GRAMMATICAL RELATIONS AND ERGATIVITY IN ST'ÁT'IMCETS (LILLOOET SALISH)[1]

TAYLOR ROBERTS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

1. Introduction.

1.1. Goals and outline. This article presents some hitherto undescribed asymmetries between transitive and intransitive subjects in St'át'imcets, a Northern Interior Salish language. Although many Salish languages are

Data are presented in the orthography that is used in van Eijk (1981; 1983) and Peters et al. (1992), with the exception of additional hyphens, which indicate morpheme boundaries. The acute accent marks primary stress, and the apostrophe indicates that the preceding consonant is glottalized. All symbols have their usual Americanist phonetic value, except for the following divergences: a = [æ, a]; e = [ə, ɪ, i]; ao = [ɑ]; ii = [ɛ, ɪ]; v = [ʌ]; ts = [č]; kw = [kʷ]; s = [š]; z = [ẓ, ð]; c = [x]; cw = [xʷ]; lh = [ɬ]; qw = [qʷ]; x = [x̣]; xw = [x̣ʷ]; g = [ʕ]; gw = [ʕʷ]; r = [ɣ]; 7 = [ʔ]; t' = [ƛ']; ts' = [c', ṭṣ']; $k'w$ = [k'ʷ]; $q'w$ = [q'ʷ]; $g'w$ = [ʕ'ʷ]. This orthography is the one that is currently the most widely used in St'át'imcets language courses. For a key to the earlier Bouchard and Powell alphabets, consult Peters et al. (1992:appendix B). The following symbols and abbreviations are used throughout the article: *—ungrammatical; ?—marginally grammatical; (x)—x is optional; (*x)—ungrammatical if x is present; *(x)—ungrammatical if x is absent; {x/y}—either x or y, but not both; 1, 2, 3—first, second, third person; A—subject of transitive; abs—absolutive; acc—accusative; appl—applicative; conj—conjunction, or conjunctive inflection; det—determiner; emp—emphatic pronoun; emph—emphasis; erg—ergative; foc—focus; incip—incipient; indic—indicative; intr—intransitive; nom—nominalizer; now—demarcation of time; O—direct object; obj—object; obl—oblique; ONI—one-nominal interpretation law; part—particle: 'well, but, so'; pass—passive; PC—parallelism constraint on discourse functions; pl—plural; poss—possessive; pred—predicate; prog—progressive; RC—relative clause; recip—reciprocal; S—subject of intransitive, or sentence constituent; sg—singular; su—subject (indicative); topic—topical morpheme (-tali); tr—transitive.

known to display ergativity in their third-person subject inflection, the extent to which they are syntactically ergative is not well documented. The question has not been investigated for St'át'imcets, and **2** shows that there is at least one aspect of its syntax that is ergative: relativization. Coreference across conjuncts will be seen in **3** to be neither ergative nor accusative; rather, it is most strongly constrained by a rule of one-nominal interpretation (Gerdts 1988) and a requirement that arguments of transitive predicates share the same discourse function across conjoined clauses (Matthewson 1993*a*). Before turning to these issues, I briefly explain in **1.2** the problems that languages displaying ergativity have posed for some theories of syntax; **1.3** outlines the morphosyntax of St'át'imcets. For an overview of the Salish language family, see Thompson (1979) or Czaykowska-Higgins and Kinkade (1997).

Most of the data in this article are from original fieldwork, and they will be useful in the kind of comparative Northern Interior Salish research begun by Davis, Gardiner, and Matthewson (1993), Gardiner, Matthewson, and Davis (1993), and Matthewson, Davis, and Gardiner (1993). Syntactic pivots have not been investigated in the other Northern Interior Salish languages, and so establishing the ways in which Nla'kapmxcín (Thompson) and Secwepemctsín (Shuswap) differ from St'át'imcets ideally will help to explain the nature of parametric variation in syntax. Salish languages are sometimes presented as though they were radically different from other languages, but with respect to the complex data examined in this article, St'át'imcets resembles other languages outside of the Salish family, providing indirect support for the broader hypothesis that genetically diverse languages share a more abstract Universal Grammar, varying arbitrarily in their phonetic and lexical resources rather than in their syntax (Chomsky 1995:169–70).

1.2. Grammatical relations and ergativity. The principal concerns of this article are the grammatical relations of transitive subject (A; mnemonic for "agent"), intransitive subject (S), and direct object (O), and their groupings into systems that are accusative or ergative, as schematized below:

(1)   Accusative   Ergative

A   nominative
S

    O   accusative

| A   ergative |

S   absolutive
O

Ergative languages have long posed a problem for theories that identify a category "subject" for the grouping {A, S}, one of the major difficulties being how to explain the method of case assignment. For example, English can be seen to have accusative morphology in its pronoun system (*I/me*, *he/him*, etc.) as well as in syntactic properties that group the A and S roles into a single category "subject." An example of the latter is the so-called *that*-trace effect: embedded subjects (both A and S) may not be questioned if the complementizer *that* is present (2a and 2b). This restriction does not hold of O, however, as (2c) indicates.

(2a) *who$_i$ do you think (*that) t$_i$ likes Fred?*   (A)

(2b) *who$_i$ do you think (*that) t$_i$ is dying?*   (S)

(2c) *who$_i$ do you think (that) Fred likes t$_i$?*   (O)

The correlation between morphological case marking (nominative/accusative) and grammatical relations (subject/object) in languages like English has been taken to support the idea that nominative case is assigned from a unique case assigner (e.g., a tensed functional category) to a unique structural position (the subject). Anderson (1976), for example, claims that subjecthood is best defined not by morphological categories like case inflection and verb agreement but by syntactic properties like control, raising, reflexivity, and coordination. He shows that many languages that are morphologically ergative are in fact syntactically accusative, since they treat {A, S} in opposition to O with respect to these syntactic properties—thus supporting his claim that {A, S} forms a universal category of "subject," whether it is defined as a primitive, as it is in Relational Grammar (Perlmutter 1983), or structurally, as it is in the Principles and Parameters framework (Chomsky 1995). The fact that languages can have ergative morphology but accusative syntax challenges theories that assume a structural correlation between case and grammatical functions. For some recent approaches to these issues in the Principles and Parameters tradition, see Campana (1992), Murasugi (1992), and Bittner and Hale (1996).

Dixon (1979) refines Anderson's (1976) observations by arguing that the notion of "pivot" is needed in addition to Anderson's notion of subject {A, S}. While agreeing that certain syntactic constructions like imperatives and jussives universally refer to a "deep subject" that comprises {A, S}, Dixon shows that other processes like coordination and subordination may have either accusative or ergative properties, as determined on a language-particular basis. Languages like English that are thoroughly accusative happen to have their pivots defined on the same set as the "deep subject" {A, S}, but other languages select an ergative {S, O} pivot for some aspects

of their syntax. Section 2 will show that St'át'imcets may well be a language of the latter category.

1.3. Outline of St'át'imcets. St'át'imcets is spoken in southwest mainland British Columbia, in an area 160–300 kilometers north–northeast of Vancouver. There are two dialects: the Upper dialect, which is spoken from D'Arcy to Pavilion, and the Lower dialect, which is spoken in Mount Currie and as far south as Port Douglas. The two groups are separated by the Lillooet mountain range but are connected by about 100 kilometers of waterway and, today, by road. The dialects are mutually intelligible, the most obvious differences being lexical. Most of the forms cited in this article originate from Upper speakers, although all of the data have been independently confirmed with speakers of the Lower dialect. All of the consultants were born between 1930–39 and had St'át'imcets as their only language until they attended English-speaking residential schools. Short biographies of the consultants may be found in Roberts (1994:112–14).

Although the exact number of St'át'imcets speakers is difficult to determine, there are probably fewer than 200, all of whom are older than 50 years. The language is obviously highly endangered, but efforts to revive it are underway. Language classes at several levels are offered in Lillooet and Mount Currie, and adult courses may be taken for credit through Simon Fraser University. Teaching materials include van Eijk (1981), Peters et al. (1992), and accompanying cassette tapes. Linguistic research has produced an excellent grammar (van Eijk 1997) and dictionaries (van Eijk 1983; 1987), which have greatly aided further study of the phonology and syntax of the language in projects and classes at the University of British Columbia during the past several years.

