Whilst there has been relatively extensive investigation of anaphoric relations between null arguments in Salish, there has been little or no work on null predicates; in fact, the very existence of non-argument ellipsis has gone unrecognized until now. In this paper, I give the first systematic description of VP ellipsis in St'át'ímcets, and outline some important consequences of its properties for syntax (including head movement, the position of the subject and the nature of predicate initial order) and for semantics (in particular, the choice function analysis of wide scope indefinites and the status of Quantifier Raising). To the extent that VP ellipsis is possible in other Salish languages, these conclusions may have broader implications across the family.

1 Introduction

In this paper, I will give the first systematic account of VP ellipsis in St'át'ímcets. In fact, as far as I know it is also the first systematic account of VP ellipsis for any Salish language: perhaps as a result of the prominent role played by null arguments in Salish and the extensive investigation of pronominal anaphora that this has engendered, VP ellipsis has been overlooked up until now. As we shall see, this is certainly not because it lacks interest from a descriptive or theoretical perspective. On the contrary, its implications are far-reaching and rather profound for both the syntax and semantics of St'át'ímcets, and by extension, for other Salish languages.

The paper is structured as follows. In Section 2, I establish the existence of VP ellipsis in St'át'ímcets, and outline its basic properties. In Section 3, I discuss the prosody of ellipsis. In Section 4, I consider its syntactic

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1 Acknowledgements. As usual, this work relies heavily on the intuitions and endless patience of St'át'ímcets consultants Beverley Frank, Gertrude Ned, Laura Thevarge, and Rose Agnes Whitley. Thanks also to the Upper St'át'ímc Language, Education and Culture Society and the Upper St'át'ímcets Language Authority for supporting work on the teaching grammar of Upper St'át'ímcets for which some of the data here were elicited, and as usual to Lisa Matthewson for help with style, content, and morale. Examples are given in the van Eijk orthography: a conversion chart to a standard North American phonemic alphabet is appended, together with a list of abbreviations used in the morpheme-by-morpheme glosses.

2 'VP ellipsis' is a slight misnomer, since ellipsis works equally well with non-verbal predicates, as long as an appropriate auxiliary is available to license the ellipsis site. I will retain the traditional term here mainly for ease of comparison with the equivalent process in English.
implications, focusing on what it tells us about verb raising, the position of the subject, and the implications of these findings for configurality. In Section 5, I turn to two semantic implications of VP ellipsis: the first concerns the choice function analysis of wide scope indefinites (Matthewson 1999), the second the absence of antecedent contained deletion, and its implications for Quantifier Raising in St'át'ímcets. Section 6 concludes.

2 VP ellipsis in St'át'ímcets

The process which I am claiming corresponds to VP ellipsis is illustrated by the examples in (1-3):

(1) a. \( wá7=lhkacw=t'u7 \) máwal’
   IMPF=2SG.SU=PART alive
   “So you’re still alive!”

   b. \( wá7=lhkan=wi7, \) n-s-tsut
   IMPF=1SG.SU=EMPH 1SG.POSS-NOM-say/think
   “I am indeed, I think!”

(2) a. \( plán=lhkacw=ha \) tsukw-s ta=s7álkst-sw=a
   already=2SG.SU=YNQ finish-CAU DET=work-2SG.POSS=EXIS
   “Have you already finished your work?”

   b. \( plán=lhkan \)
   already=1SG.SU
   “I already have.”

(3) a. \( cúz’=lhkacw=ha \) nas áts’x-en
   going.to=2SG.SU=YNQ go see-TR
   ta=kwékwa7-sw=a nátcw?
   DET=grandmother-2SG.POSS=EXIS tomorrow
   “Are you going to go see your grandmother tomorrow?”

   b. iy, \( cúz’=lhkan \)
   yes going to=1SG.SU
   “Yes, I’m going to.”

In each of these pairs, the response (b) consists only of a subject and an auxiliary verb. In each case, the missing part of (b) is interpreted as identical to a constituent in the antecedent sentence (a). This constituent minimally consists of a predicate and its complements, but can also include other auxiliaries and adjuncts (such as the motion auxiliary \( nas \) “go” and the temporal modifier \( nátcw \) “tomorrow” in (3)). In other words, the constituent looks exactly like a VP, and the process looks remarkably like VP ellipsis in English.

Moreover, just as in English VP ellipsis, St’át’ímcets allows a predicate phrase to be missing only if an auxiliary is available to license the ‘deletion site’. (St’át’ímcets is rich in auxiliaries: besides the three primary aspect markers \( wa7 \) ‘imperfective’, \( plan \) ‘already’ and \( cuz’ \) ‘going to’ illustrated
in (1-3) respectively, all motion verbs and many adverbs can also function as auxiliaries.)

In other words, since it walks like VP ellipsis and talks like VP ellipsis, I would like to conclude that the St’át’imcets process illustrated in (1-3) is VP ellipsis. Before coming to a definitive conclusion, however, I need to dismiss an alternative analysis: namely the possibility that what I am treating as an ellipsis process licensed by an auxiliary actually involves no auxiliary and no ellipsis. Under this alternative analysis, the ‘auxiliary’ is an ordinary intransitive main verb, with an antecedent-related interpretation supplied by general pragmatic principles of inference. Since many auxiliaries can function as main predicates, this is at least a conceivable possibility.

There are at least two good reasons to be dubious about such an alternative. First, some verbs can have different interpretations when employed as auxiliaries from those they have when used as main predicates: these verbs include the motion predicates *ts7ás* “come”, which has an auxiliary meaning of “begin to” and *t’ak* “go along”, which has an auxiliary meaning of “continue”, as well as the locative predicate *wa7* “be (at a location)”, which has a specialized imperfective meaning when functioning as an auxiliary. If ‘VP ellipsis’ cases were really just main verb uses of auxiliaries, we would expect such verbs to have only non-auxiliary (main verb) interpretations when used without a following main predicate. But they don’t. You can see this with *wa7* in (1) above, and with *ts7ás* and *t’ak* in (4) and (5) below; in all these cases, the auxiliary in the answer retains its distinctive auxiliary interpretation, contrary to what would be predicted if it were an ordinary (non-auxiliary) intransitive verb.

(4) a. *ts7ás=ha má-7-eg’ come=YNQ daybreak(INC)*
    “Is daylight beginning to break?”

    b. *iy, ts7ás=t’u7 yes come=PART*
    “Yes, it is.”

