THE STRUCTURE OF DP IN ST'ÁT'IMCETS (LILLOOET SALISH)¹ Lisa Matthewson and Henry Davis University of British Columbia

The aim of this paper is to provide an analysis of the internal structure of Determiner Phrases in St'át'imcets. We introduce new data on possessives and relative clauses, while building on previous work on St'át'imcets DPs (van Eijk 1985, Gardiner et al 1993, Davis 1993, Demirdache and Matthewson 1994, Demirdache et al 1994, Davis and Matthewson 1995). We have also benefited from Montler's (1994) detailed description of attributive constructions in Saanich. This examination of DPs in St'át'imcets should facilitate future comparison with other Salish languages.

We assume a basic X-bar structure, which for DP will look like (1). Details will be filled in as the different components of DP are discussed.



The determiner system is introduced in §1, followed by discussion in §2 of the syntactic categories which are selected by Ds. Relative clauses are examined in §3. In §4 we focus on possessives, which we argue are internal arguments of N which may undergo scrambling within DP. Finally, the syntax of demonstrative pronouns is addressed in §5. We conclude with an overview of the entire Determiner Phrase.

1. Determiners

Determiners are obligatory on all argument phrases in St'át'imcets, including those which do not require a determiner in English (see Matthewson in prep. for discussion). The object in (2a,b) contains the mass noun qu7 'water', which in English appears without a determiner; in St'át'imcets, the determiner is obligatory.

- 2. a. q^wən-án-ikan [k^wu q^wu?] qwen-án-lhkan [ku qu7] need-tr-1sg.subj [det water] 'I need water'
 - b. * q^wən-án-1kan [q^wu?]

* qwen-án-lhkan [qu7] need-tr-1sg.subj [water] 'I need water'

In (3a,b) the determiner is obligatory on a generic plural subject, again unlike in English.

3.	a.	wa?	ċaq [₩] -an-itaš	[?i	káx-a]	[?1	mí <u>x</u> a i−a]	
		wa7 be	ts'aqw-an'-ítas eat-tr-3nl erg	[i pl.det	t'éc-a] sweet-det	[i pl.det	míxalh-a] bear-det	
		'Bears	eat honey'	Pildor	2			

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Examples are presented both in phonemic script and in the practical orthography devised by Jan van Eijk. This is done in order to facilitate access for linguists and for native speakers. For convenience, forms cited in the text are presented in the orthography only.

b.	*	wa?	ċaq [₩] -an-itaš	[?i	káx−a]	[m1 <u>x</u> a 1]
	*	wa7 be 'Bears eat	ts'aqw-an'-ítas eat-tr-3pl.erg honey'	[i pl.det	t'éc-a] sweet-det	[míxalh] bear-det

Finally, (4) shows that proper noun arguments (both objects and subjects) require determiners.²

a.		?áċ <u>x</u> -ən- 1 kan	[k [₩] -š	Rose]	
		áts'x-en-lhkan see-tr-1sg.subj 'I saw Rose'	[kw-s [det-nom	Rose] Rose]	
b.	*	?áċ <u>x</u> -ən- 1 kan	[Rose]		
	*	áts'x-en-lhkan see-tr-1sg.subj 'I saw Rose'	[Rose] [Rose]		
c.		?áċ <u>x</u> -ən-č-aš	[k ^w -š		Rose]
		áts'x-en-ts-as see-tr-1sg.obj-3er 'Rose saw me'	[kw-s g [det-r	nom	Rose] Rose]
d.	*	?áċ <u>x</u> -ən-č-aš	[Rose]	
	*	áts'x-en-ts-as see-tr-1sg.obj-3er; 'Rose saw me'	[Rose g [Rose	-] -]	
	a. b. c. d.	a. b. * c. d. *	 a. ?áċx-ən-ikan áts'x-en-lhkan see-tr-1sg.subj 'I saw Rose' b. * ?áċx-ən-ikan * áts'x-en-lhkan see-tr-1sg.subj 'I saw Rose' c. ?áċx-ən-č-aš áts'x-en-ts-as see-tr-1sg.obj-3erg 'Rose saw me' d. * ?áċx-ən-č-aš * áts'x-en-ts-as see-tr-1sg.obj-3erg 'Rose saw me' 	 a. ?áčx-ən-ikan [k^w-š áts'x-en-lhkan see-tr-1sg.subj I saw Rose' b. * ?áčx-ən-ikan [Rose] * áts'x-en-lhkan [Rose] see-tr-1sg.subj [Rose] 'I saw Rose' c. ?áčx-ən-č-aš [k^w-š áts'x-en-ts-as [kw-s see-tr-1sg.obj-3erg [det-i 'Rose saw me' d. * ?áčx-ən-č-aš [Rose * áts'x-en-ts-as [Rose see-tr-1sg.obj-3erg [Rose 'Rose saw me' 	 a. ?áčx-ən-ikan [k^w-š Rose] áts'x-en-lhkan see-tr-1sg.subj I saw Rose' b. * ?áčx-ən-ikan [Rose] * áts'x-en-lhkan [Rose] * áts'x-en-lhkan [Rose] see-tr-1sg.subj [Rose] 'I saw Rose' c. ?áčx-ən-č-aš [k^w-š áts'x-en-ts-as [kw-s see-tr-1sg.obj-3erg [det-nom 'Rose saw me' d. * ?áčx-ən-č-aš [Rose] * áts'x-en-ts-as [Rose] * áts'x-en-ts-as [Rose] * áts'x-en-ts-as [Rose] * áts'x-en-ts-as [Rose] * áts'x-en-ts-as [Rose] * áts'x-en-ts-as [Rose]