1.3.1. Word order. St'át'imcets is a so-called radical head-marking language (Davis 1993; 1995), since subject and object arguments are marked on the predicate by obligatory pronominal affixes (listed in tables 1 and 2). Overt nominals are optional, as the following example shows (from van Eijk 1997:147):

(3)   *tsún-tsi-lhkan*
       tell-2sg.obj-1sg.su

       'I told you'

When overt nominals appear in addition to pronominal affixes, word order is typically VOS. Some speakers are not as strict as others in their post-predicate word order, although they still prefer VOS over VSO order:[2]

---

[2] Speakers of the Upper dialect tend to prefer VOS order, while Lower speakers prefer VSO (Davis 1997a)—though there is some freedom in post-predicate word order under the influence of such factors as the animacy restrictions of a predicate (van Eijk 1997:227–29).

TABLE 1
PRONOMINAL SUBJECT MARKERS[1]

		Indicative				Conjunctive		
		Singular		Plural		Singular		Plural	
	Trans.	Intr.	Trans.	Intr.	Trans.	Intr.	Trans.	Intr.
1	-(lh)k-an	none[2]	-(lh)kalh	-(lh)k-acw	-an	none[2]	-at
2	-(lh)k-acw		-(lh)k-al'ap		-acw		-al'ap	
3	-as	-∅	-it-as[3]	-wit	-as	-it-as[3]	-wit-as

[1] In main clauses, non-third-person subject markers usually cliticize to the first pre-predicate auxiliary, if one is present, though Lower St'át'imcets speakers also allow the clitic to appear sentence-initially. Intransitive subject markers are always clitics, while transitive subject marking in relative clauses is invariably affixal; see (18) and (19) and Davis (1998). See **1.3.5** on the phonological *-lhk/-k* indicative alternation.

[2] First-person plural subjects are expressed by passivized predicates; see van Eijk (1997:150–51).

[3] The third-person plural transitive subject affix has four allomorphs. The form cited in this table occurs when the object is first person. When the object is second person, however, the subject affix is *-as-wit*. When the object is third person, the subject affix is *-twit-as* if the transitivizing suffix belongs to class I, and *-it-as* if the transitivizing suffix belongs to class II. Consult van Eijk (1997:107–28) for discussion of the different transitivizing suffixes.

TABLE 2
PRONOMINAL OBJECT SUFFIXES

			Singular Transitivizer		
	Subject Suffix	I		II	Plural
1	3pl	-tumc-al		-ts-al	-tumul
	3sg, 2sg/pl	-tumc		-ts	-tumulh
2	1sg	-tumi(n)		-tsi(n)	-tumulh
	3sg/pl	-tumi		-tsi	-tam-al'ap
3	1sg				-tan-i
	1sg, 2sg/pl		-∅		-wit
	3sg/pl				-∅

(4) áts'x-en-as   ta   sqáycw-a   ta   smúlhats-a[3]
     see-tr-3erg   det   man-det   det   woman-det

'the woman saw the man' (preferred)
'the man saw the woman' (also possible)

Nominals may not precede the predicate unless introduced by the focus particle *nilh*, as shown in (5) and (6).[4] The asterisk outside of the parentheses surrounding *nilh* indicates that the entire sentence is ungrammatical if *nilh*

[3] Note the dialect variation for 'the woman' in this and the following sentence: *ta smúlhatsa* is from the Upper St'át'imcets, while *ti syáqts7a* is from Lower St'át'imcets. More generally, the determiner *ta* is used in Upper St'át'imcets, while Lower St'át'imcets uses *ti*.

[4] Some speakers of the Lower dialect also permit SVO order (Davis 1993:**3.1**, n. 5; 1997a).

is absent (not that the sentence is ungrammatical irrespective of the pres-
ence of *nilh*):

(5) *(nilh)*   ti   *syáqts7-a*   *ts'um'-qs-án'-as*   ti   *sqáycw-a*[5]
      foc   det   woman-det   lick-nose-tr-3erg   det   man-det

     'it was the woman that kissed the man'

(6) *(nilh)*   ti   *sqáycw-a*   *qwatsáts*
      foc   det   man-det   leave

     'the man left'

Emphatic pronouns, however, may behave predicatively and thus appear
sentence-initially without the focus marker. (For an example, see the foot-
note pertaining to 29 below.) This property is common to Salish languages,
and Kinkade (1983:28) has taken it as evidence against a noun/verb dis-
tinction; for different perspectives, though, see van Eijk and Hess (1986),
Demirdache and Matthewson (1995), and Matthewson and Davis (1995).

Nominals usually appear with a discontinuous determiner that comprises
a preceding morpheme (which encodes such categories as singular and plu-
ral) and a following enclitic *-a*, although the enclitic *-a* is dropped if the
progressive auxiliary *wa7* intervenes between the article and the nominal.

1.3.2. Indicative inflection. The indicative paradigm, from which the
main clause person markers are drawn, is morphologically split-ergative.
The 3sg subject of a transitive predicate in a main clause is marked on the
predicate by the ergative suffix *-as*, as shown in (7). Direct objects and
subjects of intransitive predicates, however, do not induce overt agreement
on the predicate, as indicated in (7) and (8) by absolutive *-∅* (generally
omitted from cited examples unless clarity requires it). Examples (7)–(11)
are adapted from van Eijk (1997:146, 148):

(7) *tsún-∅-as*
     tell (trans)-3sg.abs-3sg.erg

     'she told him'

(8) *tsut-∅*
     say (intr)-3sg.abs

     'she said'

In contrast, nonthird persons are inflected on a nominative/accusative pat-
tern, since transitive (9) and intransitive (10) subjects are inflected alike, in
opposition to direct objects (11):

---

[5] The topic morpheme *-tali*, rather than the third-person ergative marker *-as*, might be
expected in this sentence, since a transitive subject is focused, while the object is 3sg (van
Eijk 1997:159). For discussion of the *-tali/-as* alternation, expanding upon that of van Eijk
(1997), see Davis (1994).

(9) *tsun-ts-kál'ap*[6]
     tell-1sg.acc-2pl.nominative

     'you guys told me'

(10) *tsút-kal'ap*
     say-2pl.nominative

     'you guys said'

(11) *tsút-kan*
     say-1sg.nominative

     'I said'

In main clauses, the non-third-person subject markers usually cliticize to the first pre-predicate auxiliary if one is present. Compare the position of the 1sg subject *-lhkan* in (3) and (12) in this respect, where *tsukw* 'finish' in (12) is the main predicate and would otherwise host the subject marker *-lhkan* if no auxiliary were present (van Eijk 1987:163; 1997:230):

(12) *húy'*   *lhkan*   *ka7lh*   *tsukw*
     incip   1sg.su   for.while   finish

     'I am going to quit for a while'

1.3.3. One-nominal interpretation law. Since nominals do not have overt case, a single overt nominal in a sentence with a transitive predicate bearing third-person subject and object affixes might be expected to be ambiguous about whether it is the subject or object. In such cases, however, there is a strong tendency for the nominal to be interpreted as the object rather than as the subject:[7]

(13) *wa7*   *k'al'em-mín-as*   *ta*   *smúlhats-a*
     prog   wait-appl-3erg   det   woman-det

     'he is waiting for the woman'
     *'the woman is waiting for him'

(14) *(wa7)*   *qvl-mín-as*   *ti*   *syáqts7-a*
     prog   bad-appl-3erg det   woman-det

     'he doesn't like the woman'
     *'the woman doesn't like him'

---

[6] Initial stress (*tsún-ts-kal'ap*) is predicted by van Eijk's (1997:15) stress rules, which suggests that *-ts* 1sg.acc closes the initial syllable for the consultant who supplied the form in the text. (Cf. the following sentence.) Other such small discrepancies have been noted in the stress system, which would certainly benefit from further study.

[7] Note again the dialect variation for 'the woman' in these two sentences: *ta smúlhatsa* is from Upper St'át'imcets and *ti syáqts7a* is from Lower St'át'imcets.

In order for a sentence to be interpreted as having an overt nominal sub-ject and a null 3sg pronominal object, the sentence is passivized, as shown below:

(15) *áts'x-en-as   ta   sqáycw-a*
     see-tr-3erg   det   man-det

     'he saw the man'

(16) *áts'x-en-em   l   ta   sqáycw-a*[8]
     see-tr-pass   obl   det   man-det

     'he was seen by the man'

The same restriction has been observed in Halkomelem, a Coast Salish lan-guage, and it has come to be known as the "one-nominal interpretation law" (Gerdts 1988:59):

(17) One-Nominal Interpretation Law (ONI)
     In the absence of marking for other persons, a single third-person nominal is interpreted as the absolutive.

ONI also holds in the two other Northern Interior Salish languages, Nla'kapmxcín (Thompson and Thompson 1992:145, 148) and Secwepem-ctsín (Gardiner 1993:214–19). More will be said about this constraint in **3.3.2**.