(5) a. *t’ak=ha=t’ú7=ti7 ama-wil’c go.along=YNQ=PART=DEM good-become*
    “Is s/he getting better?”

    b. *iy, t’ák=t’u7 yes go.along=PART*
    “Yes, s/he is.”

Other predicates with distinctive auxiliary meanings include *stexw*, “straight” and *kéla7* “first”, both of which have the auxiliary interpretation “really, very”; both also retain this distinctive auxiliary interpretation under ellipsis.

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3 The auxiliary use of *kéla7* to mean “really, very” is generally confined to the Lower (lil’wat7úl) dialect.
The second reason to doubt that auxiliaries in ellipsis contexts are being employed as intransitive main predicates is that there is a miscellaneous class of 'adverbial' auxiliaries which can’t be used as main predicates at all, but quite happily control ellipsis sites. These include \textit{papt} "always" \textit{tqilh} "nearly", and \textit{aylh} "have just", as illustrated in the ellipsis cases below:

\begin{enumerate}
\item \textit{papt wa7 qelh-n-itas} \quad i=tsuw7-ih=a
\textit{always IMPF put.away-TR-3PL.ERG PL.DET=own-3PL.POSS=EXIS}
\textit{sáy’si7ten tákem i=smelh.mé.m’lhex=a}
\textit{toy all PL.DET=girls(REDUP)=EXIS}
\textit{l=ta=alk’wilh-álhcw=a, t’u7· cw7aoz}
\textit{at=DET=babysit-place=EXIS but NEG}
\textit{kw=s=papt i=sqay.qé.qy’ecw=a}
\textit{DET=NOM=always PL.DET=boys(REDUP)=EXIS}
\textit{“The girls at the daycare always put away their own toys, but the boys don’t always.”}

\item \textit{tqilh=kan=t’u7 tsúk-un’} \quad ta=píph=a
\textit{almost=1SG.SU=PART finish-TR DET=paper=EXIS}
\textit{muta7 tqilh=t’u7 t’it kw=s=Lísa}
\textit{and almost=PART also DET=NOM=Lísa}
\textit{“I’ve almost finished a paper, and Lisa almost has, too.”}

\item \textit{áylh=t’u7 áts’x-en-as} \quad ta=swúw’h=a \quad kw=s=Lémya7
\textit{just.now=PART see-TR-3ERG DET=cougar=EXIS DET=NOM=Lémya7}
\textit{muta7 áylh=kan=t’u7 t’it}
\textit{and just.now=1SG.SU=PART also}
\textit{Lémya7 just saw a cougar, and I just did, too.”}
\end{enumerate}

Other auxiliaries of this type include \textit{tsáma} "try hard (in vain)", \textit{páwel} "finally", \textit{ílpalh} "barely", and \textit{put} "just, sufficient, exactly", all of which license ellipsis. Since main verb use of all these auxiliaries is ungrammatical, when they occur in contexts similar to those given in (6-8), we can conclude that VP ellipsis is involved.

I conclude that the process illustrated in (1-8) and discussed in the rest of this paper is indeed a genuine case of VP ellipsis: the first such process to be recognized in Salish.

\section{A prosodic condition on ellipsis}

Before going on to explore some of the syntactic and semantic consequences of VP ellipsis in St’át’ímcets, I want to mention an important prosodic condition which constrains its distribution:

\begin{enumerate}
\item **Minimal Foot Condition on Ellipsis**
\textit{The remnant left by ellipsis must end in a well-formed foot.}
\end{enumerate}

The Minimal Foot Condition ensures that a ‘light’ auxiliary cannot be stranded at the right edge of the remnant string created by ellipsis. This condition
probably ultimately derives from the fact that light auxiliaries (in particular, the imperfective auxiliary *wa7*) must procliticize to a following constituent, which is obviously impossible when there is nothing to procliticize to. In such cases, only a heavy auxiliary consisting of a full prosodic word (minimally a foot) is licit.  

The effects of the Minimal Foot Condition are illustrated below in (10-12):

(10) 

a.  

\[
\begin{align*}
\text{wa7}=\text{ha} & \quad \text{es-(s)7ilhen?} \\
\text{IMPF}=\text{YNQ} & \quad \text{STA-food} \\
\text{“Does s/he have any food?”}
\end{align*}
\]

b. ??  

\[
\begin{align*}
\text{wa7} & \quad \text{iy} \\
\text{IMPF} & \quad \text{yes} \\
\text{“S/he does, yes.”}
\end{align*}
\]

c.  

\[
\begin{align*}
\text{wa...a7} & \quad \text{iy} \\
\text{IMPF} & \quad \text{yes} \\
\text{“S/he does, yes.”}
\end{align*}
\]

(11) 

a.  

\[
\begin{align*}
\text{wa7}=\text{ha}=\text{t’u7} & \quad \text{áma} \\
\text{IMPF}=\text{YNQ}=\text{PART} & \quad \text{good} \\
\text{“Is s/he doing okay?”}
\end{align*}
\]

b. ??  

\[
\begin{align*}
\text{wa7} \\
\text{IMPF} \\
\text{“S/he is.”}
\end{align*}
\]

c.  

\[
\begin{align*}
\text{wa7}=\text{t’u7} \\
\text{IMPF}=\text{PART} \\
\text{“S/he is.”}
\end{align*}
\]

(12) 

a.  

\[
\begin{align*}
\text{plán=lhka} & \quad \text{cw=ha} & \quad \text{wa7} & \quad \text{p’an’t alkst} \\
\text{already}=\text{2SG.SU}=\text{YNQ} & \quad \text{IMPF} & \quad \text{return work} \\
\text{“Have you already gone back to work?”}
\end{align*}
\]

b.  

\[
\begin{align*}
\text{iy} & \quad \text{plán=lhkan} & \quad \text{yes} & \quad \text{already}=\text{1SG.SU} \\
\text{“Yes, I have.”}
\end{align*}
\]

c. ??  

\[
\begin{align*}
\text{iy} & \quad \text{plán=lhkan} & \quad \text{wa7} & \quad \text{yes} & \quad \text{already}=\text{1SG.SU} & \quad \text{IMPF} \\
\text{“Yes, I have.”}
\end{align*}
\]

---

4 There are other morphophonological phenomena in St’át’imcets which seem sensitive to ‘optimal foot structure’. In particular, an extra /a/ is optionally inserted at the end of clitic combinations ending in a stray mora to create a final trochaic foot (van Eijk 1997: 212).
d. iy, plán=lhkan wa7 p’an’t
yes already=1SG.SU IMPF return
“Yes, I have gone back.”