The distinctions captured in the determiner system are shown in (5), which is a reanalysis of van Eijk's (1985) categorization of the system.

5.		non-referential		
	present	absent	remote	
singular	tia	nia	k [₩] u…a	k [₩] u
plural	ia	nə 1 …a	k ^w ə + …a]
collective		kia	<i>,</i>	

The major division is that between the referential determiners, all of which contain the enclitic -a, and the non-referential determiner ku, which lacks -a. Non-referential ku is restricted in its distribution; it may appear only under the scope of 'non-fact' modalities (cf. Givón 1978), such as negation, yes-no or wh-questions, epistemic modals or intensional verbs.³ A modal case is illustrated in (6).

 6. a. č?aš kəł [k^wu zúš-xal] ts7as kelh [ku zús-cal] come might [det forbid-intr] 'A policeman might come'

² There is dialectal variance on the marking required for proper noun arguments. The Upper dialect (spoken around Lillooet) requires either kws or s; the Lower dialect (spoken around Mount Currie) prefers kw.
 ³ Ku also appears on the 'objects' of middle verbs, (those which are formally intransitive but allow an overt object). We analyze these 'objects' as undergoing incorporation at Logical Form. See Matthewson (in prep.).

 * č?aš [k^wu zúš-xa1]
 * ts7as [ku zús-ca1] come [det forbid-intr] 'A policeman is coming'

The referential determiners, unlike ku, are unrestricted in their distribution. The proclitic portion (ti-, ni-, etc.) distinguishes number as well as visibility to the speaker.

7. a. č?aš [ti zúš-xal-a]

ts7as [ti zús-cal-a] come [det forbid-intr-det] 'A policeman is coming' / 'The policeman is coming' (visible)

 b. č²aš [n1 zúš-xa1-a] ts7as [ni zús-ca1-a] come [det forbid-intr-det] 'A policeman came' / 'The policeman came' (invisible / past)

See van Eijk (1985), Matthewson (in prep.) for further details and discussion.

2. Determiners select NPs or clauses

The head of the DP, the determiner, selects a projection of any open class lexical item, as shown in (8).

8.	a.	ċáq ^w -an -1 kan	lni	ċúq [₩] az'-a]
		ts'áqw-an'-lhkan eat-dir-1sg.subj 'I ate the fish'	[ni [det	ts'úqwaz'-a] fish-det]

b. čáq^w-an-ikan [ni k^wán-an-a]
 ts'áqw-an'-lhkan [ni kwán-an-a]
 eat-dir-1sg.subj [det catch(dir)-1sg.conj-det]
 'I ate the one I caught'

c. čáq^w-an-ikan [ni xzúm-a]
 ts'áqw-an'-lhkan [ni xzúm-a]
 eat-dir-1sg.subj [det big-det]
 'I ate the big one' (the one which was big)

For evidence that a three-way distinction in lexical categories (noun, verb, adjective) and syntactic categories (NP, VP, AP) is crucial in the syntax in St'át'imcets, see Matthewson and Demirdache (this volume), Davis and Matthewson (1995). We analyze (8b,c), but not (8a), as relative clauses headed by an empty pronominal.

Our (partial) analysis of the DPs in (8) is given in (9). We assume that the -a portion of the referential determiner encliticizes to the first element inside the complement of D.

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In (9b) (which represents the structure of both (8b) and (8c)), the determiner selects a relative clause, whose head is null (pro), and inside which movement of an empty operator takes place. Our crucial claim is that there is a clausal structure inside (9b,c) but not inside (9a). Further evidence for this distinction is given in the following section.

3. Relative clauses

So far we have looked at the basic constituents of a DP, the determiner and its complement. In this section we begin discussion of more complex DPs by examining relative clauses. St'át'imcets relative clauses have been discussed by Roberts (1994), Matthewson and Demirdache (this volume), Davis (1994); this is the first attempt to lay out systematically all the different relative clause types in the language.

