Coordination and constituency in St'át'imcets

Henry Davis
UBC

1 Introduction[1]

Very little work has been done on coordination in Salish. In particular, the use of coordination as a tool to explore syntactic constituency has - as far as I know - never been undertaken systematically in any Salish language. The current paper is a first attempt to remedy this gap in St'át'imcets; as usual, I hope it will provoke others to explore similar issues in other Salish languages.

2 Basics

None of the three basic English conjunctions "and", "or" and "but" have exact equivalents in St'át'imcets. "And" may be translated in one of three ways, depending on what is being coordinated and whether temporal sequencing is involved; "or" has no direct equivalent at all; and "but" has a number of equivalents, which differentiate subtly between degrees and types of antithesis. The syntax of the various elements used to translate English conjunctions is also highly variable: some are full predicates, some second position enclitics, some adverbs. A brief survey of these elements follows.

2.1 *Múta7*

The most widespread conjunction in St'át'imcets is *múta7*, which has two distinct uses: the first is as a sentence-level temporal adverb meaning "again" "still", "more", the second as a conjunction, which is the closest St'át'imcets equivalent to English "and". The first use is illustrated in the examples in (1-9), which are taken from various textual sources:[2]

1. T'ak *múta7* káti7 ti=pépel7=a, pépla7 káti7 ti=t'ák=a *múta7*
   go *again* around det=one(animal)=exis one(animal) around det=go=exis *again*

   "There goes another one, another one is going by over there!" (BE)[3]

2. Kwikws *múta7*, lan ka=hál'h=a
   small *again* already ooc=appear=ooc

   "A little bit more, it's already showing!" (CM)

---

[2] Abbreviations are as follows: abs = absent, act = active intransitivizer, adhort = adhortative enclitic, aut = autonomous intransitivizer, caus = causative (non-control) transitivizer, conj = conjunctive subject clitic, det = determiner, dim = diminutive, dir = directive (full control) transitivizer, erg = 'ergative' (transitive) subject suffix, exis = existential enclitic, foc = focus predicate, inch = inchoative infix/suffix, interr = interrogative enclitic, loc = locative prefix, mid = middle intransitivizer, neg = negation, nom = nominalizer, obj = object suffix, obl = oblique, ooc = out-of-control clitic combination, part = particle, pass = passive, past = past tense enclitic, pl = plural, poss = possessive affix/clitic, prog = progressive, quot = quotative enclitic, rec= reciprocal suffix, red = redirective (relational) transitivizer, redup = reduplication, sg = singular, stat = stative prefix, subj = (indicative) subject clitic, top = topic maintenance suffix. A dash (-) indicates an affix boundary and an equals sign (=) a clitic boundary. Examples are given in the van Eijk Practical Orthography; a conversion chart to the standard Americanist Phonemic Alphabet is given in the appendix.

[3] For textual examples, speakers' initials are given. Examples are taken from the following sources: BE, ML, RJ, SM: van Eijk and Williams (1981); CM, SJ: unpublished transcriptions by Marie Abrahams of Mount Currie, B.C; BF: Matthewson (1999); AJ, RW, BF': curriculum materials distributed by the Upper St'át'imc Language, Culture and Education Society; *Kayám*: Hill-Tout (1905). All non-attributed examples have been directly elicited.

3.   Qwatsáts=ku7   *múta7* nzánem *múta7* ít'-em   *múta7* ít'-em
       leave=quot   *again*   circle *again*   sing-mid*again* sing-mid

"So off he went again, circling and singing and singing."   (SJ)

4.   Tsicw   ti=pál7-alts=a   ti=pál7=a   sq'it,
       went   det=one-house=exis   det=one=exis   day

       pála7   *múta7* sq'it   tsícw=ku7   ti=pál7-alts=a
       one   *again* day   get=quot   det=one-house=exis

"One day he went to one house, the next day he went to another."   (ML)

5.   Wa7   *múta7* láku7   i=núkw=a   wa7   es-7ístken
       prog   *again* there   pl.det=other=exis prog   stat-(nom-)pit.house

"There were other people over there who had a pit-house."   (ML)

6.   Cw7aoz *múta7*   kw=s=ka=ts'áqw-s-as=a   lh=w=as   xí7xew'
       neg   *again*   det=nom=ooc=eat-caus-3erg   when=prog=3conj raw

"Neither could she eat it when it was raw."   (ML)

7.   Súxwast,   úqwa7, t'ak *múta7*   xát'-em
       descend   drink go   *again*   ascend-mid

"He went down, drank, and then went back up again."   (RJ)

8.   Wa7   aylh   láti7   ti=smúlhats=a, wa7   *múta7* es-qáxa7
       prog   then   there det=woman=exis prog   *again* stat-dog

"Now, the woman did have a dog...."   (ML)

9.   Pála7 lt7ú-na   sq'út-s=a   ti=sk'w-ál'ts=a   láti7=ku7 lh=w=as
       one   there-exactly side-3poss=exis det=break-rock=exis there=quot where=prog=3conj

       wats,   lt7u   *múta7* ti=sq'út=a   lh=w=as   kósao7,   lt7u
       defecate over.there *again* det=side=exis where=prog=3conj urinate   over.there

       múta7 ti =sq'út=a   wa7=ku7   láti7   nt'ak'w ti=qú7=a...
       again det=side=exis prog=quot   there   puddle det=water=exis

"On one side of the cave he used to defecate, on another side he used to urinate, and on another
side there was a pool of water..."   (BE)

As shown by (1-9), though the core use of adverbial *múta7* is as a temporal quantifier signifying the repetition or prolongation of an event, as in (3) and (7), it has several other related functions. In combination with the numeral *pála7* "one", as in (1) and (4), and sometimes without it, as in (5) and (9), it means "one more, another", quantifying over individuals; with certain adjectives such as *kwikws* "small, a little", it acts as a degree modifier, quantifying over amounts, as in (2); with negative predicates it means "no more, neither", as in (6); and finally it is sometimes used as a linking device in narratives meaning something like "what's more, furthermore", as in (8).

    The variation in quantificational force shown above is typical of what Barbara Partee (1995) has termed "A-type quantification", where the mnemonic "A" stands for adverbs, auxiliaries and affixes.[4] Like

---

[4] It is perhaps worth mentioning that in turn-of-the-century St'át'imcets, as exemplified in the story *Kayám* transcribed by Charles Hill-Tout (Hill-Tout 1905), there are some sentences strongly suggesting that *múta7* had auxiliary status (a possibility now lost). Thus in (i) and (ii), *múta7* attracts the proclitic nominalizer and enclitic third person possessive subject, a characteristic property of auxiliaries in contemporary St'át'imcets, but impossible for non-auxiliary adverbs:

other A-type quantifiers, adverb *múta7* acts as an unselective binder, quantifying over either events, individuals, or degrees.

Adverbial *múta7* has similar syntax to other temporal modifiers in St'át'imcets, including *núkun'* "again" (semi-pejorative), *kalál* "soon", *lhkún(sa)* "now". Like these other elements, *múta7* prefers to follow the first prosodic word of a sentence (including all enclitics), though it may also occur following any major constituent boundary. The examples in (10-11), which are a few sentences apart in the same narrative, clearly show the positional variability typical of such adverbs:

10. | Tsícw=ku7=ti7 | | aylh | p'an't | *múta7* | et7ú | e=ki=ucwalmícw=a |
     | went=quot=that.one | | then | return | *again* | to.there | to=pl.det=people=exis |

     "So then he went back again to the people."[5] (ML)

11. | Tsícw=ti7 | aylh | *múta7* | p'an't | áta7 | e=ki=nk'sáytken-s=a |
     | went=that.one | then | *again* | return | there | to=pl.det=relative-3poss=exis |

     "So then he went back again to his relatives." (ML)

While semantically related to adverbial *múta7* (and possibly originally derived from it), conjunction *múta7* has a quite different syntax. Just like English "and", it occurs between coordinated constituents of any category. Some examples are given below, with the coordinated constituents bracketed: (12), (13), and (14) involve coordination of subject, object, and prepositional object DPs, respectively; (15) and (16) involve main and subordinate clause coordination, respectively; and (17) involves PP coordination, though note that in this example both the proclitic prepositions and the immediately following determiners are elided, as occurs frequently in connected speech in St'át'imcets. See Section 2 below for a more systematic examination of what can and cannot be coordinated by *múta7*.

12. | Tqílh=t'u7 | tákem | [i=spzú7=a] | *múta7* | [i=spepzúz7=a] | zuqw |
     | almost=part | all | [pl.det=beast=exis] | *and* | [pl.det=bird=exis] | die |

     "Almost all the animals and birds died." (BF')

13. | Cwíl'-em | [ku=sqweyíts] | *múta7* | [ku=tákem=t'u7 | káti7 | wa7=t'u7 | t'íq-s-as] |
     | seek-mid | [det=rabbit] | *and* | [det=all=part | around.there | prog=part | arrive-caus-3erg] |

     "He looked for rabbits and for anything else around there that he used to bring." (ML)

14. | Cúy'=lhkalh | legw-ílc-min-twal' | káti7 |
     | going.to=1pl.subj | hide-aut-red-rec | around.there |

     | ken=[ki=7ay'tseqw-áz'=a] | *múta7* | [i=q'weláp-az'=a] |
     | around=[pl.det=raspberry-plant=exis] | *and* | [pl.det=strawberry-plant=exis] |

     "We began to hide from each other around the raspberry and strawberry plants." (BF)

15. | [Papt | k'éxem | ti=sutik-ák7=a] | *múta7* | [cw7it | i=máq7=a] |
     | [keep | wind.blow | det=winter-hand=exis] | *and* | [many | pl.det=snow=exis] |

     "The north wind kept blowing and there was a lot of snow." (AJ)

(i) | Nilh=t'u7s=*múta7*=s | kwán=as | ti=s-lhq'iq'-al'q{w}=a ... |
     | foc=so *nom=again=3poss* | take(dir)-3erg | det=nom-short-looking... |
     "Then she took the short one once more..."

(ii) | Tsicw-almen=kú7=t'u7, | ní---lh=t'u7 | *s=múta7=s* | káw-lec... |
     | get.there-almost=quot=so | the...n=so | *nom=again=3poss* | far-aut... |
     "He had almost reached it, but then it receded into the distance again..."

[5] The determiner *ki=* in this and following examples is an alternant of the present plural determiner *i=* which is employed after prepositions.

16. Tsukw=t'u7   ka=ptinus-mín-an=a   [kw=s=xím-in'-an   ti=sp'á7-cen-s=a]
    all=part   ooc=think-red-1erg=ooc   [det=nom=grab-dir-1erg   det=paw-foot-3poss=exis]

    múta7   [kw=n=s=tálh-lec]
    and   [det=1sg.poss=nom=stand-aut]

    "All I could think of was to grab its paw and stand up."   (BF')

17. Cw7aoz   kw=s=ka=pták=a   i=wá7   matq   l=ki=s7ácw=a
    neg   det=nom=ooc=pass.by=ooc   pl.det=prog travel   at=pl.det=slide=exis

    [n-klús-i=ha]   *múta7*   [s-áw't-i=ha]
    [loc-front-3pl.poss=exis]   *and*   [nom-behind-3pl.poss=exis]

    "Travellers could not get across the slides in front of and behind them."   (AJ)

Like English "and", *múta7* generally occurs preceding the rightmost conjunct in a sequence of more than two coordinated constituents, as shown in (18), though this is not invariable, as demonstrated by (19).