In (10), we see that the imperfective auxiliary *wa7* is not heavy enough to occupy the right edge of an ellipsis remnant: hence the deviance of (b). However, St’át’ímcets allows ‘rhetorical’ lengthening of vowels: the lengthened vowel in (c) is sufficiently heavy to convert the monosyllable *wa7* to a foot, so it may count as an ellipsis remnant. In (11), we see a different way in which *wa7* can increase its weight to that of a foot: here, the second position enclitic *t’u7* can act as a second mora, again allowing *wa7* to occupy the right edge of the remnant left by VP ellipsis.

The examples in (12) illustrate a slightly different aspect of the Minimal Foot Condition. In (12a), the antecedent question contains three auxiliaries: *plan* “already”, *wa7* “imperfective”, and the motion verb *p’an’t* “to return”. In (12b) we see that the combination of the auxiliary *plan* and the enclitic pronoun *=lhkan* is sufficiently heavy to license ellipsis. In (12c) we see that when we add auxiliary *wa7* after *plán=lhkan*, ellipsis is degraded: since it is monomoraic, *wa7* must procliticize to a following constituent, but proclisis is impossible, since no host is available. Adding the third auxiliary *p’an’t* restores the acceptability of ellipsis, as in (12d), by providing a second mora so that the two auxiliaries can together meet the Minimal Foot Condition.

4 Syntactic consequences of VP ellipsis

Now that I have established the existence of VP ellipsis and given a basic account of its prosodic properties, it is time to turn to some of its syntactic and morphosyntactic consequences. In the following subsections, I discuss the existence of a VP constituent; the extent of verb raising; the position of the subject; consequences for configurationality; and consequences for the morphology-syntax interface.

4.1 St’át’ímcets has a VP

The most obvious – but nonetheless highly significant – syntactic consequence of VP-ellipsis in St’át’ímcets is simply that it provides direct and striking evidence for the existence of a VP constituent – that is, for a phrase containing the predicate and its internal arguments, but crucially excluding the subject. (This point is independent of whether one adopts the VP-Internal Subject Hypothesis or one of its variants; if the reader prefers to interpret these findings as arguing for a ‘small’ VP inside, say *vP*, that’s fine by me.)

Notice that VP ellipsis doesn’t care about the morphological form of arguments. Internal arguments (and only internal arguments) may be elided, whether they would otherwise surface as full DPs (13), encliticized demonstrative pronouns (14), or pronominal suffixes (15).

(13) cuz’ xlit-en-as i=snek’w.núk’wa7-s=a
going.to call-TR-3ERG PL.DET=friends(REDUP)-3POSS=EXIS
Lisa, cuz’ s=Laura "Lisa’s going to invite her friends, and Laura’s going to, too."

NOM=Lisa and going.to NOM=Laura also "I have already written to him, and my wife has, too."

plán=lhkan=ti7 mets-cit, already=1SG.SU=DEM write-IND
múta7 plan t’it n-sem7ám=a and already also 1SG.POSS-wife=EXIS
"My father is coming to visit me, and my younger sibling is, too."

What this shows is that at the level of derivation where VP ellipsis applies, all arguments must occupy positions in a conventional configurational structure which differentiates subjects (external arguments) hierarchically from complements (internal arguments).

This in turn provides conclusive evidence against any version of the Pronominal Argument Hypothesis (PAH) for St’át’imcets, since the heart of the PAH is the claim that overt DPs occupy systematically different (adjoined) positions than pronominal affixes and clitics (or the pros which they license). Such a conclusion should not come as news (see the arguments marshaled against the PAH in e.g. Davis 2001); but I think the evidence presented here is particularly persuasive.

A further important point is that surface word order is irrelevant to VP ellipsis. As documented in Davis (1999), post-predicative word order in St’át’imcets is flexible: though neutral word order is VOS in Upper St’át’imcets, and VSO in Lower St’át’imcets, both dialects tolerate either order. Either order is also possible in the antecedent to ellipsis, as shown in (16).

(i) "Mary has already spoken to John, and Lisa has, too."
(ii) "John has already spoken to Mary, and Lisa has, too."
(iii) * "Mary has already spoken to John, and to Lisa too."
(iv) * "John has already spoken to Mary, and to Lisa too."

Even though the VP is apparently ‘discontinuous’ in the antecedent VSO order reflected in interpretation (ii), VP ellipsis is still licensed, just as in (i) where the antecedent sentence has VOS order with a ‘continuous’ VP. In neither case can the subject rather than the object be elided, accounting for the impossibility of interpretations (iii) and (iv).

Assuming VP ellipsis must feed LF - an assumption made by all theorists since Sag (1976) and Williams (1977) (see Hornstein 1995 for a useful
summary) - this means that the VOS-VSO word order alternation must take place at a post spell-out level: in other words, that it is a type of ‘stylistic’ or ‘PF’ process analogous to Heavy NP Shift or Extraposition from NP in English. This is what I conclude in Davis (2004), where I explore such an approach in more detail. Rather than repeat those conclusions, however, I want to turn to another issue about which VP ellipsis has much to say: that of verb movement.

4.2 There is no syntactic V-raising in St’át’imcets

Consider the following paradigm:

(17) plan cw’ik’en-as ta=sts’úqwaz’a k=Lémya7,
already butcher-TR-3ERG DET=fish=EXIS DET=Lémya7
múta7 plan t’it cwik’en-as ta=sts’úqwaz’a
and already also butcher-TR-3ERG DET=fish=EXIS
ta=skicza7-s=a
DET=mother-3POSS=EXIS
“Lémya7 has already butchered a fish, and her mother has butchered a fish, too.”

(18) plan cw’ik’en-as ta=sts’úqwaz’a k=Lémya7,
already butcher-TR-3ERG DET=fish=EXIS DET=Lémya7
múta7 plan t’it cwik’en-as ta=sts’úqwaz’a
and already also butcher-TR-3ERG DET=fish=EXIS
!! “Lémya7 has already butchered a fish, and her mother has butchered a fish, too.” (laughter)

(19) plan cw’ik’en-as ta=sts’úqwaz’a k=Lémya7,
already butcher-TR-3ERG DET=fish=EXIS DET=Lémya7
múta7 plan t’it ta=skicza7-s=a
and already also DET=mother-3POSS=EXIS
“Lémya7 has already butchered a fish, and her mother has too.”