1.3.4. Conjunctive and nominalized inflection. Several pronominal markers in the conjunctive paradigm are similar in form to the indicative clitics, except that they lack the -(*lh*)*k*- indicative marker. Also, depending on their environment, they show either clitic or affixal behavior, although their homophony has long hindered dividing the conjunctive paradigm into distinct clitic and suffix sets, as they should be (Davis 1998).

Conjunctive clitic inflection appears mainly in adverbial clauses, interrog-ative complements, and transitive complements of negation (*cw7aoz* 'not'). Relative clauses also receive conjunctive inflection, although the subject markers behave as suffixes rather than clitics, as may be seen from the fol-lowing sentences, in which the subject marker inside the relative clause re-mains attached to the main predicate and is not attracted to the pre-predicate auxiliary, as was shown in (12) to occur for main clauses:

(18) *ti   húz'-a   tsún-an*
     det   incip-det   tell-1sg.conj

     'the one I will tell'   (van Eijk 1997:159)

---

[8] The preposition *e* marks obliques in passivized forms in the Lower dialect (van Eijk 1997:219–20), while the Upper dialect uses oblique *l*. In both varieties, the oblique marker is also frequently omitted.

(19) *nilh   ts7a   ta   ts'í7-a   ti   wa7   ník'-in'-acw*
     foc   emp   det   meat-det   det   prog   cut-tr-2sg.conj

     'this is the meat you are cutting'   (Davis 1998:16)

Finally, nominalized inflection appears in noninitial conjuncts introduced by *nilh* 'then; so, then', many examples of which appear in **3**. The predicate is preceded by the nominalizer *s-*, intransitive subjects are marked by possessive affixes, and transitive subjects are marked by conjunctive affixes. Nominalization also appears in complement clauses that are introduced by the complementizer *kw*, which is glossed 'det(erminer)', since it has a similar form and function as the indefinite determiners (Davis and Matthewson 1996).

It is hard to do justice to the complexities of pronominal inflection in St'át'imcets in this short space, but the above sketch will suffice to understand the material to be presented in **2** and **3**. Should further data be needed, both van Eijk (1997) and Davis (1998) provide more detail than is given here.

1.3.5. Phonology. Stress, which is largely predictable, often shifts rightward as affixes are added to a stem, and roots sometimes bear epenthetic vowels, depending on whether or not they are flanked by a discontinuous determiner. There is also an alternation between *-lhk/-k* as the indicative marker for non-third-person subjects, which for brevity is usually not glossed as a separate morpheme but is treated as part of the rest of the subject affix; this morpheme usually appears as *-lhk* after vowels and resonants, and as *-k* elsewhere. These alternations are irrelevant to the article, and so nothing will be said concerning them; they should be small enough not to be distracting, and van Eijk (1997:14–17, 142) may be consulted for more information if desired.

2. Relativization.

2.1. Introduction. This section examines the structure of relative clauses (RCs) in St'át'imcets, filling in many of the gaps of previous descriptions and providing evidence of ergativity.[9] Additionally, data are presented that clearly show that absolutive-centered relative clauses contain an obligatory gap corresponding to the relativized constituent—not covert 3sg agreement, a possibility suggested by Matthewson (1993*b*). Although St'át'imcets,

---

[9] Previous descriptions of St'át'imcets RCs include Kroeber (1991:258–64, 281–88), Gardiner, Matthewson, and Davis (1993:145–47), Matthewson (1993*a*:14–27; 1993*b*:14–18), Matthewson, Davis, and Gardiner (1993:224–26), Matthewson and Davis (1995), Demirdache and Matthewson (1995), and van Eijk (1997:158–60, 238–39). Roberts (1994:30–35) presents additional data on possessors and objects of comparison, which are difficult to relativize.

like other Salish languages, does not display overt extraction of a relative
pronoun as European languages do, relativization nevertheless must involve
extraction of the relativized constituent—a point independently implied
by the existence of island effects in the language (Davis, Gardiner, and
Matthewson 1993).

In classic typological work on relativization, Keenan and Comrie
(1977:63) employ a semantically based definition of RC, since the surface
syntax of languages differs to an extent such that a purely syntactic defini-
tion of RC is difficult to maintain universally. In his work on Salish, Kroeber
(1991:175) likewise finds semantic criteria to be most useful in identifying
RCs, and so the following definition, from Comrie (1981:136), will simi-
larly be adopted here: ". . . restrictive relative clauses are more central to the
notion of relative clause than are non-restrictives [= appositives]. . . . A rel-
ative clause then consists necessarily of a head and a restricting clause. The
head in itself has a certain potential range of referents, but the restricting
clause restricts this set by giving a proposition that must be true of the actual
referents of the over-all construction."

In the English sentence *Sally met the man who Fred hired*, the noun
phrase *the man* is said to be the head, while *who Fred hired* is the restrict-
ing clause. Note that the restricting clause has a gap where we expect the
direct object (*who Fred hired e*), and that this gap corefers with the head of
the RC, *the man*. This RC is therefore called "object-centered," since the
relativized constituent (or "target") bears the grammatical relation of object
within the restricting clause. The only parameter of form that differs among
RC types in St'át'imcets is the presence or absence of pronominal inflection
corresponding to the target. In the following sections, presence or absence
of pronominal inflection in RCs is examined with respect to subjects and
direct objects.

2.2. Subject of transitive. In A-centered RCs, morphology correspond-
ing to the ergative target is obligatorily retained, regardless of the person of
the object. The RC below has a 2sg object:

(20) *áts'x-en-lhkan*   [*ta*   *sqáycw-a*
    see-trans-1sg.su   det   man-det

    [*ta*   *pz-án-tsih-*(as)-a*   ]]
      det   meet-trans-2sg.obj-3sg.conj-det

    'I saw the man who met you'

If the object agreement were omitted from (20), it would be interpreted as
3sg, since this person is not overtly marked. In structures in which the object
is 3sg and the subject is extracted, some speakers prefer to use either a pas-
sive construction or the morpheme *-tali* (which is in complementary distri-

bution with the 3sg -as subject suffix, and which only occurs in extraction contexts—see 51 below).[10] The latter strategy is exemplified below:

(21) *áts'x-en-as* [*ti*   *sqáycw-a* [*ti*   *tup-un'-*{-táli/-ás}-(h)a*
     see-tr-3erg   det   man-det   det   hit-tr-{topic/3sg.conj}-det

     s-Bill   ]]
     nom-Bill

     'he saw the man that hit Bill'

Sentences (22) and (23) show that this strategy applies with equal force to *wh*-extraction (Matthewson 1993*a*:3, 19):

(22) *swat   ku   ats'x-en-táli   i   skicez7-í-ha*
     who   det   see-tr-topic   pl.det   mother-3pl.poss-det

     'whoᵢ saw theirᵢ mothers?'

(23) **swat   ku   áts'x-en-as   i   skicez7-í-ha*
     who   det   see-tr-3sg-conj   pl.det   mother-3pl.poss-det

     'whoᵢ saw theirᵢ mothers?'

Interestingly, neither -*tali* nor passive may mark a relativized subject when the object is nonthird person, as shown by the following examples corresponding to (20) above:

(24) **áts'x-en-lhkan*   [*ta*   *sqáycw-a*   [*ta*
     see-trans-1sg.su   det   man-det   det

     pz-an-tsi-táli-ha   ]]
     meet-trans-2sg.obj-topic-det

     'I saw the man who met you'

(25) **áts'x-en-lhkan*   [*ta*   *sqáycw-a*   [*ta*
     see-trans-1sg.su   det   man-det   det

     pz-án-tsi-m-a   ]]
     meet-trans-2sg.obj-pass-det

     'I saw the man who met you'

Because -*tali* appears only in third-person subject/third-person object sentences, Matthewson (1993*b*:18–21) suggests that affixation of -*tali* is a disambiguation mechanism—rather than a grammatical function-changing operation—since when a 3sg transitive subject is extracted (i.e., focused, questioned, or relativized) in a sentence having a phonetically null third-person object, there would not otherwise be any indication of which argu-

---

[10] Although -*tali* is a cognate of the reflexes of Kinkade's (1989:38) Proto-Salish **-wali*, it is not a topical object marker in St'át'imcets (Davis 1994).

ment had been extracted.[11] This seems plausible, except that it does not explain why subject morphology is obligatorily retained in an RC like (20). If the subject morphology were gapped, for example (*ta pzántsina), the sentence should still be unambiguously interpretable as 'the one who met you', since there would be an overt 3sg nominal to serve as the subject (the head of the RC, ta sqáycwa 'the man'). The fact that ergative morphology must be retained when the object is nonthird person argues against an analysis of the retention of morphology as a disambiguation strategy, since no ambiguity would arise if the subject morphology were omitted.