18. L=ta=sísxets-s=a   ta=tswáw'cw=a   lh=u=s   wa7   es-tsítcw
    on=det=shore-3poss=exis   det=creek=exis   where=prog=3conj prog   stat-house

    wi=[s=Nk'yáp],   [s=Q'áwam']   *múta7*   [i=nk'saytken-í=ha]
    pl=[nom=Coyote]   [nom=Wolf]   *and*   [pl.det=relative-3pl.poss=exis]

    "On the bank of a creek is where Coyote, Wolf, and their relatives had a house."   (RW)

19. N'ás=kacw=malh   qú.qws-em'   [ku=náolaokw],   *múta7* [ku=scíci7],   [sgí7i7]
    go=2sg.subj=adhort shoot(redup)-mid   [det=Nutcracker] *and*   [det=Gray.Jay] [magpie]

    "You go shoot some Clark's Nutcrackers, Gray Jays, and magpies."   (ML)

Note the presence in (18) of the plural element *wi=*, which is used in three rather distinct environments in St'át'imcets: with plural or conjoined proper names (as in 20) or pet names (as in 21); with plural independent pronouns, as in (22-23); and with complex numbers, where it means "plus" as shown in (24):

20. Wa7   álkst=wit   *wi=s=Bill*   *múta7* s=John
    prog   work=3pl   *pl=nom=Bill*   *and*   nom=John

    "Bill and John are working."

21. Cw7it   *wi=s=kíka7*   wa7   kents7áwna
    many   *pl=nom=girl(pet-name)*   prog   around.here

    "There are a lot of girls around here."

22. Swat   lhel=*wi*=snílh   ku=xílh-tali
    who   from=*pl*=3pro   det=do(caus)-top

    "Which one of them did it?"

23. *Wi*=snímulh   ku=huz'   mays-en-táli
    pl=1pl. pro   det=going.to   fix-dir-top

    "We're the ones who are going to fix it."

24. Án'was   s-q'em'p-s   *wi*=7án'was   tsitcw   i=xek-en-án=a
    two   nom-ten-3poss *pl*=two   house   pl.det=reckon-dir=exis

"I counted twenty two houses."

Van Eijk (1997) treats *wi*= as a determiner (the plural equivalent of the proper name determiner *kw*=): this accounts for its proclitic status and its complementary distribution with other determiners, though not for its appearance in numbers (including those inside complex nominal predicates, as in (24)), or its appearance on independent pronouns (which are never introduced by *kw*=). Note also that - unlike other plural determiners - *wi* = co-occurs freely (and at least for some speakers, obligatorily) together with the (coreferential) third person plural human enclitic =*wit*, as in (20); =*wit* is otherwise in complementary distribution with coreferential plural DPs. I will not explore the rather puzzling behavior of *wi*= further here, since it is beyond the limited scope of this paper. See Roberts (1999) for additional data and analysis.

2.2   *Nilh(=t'u7)*

Unlike English "and", the conjunction *múta7* never indicates a temporal sequence. Thus a sentence like (25) in English may not be felicitously translated into St'át'imcets using *múta7*: (26) could only have the (pragmatically bizarre) reading whereby the coyote was simultaneously drinking and going up hill.

25.   "The coyote drank and (then) went up the hill."

26. ! Úqwa7   *múta7*   xát'-em   ta=nk'yáp=a
        drink   *and*   go.uphill-mid   det=coyote=exis

"The coyote drank and went up the hill (at the same time)."

In order to effect either a temporal or a logical sequence of clauses, St'át'imcets introduces the (subsequent/consequent) clause with the focusing predicate, *nilh,* together with nominalizing morphology, as shown in (27), which is the corrected version of (26):

27.   Úqwa7   *nilh*   *(múta7)*   *s*=xát'-em=*s*   ta=nk'yáp=a
       drink   *foc*   *(again)*   *nom*=go.uphill-mid=*3poss*   det=coyote=exis

"The coyote drank and (then) went up the hill (again)."

Nilh may be reinforced by adverbial *múta7*, as in (27), the adverb *aylh* "next, then", as in (28) and (29), and (most frequently) by the second position enclitic =*t'u7* "yet, still, so", as in (29) and (30).

28.   *Nílh=t'u7*   *aylh*   tsícw-s-tum'   e=ki=7em.7ímats-s=a
       foc=so   *then*   get.there-caus-pass   by=pl.det=grandchildren(redup)-3poss=exis

       tákem   i=stem.té.tem'-s=a
       all   pl.det=things(redup)-3poss=exis

"Then she was brought all her belongings by her grandchildren."   (Kayám)

29.   Psil'   *aylh,*   *nilh=t'u7*   *s*=cwak=*s*,   *nilh=t'u7*
       morning *then*   *foc=so*   *nom*=wake=*3poss*   *foc=so*

       s=mítsao7q=*s*,   *nilh=t'u7*   *s*=tálh-lec=*s*,
       nom=sit.up=*3poss*   *foc=so*   *nom*=get.up-aut=*3poss*

       nilh=t'u7   *aylh*   matq=*s*   n-ts'ítem'   áku7   ku=qú7=a
       foc=so   *then*   walk=3poss   loc-direction   to.there   det=water=exis

"It was morning, so she woke up, sat up, got up, and then walked over towards the water."[6]

<div style="text-align: right">(Kayám)</div>

30. *Nílh=t'u7*   s=tsícw-s-as   áku7   s7ístken=a,
    foc=so   *nom*=get.there-caus-3erg   to.there   pit.house=exis

    i=stsmál't-s=a   *múta7*   i=nk'saytken-s=á=t'u7
    pl.det=children-3poss=exis   *and*   pl.det=relative-3poss=exis=so

"Then he brought it back to the pithouse, to his children and his relatives."[7]   (ML)

This construction is used with astonishing frequency in narratives, very often introducing all sentences in an episode except the first. Other Salish languages have quite similar "clause-chaining" constructions, though they employ different lexical items: for example, Squamish uses the combination *s=s=mn* (Kuipers 1967:162), and Thompson the combination *(t'u7) e=*(see Kroeber 1996). It is important to point out that *nilh(=t'u7)* always introduces a full clause (thus, it cannot be used to coordinate non-sentential constituents, unlike *múta7*); this will be of significance later, when we try to tease apart sentential coordination with null arguments from constituent coordination.

2.3 "But"

I now turn to St'át'imcets equivalents of English "but". There are three basic expressions to consider: *k'ámalh, (zámas) t'u7,* and *=hem'(=t'u7)*.

    K'ámalh appears to be made up of two elements, the modal *k'a* "maybe" and the adhortative enclitic *=malh*, which both occur independently in contemporary St'át'imcets. It is doubtful, however, whether the two are synchronically separable in *k'ámalh*, which is best analyzed as a non-compositional fixed expression

    K'ámalh is used in St'át'imcets exclusively as a sentential conjunction; its meaning is closest to English "however" or perhaps French "quand-même". Examples are given below:

31. No-7-qw-ám   lhkúnsa,   *k'ámalh* inátcwas   kéla7=t'u7   xelh
    warm(inch)-mid   now   *however* yesterday   first=part   cold

"It's warming up today, but it was really cold yesterday."   (van Eijk 1997: 181)

32. Q'uq'wts   i=núkw=a   úcwalmicw,   *k'ámalh*   cw7it   i=wa7   sq'waxw
    fat   pl.det=some=exis   person   *however*   many   pl.det=prog   thin

"Some people are fat, but a lot are thin."

33. Kwikws   ti=n-ts'lá7=a   pináni7   wa7   qwez-en-án,
    small   det=1sg.poss-basket=exis   around.then   prog   use-dir-1sg.erg

    k'ámalh xzum   ti=ts'lá7=a   wa7   qwez-en-ás
    however big   det=basket=exis   prog   use-dir-3erg

"The basket I used in those days was small, but the one she used was big."   (BF)

The most common equivalent of "but" in St'át'imcets is the conjunction *t'u7*. While obviously diachronically related to the homophonous second position enclitic *=t'u7*, it has a different syntax and a

---

[6] When *aylh* or another adverb intervenes between *nilh(=t'u7)* and a following predicate, the nominalizer frequently drops , as can be seen in (29) and (30). However, the presence of possessive morphology on an (intransitive) predicate still shows that the predicate has been nominalized by *nilh* in such cases.

[7] Only intransitive predicates obligatorily take possessive subject clitics when nominalized; first or second person transitive predicates either take possessive subject clitic or subject suffix inflection, and third person transitive predicates always retain subject suffix inflection, as here and in the passive in (29). For details see Davis (1998, 1999a).

different meaning. Like *k'ámalh*, it only conjoins sentences, and always occurs in first position; its meaning is quite similar to English "but" or "although".[8]

34. Nilh s=wa7-min-túmulh-as,   *t'u7*cw7aoz   kw=n=s=wa   lexláx-s
    Then nom=be=red-1pl.obj-3erg *but* neg   det=1sg.poss=nom=prog remember-caus

    lh=k'wín=as   máqa7. *T'u7* t'ák=t'u7 gélgel   kw=s=qwenúxw=s.
    irr=how.many=3conj   snow   *but*   get=still strong   det=nom=sick=3poss

    "Then she lived with us, although I don't remember for how many years. But her illness kept getting worse."   (BF)

35. Stéxw=t'u7   wa7   qwámqwmet   lh=a=s   tsláoy-am=lhkalh,
    really=part   prog fun   when=prog=3conj   July-mid=1pl.subj

    t'u7 cw7it kw=s=alkst   t'it.
    but   much   det=nom=work also

    "It was really fun when we celebrated the 1st of July, but there was a lot of work, too."   (BF)

36. Kán=as=k'a   kw=s=cin'=s   kw=s=wá7=lhkalh
    maybe=3conj=appar   det=nom=long.time=3poss   det=nom=prog=1pl.subj

    q'weláw'-em   ki=háops=a,   *t'u7* tsicw   kw=s=p'an't skul
    pick.berry-mid   coll.det=hops=exis   *but*   came   det=nom=return school

    ti=n-qéqtsek=a   láku7   St. Marys=a   láku7   Mission-a
    det=1sg.poss-older.brother over.there   St. Mary's=exis   over.there   Mission=exis

    "I guess we picked hops for some time, but then it came time for my elder brother to go back to school over at St. Mary's, Mission."   (BF)

Particularly in the Lower (Mt. Currie) dialect of St'át'imcets, *t'u7* is often preceded by the adverbial element *zámas*, as in (37). Diachronically, *zámas* is probably derived from the adverb *zam'* (which is hard to translate, but basically asks for acquiescence on the hearer's part to an assertion or command) plus the third person conjunctive enclitic =*as* . However, in contemporary St'át'imcets, *zámas* is frequently shortened to *mes*, and in that case, it acts as a bona fide auxiliary, attracting subject clitics, as in (38). This indicates that =*as* has fused with the adverb in contemporary St'át'imcets, becoming synchronically unanalyzable.