In (17), with no ellipsis, we see that the object DP ta sts’úqwaz’a “the/a fish” in the second conjunct can have an independent denotation from the identical object DP in the first conjunct; in other words, two fish are involved, not one.

In (18), with a single DP in the second conjunct, we see the effects of the One Nominal Interpretation (ONI) constraint (Gerdt 1988): a single overt DP must be interpreted as the object rather than the subject of a transitive predicate with two third person arguments. This means that the only available interpretation is the absurd one where Lémya7 is butchering her mother.

In (19), with VP ellipsis, however, the original (non-absurd) interpretation is restored: this indicates that the elided VP is interpreted as containing an (overt) object DP, which is exactly what would be expected if the VP in the first conjunct was directly copied onto the elided VP in the second.

Now, consider the implications of this paradigm for verb raising. Suppose that in the absence of an auxiliary, the main predicate could raise into the position of the auxiliary (say, by adjoining to some functional projection
such as tense or aspect: it doesn’t matter for the purposes of the argument what it is). Then we’d expect VP ellipsis to be licensed by verb-raising; and in that case, the equivalent of (18) without an auxiliary should have the same (non-absurd) interpretation as (19). It doesn’t, as shown in (20):

(20)  
(plan)  cw’ik’-en-as ta=sts’úqwaz’=a k=Lémya7,  
(already) butcher-TR-3ERG DET=fish=EXIS DET=Lémya7  
mútə7 cwik’-en-as t’it ta=skicza7-s=a  
and butcher-TR-3ERG also DET=mother-3POSS=EXIS  
!!“Lémya7 has (already) butchered a fish, and her mother too.”

I conclude that verb-raising doesn’t take place in (20), and by extension, anywhere else. In fact, if it did, the ONI could always be circumvented, so the very existence of ONI effects points to the systematic failure of main predicates to raise not only in St’át’imcets, but right across Salish.

It might be objected that there is no independent evidence that a main predicate can ever license VP ellipsis, whether or not verb raising takes place. After all, many languages which have verb-raising, such as those of the Romance family, do not allow VP ellipsis at all. In this respect, the work of McCloskey (1991) on Irish is particularly important. McCloskey argues – convincingly, to my mind – that Irish has both V-raising and VP ellipsis, as in the following examples (from McCloskey 1991:272-3):

(21)  
(a)  ar chir tu isteach air  
INTERR.COMP put[PAST] you in on-it  
“Did you apply for it?”  

(b)  chir put[PAST]  
“I did.”

(c)  nior chir  
NEG put[PAST]  
“I did not.”

(22)  
duirt me go gceannóinn é agus cheannaigh  
said I COMP buy[1SG.COND] it and bought  
“I said that I would buy it and I did.”

McCloskey argues that these are genuine cases of VP ellipsis, in spite of surface differences with the equivalent constructions in English and St’át’imcets. Crucially, a (raised) main verb, as opposed to an auxiliary, licenses the ellipsis site: assuming McCloskey’s analysis is correct, this provides evidence that the failure of main verbs to license ellipsis in St’át’imcets is due to the absence of (main) verb raising, not to some independent inability of main predicates to license ellipsis.
4.3 The subject is outside the VP in St'át'ímcets

Aside from the fact that a raised main verb as opposed to an auxiliary licenses ellipsis, there is a second major difference between ellipsis in Irish on the one hand and in English and St'át'ímcets on the other. As can be seen in (21) and (22), the subject in Irish is (obligatorily) omitted along with the rest of the VP. McCloskey argues (reasonably) that this provides support for the VP-Internal Subject Hypothesis, in that if VP ellipsis in Irish includes the subject, the subject must be inside VP.

But now consider the implications of this analysis for St'át'ímcets, where – as in English - the subject is never included in the elided constituent. This can be seen in (23); compare (22) above:

(23) tsút=kan kw=n=s=cuz’ áz’-en,
say=1SG.SU DET=1SG.POSS=NOM=going.to pay.for-TR
plán*(=lhkan)=wi7 aylh
already*(=1SG.SU)=EMPH now
“I said I was going to buy it, and I did.”

It is not really surprising that VP ellipsis excludes the subject in English: the linear order of the subject relative to the auxiliary makes it clear that the subject has evacuated the VP at the level at which VP ellipsis applies. But in St'át'ímcets, subjects usually appear post-predicatively, as in Irish, which makes their failure to undergo VP ellipsis more surprising. What this indicates, in fact, is that at the point where VP ellipsis applies the post-verbal subject in St'át'ímcets must be very high – as high as in English, which means higher than the VP and all associated auxiliaries.

4.4 Implications for Configurationality

The conclusion that the post-verbal subject is high in St'át'ímcets, taken together with the finding that the main predicate stays low, leads us to propose a basic configuration for the St'át'ímcets clause such as that in (24).

(24) TP
    /    \
   T’   Subjecti
    /        \
   T     VP
     /  \
   V [AUX]
    /  \
   VP ei

This structure appears both very familiar, since, aside from the linear position of the subject, it looks just like English and – at least from the point of view of
most contemporary views of phrase-structure — quite unorthodox, since it conspicuously fails to conform to the Linear Correspondence Axiom of Kayne (1994) or any of its numerous variants. (It’s also worth pointing out that it is quite close to the structure of the Austronesian language Chamorro, as adduced by Chung 1998, though I do not adopt Chung’s subject lowering approach to VSO order: see Davis 2004 for discussion.)

I have included a T(ense)P in (24), following the arguments in Matthewson (2002) and Davis and Matthewson (2003b) to the effect that though St’át’ímcets has no inflectionally encoded past or present tense, it must still have an abstract T(ense) node in order to yield the correct range of temporal interpretations. The T node also provides (a rightward) specifier position for the subject. This is crucial, because the subject must occupy a position higher than all auxiliary verbs; were we simply to assume that it could occupy [SPEC, V[+AUX]], then in a sentence containing more than one auxiliary, there would be nothing to stop the subject from occupying the specifier of a non-initial auxiliary; it could then be elided along with the VP headed by that auxiliary.5

I am also assuming, partly for the sake of consistency with McCloskey’s work on Irish, some version of the VP-internal Subject Hypothesis (exactly which version is immaterial to the present discussion). This means that the subject must have raised out of the VP (or vP) to [SPEC, T], rather than being base-generated there, as indicated by the trace inside VP in (24). What exactly motivates this movement? The obvious answer is Nominative Case (or whatever syntactic feature it represents: see Pesetsky and Torrego 2001).6

4.5 Implications for the syntax-morphology interface

Before turning to semantics, it is worth spelling out some of the implications of the findings reported here for the syntax-morphology interface. This is of course an extremely important area in Salish linguistics, given ongoing controversies surrounding the relation between inflectional morphology and syntactic structure across the family (see e.g. Jelinek and Demers 1994, Davis 1996, 2001, 2003, Davis and Wiltschko 1999, Wiltschko 2002 amongst many others).