2.3. Subject of intransitive. In all Salish languages except those of the Southern Interior, person morphology corresponding to a relativized intransitive subject is absent (Kroeber 1991:235). If we assume with Kroeber (1991:184–87) that the residue of a cleft is a headless RC, this absence of subject morphology may be seen in the following contrast (from Kroeber 1991:262, citing van Eijk 1985:279):

(26) tsícw-kan
     go-1sg.subj
     'I went'

(27) tsukw   t'u7   s7ents   [ti   tsícw-a]
     only   part   1sg.emp   det   go-det
     'Only I went; the one who went is me'

Note that the 1sg suffix -kan seen in the main clause (26) is absent from the bracketed RC residue of the cleft in (27).

Previous analyses (e.g., Matthewson 1993b:15) have suggested that—despite the apparent lack of subject morphology in (27)—there could simply be null, indicative 3sg agreement with the cleftee, since in clefts in which morphology is overt (e.g., when clefting the subject of a transitive), the subject morphology of the RC residue does not agree with the person of the cleftee:

(28) *nilh   snúwa   ti   ats'x-en-ts-ácw-a[12]
      focus   2sg.emp det   see-tr-1sg.obj-2sg.conj-det
      'it was you who saw me'

Rather, there is obligatory 3sg agreement on the predicate:

[11] Craig (1977:chap. 7) gives the same analysis of a similar effect in Jacaltec.
[12] Some speakers disprefer having the focus marker nilh precede an emphatic pronoun (Matthewson and Davis 1995), although the points regarding the RC residues of clefts discussed in the text still hold, irrespective of the presence of nilh.

(29) *nilh*   *snúwa*   *ti*   *ats'x-en-ts-*(ás)-a*[13]
     focus   2sg.emp   det   see-tr-1sg.obj-3sg.conj-det

     'it was you who saw me'

To return to (27), a 3sg agreement analysis would assign it the following structure:

(30) *tsukw*   *t'u7*   *s7ents*   [*ti*   *tsicw-∅-a*   ]
     only   part   1sg.emp   det   go-3sg.intr-su-det

     'Only I went'

An argument against the 3sg agreement analysis, though, is that the residues of clefts generally receive conjunctive suffix inflection, not indicative inflection, and so absence of a 3sg pronominal in an RC would have to indicate a real gap, since conjunctive inflection is overt for 3sg. (Examine the subject paradigm in table 1.)

Another test for extraction is suggested by van Eijk's (1997:240) statement that conjoined proper noun complements generally require a plural affix on the predicate, as exemplified below:

(31) *wa7*   *k'wzús-em{-wit/*-∅}*   *wi*   *s-John*   *múta7*
     prog   work-intr-{3pl.intr/3sg.intr}   pl.det   nom-John   conj

     s-Bill
     nom-Bill

     'John and Bill are working'

For at least one speaker of the Upper dialect, though, plural marking on the predicate is optional with conjoined proper nouns:

(32) *wa7*   *alkst(-wit)*   *wi*   *s-John*   *múta7*   *s-Bill*[14]
     prog   work(-3pl.intr)   pl.det   nom-John   conj   nom-Bill

     'John and Bill are working'

Nevertheless, even that speaker has a very sharp contrast with respect to plural subject marking in the corresponding cleft:

---

[13] The emphatic pronoun in this sentence may also appear sentence-initially without the focus marker *nilh*, in which case it is functioning predicatively.

[14] Note the dialect difference here: *alkst* 'work' is Upper St'át'imcets, while *k'wzúsem* is Lower St'át'imcets (cf. previous sentence). Note also that the plural determiner *wi* preceding the conjoined proper nouns sometimes drops from the corresponding clefts below. This behavior may be related to the singular determiner *kw* also dropping from clefted proper nouns (van Eijk 1997:242).

(33) *nilh   s-John   wi*[15] *s-Bill   wa7   alkst(*-wit)*
     foc   nom-John conj nom-Bill prog work(-3pl.intr)
     'It is John and Bill who are working'

The fact that the RC residue of the cleft is ungrammatical with subject inflection constitutes strong evidence that S-centered RCs contain a gap corresponding to the relativized constituent.[16]

The same point may be demonstrated when an emphatic pronoun and another nominal are conjoined as a single object, since they too require plural agreement (van Eijk 1997:241):

(34) *wa7   lhkál'ap   alkst   snúwa   wi   s-Bill*
     prog   2pl.su   work   2sg   conj nom-Bill
     'You and Bill are working'

In the corresponding cleft, however, subject morphology is obligatorily absent from the RC residue:

(35) *nilh   snúwa   múta7   s-Bill   wa7   alkst(*-kál'ap/*-al'ap)*
     foc   2sg   conj   nom-Bill prog work(-2pl.su/-2pl.conj)
     'It is you and Bill who are working'

This contrast corroborates the claim that RCs contain a true gap.[17]

2.4. Direct object. Relativization of direct objects mirrors relativization of intransitive subjects, in that the morphology corresponding to the target is absent:

---

[15] In Upper St'át'imcets, the conjunction *wi* is in free variation with the conjunction *múta7* (cf. previous sentence and the following pair of sentences). Contra van Eijk (1997:182), which largely describes Lower St'át'imcets, *wi* is not restricted to conjoining numerals.

[16] This test specifically requires a cleft construction and an RC residue; an ordinary headed RC may not be used, since RCs may not modify proper nouns in St'át'imcets (Roberts 1994:18–19), nor indeed in many languages (Comrie 1981:132 and Kroeber 1991:176).

[17] An anonymous reviewer suggests that clarification is in order regarding whether pronominal affixes are arguments or not. The Pronominal Argument (PA) Hypothesis (see Jelinek and Demers 1994:698–700 on Straits Salish) claims that pronominal affixes are arguments of the predicate and are coindexed with any overt nominals that may appear, although the overt nominals themselves are merely adjuncts, not arguments. In contrast, the Covert Lexical Argument (CLA) Hypothesis proposes that overt nominals are arguments and that when none appear, the arguments are nevertheless represented by empty categories. This article assumes the latter hypothesis, following Davis (1995; 1997*b*), although this assumption does not affect the evidence for extraction presented in the text; when pronominal affixes are obligatorily absent from relative clauses, it indicates either that the argument has been extracted (for the PA Hypothesis) or that the null pronominal argument has been extracted, and so pronominal agreement is likewise omitted (for the CLA Hypothesis)—there being no argument for it to agree with.

(36) (nilh)   snúwa   ti   ats'x-en(*-tsín)-án-a
     focus   2sg.emp det   see-tr-2sg.obj-1sg.conj-det

    'it was you that I saw'

Although Kroeber (1991:259–63) and Matthewson (1993b:16–17) remark that object morphology in object-centered RCs may be freely retained or omitted, all of the consultants for this article strongly reject object morphology. If object morphology in these structures is indeed obligatorily absent, the familiar problem arises: perhaps the missing object morphology does not represent a gap but, rather, null 3sg agreement with the cleftee (Matthewson 1993b:17), since 3sg objects are phonetically null. The structure of (36) would therefore be more fully represented as in (37):

(37) (nilh)   snúwa   ti   ats'x-en-∅-án-a
     focus   2sg.emp det   see-tr-3sg.obj-1sg.conj-det

    'it was you that I saw'

Because third-person object agreement is overt when the object is plural and the subject is nonthird person (the 3pl object affix is variously -tani and -wit—see the object suffix paradigm in table 2), it is possible to distinguish a gap from object agreement by clefting a conjoined object that requires plural agreement. For example, the following nonclefted sentence requires 3pl agreement with its object, 'John and Bill':

(38) ats'x-en{-táni/-wít/*-∅}-lhkan   wi   s-John
     see-tr-{3pl.obj/3pl.obj/3sg.obj}-1sg.su   pl.det   nom-John

       múta7   s-Bill
       conj   nom-Bill

    'I saw John and Bill'

When the object is clefted, however, as in (39), the pattern of agreement is exactly opposite:

(39) nilh   wi   s-John   múta7   s-Bill   i
     foc   pl.det   nom-John   conj   nom-Bill   pl.det

       ats'x-en {-∅/*-táni/*-wít}-án-a   lhkúnsa
       see-tr-{ -∅/3pl.obj}-1sg.conj-det   now

    'it was John and Bill that I saw'

The fact that the 3pl agreement morphology that was obligatory in (38) is obligatorily absent from its corresponding cleft in (39) establishes that there is a gap corresponding to the clefted object in the RC residue.