37. Célhcelh   ti=skícza7-s=a,   *zámas*=*t'u7*   ki7kel'-úlh
    enthusiastic   det=mother-3poss=exis   *but*   unwilling-always

    "Her mother is active, but she is lazy."

38. Cw7ucw   i=lep'-alh-k'ún7=a,   *mes*=kán=*t'u7*   wa7   t'ec-s
    stink   pl.det=buried-con-fish.egg=exis *but*=1sg.subj=*still*   prog tasty-caus

    "Cured salmon eggs stink, but I still find them tasty."   (van Eijk 1997: 180)

The third St'át'imcets element often translated into English as "but" is the second position clitic *hem'*, glossed by van Eijk (1997) as "antithesis". *Hem'* (often reinforced by a following *t'u7*) introduces information contrary to earlier expectations, frequently including overtones of speaker disapproval, as in the common expression of exasperation in (39). (40) and (41) show how *hem'* can be combined with other

---

[8] Van Eijk (1997) characterizes the meaning difference between *k'ámalh* and *t'u7* as equivalent to that between the Russian conjunctions *a* and *no*: the former introduces information contrary to that introduced earlier, the latter information which is unexpected on the basis of earlier information.

antithetical expressions, yielding subtly different shades of meaning depending on the particular combination of adverbs and enclitics.

39. Wá7=*hem'=t'u7* núkun' snúwa!
    prog=*anti=part* again you

    "Well, there you go again!"

40. Nílh=malh   ti7   ku=sqáycw   láw=tu7,   k'a=lh=lat7=ás=malh
    foc=adhort   that   det=man   hang=past   maybe=if=there=3conj=adhort

    ku=srap,   k'a=lh=nká7=as=t'u7,   t'u7   láti7=k'a=*hem'=t'u7*.
    det=tree   maybe=from=where=3conj=part   but   there=appar=*anti=part*

    Wa7=*hem'=t'u7*   wa7   tsút   kw=a=s=tu7   wa7   ku=wa7   láw   láti7.
    prog=*anti=part* prog say   det=prog=3poss=past prog   det=prog   hang   there

    "So then that man got hung, maybe from that tree over there, maybe somewhere else, but apparently over there. At any rate, they say that someone was hanged over there."   (SM)

41. *K'ámalh*   ti=smé.m'lhats=a,   nílh=*hem'=t'u7*   sqáxa7=s=t'u7 aylh
    however   det=woman(dim.redup)=exis   foc=*anti=part*   dog=3poss=part then

    "But as for the girl, she remained a dog."   (ML)

2.4   "Or"

In contrast to the multiple St'át'imcets equivalents of English "but", there is no direct equivalent of English "or". Instead, the language employs a periphrastic construction, using the adverb/conjunction *k'a* "maybe", followed by a clause introduced by the irrealis complementizer *lh=* (see Davis and Matthewson 1996). Examples are given in (42-44):[9]

42. Ni=kél7=a   wa7   lexláx-s-an   nilh=k'a   i=zúqw=as
    det=first=exis prog   remember-caus-1sg.erg   foc=appar   when=die=3conj

    k'a   *lh*=nílh=*as*   ni7   na=n-kúkw7=a   *k'a*
    maybe *if*=foc=*3conj* that   det=1sg.poss-grandmother=exis   *maybe*

    lh=nílh=*as*   ni7   na=n-stá7=a,   cw7aoz   kw=n=s=wa   zwát-en.
    if=foc=*3conj* that   det=1sg.poss-aunt=exis neg   det=1sg.poss=nom=prog   know-dir

    "The first thing I remember is when either my grandmother or my aunt died, I don't know which."
                                                                                    (BF)

43. Cw7aoz kw=en=zwát-en   *k'a*   *lh*=nk'w.wátqwa7-mec=*as*
    neg   det=1sg.poss=know-dir   *maybe*   *if*=D'arcy-person=*3conj*

    k'a   *lh*=lil'wat7úl-mec=*as*
    maybe   *if*=Mt.Currie-person=*3conj*

    "I don't know if she was from D'arcy or from Mount Currie."   (BF)

44. *K'a*   *lh*=zúqw=*as*=tu7   ni7   na=núkw=a   qelhmín smúlhats
    maybe   *if*=die=*3conj*=past that   det=other=exis old   woman

---

[9] Adverb/conjunction *k'a* always appears clause-initially, like the conjunction *t'u7*. However, also just like *t'u7*, *k'a* has a homophonous second-position enclitic counterpart, =*k'a*, with a similar but not identical meaning ("apparently, it seems"). It is likely that both enclitic =*t'u7* and =*k'a* are derived from their full-word counterparts, though they are both syntactically and semantically distinct in the contemporary language.

k'a	*lh*=mím'c=*as*=tu7	nka7	
maybe	*if*=move=*3conj*=past	where	

"Either that other old woman died or she moved somewhere." (BF)

2.5 Summary

In Section 1, I have given an overview of the St'át'imcets equivalents of the English conjunctions "and", "but", and "or". It should by now be clear that of the various elements discussed above, only *múta7* conjoins constituents smaller than a complete clause. It follows that only *múta7* has any potential as a test for syntactic constituency. The next three sections will explore this potential. Section 3 is a general look at which constituents can and cannot be conjoined with *múta7*. Section 4 tackles the issue of VP constituency, using coordination as a diagnostic tool. Section 5 examines the constituency of subject clitics, again using *múta7* as a probe. Section 6 concludes.

3 Constituent Coordination with *múta7*

3.1 Coordination of Arguments

Coordination of argument DPs is by far the commonest and least marked type of constituent coordination with *múta7*; in fact, it is the only type discussed by van Eijk (1997: 182). Examples of coordinated intransitive subject DPs were given in (12) and (18) above, and examples of coordinated 'with objects' (the objects of semantically transitive but morphologically intransitive predicates) were exemplified in (13) and (19). Coordinated transitive subject and object DPs are given in (45-6) and (47-48) below. (Note that the examples below are from Upper St'át'imcets speakers, whose unmarked word order in transitive sentences with two overt arguments is VOS: see Davis 1999a).

45.
Ats'x-en-tsál-itas	*wi*	[s=Bill]	*múta7*	[s=Mary]
see-dir-1sg.obj-3pl.erg	*pl*	[nom=Bill]	*and*	[nom=Mary]

"Bill and Mary saw me."

46.
Pzán-itas	ta=kúkwpi7=a	*wi*	[s=John]	*múta7*	[s=Mary]
meet(dir)-3pl.erg	det=chief=exis	*pl*	[nom=John]	*and*	[nom=Mary]

"John and Mary met the chief."

47.
Ats'x-en-wít=kan	*wi*	[s=John]	*múta7*	[s=Bill]
see-dir-3pl.obj=1sg.subj	*pl*	[nom=John]	*and*	[nom=Bill]

"I saw John and Bill."

48.
Ts'áqw-an'-as	[ta=ts'í7-s=a]	*múta7*	[ta=száq'-s=a]	s=John
eat-dir-3erg	[det=meat-3poss=exis]	*and*	[det=bread-3poss=exis]	nom=John

"John ate his meat and his bread."

Coordination of complement clauses is also possible as long as there is no temporal or logical relation between the two conjuncts, as observed in Section 1 and exemplified in (16) above. Since clauses in complement position are introduced by the determiners (or determiner-like complementizers) *kw* =and *t(i)=...=a* (Davis and Matthewson 1996), an interesting question arises as to the possibility of coordinating complement clauses with unambiguously nominal complement DPs introduced by the same (or homophonous) elements. This bears on the issue of whether subordinate clauses introduced by determiner-like elements are actually DPs (as claimed by Davis and Matthewson 1996) or comprise (at least synchronically) a separate category of CP, as maintained by Kroeber (1999: 127). The following examples, judged to be terrible by native speakers, provide prima facie support for Kroeber's position, though it is just conceivable that the reason for their unacceptability, like that of their English equivalents, is semantic or pragmatic (in fact, anti-zeugmatic!) rather than purely syntactic.

49. * Zwat-en=lhkácw =ha   [kw=s=John]   *múta7* [kw=s=t'iq=s   kw=s=Mary]
     know-dir=2sg.subj=interr [det=nom=John *and* [det=nom=arrive=3poss det=nom=Mary]

  * "Do you know John and that Mary has arrived?"

50. * Áma   [ti=s=t'íq=sw=a]   *múta7* [ti=á7emh=a   st'píwen-su]
     good   [det=nom=arrive=2sg.poss=exis] *and* [det=pretty=exis   skirt-2sg.poss]

  * "It's good that you've arrived and your pretty skirt."

Other types of DPs besides subjects and objects may also be coordinated. These include overt possessors, as in (51-52), and the objects of prepositions, as in (53-55) (see also (14) above); note that (54) is a focused version of (53).

51.   Wa7 l=ta=qwenúxw-alhcw=a ta=skícza7-s=a   [s=Lémya7]   *wi* [s=Pauline][10]
        prog in=det=sick-place=exis det=mother-3poss [nom=Lémya7] *and* [nom=Pauline]

    "Lémya and Pauline's mother is in the hospital."

52.   Ka=tíg'w=a   nelh=ts'qáxa7-s=a   [ta=kúkwpi7=a] *múta7* [ta=skúza7-s=a]
        ooc=free=ooc pl.det=horse-3poss=exis [det=chief=exis] *and* [det=child-3poss=exis]

    "The chief and his son's horses got loose."

53.   Wa7 ts'éts'qwaz'-am   i=ucwalmícw=a   l=[ki=tsal'álh=a]   *múta7* [i=tswáw'cw=a]
        prog fish(dim.redup)-mid pl.det=people=exis in=[pl.det=lake=exis] *and* [pl.det=creek=exis]

    "The people fish for trout in lakes and creeks."

54.   L=[ki=tsal'álh=a]   *múta7*   [i=tswáw'cw=a]
        in=[pl.det=lake=exis]   *and*   [pl.det=creek=exis]

    lh=u=s   ts'éts'qwaz'-am   i=ucwalmícw=a
        where=prog=3conj   fish(dim.redup)-mid pl.det=people=exis

    "In the lakes and creeks is where the people fish for trout."

55.   P'en'a.p'án'ta=lhkan   lhel=[ta=Sát'=a]   *múta7* [ta=Pankúph=a]
        return(redup)=1sg.subj   from=[det=Lillooet=exis] *and* [det=Vancouver=exis]

    "I go back and forth from Lillooet and Vancouver."

There are as far as I can tell no constraints on the internal structure of coordinated DPs, as long as all the coordinates individually meet the syntactic, semantic and pragmatic requirements of the entire DP. This means that proper names, DPs containing common noun phrases, and DPs containing relative clauses (including null-headed relative clauses) may all be freely coordinated, given the right context.

Context: we're looking for various people in a crowd.