3.1. The existence of headed relative clauses

Before we begin, we outline our arguments that headed relative clauses exist in St'át'imcets, given that the existence of a relative clause construction is often denied for Salish languages (see references cited in Montler 1994, including Thompson and Thompson (1992) on Thompson, Hess and Hilbert (1980) on Lushootseed; Jan van Eijk (p.c.) also does not believe in the existence of relative clauses in St'át'imcets).

Our definition of 'relative clause' does not require the presence of a relative pronoun. Instead, we define a relative clause as an instance of restrictive clausal modification of a nominal element.⁴ An example of a headed relative clause is given in (10).

10.	wa?	láti?	(ti	smú 1 ač-a	ti	?aċ <u>x</u> -ən-án-a]
	wa7	láti7	[ti	smúlhats-a	ti	ats'x-en-án-a]
	aux	deic	[det	woman-det	det	see-dir-1sg.conj-det]
	'There's	s the worr				

We give four arguments that (10) contains a relative clause. First, the string enclosed by brackets in (10) forms a syntactic constituent, rather than being a DP with an adjoined modifier, or a string of two DPs. This can be seen in (11), where the same string appears in focussed position, an environment which is a test for constituency in St'át'imcets. In contrast, two arguments or an argument and an adjunct may not appear together in focus position, as shown in (12).

⁴ Interestingly, although the definition given in the text may be universally valid, it was only the distributional differences between NPs and clauses inside St'át'imcets relative clauses which led Demirdache and Matthewson (1994) to propose that the head of a relative clause must be an NP. In discussions of English and other languages where categorial differences are more obvious than in Salish, this fact is either taken for granted or not noticed.

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11.			nit	[ti	šmúlač-a	ti	?aċ <u>x</u> -ən-án-a	J	wa?	x‴úləl
			nilh	[ti	smúlhats-a	ti	ats'x-en-án-a]		wa7	cúlel
			foc	[det	woman-det	det	see-dir-1sg.com	nj-det]	aux	run.away
			'It's the wo	oman I s	aw who ran aw	/ay'				-
12.	a.		ni i	[ti	šmúlač-a]	wa?	x ^w úləl	[?1-nái	tx ^w -aš]	
			nilh	[ti	smúlhats-a]	wa7	cúlel	[i-nátcy	w-as]	
		:	foc	[det	woman-det]	aux	run.away	[when.]	past-day	y-3sg.conj]
			'It's the wo	man wl	ho ran away ye	sterday				
	b.	*	ni 1	(ti	šmúlač-a]	[?i-ná	tx ^w -aš]		wa?	x ^w úləl
		*	nilh	ſti	smúlhats-al	fi-náte	w-asl		wa7	cúlel
			foc	Idet	woman-det]	when.	past-day-3sg.co	onj]	aux	run.away
			'It was the	woman	yesterday who	ran aw	'ay'	<u>.</u>		,
	c	*	nił	ſŧi	šmúlač-al	[† 1	ška l álem-al	kəlkál-	-ən-aš	
	•••	*	nilh	fei	emulhete el	re:	ct'albálam al	kalkál	-	
			foo	[u [det	Sillulliais-aj	[U [dat	st alliaicili-aj	chose c	tir 20ra	
			100 'It was the	lact	woman-detj	luci ho chai	giizziy-ucij	CilaSC-C	m-Jerg	
			it was ule	woman	i, uic grizzly, w	no chas	scu			

Second, the constructions we analyze as relative clauses fit a criterion found in Montler (1994) that the constructions 'must be used exclusively for that function'. The relative clause in (10) differs both from an ordinary subordination and from a sequence of two main clauses. The pure subordinate analysis fails because the determiner pattern is not one found in normal subordination environments (see van Eijk 1985). The two-main-clause analysis also fails because of the two determiners, and also because the conjunctive morphology inside the clausal portion of the relative clause in (10) is not found in main clauses (except in certain clearly 'optative' environments; see van Eijk 1985). The sequence of main clauses in (13) differs in obvious respects from (10) (cf. Montler 1994, who cites Hess and Hilbert 1980 for this diagnostic).

	'There's	s the won	han. I sa	aw her.'	
	aux	deic	[det	woman-det].	see-dir-1sg.subj
	Wa7	láti7	[ti	smúlhats-a].	Ats'x-en-lhkan.
13.	Wa?	láti?	[ti	sm _ú tač-al.	?áċ <u>x</u> -ən- 1 kan.

Third, there is morphological evidence that movement has taken place within the clausal part of the relative, as shown in (14). The morpheme **-tali** appears only when the ergative argument has been extracted (see Roberts 1994, Davis 1994). This evidence can be compared to Montler's (1994) evidence for special subject morphology inside relative clauses in Saanich. In Saanich, 'the syntactic function of the head in the restricting clause is indicated by a gap' (in morphology). Likewise, the morpheme **-tali** in St'át'imcets replaces normal subject morphology.⁵

14.	wa?	láti?	[ti	ška l áləm-a	ti '	kəlkal-ən -táli- ha]
	wa7	láti7	ſti	st'alhálem-a	ti	kelkal-en-táli-ha]
	aux	deic	[det	grizzly-det	det	chase-dir-detop-det]
	'There'	's the grizz				

Other Salishanists have reported on 'gaps' in morphology or special morphology in constructions which involve extraction; see for example Hukari (1995), Gerdts (1988), Kroeber (1991), Jacobs (1988), among others.