There are essentially three ways in which we can conceive this relation: a purely syntactic approach, in which inflectional affixes and clitics correspond to syntactic heads and their linear relationship is established via permutations of syntactic head movement; a purely lexical approach, where inflectional

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5 To make matters more complicated, it turns out that overt DP subjects in St’át’ímcets can occupy intermediate positions, either between two auxiliaries, or between an auxiliary and the main predicate (Davis 1996). I assume that these cases involve post-syntactic movement, in a parallel fashion to post-predicative word order alternations.

6 Obviously, this runs counter to Wiltschko’s (2003) assertion that structural Case is absent in Salish (or at least, Upriver Halkomelem). It is, however consonant with the evidence presented in Matthewson (to appear) and Davis and Matthewson (2003a) that Salish (or, at least St’át’ímcets) must have structural Case.
morphology is attached in the lexicon and fully inflected words are inserted into the syntax; and a dual approach, in which inflected words are assembled in the lexicon, but are then subject to checking relations in the syntax.

One of the corollaries of VP ellipsis - the absence of verb raising - is highly problematic for a purely syntactic approach to inflectional morphology in St'át'imcets. This is because on a syntactic approach the right to left stacking of inflectional affixes corresponds to adjunction of the verb to successively higher functional projections, leading to familiar mirror effects. Since the inflected verb fails to raise in St'át'imcets, however, head-movement in the syntax cannot account for mirror effects. Moreover, we cannot rescue the syntactic account by appealing to covert (LF) V-raising, since VP ellipsis is licensed at LF, and that is precisely where we have found evidence that V-raising does not take place.

Similar arguments can be made against a checking analysis, since this approach too relies on either overt head movement in the syntax (which feeds LF) or covert (LF) movement (which also feeds LF). The only possible way in which to rescue a head-movement analysis of affix ordering, in fact, would be to do all the movement in a post-syntactic morphological component. This is not inconceivable: something like it has been suggested by Chomsky (1995) within the Minimalist Program, for example, and in a different framework, the prosodically driven syntactic movement proposed by Halpern (1995) would also fall under this type of approach. However, it leaves us with a cross-linguistic puzzle. Continuing to assume that McCloskey's account of ellipsis in Irish is essentially correct, notice that in Irish, verb-raising feeds ellipsis - therefore it cannot possibly be relegated to a post-syntactic component of the grammar. This means that if we wish to maintain a post-syntactic head movement analysis of St'át'imcets, we must parameterize verb raising so that it either takes place in the syntax (thereby feeding LF, as in Irish) or post-syntactically (thereby bypassing LF, as in St'át'imcets).

The alternative is to ascribe the mirror effect to something other than head movement, and take the absence of verb raising in St'át'imcets at face value. This still means that post-syntactic movement will be necessary: subject clitic placement, for example, will have to take place at PF (see Chung 2003 for a recent instantiation of this option in Chamorro, and Davis 2000 for evidence that at least some types of clitic placement in St'át'imcets must take place post-syntactically).

5 Semantic implications

I'll confine myself in this section to two issues. The first concerns the interaction of VP ellipsis with the interpretation of the 'assertion-of-existence' determiners discussed extensively in Matthewson (1998, 1999). The second concerns the availability of antecedent contained deletion in St'át'imcets.

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7 These are often attributed to the 'Mirror Principle'. However, since the purported principle is not a principle at all, but an observation, I prefer to term it the 'mirror effect'.
5.1 VP ellipsis and determiner semantics

One of the best-studied aspects of the semantics of St’át’imcets (and of the whole Salish family) has been its determiner system, mainly thanks to the work of Matthewson (1998, 1999). In the latter paper, Matthewson provides a choice function analysis for what she has previously referred to as the ‘assertion-of-existence’ determiners. (Assertion-of-existence determiners can easily be identified in St’át’imcets by the existential enclitic =a which accompanies them, glossed EXIS in the example sentences.) It turns out that VP-ellipsis provides problems for at least some versions of the choice function analysis.

An immediate observation is that, as in English, VP ellipsis in St’át’imcets yields both ‘strict’ and ‘sloppy’ readings with the assertion-of-existence determiner ta/iti, as can be seen by comparing the examples below (see also (17-19) above).

(25) áylh=t’u7 áts’x-en-as ta=swúw’h=a kw=s=Lémya7
    just.now=PART see-TR-3ERG DET=cougar=EXIS DET=NOM=Lémya7
    múta7 áylh=kan=t’u7 t’it áts’x-en ta=swúw’h=a
    and just.now=1SG.SU=PART also see-TR DET=cougar=EXIS
    “Lémya7 just saw a cougar, and I just saw a cougar, too.”
    (Could be the same one, could be different.)

(26) áylh=t’u7 áts’x-en-as ta=swúw’h=a kw=s=Lémya7
    just.now=PART see-TR-3ERG DET=cougar=EXIS DET=NOM=Lémya7
    múta7 áylh=kan=t’u7 t’it áts’x-en
    and just.now=1SG.SU=PART also see-TR
    “Lémya7 just saw a cougar, and I just saw it, too.”
    (Must be the same one.)

(27) áylh=t’u7 áts’x-en-as ta=swúw’h=a kw=s=Lémya7
    just.now=PART see-TR-3ERG DET=cougar=EXIS DET=NOM=Lémya7
    múta7 áylh=kan=t’u7 t’it
    and just.now=1SG.SU=PART also
    “Lémya7 just saw a cougar, and I just did, too.”
    (Could be the same one, could be different.)