---

[10] For some Upper St'át'imcets speakers, *múta7* may be replaced with *wi* in conjunctions of proper names. When it replaces *múta7*, *wi* is obligatorily absent from the beginning of the coordinated structure: cf. (45-47). Note also that in the Upper dialect, coordinated proper name possessors often co-occur with the singular (or more correctly, unmarked) third person possessive suffix -*s*, rather than the plural possessive suffix -*i*. With coordinated common noun DPs, this pattern is common to both dialects, but with proper names (at least according to van Eijk 1997), the Lower dialect strongly prefers the plural possessive suffix.

56.　Pún=lhkan　　　　[ti=zác-alqwem'=a]　　　*múta7*　[ti=wa7　　cwíl'-en-as　　s=Lisa]
　　　find(dir)=1sg.subj　[det=long-looking=exis]　*and*　[det=prog　seek-dir-3erg　nom=Lisa]

　　　"I found the tall one and the one Lisa was looking for."

57.　Pún=lhkan　　　　　　[ti=zác-alqwem'=a]　　　*múta7*　[s=Gertie]
　　　find(dir)=1sg.subj　　[det=long-looking=exis]　*and*　[nom=Gertie]

　　　"I found the tall one and Gertie."

58.　Pún=lhkan　　　　　　[ti=zác-alqwem'=a]　　　*múta7*　　[ti=kúkwpi7=a]
　　　find(dir)=1sg.subj　　[det=long-looking=exis]　*and*　　[det=chief=exis]

　　　"I found the tall one and the chief."

59.　Pún=lhkan　　　　[s=Gertie]　*múta7*　[ti=wa7　　cwíl'-en-as　　s=Lisa]
　　　find(dir)=1sg.subj　[nom=Gertie]　*and*　[det=prog　seek-dir-3erg　nom=Lisa]

　　　"I found Gertie and the one Lisa was looking for."

60.　Pún=lhkan　　　　　　[s=Gertie]　　　　　*múta7*　[ti=kúkwpi7=a]
　　　find(dir)=1sg.subj　　[nom=Gertie]　　　　*and*　[det=chief=exis]

　　　"I found Gertie and the chief."

61.　Púnlhkan　　　　　[ti=kúkwpi7=a]　　　*múta7*　[ti=wa7 cwíl'enas　　s=Lisa]
　　　find(dir)=1sg.subj　[det=chief=exis]　　*and*　[det=prog　seek-dir-3erg　nom=Lisa]

　　　"I found the chief and the one Lisa was looking for."

　　　　Argument coordination brings some interesting evidence to bear on the internal constituency of DPs. To start with, as shown by Matthewson (1998), it provides crucial evidence for the constituency of pre-determiner quantifiers. According to Matthewson, quantifiers preceding D are adjoined to the entire DP (see also Matthewson and Davis 1995); as predicted by this analysis, they may either occur outside or inside a coordinated DP:

62.　Áts'x-en=lhkan　　tákem　[i=sqáy.qeycw=a]　　　*múta7*　[i=smelh.múlhats=a]
　　　see-dir=1sg.subj　all　　[pl.det=men(redup)=exis]　*and*　[pl.det=women(redup)=exis]

　　　"I saw all the men and the women."

63.　Áts'x-en=lhkan　[tákem　i=sqáy.qeycw=a]　　*múta7*　[tákem　i=smelh.múlhats=a]
　　　see-dir=1sg.subj　[all　　pl.det=men=exis]　　*and*　[all　　pl.det=women(redup)=exis]

　　　"I saw all the men and all the women."

64.　Cw7it　　　[i=sqáyqeycw=a]　　*múta7*　[i=smelhmúlhats=a]　　qwatsáts
　　　many　　　[pl.det=men=exis]　　*and*　[pl.det=women=exis]　　leave

　　　"Many of the men and the women left."

65.　[Cw7it　　i=sqáyqeycw=a]　　*múta7*　[cw7it　　i=smelhmúlhats=a]　　qwatsáts
　　　[many　　pl.det=men=exis]　　*and*　[many　　pl.det=women=exis]　　leave

　　　"Many of the men and many of the women left."

(For justification of the DP-initial structure assumed in (64-5), see Matthewson 1998).

Interestingly, there is a third - and more marginally, a fourth - pattern of DP coordination. The third pattern involves coordinating two DPs under the scope of the same determiner, as shown in (66-9).

66. 　Wa7　ts'éts'qwaz'-am　　i=ucwalmícw=a　l=ki=[tsal'álh=a]　*múta7* [tswáw'cw=a]
　　　prog　fish(dim.redup)-mid　pl.det=people=exis　in=pl.det=[lake=exis]　*and*　[creek=exis]

"The people fish for trout in lakes and creeks."

67. 　L=ki=[tsal'álh=a]　　*múta7* [tswáw'cw=a]　lh=u=s　　　ts'éts'qwaz'-am
　　　in=pl.det=[lake=exis]　*and*　[creek=exis]　where=prog=3conj　fish(dim.redup)-mid

　　　i=ucwalmícw=a
　　　pl.det=people=exis

"In the lakes and creeks is where the people fish for trout."

68. 　P'en'a.p'án'ta=lhkan　　lhel=ta=[Sát'=a]　　　*múta7*　　[Pankúph=a]
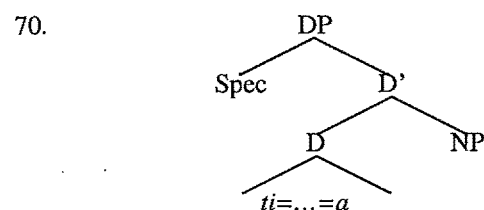　　　return(redup)=1sg.subj　from=det=[Lillooet=exis]　*and*　　[Vancouver=exis]

"I go back and forth from Lillooet and Vancouver."

69. 　P'en'ap'án'ta-mín=lhkan　ta=[Sát'=a]　　　*múta7*　[Pankúph=a]
　　　return(redup)-red=1sg.subj　det=[Lillooet=exis]　*and*　[Vancouver=exis]

"I go back and forth from Lillooet and Vancouver."

The examples in (66), (67) and (68) contrast minimally with those in (54), (55), and (56), respectively. While (66-8) all involve coordinating the objects of prepositions, the possibility of constituent coordination beneath D is by no means confined to PP environments. This is demonstrated by (69), whose meaning is identical to (68), but which contains a coordinated locative complement DP directly selected by the redirective transitivizer *min-* .

　　(66-69) appear to show that the structure of DP in St'át'imcets is more articulated than assumed in e.g. Matthewson and Davis (1995), who hypothesize a single layer of DP structure with both the proclitic (deictic) portion *ti=* of D and the enclitic (existential) portion *=a* occupying the same D position in the syntax, and prosodic rules accounting for their different surface positions. The structure proposed by Matthewson and Davis is shown in (70):

70.
```
            DP
          /    \
        Spec    D'
               /  \
              D    NP
             / \
          ti=...=a
```

(Note that the [SPEC, D] position is occupied by demonstratives, which may cooccur with determiners).

The coordination data presented here, in contrast, indicate a structural difference between the two portions of D, with the proclitic part (D) c-commanding the enclitic part (X), as shown in (71):

71.

```
                    DP
                  /    \
              Spec      D'
                      /    \
                    D        XP
                   ti=      /   \
                        Spec      X'
                               /    \
                             NP       X
                                      =a
```

I leave both the identity of XP in (71) and the nature of its specifier for future investigation. However, it is worth pointing out that the both the structures in (70) and (71) predict a fourth coordination pattern, involving NP rather than DP or XP. The examples in (72-3) seem to show exactly this pattern:

72. Áts'x-en=lhkan   i=cw7ít=a   [maw] *múta7* [sqáxa7]
     see-dir=1sg.subj pl.det=many=exis   [cat]   *and*   [dog]

     "I saw many cats and dogs."

73. Cw7it   i=[smelhmúlhats]=a   múta7   [sqáyqeycw]   ulhcw
     many   pl.det=[women]=exis   and   [men]   enter

     "Many women and men entered."

Observe that in (73) the existential enclitic portion of the determiner occupies a surface position inside the coordinated NP, following the first conjunct. This indicates that even if we adopt the structure in (71) we must still invoke a prosodic rule encliticizing =a in second position as originally proposed by Matthewson and Davis.

3.2   Coordination of Obliques

Oblique DPs in St'át'imcets are introduced by the proclitic prepositions *l*= "in, on, at", *lhel*= "from", *kn*= "around", and *e*= "to", as already illustrated in several examples above. Both *l*= and *e*= may also be used to mark the agent of a passive verb (the former predominantly by Upper St'át'imc speakers). Oblique DPs (including passive agents) may be freely coordinated, subject to normal constraints on pragmatic plausibility. Examples are given below; (74) and (75) contrast minimally with (54-5) and (66-7). See also (17) in Section 2.1.

74. Wa7   ts'éts'qwaz'-am   i=ucwalmícw=a   [l=ki=tsal'álh=a   *múta7*
     prog   fish(dim.redup)-mid   pl.det=people=exis   [in=pl.det=lake=exis   *and*

     l=ki=tswáw'cw=a]
     in=pl.det=creek=exis]

     "The people fish for trout in lakes and creeks."

75. [L=ki=tsal'álh=a]   *múta7*   [l=ki=tswáw'cw=a]   lh=u=s
     in=[pl.det=lake=exis]   *and*   [in=pl.det=creek=exis] where=prog=3conj

     ts'éts'qwaz'-am   i=ucwalmícw=a
     fish(dim.redup)-mid   pl.det=people=exis

     "In the lakes and creeks is where the people fish for trout."

76. Wa7   kwán.en-s-tum   i=ts'í7=a   [e=ki=ucwalmícwa]
     prog   catch(redup)-caus-pass   pl.det=deer=exis   [obl=pl.det=people=exis]

müta7   [e=ki=sám7=a]
and   [obl=pl.det=white.person=exis]

"Deer are caught by Indian people and by white people."

Temporal adjunct clauses (introduced by *lh=* or - in the past tense only - *i=*) may also be free coordinated with *müta7*, as in (77). See Davis and Matthewson (1996) for details of these subordinate constructions.

77. Wa7   q'weláw'-em   i=ucwalmícw=a   [lh=wá7=as
     prog   pick.berry-mid   pl.det=people=exis   [when=prog=3conj

     pipántsek] *müta7*   [lh=wá7=as   lhwál'tsten]
     summer]   *and*   [when=prog=3conj   fall]

"The people pick berries in summer and fall."