⁵ Davis (1994) argues that the morpheme which -tali replaces, namely -as, is not a subject agreement marker. However, the relevant point here is that there is different morphology inside a relative clause from a main clause or an ordinary subordinate clause. 5 Fourth, it can be shown that the clausal portion of the constituents in question is not appositive. Appositive relatives cannot modify proper nouns; similarly, in St'át'imcets, proper nouns cannot be substituted for the head of a relative clause:

	"There	's Mary w	ho I saw'			
	aux	deic	[det-nom	Mary	det	see-dir-1sg.conj-det]
	* wa7	láti7	[kw-s	Mary	ti	ats'x-en-án-a]
15.	* wa?	láti?	[k [₩] -š	Mary	ti	?aċ <u>x</u> -ən-án-a]

The non-appositive nature of relative clauses is also shown by speakers' judgements. For example, when given a sentence containing the relative clause translated as 'John's son who is sensible', one consultant replied that 'it implies he also has a non-sensible son'. Such an implication is a diagnostic for restrictive modification (see e.g. Kamp and Reyle 1993).

3.2. Relative clause types

The first relative clause type we examine contains two identical determiners, as in (10), repeated here.

10.	wa?	láti?	[ti	sm _ú ∔ač−a	ti	?aċ <u>x</u> -ən-án-a]
	wa7	láti7	[ti	smúlhats-a	ti	ats'x-en-án-a]
	aux	deic	[det	woman-det	det	see-tr-1sg.conj-det]
	'There'	s the worr				

The selection of the first determiner here is made in the same way as determiner-selection for an ordinary argument. As outlined in 1, the non-referential determiner ku may appear only under 'non-fact' modalities. In examples throughout this section we simplify by using the visible, singular, referential determiner ti...a; any referential determiner would be substitutable. In the case of the two-determiner relatives, both determiners become ti...a, since the determiners match each other.

As shown in (16), the only possible configuration for a two-determiner relative contains an NP, followed by a clause (which we designate, non-theoretically, as 'S'). A clause followed by an NP is impossible (16b), as is either two NPs (16c) or two clauses (16d).

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16.	a.	ti	NP	ti	S
	b. *	ti	S	ti	NP
	c. *	ti	NP	ti	NP
	d. *	ti	S	ti	S

Examples of each type are given in (17).

17. a. ti NP ti S:

		pun-tkan pún-lhkan find(dir)-1sg.subj 'I found the horse who			[ti [ti [det ran awa;	čqá <u>x</u> 7-a ts`qáx7-a horse-det y'	ti ti det	x ^w úləl-a] cúlel-a] run.away-det	
b.	*	ti	S	ti	NP:				
	*	pún-	- i kan			[ti	x ^w úlə1−a	ti	ċɑáx7-a]

* pún-lhkan [ti cúlel-a ti ts'qáx7-a] find(dir)-1sg.subj [det run.away-det det horse-det] 'I'm going to look for the one who ran away who was a horse' c. * ti NP ti NP:

	'I know an Indian who is	a priest	L' se		
	know-dir-1sg.subj	[det	Indian-det	det	priest-det]
ĸ	zwát-en-lhkan	[ti	ucwalmícw-a	ti	naplít-a]
k	zwát-ən- i kan	[ti	?ux ^w almîx ^w −a	ti	napl _i t-al

d.*tiStiS:

*	pún-tkan	[ti	x ^w úləl-a	ti	x ^w il-ən-án-al
*	pún-lhkan	[ti	cúlel-a	ti	cwil'-en-án-a]
	find(dir)-1sg.subj	[det	run.away-det	det	look.for-dir-1sg.conj-det
	'I found the one who ran	away w	vho I was looki	ng for'	

The pattern in (17), which is completely general throughout the language, indicates not only that there is a categorial difference between nouns (such as ts'qáxa7 'horse', úcwalmicw 'Indian') and clauses (such as cúlel 's/he ran away', cwil'enán 'I looked for it'), but also that this difference is a syntactic one which projects even past a determiner. Thus, a [D NP] constituent is differentiable from a [D RC] constituent. This is part of our argumentation for the syntactic distinction between (9a) and (9b) above.

The strictly NP-initial nature of the two-determiner relative leads us to call it a head-initial relative clause.

