copy raising with *číla*

Recall that every predicate in St’át’imcets which takes an infinitival complement also takes a finite (nominalized) complement clause; *číla* is no exception (see 31–32 above). Its finite complement shows an almost inverse pattern of raising to that which characterizes its infinitival complement: movement raising is forbidden, while copy raising is permitted. Relevant examples are given in (52); note that I give two versions of each finite clause, one with a possessive subject clitic attached to an imperfective auxiliary, the other with a subject suffix attached to the main verb.

- (52) a. **číla=łu?** [k^wásu kam-án
like=EXCL [D/C+NMLZ+IPFV+2SG.POSS despise-DIR
 ta=n-s-k^wúk^w=a].
 DET=1SG.POSS-NMLZ-cook=EXIS]
 ‘It’s like you despise my cooking.’
- b. **číla=łu?** [k^w=s=kam-án-ax^w ta=n-s-k^wúk^w=a].
like=EXCL [D/C=NMLZ=despise-DIR-2SG.ERG DET=1SG.POSS-NMLZ-cook=EXIS]
 (same)
- c. **číla=łkax^w=łu?** [k^wásu kam-án
like=2SG.SUBJ=EXCL [D/C+NMLZ+IPFV+2SG.POSS despise-DIR
 ta=n-s-k^wúk^w=a].
 DET=1SG.POSS-NMLZ-cook=EXIS]
 (same)
- d. **číla=łkax^w=łu?** [k^w=s=kam-án-ax^w
like=2SG.SUBJ=EXCL [D/C=NMLZ=despise-DIR-2SG.ERG
 ta=n-s-k^wúk^w=a].
 DET=1SG.POSS-NMLZ-cook=EXIS]
 (same)

- e. * **ćila=Ikáx^w=łu?** [k^w=s=kam-án
like=2SG.SUBJ=EXCL [D/C=NMLZ=look.down.on-DIR
 ta=n-s-k^wúk^w=a].
 DET=1SG.POSS-NMLZ-cook=EXIS

The table below compares the movement raising and copy raising patterns with *ćila*: note that a non-raising ('expletive') pattern is grammatical with both finite and non-finite complements.⁹

Table 1: Patterns of raising with *ćila*

	<i>non-raising</i>	<i>copy raising</i>	<i>movement raising</i>
<i>finite</i>	yes	yes	no
<i>infinitival</i>	yes	no	yes

5.3 More on copy raising

While, as we have seen, movement raising in St'át'imcets is confined to *ćila*, it turns out that copy raising is not. Interestingly, it occurs with predicates that do *not* normally take infinitival complements. One such predicate is *cuk^w* 'stop, finish, quit', as exemplified in (53):

- (53) a. **cuk^w** [k^w=n=s=mác-ən ti? k^wu=púk^w].
 finished [D/C=1SG.POSS=NMLZ=write-DIR that DET=book]
 'I've finished writing that book.'
- b. **cuk^w** [k^w=s=mác-ən-án ti? k^wu=púk^w].
 finished [D/C=NMLZ=write-DIR-1SG.ERG that DET=book]
 (same)
- c. **cúk^w=kan** [k^w=n=s=mác-ən ti? k^wu=púk^w].
 finished=1SG.SUBJ [D/C=1SG.POSS=NMLZ=write-DIR that DET=book]
 (same)
- d. **cúk^w=kan** [k^w=s=mác-ən-án ti? k^wu=púk^w].
 finished=1SG.SUBJ [D/C=NMLZ=write-DIR-1SG.ERG that DET=book]
 (same)
- e. * **cúk^w=kan** [k^w=s=mác-ən ti? k^wu=púk^w].
 finished=1SG.SUBJ [D/C=NMLZ=write-DIR that DET=book]

⁹ The expletive subject is overtly realized when *ćila* is embedded in a nominalized or subjunctive clause, since in these environments third person intransitive subjects are realized as =s or =as, respectively, rather than Ø, as in indicative environments. A nominalized case is shown in (i); another is in (38) above.