3.3   Coordination of Argument Modifiers

There are two principle types of argument modification in St'át'imcets, both involving relative clauses. Following Demirdache and Matthewson (1995) and subsequent work, I will refer to them as REL1s (for post-head modifiers) and REL2s (for pre-head modifiers). REL2s contain a single determiner; REL1s contain two, with the post-head modifier being introduced by a copy of the determiner on the head. Examples of each type are given in (78) and (79):

78. ta=ʐwat-en-án=a   sqaycw   (REL2)
     det=*know-dir-1sg.erg*=exis   man

     "the man I know"

79. ta=sqáycw=a   *ta=ʐwat-en-án=a*   (REL1)
     det=man=exis   *det=know-dir-1sg.erg=exis*

     "the man I know"

In general, the REL2 structure is preferred with shorter modifiers (including but not confined to those which translate into English as prenominal adjectives) while REL1s are preferred with longer modifiers, and are the only possible structure for modifiers containing overt DP complements. Under certain not well-understood circumstances, REL2s may extrapose; extraposed REL2s are particularly common with the progressive auxiliary *wa7*, as shown in (80-81):[11]

80. ta=wá7   *zwát-en-an*   sqáycw   (REL2)
     det=*prog*   *know-dir-1sg.erg*   man

     "the man I know"

81. ta=sqáycw=a   *wa7*   *zwát-en-an*   (extraposed REL2)
     det=man=exis   *prog*   *know-dir-1sg.erg*

     "the man I know"

See Matthewson and Davis (1995) for further details. I will confine myself here to remarks on the coordination of REL2s: this is an area which requires further exploration.

---

[11] Note that *wa7* phonologically absorb a following existential enclitic, as seen in (80): except in hyper-correct speech (e.g., in a classroom setting) *wá7=a* is pronounced simply *[wa7]*.

Both ordinary and extraposed REL2s may be coordinated with *múta7*, with a slight but detectable difference in meaning, as shown in (82) and (83), respectively:

82. S-páqw-s=kan   [i=t'íq=a]   *múta7*   [i=qwatsáts=a]   smelhmúlhats
    stat-watch-caus=1sg.subj [pl.det=come=exis] *and*   [pl.det=leave=exis] women

    "I watched the women come and go."

83. S-páqw-s=kan   i=smelhmúlhats=a   [wa7 t'iq] *múta7* [wa7   qwatsáts]
    stat-watch-caus=1sg.subj pl.det=women=exis   [prog come] *and*   [prog leave]

    "I watched the women that were coming and going."

In general, REL2 coordination shows a similar but not identical pattern to DP coordination. Observe the following contrasts:

84. Qw'eláw'-en=lhkan   [i=kwíkws-a]   *múta7*   [i=xzúm=a]   aopls
    pick.berry-dir=1sg.subj [pl.det=small=exis] *and*   [pl.det=big=exis]   apple

    "I picked the small and the big apples."

85. Qw'eláw'-en=lhkan   [i=kwíkws-a]   *múta7*   [xzúm=a] aopls
    pick.berry-dir=1sg.subj [pl.det=small=exis] *and*   [big=exis] apple

    "I picked the small and big apples."

86. * Qw'eláw'-en=lhkan   [i=kwíkws=a]   *múta7*   [xzúm]   aopls
    pick.berry-dir=1sg.subj [pl.det=small=exis] *and*   [big]   apple

    "I picked the small and big apples."

87. Lhép.lhep.lhep   [i=kwḻíi7=a]   *múta7*   [i=tseqwtsíqw=a] sts'ak'w
    blink(redup)   [pl.det=green=exis] *and*   [pl.det=red=exis] light

    "The green and the red lights are blinking."

88. Lhép.lhep.lhep   [i=kwḻíi7=a]   *múta7*   [tseqwtsíqw=a] sts'ak'w
    blink(redup)   [pl.det=green=exis] *and*   [red=exis]   light

    "The green and red lights are blinking."

89. * Lhéplheplhep   [i=kwḻíi7=a]   *múta7*   [tseqwtsíqw]   sts'ak'w
    blink(redup)   [pl.det=green=exis] *and*   [red]   light

    "The green and red lights are blinking."

As can be seen from the ungrammaticality of the examples in (86) and (89), one of the DP coordination patterns observed in 3.1 above fails to hold in modification structures. This gives us a valuable clue as to the constituency of the modifying phrase: it cannot consist of a predicate alone, but must minimally be the category headed by the existential enclitic part of the discontinuous determiner.

The interpretation of coordinated modifiers gives us a further clue to their underlying constituency. As observed in Section 2, it is relatively easy in fast speech to elide the deictic proclitic part of the discontinuous determiner, but not the existential enclitic part. This means that examples such as (85) and (88) have two possible sources: they could be reduced versions of the examples in (84) and (87), which are coordinations of full (relative clause) DPs, or they could be coordinations of the XP category headed by the enclitic part of the determiner only. In the former case, each of the modifying predicates will have their argument variables bound by a separate proclitic determiner, encoding the number and spatio-temporal

location of each argument; in the latter case, however, a single determiner will bind both arguments, which will then be interpreted as instances of a single variable.

Example (85) argues clearly for the first option: apples cannot be simultaneously big and small, so the speaker must be talking about separate sets of entities. (88) seems to show the same thing, though here the evidence is not as clear-cut, since it is not inconceivable that a blinking light could be both red and green. Given the availability of a "determiner-reduction" operation, the question then arises whether there are any unambiguous cases of XP coordination.

The easiest way to check is to employ a singular referent, as in (89):

89.　Haláw'=ha　　láti7　　ta=[q'wexq'wíx=a]　　múta7　[péq=a]　　　spzúza7
　　　eagle=interr　there　det=[black=exis]　　　and　　[white=exis]　　bird

　　　"Is that black and white bird an eagle?"

This example clearly shows that XP coordination is also possible in REL2 structures. Perhaps surprisingly, however, it turns out that both DP and bare predicate coordination are also possible with singular referents:

90.　Haláw'=ha　　láti7　　[ta=q'wexq'wíx=a]　múta7　[ta=péq=a]　　spzúza7
　　　eagle=interr　there　[det=black=exis]　　　and　　[det=white=exis]　bird

　　　"Is that black and white bird an eagle?"

91.　Haláw'=ha　　láti7　　ta=[q'wexq'wíx]=a　múta7　　　　　[peq]　spzúza7
　　　eagle=interr　there　det=[black]=exis　　and　　　　　　white　bird

　　　"Is that black and white bird an eagle?"

Consultant's comment: "Aren't they all the same?"

Thus when both modifiers refer to a single referent, all three coordination patterns are possible, as in argument DP coordination; but when the modifiers refer to different referents, coordination is possible only at the DP (and possibly XP) levels. DP coordination with a singular referent (as in (90)) is particularly puzzling here, since it means that both determiners must be referring to the same entity, which is not possible with English prenominal modifiers:[12]

92.　*　Is the black and the white bird an eagle?

Turning to REL1 structures, we see that with a single referent, coordination of the modifying element is possible at the DP (93), XP (94), and bare predicate (95) levels, just as with REL2 structures. I have no examples of REL1s with plural referents: more work is needed here.

93.　Ats'x-en=lhkácw=ha　　　ta=míxalh=a　　[ta=wa7　　wáz'-an-em　　ta=sqaxa7-lhkálh=a]
　　　see-dir=2sg.subj=interr　det=bear=exis　[det=prog　bark-dir-pass　det=dog-1pl.poss=exis]

　　　múta7　[ta=n-q'ep'ts-an'-talí=ha　　　　ta=n-7áxwil'-ten=a]?
　　　and　　[det=loc-overturn-dir-top=exis　det=loc-garbage-thing=exis]

　　　"Did you see the bear that our dog was barking at and that overturned the garbage can?"

94.　Ats'x-en=lhkácw=ha　　　ta=míxalh=a　　[ta=wa7　　wáz'-an-em　　ta=sqaxa7-lhkálh=a]
　　　see-dir=2sg.subj=interr　det=bear=exis　[det=prog　bark-dir-pass　det=dog-1pl.poss=exis]

　　　múta7　[n-q'ep'ts-an'-talí=ha　　　　ta=n-7áxwil'-ten=a]?
　　　and　　[loc-overturn-dir-top=exis　det=loc-garbage-thing=exis]

---

[12] Though note that there are independent reasons to suspect that determiners in St'át'imcets may not be equivalent to English determiners; I have recently argued (Davis 1999b) that they may in fact be "D-agreement" morphemes, with "true" determiners actually being represented by demonstrative pronouns.

64

"Did you see the bear that our dog was barking at and that overturned the garbage can?"

95. Ats'x-en=lhkácw=ha   ta=míxalh=a   [ta=wa7   wáz'-an-em   ta=sqaxa7-lhkálh=a]
     see-dir=2sg.subj=interr det=bear=exis   [det=prog bark-dir-pass det=dog-1pl.poss=exis]

     múta7   [n-q'ep'ts-án'-tali   ta=n-7áxwil'-ten=a]?
     and   [loc-overturn-dir-top   det=loc-garbage-thing=exis]

"Did you see the bear that our dog was barking at and that overturned the garbage can?"

3.4   Coordination of Predicates

Finally, we turn to predicate coordination. It is possible to coordinate predicates of all types. Examples of noun, adjective and verb coordination follow:

96. [Kapúh   *múta7*   qmut]   i=s-lhecw-s-án=a
     [coat   *and*   hat]   pl.det=stat-put.on-caus-1sg.erg=exis

     i=xelh=ás
     when(past)=cold=3conj

     "A coat and a hat was what I wore when it was cold."

97. [Úcwalmicw   *múta7*   sáma7]   i=wá7   zús-cal
     [Indian.person   *and*   white.person] pl.det=prog   tie-act

     "The police are both Indian and White people."

98. [Léxlex   *múta7*   á7ma]   kw=s=Lisa
     [intelligent   *and*   pretty   det=nom=Lisa

     "Lisa is clever and pretty."

99. [Q'wexq'wix   *múta7*   peq]   na=sqáxa7-s=a   s=Tom
     [black   *and*   white]   abs.det=magpie=exis   nom=Tom

     "Tom's dog was black and white."

100. Wa7   [píx-em'   *múta7*   ts'úqwaz'-am]   i=ucwalmícw=a
     prog   [hunt-mid   *and*   fish-mid]   pl.det=people=exis

     "The people hunt and fish."

101. Wa7   [t'iq   *múta7*   qwatsáts]   i=ucwalmícw=a
     prog   [arrive   *and*   leave]   pl.det=people=exis

     "The people came and went."

Since coordination is meant to be subject to a 'like-category' constraint, predicate coordination offers a potential test for the existence of lexical categorial distinctions in Salish. As can be seen in the pairs of examples in (102-7), which involve coordination of (putative) adjectives and nouns, adjectives and verbs, and verb and nouns, respectively, the test yields results which are at best ambiguous. Though I have attempted to control for confounding variables in constructing these examples (in particular, for the stage-level/individual-level distinction, which is known to be active in St'át'imcets), no obvious syntactic generalization emerges; instead, the relative acceptability of the examples seems sensitive to semantic and pragmatic factors.

102. ? [Kel7áqsten] *múta7* [gélgel] kw=s=John
     [leader]   *and*   [strong] det=nom=John

     "John is a leader and strong."

103. * [Léxlex]   *múta7* [kúkwpi7] kw=s=John
     [intelligent] *and*   [chief]   det=nom=John

     "John is smart and a chief."

104. Wa7   [s-kwil']   *múta7* [q'es-p]   kw=s=Lisa
     prog   stat-prepared *and*   [anxious-inch]   det=nom=Lisa

     "Lisa is ready and anxiuos (to go)."