Now we turn to a second type of relative clause, which has an NP in final position and a different determiner pattern from the head-initial relatives. The possible and impossible configurations are shown in (18). As with the head-initial relatives, two NPs or two Ss are both ungrammatical (18c,d); unlike the head-initial relatives, the NP is preferred in second position (18a). The non-referential determiner \mathbf{ku} is possible but dispreferred before the final NP. We return to the questionable status of (18b) below.

8.	a.		ti	S	(ku)	NP
	b.	?	ti	NP	(ku)	S
	c.	*	ti	NP	(ku)	NP
	d.	*	ti	S	(ku)	S.

19. a. ti S NP:

1

pún-ikan [ti x^wúləl-a cqáxa?] pún-lhkan [ti cúlel-a ts'qáxa7] find(dir)-1sg.subj [det run.away-det horse] 'I found the horse who ran away'

b.?ti NP S:

?	pún- 1 kan	[ti	čqá <u>x</u> ?−a	x ^w úləl]
?	pún-lhkan	[ti	ts'qáx7-a	cúlel]
	find(dir)-1sg.subj	[det	horse-det	run.away]
	'I found the one who ran	away y	vho was a horse	s'

c. * ti NP NP:

*	zwát-ən -1 kan	{ti	?ux ^w almíx ^w −a	napl _í t]
*	zwát-en-lhkan know-dir-1sg.subj 'I know an Indian who is	[ti [det s a prie:	ucwalmícw-a Indian-det st'	naplít] priest]

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pún- 1 kan	[ti	x ^w úləl-a	x ^w îl-ən-an]
pún-lhkan	[ti	cúlel-a	cwil'-en-an]
Ind(dir)-Isg.subj	Idet	run.away-det who I was looki	look.for-dir-lsg.conjj

In (15) above it was shown that the head-initial relatives cannot be reanalyzed as sequences of two main clauses. The same is true for the second type of relative clause in (19). This time the evidence is not morphological, but discourse-related. For example, (19a) under the two-main-clause analysis would be as in (20):

20.	Pún- 1 kan	[ti	x ^w úlə1-al.	ċqá <u>x</u> a?.	
	Pún-lhkan	[ti	cúlel-a].	Ts'qáxa7.	
	find(dir)-1sg.subj	[det	run.away-det]	horse	
	'I found the one who	ran away.	It was a horse.'		

Both clauses in (20) would be odd under some or all circumstances. Discourse-initially, a headless relative of the type **ti** cúlela is unusual, as the hearer does not know what or who it was who ran away. In addition, intransitive predicates such as **ts'qáxa7** are almost impossible as clauses in their own right in St'át'imcets (contrary to claims made for Straits in Jelinek 1995, for example). On the contrary, a deictic element is almost obligatory in such cases.

Before we continue, a note is necessary regarding determiners. Recall that we have been simplifying the examples by using arguments whose first determiner is referential **ti...a**. The head-final relatives are of course permissable with initial non-referential **ku**, as shown in (21) (where **ku** is licensed by the presence of an intensional verb).

21.	<u>x</u> áۂ-miǹ- i kan	[k ^w u	<u>x</u> zum	čitx [₩]]	
	xáť-min'-lhkan	[ku	xzum	tsitcw]	
	hard-appl-1sg.subj	[det	big	house]	
	'I want a big house' (a	house that	t is big)		

Notice that just in case the first determiner is \mathbf{ku} , there can be an identical determiner pattern in a head-initial relative and an NP-final relative (since in the NP-final relative, \mathbf{ku} is possible on the head). Thus, (22a) is an NP-final relative where \mathbf{ku} appears on the head, and (22b) is a head-initial relative where the determiners match each other.⁶ As predicted, (22a) is questionable because NP-final relatives prefer not to have two instances of \mathbf{ku} , while (22b) is fine as a head-initial relative.

22.	a. ? ?	xák-min- xát'-min'- hard-appl 'I want a l	- i kan l hkan -1sg.subj big house'	[k ^w u [ku [det	<u>x</u> zum k ^w u xzum ku big det	čitx ^w] tsitcw house]
	b.	kan	x ^w íl-əm	[k ^w u	sqayx ^w	k ^w u	?ík-əm]
		kan 1sg.subj	cwíl'-em look.for-intr	[ku [det	sqaycw man	ku det	ít'-em] sing-intr]
		'I'm look	ing for a man w	ho's go	oing to sing'		

There are two possible analyses of this second type of relative clause. One is that they are head-final relative clauses; this claim is made by Matthewson and Demirdache (this volume). The NP which appears in final

⁶ This is an area where future research is required. For example, the choice of an adjective in (22a) and a verb in (22b) for the clausal portion of the relative clause is not random; adjectives and verbs do not have the same distribution within relative clauses. The differences show up particularly with the non-referential determiners, which we have not yet fully investigated.

position is the head of the relative clause, and movement takes place within the clausal portion to an operator position. The head is coindexed with the moved operator, as shown in (23).