(i) **níl=łu?** **s=ćila=s** [k^wu=ti<?>əŕ^w=wít].
 COP=EXCL NMLZ=like=3POSS [D/C=free<INCH>=3PL]
 'Then they kind of got free.'

(Mitchell *in prep.*)

Copy raising with *cuk^w* is identical to copy-raising with *ćila*: it is optional, occurs with either a possessive subject clitic or a subject in its clausal complement, and is ungrammatical with no subject in the subordinate clause.

However, not all potential raising predicates allow copy raising: the adjective *ʔiʔə́z* ‘enough’, for example, meets the semantic criteria for a raising predicate (it selects a clausal complement and lacks an external argument) but is rejected in copy raising contexts (and less surprisingly, in movement raising contexts as well):

- (54) a. ʔiʔə́z [k^wásu ʔəs-páq^w-s ta=TV=ha].
 enough [D/C+NMLZ+IPFV+2SG.POSS STAT-watch-CAUS DET=TV=EXIS]
 ‘You’ve watched enough TV.’
- b. ʔiʔə́z [k^w=s=ʔəs-páq^w-s-ax^w ta=TV=ha].
 enough [D/C=NMLZ=STAT-watch-CAUS-2SG.ERG DET=TV=EXIS]
 (same)
- c. *ʔiʔə́z=Ikax^w [k^wásu ʔəs-páq^w-s ta=TV=ha].
 enough=2SG.SUBJ [D/C+NMLZ+IPFV+2SG.POSS STAT-watch-CAUS DET=TV=EXIS]
- d. *ʔiʔə́z=Ikax^w [k^w=s=ʔəs-páq^w-s-ax^w ta=TV=ha].
 enough=2SG.SUBJ [D/C=NMLZ=STAT-watch-CAUS-2SG.ERG DET=TV=EXIS]
- e. *ʔiʔə́z=Ikax^w [k^w=s=ʔəs-páq^w-s ta=TV=ha].
 enough=2SG.SUBJ [D/C=NMLZ=STAT-watch-CAUS DET=TV=EXIS]

In other words, there is an irreducible lexical component to copy-raising in St’át’imcets, as has often been pointed out with respect to raising more generally.¹⁰

Summarizing, we can deduce the following one-way implications:

- (i) If a predicate allows copy-raising, it selects for a clausal complement and occurs with an expletive subject (e.g., *cuk^w*). However, not all predicates with these selectional properties allow copy-raising (e.g., *ʔiʔə́z*).
- (ii) If a predicate allows movement raising in infinitives, it also allows copy raising in finite clauses (*ćila*). However, not all predicates allow copy-raising occur in infinitivals (e.g., *cuk^w*).

¹⁰ It is worth mentioning that though it is lexically restricted, copy raising in St’át’imcets is nevertheless more freely available than its English counterpart, which only occurs with predicates which take finite clausal complements introduced by *like* or *as if/as though*, as in (i). The direct English equivalent of St’át’imcets copy-raising is ungrammatical, as shown in (ii):

- (i) **You seem like/as if you** have seen a ghost.
- (ii) ***You** seem (that) **you** have seen a ghost.

5.4 Implications

I have now outlined the basic properties of subject-to-subject raising in both infinitival and finite complements in St'át'imcets. Obviously, there is a great deal more to do: for example, well-known syntactic characteristics of raising in better-studied languages, including reconstruction for scope and binding, as well as locality effects such as the (im)possibility of 'super-raising' constructions, have yet to be investigated.¹¹

Nevertheless, there are lessons we can draw from the raising patterns identified here. The first is that raising is not a property of infinitives *per se*: rather, it is a general property of predicates which select a clausal complement but not an external argument, including both finite and infinitival clauses.