105. * Wa7   [tayt]   *múta7* [s-mítsa7q]   i=ucwalmícw=a
       prog   [hungry]   *and*   [stat-sit]   pl.det=people=exis

106. Wa7   [naplít]   *múta7* tsunám'-ts-cal   kw=s=John
     prog   [priest]   *and*   teach-mouth-act   det=nom=John

     "John is a priest and teaches (language)."

107. * Wa7=tu7   [píx-em']   *múta7* [kúkwpi7]   kw=s=Roger
       prog=past [hunt-mid]   *and*   [chief]   det=nom=Roger

     "Roger hunted and was a chief."

So far, all the examples of predicate coordination I have given involve unmodified intransitive predicates, and are thus ambiguous between coordination of the lexical categories N, A, and V and their phrasal projections NP, AP, and VP. However, at least in the case of nominals, it is quite easy to show that NPs as well as N's may be coordinated. Firstly, nominal predicates may include a possessor, and possessed nominal predicates may be coordinated either with each other or with simple nominal predicates:

108. [Snúk'wa7-s   s=Lisa]   *múta7* [skícza7-s   s=Clayton]   kw=s=Gertie
     [friend-3poss   nom=Lisa]   *and*   [mother-3poss   nom=Clayton]   det=nom=Gertie

     "Gertie is Lisa's friend and Clayton's mother."

109. [Sqátsza7-s   s=Kwímtscen]   *múta7* [kúkwpi7]   kw=s=Gary
     [father-3poss   nom=Kwímtscen]   *and*   [chief]   det=nom=Gary

     "Gary is Kwímtscen's father and a chief."

Second, as documented in Demirdache and Matthewson (1995) and Davis, Lai, and Matthewson (1997), more than one predicative element may co-occur in nominal predicates, as long as the last element is a noun and all the other elements are individual-level predicates. It is possible to coordinate these complex nominal predicates (which have counterparts in many other Salish languages); examples are given in (110-111) below:

110. [Peq   kapúh]   *múta7* [q'wexq'wíx   qmut]   i=s-lhecw-s-án=a
     [White coat]   *and*   [black   hat]   pl.det=stat-put.on-caus-1sg.erg=exis

     i=sútik=as
     when.past=winter=3conj

     "What I wore last winter was a white coat and a black hat."

66

111. [Gélgel kúkwpi7] *múta7* [áma   plísmen]   kw=Mike
     [strong chief *and*   [good   policeman] det=Mike

     "Mike is a strong chief and a good policeman."

It is also possible to coordinate a complex nominal predicate with a simple nominal predicate:

112. [Kapúh] *múta7* [q'wexq'wíx   qmut]   i=s-lhecw-s-án=a
     [Coat]   *and*   [black   hat]   pl.det=stat-put.on-caus-1sg.erg=exis

     i=nátcw=as
     when.past=day=3conj

     "What I wore yesterday was a coat and a black hat"

113. [Q'wexq'wíx   qmut] *múta7* [kapúh] i=s-lhecw-s-án=a
     black   hat]   *and*   [coat]   pl.det=stat-put.on-caus-1sg.erg=exis

     i=nátcw=as
     when.past=day=3conj

     "What I wore yesterday was a black hat and a coat."

(Note that (113) has a second interpretation where *both* the coat and hat are black: this is expected if the head noun may be coordinated independently of the predicate modifier.)

These results are as expected if the noun is the head of the complex nominal predicate. If the "modifier", on the other hand, were actually the head, then we would expect coordination of ["modifier" + noun] with ["modifier"], as in (114):

114. * Q'wexq'wíx   [kapúh] *múta7* [ts'emx]   i=s-lhecw-s-án=a
       black   [coat]   *and*   [worn-out] pl.det=stat-put.on-1sg.erg=exis

     i=sútik=as
     when.past=winter=3conj

     "What I wore last winter was a worn-out black coat." (i.e., "a black coat and a worn-out".)

The ungrammaticality of (114) provides further evidence for the hypothesis that a complex predicate is headed by its rightmost nominal element.
    While possessed nominals and complex nominal predicates provide robust support for NP as opposed to N coordination, it is far harder to find evidence for (predicative) AP as opposed to A coordination. Adjectives are all intransitive in St'át'imcets, as elsewhere in Salish, and cannot head complex predicates; moreover, there are no category specific degree modifiers such as English "very" or "so". The nearest equivalents are auxiliary plus second-position clitic expressions such as *(s)texw=t'u7* "really" and *tqilh=t'u7* "almost", which project beyond the AP level, or suffixal modifiers, such as *-7úl* "really" or *-almen* "almost", which project only as far as A.

115. [*Stéxw=t'u7*   cw7it] *múta7* [*tqílh=t'u7*   q'wel]   i=stsáqwem=a
     [*really=part* many]   *and*   [*almost=part*   ripe]   pl.det=saskatoon=exis

     "The saskatoon berries are very numerous and amost ripe."

116. [Qwenuxw-*7úl*] *múta7* [zúqw-*almen*] ti7   ta=múzmit=a   maw
     [sick-*really*] *and*   [dead-*almost*] that   det=pitiful=exis cat

     "That poor cat is really sick and almost dead."

Since the status of adjective as a distinct lexical category in St'át'imcets is dubious (see Demirdache and Matthewson 1995 and Davis, Lai, and Matthewson 1997 for opposing views), it may well be that the absence of evidence for AP coordination is not an accidental gap. I will leave the issue of AP coordination open for now.

This leaves VP coordination. Since the data here are particularly complex and have potentially important repercussions for the structure of the clause in St'át'imcets, I will devote the whole of the next section to it.

4 VP Coordination

First of all, it is important to remind ourselves of what is at stake here. All other things being equal, coordination should provide a test for the constituency of [verb + object] and [verb + subject] combinations, thus either supporting or undermining the hypothesis that St'át'imcets has a configurationally defined VP, and a hierarchically defined asymmetry between subject and object. Since this is perhaps the most central issue in the long-standing debate between 'configurational' and 'non-configurational' representations of clausal structure in Salish, the results are of interest far beyond coordination itself.

4.1 Distinguishing VP from S coordination

Before turning directly to VP coordination, we must first prepare the ground by eliminating irrelevant complications. In particular, it is necessary to show that the cases we are interested in *are* genuine cases of VP coordination, rather than disguised cases of sentential coordination with an ellipsed (*pro*) subject in one conjunct. Since *múta7* is quite capable of coordinating sentences, and a *pro* subject is potentially available in any sentence, an example like (117) has two potential analyses:

117. Papt=t'u7   wa7   kel.kál-en-as   i=ts'í7=a   *múta7*   kwán.en-s-as
      Always=part prog   chase(redup)-dir-3erg   pl.det=deer=exis *and*   be.caught-caus-3erg

      i=sqweyíts=a   na=sqaxa7-lhkálh=a
      pl.det=rabbit=exis abs.det=dog-1pl.poss=exis

      "Our dog always used to chase deer and catch rabbits."

On one analysis, this example is a case of genuine VP coordination with the subject, *na sqaxa7lhkálha,* outside the coordinated VP *[kelkálenas i ts'í7a] múta7 [kwánensas i sqwyítsa]*. On the other, it involves sentential coordination, with a *pro* subject in the first conjunct *[kelkálenas i ts'í7a pro_i]*, coreferent with the subject of the second conjunct, *[kwánensas i sqwyítsa na sqaxa7lhkálha]*. How can we distinguish the two analyses?

In fact, it is quite easy to do so, since *pro* is subject to a precedence condition in coordinate structures:

118. *pro must have a preceding antecedent*

The effect of this condition can be seen in the following examples. When an overt DP antecedent is provided in the first conjunct, *pro* is licensed in the second, as in (119) and (121); however, when the order is reversed, and *pro* is in the first conjunct, with the antecedent in the second, the resulting sentences are ungrammatical with intended coreference, as shown in (120) and (122). Note that all these examples contain the conjunction *nilh*, which we have already seen can only coordinate full clauses.

119. *[V DP_i] nilh [V-tr pro_i ...]*

      Tálh-lec   s=Mary,   nilh   s=súcwt-en-as   ti=kúkwpi7=a
      stand-aut   nom=Mary   then   nom=recognize-dir-3erg   det=chief=exis

      "Mary_i stood up and then she_i recognized the chief."

120. *[V pro_i] nilh [V-tr DP_i...]*

120. *[V pro_i] nilh [V-tr DP_i ...]*

*	Tálh-lec,	.nilh	s=súcwt-en-as	s=Mary	ti=kúkwpi7=a
	stand-aut	then	nom=recognize-dir-3erg	nom=Mary	det=chief=exis

* "She$_i$ stood up, and then Mary$_i$ recognized the chief."

121. *[V DP$_i$] nilh [V-pass pro$_i$ ...]*

Tálh-lec	s=Mary,	nilh	s=súcwt-en-em	e=ti=kúkwpi7=a
stand-aut	nom=Mary	then	nom=recognize-dir-pass	obl=det=chief=exis

"Mary$_i$ stood up and then she$_i$ was recognized by the chief."

122. *[V pro$_i$] nilh [V-pass DP$_i$ ...]*

*	Tálh-lec,	nilh	s=súcwt-en-em	s=Mary	e=ti=kúkwpi7=a
	stand-aut	then	nom=recognize-dir-pass	nom=Mary	obl=det=chief=exis

* "She$_i$ stood up, and then Mary$_i$ was recognized by the chief."

Thus, interclausally, *pro* can only be licensed by a preceding antecedent (a natural enough condition, given that the reference of *pro* can easily be provided inter-sententially, where hierarchical conditions are inapplicable and linear precedence is clearly the appropriate condition). For our purposes, this means that a conjunction of VO + VSO cannot contain a *pro* in the first conjunct, but must be a genuine (if peculiar) case of VP-coordination.

4.2   VP coordination: the data

Now we are ready to examine our test cases. Since subject-initial structures are more or less confined to speakers of the Lower (Mount Currie) dialect (Davis 1999a), I provide data from both Upper and Lower dialects. Note also that the unmarked word order is VOS in the Upper dialect, VSO in the Lower; this turns out to have no bearing on coordination patterns. The data are given in (123-134) below; a summary is provided in (135).

123.   *VO + VSO*

Lh=as	pípantsek,	wa7	[kwan.en-s-twítas	i=sts'úqwaz'=a]
when(prog)=3conj	summer	prog	[catch(redup)-caus-3pl.erg	pl.det=fish=exis]

múta7	[q'weláw'-en-ítas	i=ucwalmícw=a	i=mecáoz'=a / i=ús7=a]
and	pick.berry-dir-3pl.erg	pl.det=people=exis	pl.det=huckleberry=exis]

"In the summer, the people catch fish and pick huckleberries."

nb:	*mecáoz'*	=huckleberry (Lower dialect)
	úsa7	=huckleberry (Upper dialect)

124.   *VSO + VO*

Lhas pípantsek, wa7 [kwanenstwítas i ucwalmícwa i sts'úqwaz'a] *múta7* [q'weláw'enítas i mecáoz'a / i ús7a]

"In the summer, the people catch fish and pick huckleberries."

69

125. *VO + VOS*

Lhas pípantsek, wa7 [kwanenstwítas i sts'úqwaz'a] *múta7* [q'weláw'enítas i mecáoz'a / i ús7a] i ucwalmícwa

"In the summer, the people catch fish and pick huckleberries."