Another possible analysis is as a null-headed relative clause, with an adjoined NP coindexed with the null head, as in (24).



24.

There are irrelevant differences in detail between (23) and (24), and there are other possible ways of representing the two basic analyses we wish to contrast. The major difference is that (24) contains a null pronominal head, with which an adjoined overt noun phrase is coindexed. In (23), the noun phrase itself is the head of the relative clause. So, while (24) *contains* a null-headed relative, (23) converts into a null-headed relative by the replacement of tsitcw by a null pronominal.

At this stage we do not have convincing arguments for either type of analysis. At first glance, it appears that (24) requires a stipulation that NP must adjoin to DP (rather than DP adjoining to DP, overgenerating impossible relative clauses of the form ti S ti NP; see (16b)). The NP status of the head could follow more easily from (23); see Matthewson and Demirdache (this volume). On the other hand, the non-referential determiner ku is possible on the final NP of these relative clauses, implying that a DP may in fact be necessary. In that case, either (23) or (24) would require independent reasons for restricting the determiner of this DP to ku (an easy task, in fact, given the obligatorily indefinite status of the head of a relative clause).

We tend towards adopting (24), in part for the simple conceptual reason that it avoids positing two opposite relative clause structures for a single language (head-initial and head-final). But the jury is still out. It is even

possible that both structures are available; for example, one could represent the cases without \mathbf{ku} on the NP, the other representing the cases containing \mathbf{ku} . To avoid committing ourselves, we refer to this type of relative clause neutrally as 'NP-final'.

The problematic pattern mentioned above and returned to now is the questionable grammaticality of (18b):

×

(18b) should be ungrammatical under either analysis of the NP-final relative clause, since S is by hypothesis an impossible RC head, and therefore cannot even be coindexed with a head, since this would create a category clash. The construction is in fact completely ungrammatical when the second element contains an adjectival predicate rather than a verb:

25.	*	?áċ <u>x</u> -ən- i kan	[ti	šmú 1 ač−a	[[62[62
	*	áts'x-en-lhkan see-dir-1sg.subj 'I saw a strong we	[ti [det oman'	smúlhats-a woman-det	gélgel] strong]

However, when the second element is clearly verbal, the configuration in (18b) is often possible, as shown in (26).

26.	?aċ <u>x</u> -ən-îtaš	[?i	ščeq ^w čáčq ^w az – a	wa?	slaw	1-ki	múlx-a]
	ats'x-en-ítas	[i	sts'eqwts'éts'qwaz'-a	wa7	slaw	l-ki	múlc-a]
	see-dir-3pl.erg	[pl.det	fish(redup)-det	aux	hang	on-det	stick-det]
	They saw the fish	n that w	ere hung on the sticks'	(van	Eijk and	Willia	ms 1981:52

We do not have a satisfactory analysis of the possibility of (26) and other similar examples. However, we tentatively claim that they are derived from NP-final relatives (as in (18a)) by extraposition of the clausal part of the relative clause. Evidence for this is that relatives like in (26) are far more common, and more acceptable, if an auxiliary is involved, and the NP - S order becomes obligatory when an overt object is present. In other words, extraposition is preferred when the clausal portion is longer than one word. An example of an overt object forcing extraposition is given in (27). The head NP is ungrammatical in final position (27b).

27. a.			?ácx-ən-ikan áts'x-en-lhkan see-dir-1sg.subj 'I saw the womar	[ti šmúłač-a [ti smúlhats-a [det woman-det n who killed the grizzly		zuq ^w -š-táli zuqw-s-táli die-caus-detop		ti ti det	ška l áləm-al st'alhálem-a] grizzly-det]	
	b.	*	?áċ <u>x</u> -ən− 1 kan	[ti	zuq ^w -š-táli-h	a	ti	ška l á1əm∸a	šmú l ač]	
		*	áts'x-en-lhkan see-dir-1sg.subj 'I saw the womar	[ti [det 1 who k	zuqw-s-táli-ha die-caus-detop cilled the grizzly'	-det	ti det	st'alhálem-a grizzly-det	smúlhats] woman]	

In summary, the possible determiner combinations in St'át'imcets relative clauses are restricted by the headinitial vs. NP-final nature of the relative clause, something which is determined only by the categorial status of the elements selected by D. NP is the only syntactic category which can project to the head of a relative clause. There must be one and only one head in each relative clause; in a head-initial relative clause, the determiners must match, and in an NP-final, the NP either has no determiner, or as a dispreferred option, allows the nonreferential determiner **ku**.

The fact that there is a syntactic difference between [D NP] and [D RC] in St'át'imcets is significant, since as is well-known, NPs can form the main predicates of clauses in Salish languages (28).