The second is that not all predicates which meet the preconditions for raising actually undergo it. As has often been observed for better-studied languages, raising is partly a lexically-specified property of individual predicates. Within the Salish family, where copy raising has been reported sporadically in a number of languages, this is almost certainly also true, and should act as a stimulus for a more systematic investigation of potential raising predicates in individual languages.

Third, the crucial factor in St'át'imcets which distinguishes finite from infinitival clauses, and therefore triggers the difference between movement raising and copy raising, is neither the initial D/C element (which is identical in both) nor features of T (which are as fully specified in *čila* infinitives as they are in finite clauses), but specifically a functional head which encodes finiteness features, and is responsible for licensing outer (clitic) subjects.¹² It is the [+Fin] specification of this head which blocks movement raising, and forces copy raising to take place instead.

Fourth, there is nothing intrinsic to the structure of infinitives which *forces* movement raising in St'át'imcets: the process is optional. This is a challenge to older GB-style theories of NP-movement, which essentially appeal to a conspiracy between (abstract) Case (which forces an argument to move out of a Caseless subject position) and the Theta Criterion (which allows it to move into a non-thematic subject position). However, at least in principle, contemporary Agree-based theories allow for the possibility of optional raising: since they are based on feature matching mediated by the Probe-Goal mechanism, it is always possible simply not to generate a feature on the Probe, thereby obviating the need to move.¹³

¹¹ The difficulty of applying these tests in St'át'imcets should not be under-estimated. The absence of generalized quantifiers makes scope-based tests particularly challenging (see Davis 2010), and binding reconstruction is hampered by the fact that Condition C does not hold across clauses (Davis 2009). In addition, St'át'imcets lacks idioms of the type standardly used to motivate reconstruction in languages like English.

¹² It is unclear to me what the semantic contribution of finiteness (in the form of the clausal nominalizer *s=*) actually is, or indeed if it has any. See Arregui and Matthewson (2001) for the proposal that *s=* is a 'situation minimizer', though their account is limited to factive nominalized clauses introduced by the D/C element *ta=*, and does not obviously extend to nominalized clauses introduced by *k'u=*. Another possibility — motivated by the role of the nominalizer in cases of predicate nominalization, where it is a prefix, not a proclitic — is that *s=* does not head a functional projection but is a marker of abstraction over a semantic argument. The problem here is it is unclear *which* argument is being abstracted over in a nominalized complement clause. I leave this issue open here.

¹³ Of course, this entails that an expletive subject is allowed to satisfy the EPP even when movement is a possibility; I leave the technical details aside here.

6 Conclusion

As I mentioned at the outset of this paper, I had originally hoped it would cover the entire spectrum of infinitive constructions in St'át'imcets. I have ended up, I discover, hardly covering one of them.

This is both intriguing and alarming. Intriguing, because what appeared at first to be an obscure corner of the grammar of St'át'imcets turns out to be a larger and more important space than I had imagined, and – like infinitives in better known languages – has the potential to shed some crucial light on clause structure. Alarming, because, frankly, we're running out of time to do the necessary fieldwork, and this is only one of many apparently obscure areas to investigate in Salish grammar, any or all of which could prove just as fruitful.

In terms of the next steps to take in the investigation of infinitives specifically, a thorough examination of the other two major classes of infinitival complement is a priority. Of particular pertinence to the current paper, evaluative predicates (the equivalents of 'good', 'difficult', 'funny', etc.: see 2.3 above) exhibit another type of raising, which is the functional equivalent of English tough-movement, but targets unaccusative and passive patients rather than objects. In addition, control in St'át'imcets infinitives needs to be looked at more closely: preliminary findings indicate that obligatory control is missing entirely, and all control relations are therefore non-obligatory. I look forward to reporting on these questions in the near future.