In (25), with no ellipsis, we see the typical interpretations of a DP introduced by an assertion-of-existence determiner: the DP can either get an anaphoric ‘definite’ reading, in which case the second instance of ta swúw’h’a “the/a cougar” refers to the same individual as the first one, or an existential ‘indefinite’ reading, in which case the second instance introduces a new discourse referent. This follows on Matthewson’s (1998) account if assertion-of-existence determiners are treated as wide scope indefinites, existentially closed at the sentence level: the ‘definite’ reading is a case of accidental coreference, where two discourse referents happen to pick out the same individual, and the indefinite reading arises as the default case where they refer to different individuals.

In (26), in contrast, only an anaphoric interpretation is available. This follows from the fact that no V-raising, hence no VP ellipsis is possible here. In
that case, the only way to interpret the missing object is as an empty pronoun (*pro*): since *pro* is always anaphoric, only a coreferential reading is available.

Now look at (27), repeated from (8) above. Here both the interpretations available for (25) are restored: a ‘strict’ one, in which the object of the antecedent and the elided VP refer to the same individual, and a ‘sloppy’ one, in which they refer to different individuals. This follows from standard treatments of VP ellipsis, which copy the missing VP from an antecedent, respecting an identity condition known as ‘alphabetic variance’ (Sag 1976, Williams 1977). This condition allows a VP copy to have different indexing from its antecedent, as long as all the relations between the indices are the same. Here are representations of the ‘strict’ (a) and ‘sloppy’ (b) readings of (27):

(28)  

a. \( \exists y (\text{Lemya7 saw } y \& \text{(cougar, } y)) \) \& (I saw \( y \) \& \( \text{(cougar, } y) \))  

b. \( (\exists y (\text{Lemya7 saw } y \& \text{(cougar, } y)) \) \& (\( \exists w \) (I saw \( w \) \& \( \text{(cougar, } w) \))) \)

The interest of this type of example for the semantics of assertion-of-existence determiners relates to a debate in the literature concerning where (if anywhere) to existentially close the variable created by the determiner. Matthewson (1999) adopts a choice function analysis of wide scope indefinites, in which this variable stands not for an individual, but for a function which picks out a member of the set denoted by the predicate to which the determiner applies. (The ultimate justification for the choice function analysis is beyond the scope of this paper, but relates principally to the fact that wide scope indefinites fail to obey the standard island conditions that constrain Quantifier Raising, and fail to show intermediate scope: see Reinhart (1997), Winter (1997), Kratzer (1998), Matthewson (1999).

There have been basically three proposals as to where and if existential closure takes place. According to Reinhart and Winter, an existential quantifier can be inserted anywhere, leading to the prediction that ‘wide-scope’ indefinites can have any kind of scope possibility. According to Kratzer, on the other hand, there is no existential closure at all: choice function variables receive their interpretation from context, and thus always appear to have maximally wide scope. Matthewson takes an intermediate position: she adopts the mechanism of existential closure, like Reinhart and Winter, but claims it takes place at the sentence level only.

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8 It is known that the alphabetic variance condition cannot deal with certain well-documented counter-examples (see e.g., Fiengo and May 1994 and references therein). I retain it here for ease of exposition.

9 Kratzer points out that cases of intermediate scope with wide-scope indefinites generally involve a bound variable pronoun in the restrictor clause to the indefinite. She treats these cases as involving an implicit argument which binds the pronoun, leading to ‘pseudo-scope’ effects. Matthewson finds similar effects in St'át'imcets, and adopts Kratzer's analysis of these cases.
It is not easy to choose between these options: the relevant examples involve complicated cases of intermediate scope, as discussed in detail for St’át’imcets by Matthewson (1999). However, VP ellipsis does provide a potential test between choice function analyses, in the following way. Since the interpretation of VP ellipsis involves copying the missing VP from the antecedent, up to alphabetic variance, as long as the choice function variables in the two conjuncts can be existentially closed by two different instances of $\exists$, a sloppy reading should be possible. But if existential closure takes place at the highest sentence level (including both conjuncts) then only a strict reading will be possible. In this light, consider (28) again, this time construed under a choice function analysis:

\[ (29) \]

a. $\exists f (CH(f) \& (Lémya7 saw f (cougar)) \& (I saw f (cougar)))$

b. $\exists f (CH(f) \& (Lémya7 saw f (cougar))) \& \exists g (CH(g) \& (I saw g (cougar)))$

Here, $f$ and $g$ are choice functions (CH) subject to existential closure by $\exists$. The strict reading in (a) will be possible under any of the three choice function analyses (since widest scope existential closure is possible under both the Reinhart/Winter analysis (optionally) and the Matthewson analysis (obligatorily), and since the Kratzer 'no-scope' analysis is specifically designed to mimic widest scope. But the sloppy reading in (b) will only be possible if the choice function variable in each conjunct can be existentially closed separately, rather than at the level of the maximal sentence node dominating the conjuncts. This rules out the Kratzer analysis, and only allows the Matthewson analysis if in conjoined sentences widest-scope existential closure can be construed as applying to individual conjuncts. On the other hand, the sloppy reading is not a problem for the Reinhart/Winter analysis, which allows existential closure at any level.

We can go a little further. As in English, VP ellipsis is by no means confined to conjoined structures in St’át’imcets: it is possible in a variety of other environments, including temporal adjuncts (30), conditionals (31), and relative clauses (32).

(30) \[ \text{plán=tu7 ka-tsúkw-s-as-a ti=s7álkst-s=a} \]
\[ \text{already=PAST OOC-finish-CAU-3ERG-OOC DET=work=3POSS-EXIS} \]
\[ [i=tqilh=an=t'u7 s7ents] \]
\[ \text{[when(PAST)=1SG.CNJ=PART me]} \]
\[ \text{"H e had already finished his work when I almost had."} \]

(31) \[ \text{cúz'=lhkacw=ha t'anam-ilc [lh=cúz'=an kéla7]} \]
\[ \text{going.to=2SG.SU=YNQ try-AUT [COMP=going.to=1SG.CNJ first]} \]
\[ \text{“Will you try if I do first?”} \]

(32) \[ \text{wá7=wit lt7u i=nkekalhás=a sk'wem.k'úk'wmi7t:} \]
\[ \text{be=3PL DEM PL.DET=three(human)=EXIS children(REDUP)} \]
\[ [\text{ta=pápel7=a [plan ka-tsúkw-s-as-a} \]
\[ \text{[DET=one(human)=EXIS [already OOC-finish-CAU-3ERG-OOC} \]

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Since assertion-of-existence determiners in these environments take widest scope with respect to any other scope-bearing elements (Matthewson 1999: 119-121), the Matthewson analysis predicts that sloppy readings should be impossible under VP ellipsis in these same environments. In this light, consider the following paradigm, parallel to that in (25-27), involving the scope-bearing element lh= “if”.