 šmúłač-kan smúlhats-kan woman-1sg.subj 'I am a woman'

We claim that although NP can project to the clausal level when not inside DP, the NP heads of relative clauses crucially do not (and may not) project to a clausal level. There is truly a syntactic difference in St'át'imcets between 'the one who left' and 'the man', contrary to claims made by Jelinek (1993, 1994), Jelinek and Demers (1994) for Straits, Kinkade (1983), but agreeing with claims made by Demirdache and Matthewson (1994).

To conclude this section, we present our tentative analysis of each type of relative clause.

29. null-headed:

30.





In all cases, only NPs may function as the head of a relative clause. It is this distributional difference between NPs and clauses which leads us to postulate the difference in syntactic status between (9a) and (9b) in the previous section.

4. Possessors

31.

This section investigates the syntactic behaviour of overt possessors. First, we deal with word order.

There is a dialectal difference regarding word order possibilites with overt possessors. Speakers of the Lower dialect allow only a head-initial order (i.e. with the possessor following the possessed nominal). This is illustrated in (32).

32.	a.	pálp-š-kan pél'p-s-kan lost-caus-1sg.subj	l?i púk"-š-a [i púkw-s-a [pl.det book-3sg.poss-det		š-Mary] s-Mary] nom-Mary]	
		'I lost Mary's books'				
	h *	náln-č-kan	[č-Marv	21 Dúk ^W	-×-2]	

••	pulp o Rall	co riary	•	par o ai	
*	pél'p-s-kan	[s-Mary	i	púkw-s-a]	
	lost-caus-1sg.subj	[nom-Mary	pl.det	book-3sg.poss-det	:]
	'I lost Mary's books'				(Lower dialect

Speakers of the Upper dialect, on the other hand, allow possessors either to precede or follow the possessed nominal (see also Gardiner et al 1993). This dialect difference is reflected not only by consistent contrasts between our Upper and Lower consultants, but also by the fact that van Eijk (1985), who worked mainly with Lower speakers, explicitly states that the possessor must follow its possessed NP (see van Eijk 1985:277).

(33) and (34) contain minimal pairs given by Upper speakers, showing the interchangeability of the two constituents.

33.	a.	ni l	[ti	škíxza?-š-a ta	šqáyx ^w -a]	?áċ <u>x</u> -ən-an
		nilh	[ti	skíceza7-s-a ta	sqáycw-a]	áts'x-en-an
		10C	luct	mother that I saw'	det man-detj	see-ur-1sg.conj
		ii was u	iic mail s	mounci mat i saw		

b.	n1 4	lta	sqayx"-a	ti 	skixza ⁷ -s-al	∕ac <u>x</u> -ən-an
	foc	[ta [det	sqaycw-a man-det	ti det	mother-3sg.poss-det]	see-tr-1sg.conj
	'It was t	(Upper dialect)				

		'It was M	Mary that bit John's dog'				
		nilh foc	s-Mary nom-Mary	t'aol-aon-táli bite-dir-detop	[ti [det	sqáxa7-s-a dog-3sg.poss-det	s-John] nom-John]
34.	a.	ni i	š-Mary	k <u>a</u> l- <u>a</u> n-táli	lti	šqa <u>x</u> a?-š-a	š-John]

b.	nit	š-Mary	k <u>a</u> l- <u>a</u> n-táli	[š-John	ti	šqá <u>x</u> a?-š-a]
	nilh	s-Mary	t'aol-aon-táli	[s-John	ti	sqáxa7-s-a]
	foc	nom-Mary	bite-dir-detop	nom-John	det	dog-3sg.poss-det]
	'It was l	Mary that bit Jol	(Upper dialect)			

Even in the Upper dialect, it can be shown that the head-initial order is basic. Evidence comes from stacked possessors, where the available orders are not free. Here, to complicate matters, we find some variation within one dialect; there appears to be a gradation from least liberal to most liberal speakers. The inter-speaker variation, however, is not random; we can identify an implicational relation, such that if a speaker allows a certain order, they also necessarily allow certain other orders.

Z × The most restrictive pattern from the Upper dialect allows order reversal in ordinary possessors, but disallows it completely with stacked possessors. In (35), given by an Upper speaker, the possessed nominal must come first, and the whole phrase must occur in reversed order from the English translation. polito

35.	a.	ta škixza?-š-a ta skícza7-s-a det mother-3sg.poss-det 'John's sister's mother' (only read		ta ta det ding)	káxkax-š-a kéckec-s-a sister-3sg.poss-det	s-John s-John nom-John	
	b	ta	káxkəx−š−a	ta	škíxza?-š-a	š-John	
		ta det	kéckec-s-a sister-3sg.poss-det	ta det	skícza7-s-a mother-3sg.poss-det	s-John nom-John	

The most liberal Upper speaker we have worked with still does not allow every order in stacked possessors, as shown in (36) (see below for analysis of this speaker's scrambling facts).