126. *VOS + VO*

Lhas pípantsek, wa7 [kwanenstwítas i sts'úqwaz'a] i ucwalmícwa *múta7* [q'weláw'enítas i mecáoz'a / i ús7a]

"In the summer, the people catch fish and pick huckleberries."

127. *SVO + VO (Lower dialect only)*

Lhas pípantsek, i ucwalmícwa wa7 [kwanenstwítas i sts'úqwaz'a] *múta7* [q'weláw'enítas i mecáoz'a]

"In the summer, the people catch fish and pick huckleberries."

128. *VO + SVO (Lower dialect only)*

*   Lhas pípantsek, wa7 kwanenstwítas i sts'úqwaz'a *múta7* i ucwalmícwa q'weláw'enítas i mecáoz'a

129. *VSO + O*

Lh=as	pípantsek,	kwan.en-s-twítas	i=ucwalmícw=a
when(prog)=3conj	summer	be.caught(redup)-caus-3pl.erg	pl.det=people=exis

[i=zúmak=a]	*múta7*	[i=láw7=a / i=sxwá7s=a]
[pl.det=spring.salmon=exis]	*and*	[pl.det=sockeye.salmon=exis]

"In the summer, the people catch springs and sockeyes."

nb:	*láwa7*	= sockeye salmon (Lower St'át'imcets)
	sxwá7s	= sockeye salmon (Upper St'át'imcets)

130. *VOS + O*

Lhas pípantsek, kwanenstwítas [i zúmaka] i ucwalmícwa *múta7* [i láw7a / i sxwá7sa]

"In the summer, the people catch springs and sockeyes."

131. *VSO + S*

Lh=as	pípantsek,	kwan.en-s-twítas	i=st'át'imc=a
when(prog)=3conj	summer	be.caught(redup)-caus-3pl.erg	pl.det=St'át'imc=exis

[i=láw7=a / i=sxwá7s=a]	*múta7*	[i=scwápmec=a]
[pl.det=sockeye.salmon=exis]	*and*	[pl.det=Secwépemc=exis]

!   "In the summer, the St'át'imc catch sockeye and Secwépemc." (only interpretation)

132. *VOS + S*

Lhas pípantsek, kwanenstwítas i láw7a / i sxwá7sa [i st'át'imca] *múta7* [i scwápmeca]

"In the summer, the St'át'imc and the Secwépemc catch sockeyes."

133. *SVO + O [Lower dialect only]*

Lhas pípantsek, i st'át'imca kwanenstwítas [i zúmaka] *múta7* [i láw7a]

"In the summer, the St'át'imc catch springs and sockeyes."

134. ** SVO + S [Lower dialect only]*

Lhas pípantsek, i st'át'imca kwanenstwítas [i láw7a] *múta7* [i scwápmeca]

! "In the summer, the St'át'imc catch catch sockeyes and Secwépemc ." (Only interpretation)

135. *Summary of the VP-coordination data*

	#	(Upper dialect)	(Lower dialect)
VO + VSO	123	√	√
VSO + VO	124	√	√
VO + VOS	125	√	√
VOS + VO	126	√	√
SVO + VO	127	-	√
VO + SVO	128	-	*
VSO + O	129	√	√
VOS + O	130	√	√
VSO + S	131	*	*
VOS + S	132	√	√
SVO + O	133	-	√
SVO + S	134	-	*

4.3 Implications for configurationality

Even a brief examination of the data tabulated in (135) reveals that VP coordination is not a simple matter in St'át'imcets. However, neither is it random; once we begin to examine the facts more closely, we can extract the following generalizations:

(i) Coordination is grammatical in all cases where we would expect it to be possible if St'át'imcets had a configurationally defined VP, excluding the subject. This accounts for the patterns in (125, 127, 129, 132, and 133).

(ii) Coordination is possible where a subject *pro* could be licensed by a preceding antecedent, as in (124) and (126).

(iii) Coordination is ungrammatical in (128), (131), and (134), as we would expect if St'át'imcets had a configurationally defined VP, excluding the subject.

(iv) Coordination is possible - contrary to expectations - where the object is 'stranded' by an intervening subject, as in (123) and (130).

Clearly, the anomalous (and therefore interesting) cases are those in (iv), which appear to involve coordination of non-constituents. In fact, the *VO + VSO* pattern in (123), with a subject unexpectedly lodged inside the second conjunct, is precisely the one used by Chung (1990, 1998) to argue that VSO order in Chamorro is derived from an underlying (configurational) VOS order by lowering the subject into
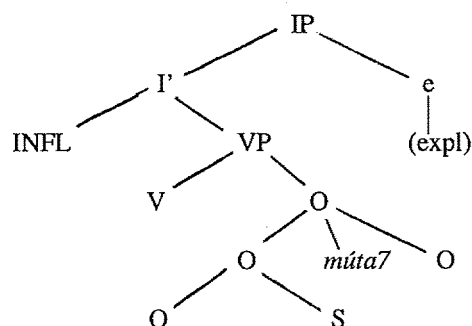
the VP, where it adjoins to a projection of V, leaving an expletive in the original subject position. Her analysis is given in (136).

136.

```
              IP
            /    \
          I'      e
        /    \   (expl)
     INFL    VP
           /  |  \
         VP  múta7  VP
        /  \        /  \
       V    O      V    O
                 /  \
                V    S
```

However, there is no way to derive the *VOS + O* case in (130) by subject adjunction, since the subject is not attached to a projection of V, but inside a coordinated *object*. Under the subject adjunction analysis, (130) would have to be represented as in (137):

137.

```
              IP
            /    \
          I'      e
        /    \   (expl)
     INFL    VP
           /    \
          V      O
               /  |  \
              O  múta7  O
            /  \
           O    S
```

At best, this is an unwelcome extension of subject adjunction to adjoin to *any* projection, rather than a V-projection.

However, it turns out that more conventional phrase-structure accounts do even less well with the facts in (iv). Take, for example, an analysis based on Kayne's (1994) theory of anti-symmetry. Given anti-symmetry, coordinate structures cannot be 'flat', as in the traditional analysis adopted by Chung. Instead, VP-coordination structures would have to be based on the following basic configuration:

138.

```
         F
       /   \
             F'
           /    \
          F      VP
               /    \
              S      CoP
                   /     \
                 V'1      Co'
                        /     \
                      Co       V'2
```

Can we derive either (123) or (130) from this initial configuration? Certainly not in any simple or elegant fashion. In fact, in order to derive (123), we would have to through the following steps (where F1, F2... Fn are arbitrary functional projections necessary to support moved constituents):

(i)   raise the object DP out of the second conjunct V'2 to F1 to yield
      [O2 [S [V'1 [Co [V2 t]]]]]

(ii)   raise S to F2, to yield
        [S [O2 [t [V'1 [Co [V2 t]]]]]]

(iii)   raise the remnant CoordinateP to F3, to yield
        [[V'1 [Co [V2 t] [S [O2 [t t]]]]]]
        with the required order.

There is a further serious problem with this derivation: step (i) violates the Coordinate Structure Constraint, which is independently known to hold in St'át'imcets (see Davis, Gardiner and Matthewson 1993, and Section 6 below).

The derivation of (130) is equally problematic in a Kayneian framework: I leave the reader to work out the details.

At this point I could conclude that VP coordination in St'át'imcets is simply anomalous. Yet (123) and (130) seem to have something in common: they both involve a subject on the right periphery appearing inside an adjacent coordinated constituent. This suggests that there may be a more superficial generalization underlying both (123) and (130): namely, a rule which 'tucks' a subject inside a coordinated constituent to its left. The fact that it violates rather fundamental grammatical principles (such as the requirement for an antecedent to c-command its trace) suggests that such a rule may be a low-level, quasi-phonological process, with little bearing on underlying structure. I leave this issue open for further exploration.

5   Coordination and subject clitics

I now turn to a rather different set of coordination data, bearing on the relation of subject clitics to their hosts. As in other Salish languages, subject clitics in St'át'imcets show semi-independent behavior: unlike affixes, they are mobile, in that they attach to the first predicative element in a clause, which may be an auxiliary or the main predicate; but like affixes, they lack independent stress and must associate with a prosodically independent host. Coordination is a particularly good tool for investigating the syntax of subject clitics, because it has the potential to reveal constituency independently of linear order, which for clitics is to a large extent prosodically rather than syntactically driven. While subject clitics can never themselves be coordinated (as would be expected, given their dependent status), verbs and auxiliaries in their scope sometimes may. It is these facts which will be the focus of our attention in this section.

A further interesting wrinkle in the data is provided by a dialect split: in the Upper dialect, subject clitics are always enclitics, whereas in the Lower dialect they may also appear pre-predicatively, with an imperfective interpretation which probably originally derived from the elision of the progressive auxiliary *wa7* (see van Eijk 1997).

5.1   The data

Basic data are given in (139-159). All the examples have the same interpretation: "I smoke and drink." Activity predicates are employed in order to minimize the effect of the progressive auxiliary *wa7*, which is freely available with activity predicates but adds little or nothing to their interpretation.

139.   *clitic [V] múta7 [V] (Lower dialect only)*

        kan   [mán'c-em]   múta7   [úqwa7]
        1sg.subj [smoke-mid]   and   [drink]

140.   **clitic [V] múta7 [wa7 V] (Lower dialect only)*

        *   kan   [mán'c-em]   múta7   [wa7   úqwa7]
            1sg.subj [smoke-mid]   and   [prog   drink]

141.   *[clitic V] múta7 [wa7=clitic V] (Lower dialect only)*

        [kan   mán'c-em]   múta7   [wá7=lhkan   úqwa7]
        [1sg.subj   smoke-mid]   and   [prog=1sg.subj   drink]

142. *[clitic V] múta7 [clitic V] (Lower dialect only)*

[kan   mán'c-em]   *múta7*   [kan   úqwa7]
[1sg.subj   smoke-mid]   *and*   [1sg.subj   drink]

143. *[clitic V] múta7 [V=clitic] (Lower dialect only)*

[kan   mán'c-em]   *múta7*   [úqwa7=lhkan]
[1sg.subj   smoke-mid]   *and*   [drink=1sg.subj]

144. *wa7 =clitic [V] múta7 [V]*

wá7=lhkan   [mán'c-em]   *múta7*   [úqwa7]
prog=1sg.subj   [smoke-mid]   *and*   [drink]

145. **wa7 =clitic [V] múta7 [wa7 V]*

*   wá7=lhkan   [mán'c-em]   *múta7*   [wa7   úqwa7]
   prog=1sg.subj   [smoke-mid]   *and*   [prog   drink]

146. *[wa7=clitic V] múta7 [wa7=clitic V]*

[wá7=lhkan   mán'c-em]   *múta7*   [wá7=lhkan   úqwa7]
[prog=1sg.subj   smoke-mid]   *and*   [prog=1sg.subj   drink]

147. *[wa7=clitic V] múta7 [clitic V] (Lower dialect only)*

[wá7=lhkan   mán'c-em]   *múta7*   [kan   úqwa7]
[prog=1sg.subj   smoke-mid]   *and*   [1sg.subj   drink]