The relevant case is (35), which, like the coordinate structure in (27), allows the sloppy reading under VP ellipsis. This argues against ‘widest scope’ existential closure, since in order to yield the sloppy reading, existential closure needs to take place in the conditional clause containing the VP ellipsis, as well as in the main clause. The only option left seems to adopt the Reinhart/Winter analysis, in which existential closure of the choice function variable can take place anywhere.

10 The final ellipsis here, involving negation, cannot be treated in the same way as the other cases we have been discussing, since negation in St’át’imcets is not an auxiliary, but a main predicate taking a subordinate clause (Davis to appear). More investigation is needed here.
This, however, creates a paradox. Matthewson has good reasons not to adopt a Reinhart/Winter analysis. In non-elided clauses in St’át’imcets, assertion-of-existence determiners only take widest scope, even when they are situated in scope islands, including conditional clauses such as those in (33-35). I will not attempt to resolve the paradox here. Instead, I’ll turn to a second set of semantic implications raised by ellipsis, this time involving antecedent contained deletion.

5.2 Antecedent contained deletion in St’át’imcets

Anyone who has studied VP ellipsis in any detail has come across the famous cases known as ‘antecedent contained deletion’ (ACD) illustrated in (36-38).

(36) I’m going to [VP1 see all the movies that Lisa has [VP2 ]].
(37) I don’t like [VP1 all the same foods that Lisa does [VP2 ]].
(38) I [VP1 gave my little sister the same two books that Lisa did [VP2 ]].

The salient properties of this construction are the following:

- the elided VP is in a relative clause inside the antecedent VP
- the elided VP must contain a quantified expression

The first of these properties leads to a paradox which can be resolved on a particular interpretation of the second. The paradox is one of infinite regress: if the overt VP (VP1) in the antecedent expression is copied onto the site of the ellipsis (VP2), the ellipsis site itself (contained in VP1) will be copied as well; but then a further copying must take place, which will install another empty VP in the new ellipsis site, and so on ad infinitum.

The solution (first elucidated in May 1985) is to appeal to Quantifier Raising (QR) to move the quantified relative clause to a position outside the deletion site. The relevant LF configuration is given in (39) for the example in (36):

(39) [[QP all the movies that Lisa has [VP2 ]] I’m going to [VP1 see tQ]]

In this configuration, VP1 can be copied onto VP2 without regress to yield the correct interpretation, given in (40):

(40) ∀x ((x is a movie & Lisa has seen x) → I’m going to see x)

ACD, and the support it has provided for the level of Logical Form and the operation of QR have been extremely influential in the study of the syntax-semantics interface. What then, do we make of the fact that it is systematically
disallowed in St’át’imcets? The following examples are attempts to elicit equivalent structures to the English cases in (41-43).11

(41) * cúz’=lhkan nas áts’x-en takem i=qwēts-p=a going.to=1SG.SU go see-TR all PL.DET=move-INC=EXIS piktsa plan kw=s=Lisa picture already DET=NOM=Lisa
“I’m going to see all the movies Lisa already has.”

Consultant’s comment: “You’d have to say ...plan áts’xenas kws Lisa (i.e., ‘...Lisa has already seen’), because if it’s plan Lisa might have done anything.”

(42) * áw-an=lhkan i=cw7it=a pukw choose-TR =1SG.SU PL.DET=many=EXIS book plán=tu7 kw=s=Lisa already=PAST DET=NOM=Lisa
“I chose many of the books Lisa did.”

Corrected to: ...plan tu7 áwanas kws Lisa (i.e., ‘...Lisa already chose.’)

(43) * cw7áoz=hem’ kw=n=s=wa t’ec-s NEG =ANTI DET=1SG.POSS=NOM=IMPF tasty-CAU takem i=s7ilhen=a wa7 s=Lisa all PL.DET=food=EXIS IMPF NOM=Lisa
“I don’t like all the same foods Lisa does.”

Corrected to: ...wa7 t’ecsás sLisa (i.e., ‘...Lisa likes.’)

Two possible reasons for the failure of ACD in St’át’imcets immediately spring to mind. The first is that for some reason VP ellipsis is generally impossible intra-sententially, or perhaps more specifically in relative clauses. Neither of

11 It is impossible to construct potential ACD examples with first and second person subjects, since in relative clauses first and second person transitive subject markers are suffixes rather than clitics and therefore inevitably get deleted along with the main verb under VP ellipsis, violating recoverability. Compare (i), for example, with (41):

(i) cúz’=lhkan nas áts’x-en takem i=qwēts-p=a going.to=1SG.SU go see-TR all PL.DET=move-INC=EXIS piktsa plan *(áts’x-en-acw) picture already *(see-TR-2SG.ERG)
“I’m going to see all the movies you have already (seen).”

Eliding the verb phrase in (i) (in parentheses) will also elide the subject, leading to an ill-formed ellipsis remnant. In contrast, the DP subject in (41) ensures that the ellipsis remnant is well-formed, which means that the deviance of (41) must be accounted for in a different way.
these is true, since as we already saw in (30-32), VP ellipsis is licensed in all kinds of adjunct clauses, including relative clauses.

The second possible reason for the failure of ACD is that QR fails to take place, and therefore cannot rescue VP ellipsis from the infinite regress problem. This seems more promising, but has far-reaching implications both within and beyond the grammar of St’át’imcets. Within St’át’imcets, it runs counter to the claims of Demirdache and Matthewson (1995) that St’át’imcets has an overt operation of QR, and also to Demirdache’s (1997) account of Condition C binding violations in St’át’imcets, which crucially depends on QR to account for strong crossover effects. Beyond St’át’imcets, it suggests that the operation of QR is subject to parametric variation – not a particularly palatable conclusion, given that QR is usually a covert operation whose effects are not readily detectable in the Primary Linguistic Data available to the language learner.

Further work is clearly needed here, but as a final observation, compare the examples in (44-45) with those in (41-43) above:

(44) tákem i=qwets-p=a piktsa plan áts’x-en-acw, all PL.DET=move-INC=EXIS picture already see-TR-2SG.ERG
cúz’=lhkan=t’u7 t’it s7ents going.to=1SG.SU=PART also me
“All the movies that you’ve already seen, I’m going to, too.”