As with intransitive subjects, these data may be corroborated by conjoining an emphatic pronoun and another nominal as a single object. In (40), a 2sg emphatic pronoun is conjoined with a proper noun. Unlike the clefting of a single 2sg emphatic pronoun as the subject of a transitive, as in (28) and (29), there cannot be 3sg agreement. Rather, agreement is obligatorily second person (either singular or plural):

(40) *ats'x-en{-tsín/-túmulh/*-∅}-(lh)kan*   *snúwa*   *múta7*
       see-tr-{2sg.obj/2pl.obj/3sg.obj}-1sg.conj 2sg.emp   conj

       s-Mary
       nom-Mary

       'I saw you and Mary'

When the conjoined object in (40) is clefted, however, the opposite pattern of morphology obtains in the RC residue, with an obligatory gap:

(41) *(nilh)*   *snúwa*   *múta7*   *s-Mary*   {*ti/i*}
       foc   2sg.emp   conj   nom-Mary   det/pl.det

       ats'x-en{-∅/*-túmulh/*-tsín}-án-a
       see-tr-{∅/2pl.obj/2sg.obj}-1sg.conj-det

       'it was you and Mary that I saw'

Kroeber's (1991:235) suggestion that object pronominals are "probably never obligatorily deleted in object-centered RCs" should probably be refined in light of these data, which comprise further evidence that object-centered RCs contain a gap corresponding to the target, not covert 3sg agreement.

The tests above do not work for all speakers. One consultant for the Lower dialect, for example, requires (null) 3sg agreement in both (38) and (40), and so the absence of object morphology for her in (41) cannot be taken as evidence for a gap in that structure—though it also does not suggest that the missing morphology is not a gap. The most general assumption consistent with the facts is that the missing morphology marks an extraction site for all speakers, although not all speakers have the relevant (obligatorily plural) nonextraction forms in their grammar to provide the same knock-down argument for the gap in the corresponding clefts, since they have adopted 3sg as a default agreement strategy. The alternative assumption—that some speakers but not others have extraction in their grammars—would be considerably more difficult to explain.

The gap found in object-centered RCs for several speakers therefore parallels the gap found in intransitive-subject-centered RCs. Stated more generally, these constructions offer clear evidence for syntactic extraction of relativized absolutives.

2.5. Summary. An ergative/absolutive pattern has emerged. Absolutive-centered RCs obligatorily omit person morphology. Ergative-centered RCs, however, are complicated in two respects: first, subject morphology corresponding to the target is retained; and second, there exists special morphology (the morpheme -tali) that can occur only in this type of RC. Not only are ergative-centered RCs therefore marked more explicitly than absolutive-centered RCs (by retaining the 3sg subject suffix -as), but they can also employ a distinct strategy of relativization (affixation of -tali). The status of the morphology in ergative-centered RCs is not clear, though; if -as were not a subject suffix, for example, then the ergative-centered RCs would more plainly have a gap, exactly as do the absolutive-centered RCs. The structural analysis of RCs in Roberts (1994:57–103) assumes that ergative-centered RCs do indeed involve extraction of the relativized constituent, and such an analysis is surely desirable, not only on general theoretical grounds (it is simpler to assume that relativization behaves consistently within and across languages), but because there is indirect evidence for ergative extraction in another Salish language: Halkomelem omits the person morphology corresponding to relativized ergatives (Gerdts 1988:82–83)—exactly the environment in which St'át'imcets seems to retain such morphology. (See also Davis 1994 for discussion of ergative extraction in St'át'imcets and the -as and -tali morphemes.) Nevertheless, in having a restriction on relativization of ergatives, St'át'imcets is only one of many such languages.[18] Recent, corroborating evidence for a yet deeper syntactic ergativity in St'át'imcets than has hitherto been realized comes from Matthewson (1998), who shows that negation licenses the determiner ku only in absolutives.

The data in this section buttress the claim of Davis, Gardiner, and Matthewson (1993) that the Northern Interior Salish languages have covert wh-movement, exactly as do European languages like English. St'át'imcets not only respects island constraints (syntactic conditions that have been assumed to be diagnostic of movement), but now offers additional, morphosyntactic evidence for extraction in the form of obligatorily deleted agreement morphology in relativization, a syntactic process.[19]

---

[18] Others include Tzutujil (Dayley 1985:210–15), Dyirbal (Dixon 1979:127–28), Tongan and other Polynesian languages (Chung 1978:37–44), Jacaltec (Craig 1977:chap. 6), Chukchee (Comrie 1979:225–26, 229–30), Coast Tsimshian (Mulder 1988:3.10; 1989:426–28), Inuktitut (Creider 1978:99 ff. and Johns 1992:72), Yup'ik Eskimo (Payne 1982:85–87), and Greenlandic Eskimo (Woodbury 1975, cited by Keenan and Comrie 1977:83; cf. Smith 1984).

[19] Although Salish languages do not have overt wh-movement in relative clauses, an intriguingly similar kind of fronting is found in Nla'kapmxcín (a close relative of St'át'imcets), where the preposition of relativized locatives is moved to the beginning of the RC (Kroeber 1997:397).

3. Conjunction.

3.1. Introduction. This section examines conjunction (the other major process besides subordination claimed by Dixon 1979 to vary cross-linguistically in its pivot) in order to determine the behavior of {A, S, O} with respect to each other. It will be seen that coreference across conjuncts, unlike relativization, is neither ergative nor accusative; rather, coreference is most forcefully constrained by the one-nominal interpretation law (17), which compels a unique interpretation in conjuncts that contain a single overt nominal.

St'át'imcets has many ways of marking conjunction; for a sampling of subordinating and coordinating conjunctions, see van Eijk (1997:180–82, 217–18). In order to restrict the domain of investigation and thus facilitate the comparison of sentences, all of the sentences presented below have the subordinating conjunction *nilh* 'then; so, then', which is not to be confused with the homophonous focus-marker mentioned in **1** and seen throughout **2** in cleft constructions. The conjunction *nilh* is clearly subordinating, rather than coordinating, as it induces subordinate inflection (specifically, nominalization) in the noninitial conjunct.

Another methodological point is worth noting. Although sentences having both an overt subject and an overt object are rare in discourse (van Eijk 1997:227)—since St'át'imcets is a radical head-marking language and thus allows arguments to be referenced solely by morphology on the predicate—entirely third-person sentences without at least one overt nominal argument are highly disfavored discourse-initially. For this reason, in eliciting most of the data, a discourse context (45) was provided immediately preceding the sentences of interest; this context was necessary especially before sentences having no overt nominals in the first conjunct. Even transitive sentences having a single overt nominal—for example, (13) and (14) in **1**—are regarded as felicitous only when there is a discourse context that can supply a referent for the subject of such sentences.

3.2. Conjuncts with nonthird person. Null pronominal sentences whose second, transitive conjunct has one pronominal affix (marking either A or O) that is uniquely nonthird person show clearly that there is no single pivot for conjunction that is either ergative or accusative. Consider sentences (43) and (44), which have (42) as their context:

(42) *qwatsáts   i   smelhmúlhats-a*
     leave   pl.det   women-det

   'the women$_i$ left'

(43) *p'án't-wit*   *nilh*   *s-7ats'x-en-tsál-itas*
     return-3pl.intr   conj   nom-see-tr-1sg.obj-3pl.su

'they$_i$ returned and they$_i$ saw me'

(44) *p'án't-wit*   *nilh*   *s-7ats'x-en-tánih-an*
     return-3pl.intr   conj   nom-see-tr-3pl.obj-1sg.conj

'they$_i$ returned and I saw them$_i$'

Both (43) and (44) have a 3pl subject in the first conjunct, coreferent with *i smelhmúlhatsa* 'the women' in (42). In the second conjunct of each sentence is a 3pl affix, which marks the subject in (43) and the object in (44). In each sentence, the 3pl argument of the second conjunct may corefer to the 3pl subject of the first conjunct, as indicated in the glosses by subscript indices. It is important to note that (43) and (44) differ minimally in the person morphology of the second conjunct; the conjoined predicate in neither of these sentences needs grammatical function-changing morphology, e.g., passive *-m* or *-tali*. If conjunction had an ergative or an accusative pivot, a process like passive or antipassive might be expected to apply in (43) or (44) in order to feed the syntactic pivot (Dixon 1979:120–30).