References

- Alexander, Carl, Henry Davis, Beverley Frank, Gertrude Ned, Desmond Peters Sr., Linda Redan, Rose Whitley. In preparation. *Nqwal'uttenlhkálha: An English-Upper St'át'imcets Dictionary*. Ms., Lillooet, BC.
- Arregui, Ana, and Lisa Matthewson. 2001. A cross-linguistic perspective on the expression of manner. *Proceedings of Semantics and Linguistics Theory X*. Ithaca, NY: Cornell Linguistics Publications.
- Davis, Henry. 1999. Subject inflection in Salish. *Current Research on Language and Linguistics*, Vancouver, BC: UBCWPL, 181–239.
- Davis, Henry. 2000. Remarks on Proto-Salish subject inflection. *International Journal of American Linguistics* 66.499–520.
- Davis, Henry. 2009. Cross-linguistic variation in anaphoric dependencies: evidence from the Pacific Northwest. *Natural Language & Linguistic Theory* 27.1–43.
- Davis, Henry. 2010. Salish languages lack generalized quantifiers after all! Paper given at *Semantics and Linguistic Theory 20*, Vancouver, BC.
- Davis, Henry, 2019. St'át'imcets and the non-existence of T-S-V-O languages. Ms., UBC.
- Davis, Henry, and Lisa Matthewson. 1996. Subordinate clauses and functional projections in St'át'imcets. *Papers for ICSNL 31*. Vancouver, BC: University of British Columbia, 59–73
- Davis, Henry, and Gloria Mellesmoen. 2019. Degree constructions in two Salish languages. In: D. K. E. Reisinger and Gloria Mellesmoen (eds.), *Papers for ICSNL 54*. Vancouver, BC: UBCWPL, 24–52.

- Edwards, Ann, Francis Edwards, Paul Hickson, and Ray C. Tom. In preparation. *Upper St'át'imc Stories*. Recorded by Randy Bouchard, transcribed and translated by John Lyon and Henry Davis.
- Edwards, Bill, Sam Mitchell, and Martina LaRoche. 2017. *Sqwéqwel's nelh Skelkekla7lhálha ('Tales of our Elders')*, edited, transcribed and translated by Henry Davis John Lyon, Jan van Eijk and Rose Whitley. Vancouver, BC: UBCOPL.
- Jackson, Slim. In preparation. *Stories by Slim Jackson*. Recorded by Randy Bouchard, transcribed and translated by John Lyon and Henry Davis.
- Kroeber, Paul. 1999. *The Salish Language Family: Reconstructing Syntax*. Lincoln, NE: University of Nebraska Press.
- Kuipers, Aert. 1967. *The Squamish Language: Grammar, Texts, Dictionary*. The Hague: Mouton.
- Landau, Idan, 2013. *Control in Generative Grammar*. Cambridge: Cambridge University Press.
- Matthewson, Lisa. 2005a. *Iwan Kwikws ('When I was Small')*. Vancouver, BC: University of British Columbia Press.
- Matthewson, Lisa. 2005b. On the absence of tense on determiners. *Lingua* 115(12):1697–1735.
- Matthewson, Lisa. 2006. Temporal semantics in a supposedly tenseless language. *Linguistics and Philosophy* 29.673–713.
- Matthewson, Lisa. 2010. Crosslinguistic variation in modality systems: the role of mood. *Semantics and Pragmatics* 3.1–74.
- Mitchell, Sam. In preparation. *Wa7 Sqwéqwel' kw sSam: Sam Tells Stories*. Recorded by Randy Bouchard, transcribed and translated by John Lyon and Henry Davis.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In: Liliane Haegemann (ed.), *Elements of Grammar*. Kluwer International Handbooks of Linguistics. Dordrecht: Springer, 281–337.
- Rullmann, Hotze, Lisa Matthewson, and Henry Davis. 2008. Modals as distributive indefinites. *Natural Language Semantics* 16:317–357.
- Thompson, James. 2012. *Syntactic nominalization in Halkomelem Salish*. Ph.D. dissertation, UBC.