(45) tákem i=púkw=a cuz’ paqw-al’ikst-min-acw, all PL.DET=book=EXIS going.to look-leaf-RED-2SG.ERG
plán=lhkan=tu7 s7ents already=1SG.SU=PAST me
“All the books that you’re going to read, I already have.”

In these cases, copying of the VP from the topicalized relative clause into the ellipsis site in the main clause will also copy the trace of the relativized object. Schematically, we get the following configuration:

(46) \( [[Q\text{P tákem i qwetspa piktsa}], \text{plan} [\text{VP}_1 \text{áts’xenacw t}_i]] [\text{cúz’lhkan [VP}_1 ]] \)

VP1 is copied into VP2, along with the trace it contains. The resulting configuration avoids the regress problem associated with ACD in exactly the same way as standard ACD cases in English after QR has applied. The relevant difference between the grammatical cases in (44-45) and the ungrammatical ones in (41-43) is simply this: in the grammatical cases, movement is overt. This evidence strongly suggests that there is no (covert) rule of QR in St’át’imcets, while indicating that the QR solution to the regress problem associated with ACD is universal.

6 Conclusion

Even this preliminary investigation has shown that the discovery of VP ellipsis in St’át’imcets provides a very powerful instrument for the examination of syntactic and semantic structure, as it has in better-studied languages. In
conclusion, I'll address two further questions. First, what is the likelihood of
discovering a similar process elsewhere in Salish? And second, what further
issues are likely to be raised (and possibly resolved) by VP ellipsis?

As far as the first question is concerned, the most likely place to look is
in languages with extensive auxiliary systems – including Thompson in the
Interior and various Central Salish languages. (None of the Southern Interior
languages nor Shuswap have clear-cut auxiliaries). Thompson has a full range of
auxiliaries similar to, though by no means identical to, those found in
St’át’imcets: I think it high likely that VP ellipsis will be found there. Central
Salish auxiliary systems are rather different (with Squamish being intermediate):
they have two relatively distinct classes of auxiliary-like elements (here defined
simply as pre-predicative elements which attract subject clitics): highly-reduced
locative and directional auxiliaries (e.g., Squamish na, mi, Halkomelem ?i,
mi/ni) and ‘adverbial’ auxiliaries with meanings like “again”, “very”, “just” and
so on. The latter have the distinction in Halkomelem and Straits of inducing the
mysterious ‘link’ particle ~wlu?, which precedes the main predicate, but does not
prevent clitics (including subject pronouns) from attaching to the pre-predicative
adverb. Given prosodic conditions on the remnant of ellipsis, I speculate that
the most likely place to find VP-ellipsis will be with these adverbial-type
auxiliaries, which are ‘heavy’ enough to act as ellipsis remnants. But of course,
this must remain speculation until someone goes and looks.

Turning to the second question, there is lots more work to do with VP
ellipsis in St’át’imcets, though the data and judgements tend to get quite
complex and variable as one ventures further into the empirical thickets of this
tangled area. One direction to take is the investigation of what Fiengo and May
(1994) refer to as ‘eliminative puzzles of ellipsis’ – that is, missing mixed
readings in bound variable contexts under ellipsis, involving examples such as
those in (47) (the ‘many pronouns puzzle’) and (48) (the ‘many clauses puzzle’).

(47)  

a. Max said he saw his mother, and Oscar said he saw his mother.

b. Max said he saw his mother, and Oscar did, too.

(48)  

a. Max saw his mother, Oscar saw his mother too, but Sam didn’t see his mother.

b. Max saw his mother, Oscar did too, but Sam didn’t.

In (47), the natural readings of the pronouns in both (a) and (b) are
either ‘all strict’ (where each pronoun refers to Max) or ‘all sloppy’ where both
the pronouns in the first conjunct refer to Max and in the second conjunct to
Oscar. In the non-ellided example (47a), however, it is possible to get two other
‘mixed’ readings: one where Max said Max saw Max’s mother, and Oscar said
Oscar saw Max’s mother, and one where Max said Max saw Max’s mother, and
Oscar said Max saw Oscar’s mother. In the elided example (47b), in contrast, the
first mixed reading is very marked, and the second is impossible.

In (48), with three conjuncts, the natural readings are also ‘all strict’ (all
pronouns refer to Max’s mother) or ‘all sloppy’ (the pronoun in each conjunct
refers to the subject of that conjunct. But whereas ‘mixed’ readings (facilitated by stress) are available in non-elided cases such as (48a) (e.g., Max saw Max’s mother, Oscar saw Max’s mother, but Sam didn’t see Sam’s mother) they are systematically absent in elided cases such as (48b).

Cases such as these are likely to be of some interest in St’át’imcets because of the absence of prosodic accenting and deaccenting strategies, which help to disambiguate the various readings in English.  

**Appendix**

**Abbreviations**

ABS = absent, ANTI = antithetical, AUT = autonomous intransitivizer, AUX = auxiliary, CAU = causative transitivizer, CNJ = conjunctive subject clitic, COMP = complementizer, COND = conditional, DEM = demonstrative, DET = determiner, ERG = ergative (transitive) subject suffix, EMPH = emphatic, EXIS = existential enclitic, IMPF = imperfective, IND = inchoative transitivizer, INTERR = interrogative, MID = middle intransitivizer NOM = nominalizer, OBJ = object suffix, OOC = out-of-control, PL = plural, PART = particle, POSS = possessive, RED = redirective transitivizer, REDUP = reduplication, SG = singular, STA = stative prefix, SU = indicative subject clitic, TR = directive (control) transitivizer, YNQ = yes-no question enclitic. A dash (−) corresponds to an affix boundary, a period (.) separates reduplicants, and an equals sign (=) corresponds to a clitic boundary.

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12 Another potentially interesting area to investigate is the ‘Ellipsis Scope Generalization’ of Fox (2000), which (very roughly) disambiguates potential scope ambiguities in the antecedent to ‘ellipsis in favour of surface scope when the elided constituent is scopally unambiguous. However, since sentences with multiple quantifiers in St’át’imcets are not generally ambiguous (Matthewson 1998, 1999), I have so far been unable to come up with cases which might test this generalization.
## Conversion chart for American Phonemic and van Eijk St'at'imcets Practical Orthography

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## References


Davis, H. In preparation. *A Teacher's Grammar of Upper St'at'imcets*.


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