Conjunction therefore behaves as it does in most languages. Dixon (1979:129) remarks:

> It may be that some languages cannot be clearly characterized, at the syntactic level, in terms of the ergative/accusative continuum. That is, processes such as coördination [= conjunction] may not operate in terms of well-defined constraints like those applicable to Walmatjari and Dyirbal. . . . Certainly, some languages have a considerable set of well-defined syntactic constraints, which facilitate a clear judgment of their position on the ergative/accusative syntactic scale; but others have more fluid conditions that provide slimmer evidence for judgment. For instance, coördination may largely follow semantic, stylistic, or discourse-organization preferences, rather than conforming to any strict syntactic matrix.

The last sentence describes conjunction in St'át'imcets well, as will be seen in the next section.

3.3. Conjoined transitives with third-person subject and object. Coreference across conjuncts is more restricted in sentences having third-person subjects and objects with various combinations of proper nouns. Only sentences having two transitive conjuncts are examined here, since consultants have consistent grammaticality judgments for them. For discussion of sentences having intransitive conjuncts, in which coreference judgments are less firm, see Roberts (1994:51–55).

3.3.1. Parallelism constraint on discourse functions. Sentences having two transitive conjuncts display striking evidence for a parallelism constraint on discourse functions. This is seen most clearly in sentences having no overt nominals, as in (46) below. This sentence is preceded by the context in (45), as are the others in this section; a reciprocal context is used in order to minimize the possibility that one participant will be more prominent in the discourse and unduly affect the coreference possibilities in the sentences of interest.

(45) *Pz-án-twal'*   *wi*   *s-Bill*   *múta7*   *s-John.*[20]   *Wa7*   *wi7*
     meet-tr-recip   pl   nom-Bill   conj   nom-John   prog   emph

     cmán'-twal'-wit.
     enemy-recip-3pl.su

     'Bill$_i$ and John$_j$ met each other. They're enemies'.

(46) *áts'x-en-as*   *nilh*   *s-qvlqvl-ts-mín'-as*
     see-tr-3erg   conj   nom-bad-mouth-appl-3sg.conj

     (*a*) 'he$_i$ saw him$_j$, and then {he$_i$ swore at him$_j$/*he$_j$ swore at him$_i$}'
     (*b*) 'he$_j$ saw him$_i$, and then {he$_j$ swore at him$_i$/*he$_i$ swore at him$_j$}'

Because the first conjunct of (46) has no overt nominals, its subject and object are ambiguous. However, given a specific interpretation of the first conjunct, all speakers tend to interpret the subject and object of the second conjunct as referring to the same subject and object as the first conjunct. A similar phenomenon has been observed for pronominal coreference in relative clauses (Matthewson 1993*a*:19 and Matthewson, Davis, and Gardiner 1993:229).

Kinkade (1989; 1990) shows that topics ("old," presupposed information in the discourse) in Salish languages typically occupy the subject position of clauses, whereas nontopics ("new" information) appear in object position. Topics and nontopics may appear in noncanonical positions (object and subject respectively) if the predicate is passivized or affixed by the morpheme *-tali* (though in St'át'imcets, the latter strategy may be used only in extraction contexts, as noted above). (For examples of passivization switching discourse topics, see 50.) Data like those in (46) suggest that St'át'imcets is subject to the following restriction (Matthewson 1993*a*:20–21; cf. Matthewson, Davis, and Gardiner 1993:228):

(47) Parallelism Constraint on Discourse Functions (PC)
     For two items to corefer, they must both fulfill the same discourse

---

[20] Plural marking need not be marked on the predicate (here, *pz-án-twal'* rather than *pz-án-twal'-wit*) in Upper St'át'imcets, contra van Eijk's (1997:240) statement that conjoined proper noun complements generally require a plural affix on the predicate. This optionality for Upper St'át'imcets speakers was also noted in **2.3**.

function (either topic of the discourse or nontopic). In addition, there is a preference for both coreferential elements to fulfill the topic of the discourse function.

Some idealization is necessary in order to accept the parallelism constraint, since the starred interpretations in this section are ungrammatical only for one of the consultants. For the other consultants, the interpretations marked with an asterisk should be taken only as less obvious and mildly dispreferred; when asked to translate the sentences in this section into English, these consultants spontaneously provide glosses in accord with the parallelism constraint but will concede that the nonparallel reading is possible, if prompted for it.[21]

The parallelism constraint is expected to hold across conjuncts if one conjunct has two overt nominals. This is indeed the case, as (48) and (49) show:[22]

(48) *áts'x-en-as   nilh   s-qvlqvl-ts-mín'-as   kw-s*
    see-tr-3erg   conj   nom-bad-mouth-appl-3sg.conj   det-nom

       John   kw-s   Bill
       John   det-nom   Bill

    (*a*) 'he$_i$ saw him$_j$, and then {Bill$_i$ swore at John$_j$/*John$_j$ swore at Bill$_i$}'

    (*b*) *'he$_j$ saw him$_i$, and then {Bill$_i$ swore at John$_j$/John$_j$ swore at Bill$_i$}'

(49) *áts'x-en-as   kw-s   John   kw-s   Bill   nilh*
    see-tr-3erg   det-nom   John   det-nom   Bill   conj

    s-qvlqvl-ts-mín'-as
    nom-bad-mouth-appl-3sg.conj

    (*a*) 'Bill$_i$ saw John$_j$, and then {he$_i$ swore at him$_j$/*he$_j$ swore at him$_i$}'

    (*b*) *'John$_j$ saw Bill$_i$, and then {he$_j$ swore at him$_i$/he$_i$ swore at him$_j$}'

---

[21] Parallelism can also be observed in the two other Northern Interior Salish languages, Nla'kapmxcín and Secwepemctsín (Matthewson, Davis, and Gardiner 1993:228–30), and a similar parallelism restriction obtains in Nuxalk (Bella Coola), another Salish language (Davis and Saunders 1984).

[22] The nominalizer *s-*, which typically appears as a prefix, is represented here as a suffix, since it is enclitic on the preceding determiner *kw*. There is a distinction between lexical and syntactic nominalization, as illustrated by the contrast between *cw7aoz ku s-7ílhen* 'there isn't any food' and *cw7aoz kw-s 7ílhen* 'he/she hasn't eaten' (Davis and Matthewson 1996:2.1). This varying representation of the nominalizer as either a prefix or suffix is also used in the orthography of Peters et al. (1992).

The preference for VOS word order accounts for the ungrammaticality of interpretation (*b*) for (48), since it would require VSO order in the second conjunct. Interpretation (*a*), however, respects the VOS order of the second conjunct ('Bill swore at John') and—as expected, in accord with (47)— imposes parallelism on both conjuncts, so that the subject of *qvlqvl-ts-mín'* 'to swear' (viz., 'Bill') must also be the subject of *áts'x-en* 'to see'.

Sentence (49) differs from (48) only in that the two overt nominals are in the first conjunct rather than in the second. The same point is illustrated here: interpretation (*b*) is not allowed, since it would require VSO order; rather, the VOS interpretation of (*a*) is preferred for the first conjunct ('Bill saw John'), in which case the interpretation of the second conjunct must have a null pronominal subject coindexed with the subject of the first conjunct. An interpretation in which the object of the first conjunct is the subject of the second conjunct ('John swore at Bill') is ungrammatical, although this reading in (49*a*) can be saved with a passivized predicate in the second conjunct, as exemplified below:

(50) *áts'x-en-as*   *kw-s*   *John*   *kw-s*   *Bill*   *nilh*
       see-tr-3erg   det-nom   John   det-nom   Bill   conj

       s-qvlqvl-ts-mín'-em
       nom-bad-mouth-appl-pass

       'Bill$_i$ saw John$_j$, and then he$_i$ was sworn at by him$_j$'

Note that the ungrammatical interpretation in (49*a*) cannot similarly be saved by affixation of *-tali*; such a sentence is ungrammatical under any reading:

(51) **áts'x-en-as*   *kw-s*   *John*   *kw-s*   *Bill*   *nilh*
       see-tr-3erg   det-nom   John   det-nom   Bill   conj

       s-qvlqvl-ts-mín'-tali
       nom-bad-mouth-appl-topic

The ungrammaticality here is not surprising, since *-tali* appears only in extraction contexts (Matthewson 1993*a*:4–5 and Davis 1994), as was also noted with respect to (21) and (22) in **2.2**.