148. *[wa7=clitic V] múta7 [V=clitic]*

[wá7=lhkan   mán'c-em]   *múta7*   [úqwa7=lhkan]
[prog=1sg.subj   smoke-mid]   *and*   [drink=1sg.subj]

149. *{V]=clitic múta7 [V]*

[mán'c-em]=lhkan   *múta7*   [úqwa7]
[smoke-mid]=1sg.subj   *and*   [drink]

150. **{V]=clitic múta7 [wa7 V]*

*   [mán'c-em]=lhkan   *múta7*   [wa7   úqwa7]
   [smoke-mid]=1sg.subj   *and*   [prog   drink]

151. *[V=clitic] múta7 [wa7=clitic V]*

[mán'c-em=lhkan]   *múta7*   [wá7=lhkan   úqwa7]
[smoke-mid=1sg.subj]   *and*   [prog=1sg.subj   drink]

152. *[V=clitic] múta7 [clitic V] (Lower dialect only)*

[mán'c-em=lhkan]   *múta7*   [kan   úqwa7]
[smoke-mid=1sg.subj]   *and*   [1sg.subj   drink]

153.   *[V=clitic] múta7 [V=clitic]*

    [mán'c-em=lhkan]   *múta7*   [úqwa7=lhkan]
    [smoke-mid=1sg.subj]   *and*   [drink=1sg.subj]

154.   **[V] múta7 clitic [V] (Lower dialect only)*

  * [mán'c-em]   *múta7*   kan   [úqwa7]
     [smoke-mid]   *and*   1sg.subj [drink]

155.   *[V] múta7 wa7=clitic [V]*

    [mán'c-em]   *múta7*   wa7=lhkan   [úqwa7]
    [smoke-mid]   *and*   prog=1sg.subj [drink]

156.   *[V] múta7 [V]=clitic*

    [mán'c-em]   *múta7*   [úqwa7]=lhkan
    [smoke-mid]   *and*   [drink]=1sg.subj

157.   **[wa7 V] múta7 clitic (V] (Lower dialect only)*

  * [wá7   mán'c-em]   *múta7*   kan   [úqwa7]
     [prog   smoke-mid]   *and*   1sg.subj [drink]

158.   **[wa7 V] múta7 wa7=clitic [V]*

  * [wá7   mán'c-em]   *múta7*   wá7=lhkan   [úqwa7]
     [prog   smoke-mid]   *and*   prog=1sg.subj [drink]

159.   **[wa7 V] múta7 (V]=clitic*

  * [wá7   mán'c-em]   *múta7*   [úqwa7]=lhkan
     [prog   smoke-mid]   *and*   [drink]=1sg.subj

The data are summarized in the table in (160):

160.

	#	(Upper dialect)	(Lower dialect)
kan [V + V]	139	-	√
kan [V] + [wa7 V]	140	-	*
[kan V] + [wa7=lhkan V]	141	-	√
[kan V] + [kan V]	142	-	√
[kan V] + [V=lhkan]	143	-	√
wa7=lhkan [V + V]	144	√	√
[wa7]=lhkan [V] + [wa7 V]	145	*	*
[wa7=lhkan V]+[wa7=lhkan V]	146	√	√
[wa7=lhkan V] + [kan V]	147	-	√
[wa7=lhkan V] + [V=lhkan]	148	√	√
[V]=lhkan + [V]	149	√	√
[V]=lhkan + [wa7 V]	150	*	*
[V=lhkan]+ [wa7=lhkan V]	151	√	√
[V=lhkan] + [kan V]	152	-	?
[V=lhkan] + [V=lhkan]	153	√	√
[V] + kan [V]	154	-	*
[V] + wa7=lhkan [V]	155	√	?
[V] + [V]=lhkan	156	√	√
[wa7 V] + kan [V]	157	-	*
[wa7 V]+ [wa7]=lhkan [V]	158	*	*
[wa7 V] + [V]=lhkan	159	*	*

5.2 Implications for structure

Once again, though somewhat bewildering at first, the data fall into clear patterns. The first point to make is that it is certainly possible to coordinate two lexical verbs in the scope of a single subject clitic: this is shown by (139), (144), (149), (155), and (156). That this is genuine constituent coordination, rather than clausal or phrasal conjunction with a coreferential *pro* in the second conjunct, is shown by examples (140), (145) and (150), which contain the auxiliary *wa7* and thus involve coordination of a constituent larger than V (presumaby either VP or IP). These examples are ungrammatical even though a subject clitic occurs in the first conjunct, thus providing a potential preceding antecedent for *pro* in the second conjunct, in conformity with the *pro*-precedence condition in (118). In fact, the ungrammaticality of these examples (as well as the examples in (157) in (158) and (159)) shows that a subject clitic *never* licenses *pro*, an interesting fact in itself.

The second point to make is that the clitic-initial structures with *kan V* behave identically to auxiliary plus enclitic structures with *wá7=lhkan V*. This provides important independent syntactic support for the hypothesis that clitic-initial structures are derived synchronically as well as diachronically from enclitic structures with an ellipsed *wa7*.

Third, the grammaticality of example (149), where the subject clitic occurs between two coordinated verbs, shows that at least some prosodic movement must take place at a post-syntactic level. This is because the relevant configuration for constituent coordination is disrupted by the enclitic; by assuming coordination is licensed prior to movement, this case can be assimilated to ordinary cases of V-coordination, such as (156). The relevant configuration (assuming verb-movement of the whole coordinated V round the subject clitic, prior to encliticization), is given in (161):

161.   [[V=[subject clitic$_i$]]   *múta7*   [V]]$_j$ e$_i$ e$_j$

Here we see that an account of subject clitics needs to take into account both prosodic factors (since the subject must encliticize if a host is available) and syntactic factors (V-movement must take place in order to provide the relevant host).

6. Conclusion

As I pointed out in the introduction, remarkably little use has been made of coordination in Salish, even though it is usually one of the more important diagnostic instruments in the syntactician's tool-kit. This paper has been a first step towards filling this lacuna, though I have left many interesting issues unexplored, including the status of the Coordinate Structure Constraint and Across the Board extraction (though see Davis, Gardiner and Matthewson 1993 for some preliminary data), and the status of coordination-related deletion rules such as VP-deletion, Sluicing, and Stripping. I hope to explore these issues at a future point; in the meantime, I hope the present paper inspires others to explore coordination across Salish.

References

Chung, Sandra 1990. VP's and Verb Movement in Chamorro. *Natural Language and Linguistic Theory* 8: 559-619.

Chung, Sandra 1998. *The Design of Agreement: Evidence from Chamorro*. Chicago: University of Chicago Press.

Davis, Henry 1999a. Word Order and Configurationality in St'át'imcets. *Papers for the 35th International Conference on Salish and Neighboring Languages*, 291-316. Kamloops, B.C.: Secwépemc Cultural Education Society.

Davis, Henry 1999b. Pronominal Determiners. Colloquium, University of Massachusetts, Amherst.

Davis, Henry, Dwight Gardiner and Lisa Matthewson 1993. *Papers for the 28th International Conference on Salish and Neighboring Languages*. Seattle: University of Washington.

Davis, Henry, Sandra Lai, and Lisa Matthewson 1997. Cedar Roots and Singing Detectives: Attributive Modification in Salish and English. *Papers for the 32nd International Conference on Salish and Neighboring Languages*, 291-316. Port Angeles, WA.

Davis, Henry and Lisa Matthewson 1996. Subordinate Clauses and Functional Projections in St'át'imcets. *Papers for the 31st International Conference on Salish and Neighboring Languages*, 59-74. Vancouver, B.C.

Davis, Henry and Lisa Matthewson 1999. On the Functional Determination of Lexical Categories. *Revue Québecoise de Linguistique* 27: 29-69.
Demirdache, Hamida and Lisa Matthewson 1995. On the Universality of Syntactic Categories. *Proceedings of NELS* 25: 79-93.

Hill-Tout, Charles 1905. 'Report on the ethnology of the StltatlumH of British Columbia.' *Journal of the Royal Anthropological Institute* 35.

Kayne, Richard 1994. *The Antisymmetry of Syntax*. Cambridge, Mass: MIT Press.

Kroeber, Paul 1996. Clause-Chaining in Thompson Salish. *Papers for the 31st International Conference on Salish and Neighboring Languages*, 197-202. Vancouver, B.C.

Kroeber, Paul 1999. *Reconstructing Salish Syntax*. University of Nebraska Press.

Kuipers, Aert 1967. *The Squamish Language*. The Hague: Mouton.

Matthewson, Lisa 1998. *Determiner Systems and Quantificational Strategies: Evidence from Salish*. The Hague: Holland Academic Graphics.

Matthewson, Lisa 1999 (ed.) Nilh izá Sqwéqwel'lhkalh: Extracts from the Life Histories of Three St'át'imc Elders. *Papers for the 34th International Conference on Salish and Neighboring Languages*, 165-184. Kamloops, B.C.

Matthewson, Lisa and Henry Davis 1995. The structure of DP in St'át'imcets (Lillooet Salish). *Papers for the 30th International Conference on Salish and Neighboring Languages*, 54-68. Victoria: University of Victoria.

Partee, Barbara 1995. Quantificational Structures and Compositionality. In E. Bach, E. Jelinek, A. Kratzer and B. Partee (eds.). *Quantification in Natural Language*, 51-602. Dordrecht: Kluwer.
Roberts, Taylor 1999. Grammatical Relations in St'át'imcets. *International Journal of American Linguistics* 65: 3, 275-302.

van Eijk, Jan 1997. *The Lillooet Language: Phonology, Morphology, Syntax*. Ph.D. Dissertation, Universiteit van Amsterdam. Published by University of British Columbia Press, Vancouver.

van Eijk, Jan and Lorna Williams 1981. *Cuystwí Malh Ucwalmicwts: Lillooet Legends and Stories*. Mount Currie, B.C.: Ts'zil' Publishing House.

Appendix   **Key to St'át'imcets (van Eijk) orthography**

orthographic value	phonemic value	orthographic value	phonemic value
p	p	n'	ň̓
p'	p̓	z	z
t	t	z'	z̓
t'	ƛ̓	l	l
ts	č (c)	l'	l̓
ts'	c̓	r	ɣ
k	k	r'	ɣ̓
kw	kʷ	g	ʕ
k'	k̓	gw	ʕʷ
k'w	k̓ʷ	g'	ʕ̓
q	q	g'w	ʕ̓ʷ
qw	qʷ	7	ʔ
q'	q̓	y	y
q'w	q̓ʷ	y'	y̓
s	š (s)	w	w
lh	ɬ	w'	w̓
c	x	i	i
cw	xʷ	ii	i̱
x	x̱	e	ə
xw	x̱ʷ	v	ə̱
h	h	u	u
m	m	o	u̱
m'	m̓	a	a
n	n	ao	a̱

Henry Davis,
Department of Linguistics,
University of British Columbia
E-270 1866 Main Mall,
Vancouver, B.C.
V6K 1Z1 Canada

<henryd@interchange.ubc.ca>