3.3.2. Interaction with the one-nominal interpretation law. The remaining class of sentences with two transitive conjuncts are those that contain a single overt nominal in one or both of the conjuncts. Recall from **1.3.3** that St'át'imcets is subject to the rule of one-nominal interpretation (17), which can be seen to apply in the following sentence:

(52) *áts'x-en-as*   *kw-s*   *John*   *nilh*
       see-tr-3erg   det-nom   John   conj

       s-qvlqvl-ts-mín'-as
       nom-bad-mouth-appl-3sg.conj

(a) 'he$_i$ saw John$_j$, and then {he$_i$ swore at him$_j$/*he$_j$ swore at him$_i$}'

(b) *'John$_j$ saw him$_i$, and then {he$_j$ swore at him$_i$/he$_i$ swore at him$_j$}'

The (b) interpretation is excluded because there is a single nominal ('John') in the first conjunct, which must be interpreted as the absolutive. Because (52) can be grammatical only with 'John' as the object of the first conjunct, the null pronominal object of the second conjunct must likewise corefer to the object 'John' of the first conjunct, in accord with parallelism (47).

The obvious question that arises with a constraint like parallelism is whether it interacts with the one-nominal interpretation rule, since the PC and the ONI will impose conflicting demands in sentences having a single overt nominal in each conjunct (when the nominals are different from each other). Such sentences might be expected to be ungrammatical, or at least dispreferred, since—no matter what interpretation is assigned to them—a constraint will be violated. But such structures have a unique, grammatical interpretation:

(53) *áts'x-en-as   kw-s   John   nilh   s-qvlqvl-ts-mín'-as*
     see-tr-3erg det-nom   John   conj   nom-bad-mouth-appl-3sg.conj

     kw-s   Bill
     det-nom   Bill

(a) 'he$_i$ saw John$_j$, and then (i) he$_j$ swore at Bill$_i$/(ii) *Bill$_i$ swore at him$_j$'

(b) *'John$_j$ saw him$_i$, and then (i) he$_j$ swore at Bill$_i$/(ii) Bill$_i$ swore at him$_j$'

That (53) has a grammatical interpretation at all is striking, since it illustrates that parallelism (47) is violable; specifically, it may be violated when such violation leads to the satisfaction of the ONI (17).

A perspicuous way to encode the relationship between these constraints is to employ the formalism of Optimality Theory (Prince and Smolensky 1993 and Grimshaw 1997), which hypothesizes that grammatical constraints are violable, and that minimal violation is allowed when it leads to the satisfaction of higher-ranked constraints. Because the one-nominal constraint has precedence over the parallelism constraint in evaluating whether a given interpretation is grammatical, the former is ranked above the latter, as formalized in (54), where >> is interpreted as "dominates":

(54) ONI >> PC

Each possible interpretation of (53) is a member of the "candidate set" and is evaluated with respect to its satisfaction of each constraint, as shown in table 3. The fact that candidates (b) and (c) satisfy the PC is not sufficient

TABLE 3
CONSTRAINT EVALUATION OF (53)[1]

		áts'x-en-as kw-s John nilh s-qvlqvl-ts-mín'-as kw-s Bill	ONI	PC
(a)	☞	'he$_i$ saw John$_j$, and then he$_i$ swore at Bill$_i$' (= 53*ai*)		*
(b)		'he$_i$ saw John$_j$, and then Bill$_i$ swore at him$_j$' (= 53*aii*)	*!	
(c)		'John$_j$ saw him$_i$, and then he$_j$ swore at Bill$_i$' (= 53*bi*)	*!	
(d)		'John$_j$ saw him$_i$, and then Bill$_i$ swore at him$_j$' (= 53*bii*)	*!*	*

[1] Following the usual conventions, each candidate is listed next to the set of constraints, where left-to-right order reflects their ranking. Each occurrence of an asterisk (*) in a cell indicates a single violation of that constraint; lack of such a mark indicates that the constraint is satisfied or irrelevant. Exclamation marks (!) identify fatal violations, and the remaining optimal candidate (the grammatical interpretation) is identified by the pointing hand (☞).

for them to be grammatical, since it is better to satisfy the higher-ranked ONI, even if it requires that the lower-ranked PC be violated, as it is in (a). The contrast between (a) and (b) and (c) illustrates a clash between competing constraints and shows that the conflict is indeed resolved in accord with the ranking in (54).

The relatively low ranking of the PC (47) expresses two generalizations about coreference across transitive conjuncts, the most obvious of which is that, for all but one consultant, parallelism is merely a preference; speakers permit interpretations that violate it, even in sentences about which the one-nominal interpretation law has nothing to say. More importantly, however, it captures the difference between the grammars of different consultants. Given only sentence (46), for example, it is unusual that violations of parallelism should be ungrammatical for a single consultant, but possible for the others. However, sentences like (53)—in which the PC and the ONI impose conflicting demands—show that the PC is violable even for the more restrictive consultant. (54) is therefore useful as a formal statement of the fact that all of these speakers' grammars share the dominant ranking of the one-nominal interpretation law.

Grammaticality judgments for some sentences involving the Parallelism Constraint are subtle, and sometimes vary across speakers and across elicitation sessions, as discussed in more detail by Roberts (1994:47–55). Although it is not clear why the parallelism constraint has varying importance across speakers, it accords with Dixon's (1979:129) statement, quoted above in **3.2**, that ". . . processes such as coördination [= conjunction] may not operate in terms of well-defined constraints. . . . [S]ome languages . . . have more fluid conditions. . . . [F]or instance, coördination may largely follow semantic, stylistic, or discourse-organization preferences, rather than conforming to any strict syntactic matrix."

4. Conclusion. This article has described some hitherto uninvestigated syntactic properties of St'át'imcets, with a view to determining specifically

to what extent the language is syntactically ergative. Section **1** outlined some morphosyntactic characteristics of St'át'imcets, showing how it shares with other Salish languages the property of morphological ergativity in its pronominal inflection. Relativization (**2**) has the appearance of syntactic ergativity, since ergative nominals are relativized by processes that are not employed in relativizing absolutive nominals; specifically, absolutive-centered relative clauses have an obligatory gap where person morphology would normally appear, which strongly suggests, moreover, that relative clauses involve extraction of the relativized constituent. Coreference across conjuncts (**3**) is constrained most strongly by the one-nominal interpretation law (17) and by a parallelism constraint on discourse functions (47). St'át'imcets, like other radical head-marking languages, may alternately omit or specify overt nominals according to rules that are not well understood, but section **3** supports the conclusions of Kinkade (1989; 1990) and Matthewson (1993*a*) that the principles governing *pro*-drop and coreference are heavily discourse-based.

A possible objection to the analysis of relative clauses is that its implicit positing of an empty category corresponding to the relativized constituent is too abstract and suggests a greater affinity between St'át'imcets and European languages than seems obvious from their otherwise dissimilar surface properties of phonology, word formation, and sentence structure.[23] But the linguistic arguments for empty categories in European relative clauses are equally abstract, and the fact that abstract properties from such apparently disparate languages should converge on the same conclusion is what makes the present result so compelling. Only by looking beyond the surface variety of languages can we begin to form a general theory of all human languages, and in this pursuit, theoretical and descriptive approaches have much to offer each other.

REFERENCES

ANDERSON, STEPHEN. 1976. On the notion of subject in ergative languages. Subject and Topic, ed. Charles N. Li, pp. 1–23. New York: Academic Press.

BITTNER, MARIA, AND KEN HALE. 1996. Ergativity: toward a theory of a heterogeneous class. Linguistic Inquiry 27:531–604.

CAMPANA, MARK. 1992. A movement theory of ergativity. Ph.D. dissertation, McGill University.

CHOMSKY, NOAM. 1995. The Minimalist Program. Cambridge, Mass.: The M.I.T. Press.

CHUNG, SANDRA. 1978. Case Marking and Grammatical Relations in Polynesian. Austin: University of Texas Press.

COMRIE, BERNARD. 1979. Degrees of ergativity: some Chukchee evidence. Ergativity: Towards a Theory of Grammatical Relations, ed. Frans Plank, pp. 219–40. New York: Academic Press.

---

[23] Positing a covert 3sg agreement morpheme in relative clauses could certainly be argued to be more complicated and abstract than a true gap there, but in any case the null 3sg analysis was shown in **2.3** and **2.4** to be empirically inadequate.

————. 1981. Language Universals and Linguistic Typology: Syntax and Morphology. Chicago: University of Chicago Press.

CRAIG, COLETTE GRINEVALD. 1977. The Structure of Jacaltec. Austin: University of Texas Press.

CREIDER, CHET. 1978. The syntax of relative clauses in Inuktitut. Inuit Studies 2:95–110.

CZAYKOWSKA-HIGGINS, EWA, AND M. DALE KINKADE, eds. 1997. Salish Languages and Linguistics: Theoretical and Descriptive Perspectives. Berlin: Mouton de Gruyter.

DAVIS, HENRY. 1993. A configurational pronominal argument language. Paper presented at WECOL 23, University of Washington, October 22–24.

————. 1994. Tali-ho! Papers for the Twenty-ninth International Conference on Salish and Neighboring Languages, pp. 117–44. Pablo, Mont.: Salish Kootenai College.

————. 1995. The clitic–affix distinction in radical head marking languages. Proceedings of the Thirty-first Regional Meeting of the Chicago Linguistic Society, Parasession on Clitics, ed. A. Dainora et al., CLS 31, vol. 2, pp. 64–78. Chicago: Chicago Linguistic Society.

————. 1997a. Remarks on word order and scrambling in St'át'imcets. Paper presented at the Workshop on Salish Morphosyntax, University of Victoria, February 8.

————. 1997b. Turning the Pronominal Argument Hypothesis on its head. Paper presented at the Workshop on Structure and Constituency in the Languages of the Americas, University of Manitoba, March 22.

————. 1998. Subject inflection in Salish. Ms., University of British Columbia.

DAVIS, HENRY, AND LISA MATTHEWSON. 1996. Subordinate clauses and functional projections in St'át'imcets. Paper presented at the Thirty-first International Conference on Salish and Neighboring Languages, University of British Columbia.

DAVIS, HENRY; DWIGHT GARDINER; AND LISA MATTHEWSON. 1993. A comparative look at wh-questions in Northern Interior Salish. Papers for the Twenty-eighth International Conference on Salish and Neighboring Languages, pp. 79–95. Seattle: University of Washington.

DAVIS, PHILIP W., AND ROSS SAUNDERS. 1984. An expression of coreference in Bella Coola. The Syntax of Native American Languages, ed. Eung-Do Cook and Donna B. Gerdts, Syntax and Semantics, vol. 16, pp. 149–67. Orlando, Fla.: Academic Press.

DAYLEY, JON P. 1985. Voice in Tzutujil. Grammar Inside and Outside the Clause: Some Approaches to Theory from the Field, ed. Johanna Nichols and Anthony C. Woodbury, pp. 192–226. Cambridge: Cambridge University Press.

DEMIRDACHE, HAMIDA, AND LISA MATTHEWSON. 1995. On the universality of syntactic categories. NELS 25: Proceedings of the North East Linguistic Society, ed. Jill N. Beckman, vol. 1, pp. 79–93. Amherst: Graduate Linguistic Student Association, University of Massachusetts.

DIXON, R. M. W. 1979. Ergativity. Language 55:59–138.

GARDINER, DWIGHT. 1993. Structural asymmetries and preverbal positions in Shuswap. Ph.D. dissertation, Simon Fraser University. [To be published by the University of British Columbia Press.]

GARDINER, DWIGHT; LISA MATTHEWSON; AND HENRY DAVIS. 1993. A preliminary report on word order in Northern Interior Salish. Papers for the Twenty-eighth International Conference on Salish and Neighboring Languages, pp. 139–57. Seattle: University of Washington.

GERDTS, DONNA B. 1988. Object and Absolutive in Halkomelem Salish. New York: Garland Publishing.

GRIMSHAW, JANE. 1997. Projection, heads, and optimality. Linguistic Inquiry 28:373–422.

JELINEK, ELOISE, AND RICHARD A. DEMERS. 1994. Predicates and pronominal arguments in Straits Salish. Language 70:697–736.

JOHNS, ALANA. 1992. Deriving ergativity. Linguistic Inquiry 23:57–87.

KEENAN, EDWARD L., AND BERNARD COMRIE. 1977. Noun phrase accessibility and universal grammar. Linguistic Inquiry 8:63–99.

KINKADE, M. DALE. 1983. Salish evidence against the universality of 'noun' and 'verb'. Lingua 60:25–39.
_____. 1989. When patients are topics: topic maintenance in North American Indian languages. Paper presented at the Twenty-fourth International Conference on Salish and Neighboring Languages, Steilacoom, Washington, August 16–19.
_____. 1990. Sorting out third persons in Salishan discourse. IJAL 56:341–60.
KROEBER, PAUL. 1991. Comparative syntax of subordination in Salish. Ph.D. dissertation, University of Chicago.
_____. 1997. Relativization in Thompson River Salish. Anthropological Linguistics 39:376–422.
MATTHEWSON, LISA. 1993a. Binding and configurationality in St'át'imcets. Ms., University of British Columbia.
_____. 1993b. A preliminary investigation of wh-questions in Northern Interior Salish. Ms., University of British Columbia.
_____. 1998. Determiner Systems and Quantificational Strategies: Evidence from Salish. The Hague: Holland Academic Graphics.
MATTHEWSON, LISA, AND HENRY DAVIS. 1995. The structure of DP in St'át'imcets (Lillooet Salish). Papers for the Thirtieth International Conference on Salish and Neighboring Languages, pp. 54–68. Victoria: University of Victoria.
MATTHEWSON, LISA; HENRY DAVIS; AND DWIGHT GARDINER. 1993. Coreference in Northern Interior Salish. Papers for the Twenty-eighth International Conference on Salish and Neighboring Languages, pp. 217–32. Seattle: University of Washington.
MULDER, JEAN GAIL. 1988. Ergativity in Coast Tsimshian (Sm'algyax). Ph.D. dissertation, University of California, Los Angeles.
_____. 1989. Syntactic ergativity in Coast Tsimshian (Sm'algyax). Studies in Language 13:405–35.
MURASUGI, KUMIKO G. 1992. Crossing and nested paths: NP movement in accusative and ergative languages. Ph.D. dissertation, Massachusetts Institute of Technology.
PAYNE, THOMAS E. 1982. Role and reference related subject properties and ergativity in Yup'ik Eskimo and Tagalog. Studies in Language 6:75–106.
PERLMUTTER, DAVID M., ed. 1983. Studies in Relational Grammar 1. Chicago: University of Chicago Press.
PETERS, DESMOND, SR; ET AL. [1992]. Introducing St'át'imcets (Fraser River Dialect): A Primer. Kamloops: Secwepemc Cultural Education Society.
PRINCE, ALAN, AND PAUL SMOLENSKY. 1993. Optimality theory: constraint interaction in generative grammar. Technical Report no. 2 of the Rutgers Center for Cognitive Science, Rutgers University. [To appear in the Linguistic Inquiry Monograph series published by The M.I.T. Press.]
ROBERTS, TAYLOR. 1994. Subject and topic in St'át'imcets (Lillooet Salish). M.A. thesis, University of British Columbia.
SMITH, LAWRENCE R. 1984. On the nonergativity and intransitivity of relative clauses in Labrador Inuttut. The Syntax of Native American Languages, ed. Eung-Do Cook and Donna B. Gerdts, Syntax and Semantics, vol. 16, pp. 289–315. Orlando, Fla.: Academic Press.
THOMPSON, LAURENCE C. 1979. Salishan and the Northwest. The Languages of Native America: Historical and Comparative Assessment, ed. Lyle Campbell and Marianne Mithun, pp. 692–765. Austin: University of Texas Press.
THOMPSON, LAURENCE C., AND M. TERRY THOMPSON. 1992. The Thompson Language. Occasional Papers in Linguistics, no. 8. Missoula: University of Montana.
VAN EIJK, JAN. 1981. Cuystwí Malh Ucwalmícwts: Teach Yourself Lillooet: Ucwalmícwts Curriculum for Advanced Learners. Mount Currie, B.C.: Ts'zil Publishing House.

_____. 1983. A Lillooet–English dictionary. Ms., Mount Currie Cultural/Curriculum Development.

_____. 1985. The Lillooet language: phonology, morphology, syntax. Ph.D. dissertation, Universiteit van Amsterdam. [Published as van Eijk (1997).]

_____. 1987. Dictionary of the Lillooet language. Ms., University of Victoria.

_____. 1997. The Lillooet Language: Phonology, Morphology, Syntax. Vancouver: University of British Columbia Press. [Revision of van Eijk (1985).]

VAN EIJK, JAN, AND THOM HESS. 1986. Noun and verb in Salish. Lingua 69:319–31.

WOODBURY, ANTHONY C. 1975. Ergativity of grammatical processes: a study of Greenlandic Eskimo. M.A. thesis, University of Chicago.