- šnúkwa?-š-al 36. təx^wp-min-ikan [ni čitx^w-š-a š-Marv s-Mary na snúk'wa7-s-al tecwp-mín-lhkan [ni tsítcw-s-a buy-appl-1sg.sub [det house-3sg.poss-det nom-Mary det friend-3sg.poss-det] 'I bought Mary's friend's house'
 - tecwomínlhkan ni tsítcwsa sMarv na snúk'wa7sa a.

'John's mother's sister' (only reading)

- tecwpmínlhkan ni tsítcwsa na snúk'wa7sa sMary b.
- tecwpmínlhkan sMary ni tsítcwsa na snúk'wa7sa c.
- tecwpmínlhkan sMary na snúk'wa7sa ni tsítcwsa d.
- tecwpmínlhkan na snúk'wa7sa ni tsítcwsa sMary e.
- tecwomínlhkan na snúk wa7sa sMary ni tsítcwsa f.

We propose that the base position of possessors is post-nominal, with DP-internal scrambling to pre-nominal position. This is supported by the restriction in one dialect to possessor-final order, plus the fact that no speaker disallows this order, while other orders are disallowed to a greater or lesser degree. We therefore assume a base structure for possessives as in (37) (cf. Baker 1993:219).

13



61

Baker (1993) proposes for Mohawk that possessives are internal arguments of N; however, in Mohawk, possessor scrambling is not possible due to independent differences (see Baker 1993:210-226).⁷

The semantics of possessors

D

Spec

37.

4.1.

6

9

5

Up

Further support for our proposal that the possessor is an internal argument of N comes from the fact that unlike in English. possessors in St'át'incets do not saturate the noun phrase of which they are a part. On the contrary, a , fassing) possessed nominal which lacks a determiner must function as a predicate, not an argument. We assume that saturation can be performed by an element in Spec position or in head position, but not by an internal argument (see Rothstein 1983, Higginbotham 1985). Hence, the fact that possessors do not saturate NPs in St'at'incets fits with our analysis. The data is shown in (38).

In (38a,b) possessed nominals function as main predicates;⁸ their ungrammaticality in argument position is shown in (38c). To function as arguments, possessed NPs require an initial determiner (38d).

a.	lčitx"-š	š-Mar	٧l	lti	pint-	an-an-al	
	[tsitcw-s [house-3sg.poss 'I painted Mary's	s-Mary nom-N house' (y] /Iary] (the one	[ti [det I pain	pint-á paint- ted was	n-an-a] dir-1sg.conj-det] Mary's house)	
b.	[š-Mary [s-Mary [nom-Mary 'I painted Mary's	čitx ^w - tsitcw- house- house' (š] ·s] 3sg.pos (the one	ss] e I paint	(ti [ti [det ted was	pint-án-an-a] pint-án-an-a] paint-dir-1sg.conj-det] Mary's house)	
C. * *	?ác॓ <u>x</u> -ən-ikan áts'x-en-lhkan see-dir-1sg.subj 'I saw Mary's hou	n [čitx ^w -š 1 [tsitcw-s 1bj [house-3sg.poss house'		oss	š-Mary] s-Mary] nom-Mary]		
d.	?ác̀x-ən-tkan áts'x-en-lhkan see-dir-1sg.subj 'I saw Mary's hou	[ti [ti [det 1se'	čitx ^w - tsitcw- house-	-š-a -s-a -3sg.po	ss-det	š-Mary] s-Mary] nom-Mary]	

⁷ Although Baker states that scrambling is impossible in Mohawk inside DP, the surface position of an overt possessor seems to be always preceding the head noun. How Baker intends to derive the correct word order from a structure similar to (35) is unclear.

Another difference with Mohawk is that the possessor in that language is an NP, while in St'át'imcets it is a DP, as shown by the fact that the possessor obligatorily requires its own determiner (unlike in English; cf. 'the chiefs' mother', * 'the chief's the mother').

(39) shows that in English, unlike in St'at incets, a possessor does saturate the NP, enabling it to function as an argument.

39. a. * I saw [house]

40.

b. I saw [Mary's house]

A language which is similar to St'át'incets in that possessors do not saturate NPs is Italian; Giorgo and Longobardi (1991:157) note that 'articleless singular NPs containing a possessive ... cannot function as arguments'. Giorgo and Longobardi analyze Italian possessors as adjectives.

Further evidence for the internal argument status of possessors in St'át'imcets comes from the absence of any other complements to N. This follows if there is only one theta-role assigned to each syntactic position (cf. Baker 1988, 1993). Mohawk, which also has internal possessors, also lacks other complements to N; see Baker (1993). In English, on the other hand, the possessor occupies Spec, DP and the complement position is available for use in phrases such as 'a picture of John', 'the destruction of the city'.

The possessor in St'at'incets cannot, unlike in English, receive the agent theta-role (a role typically associated with Specifier positions). This is shown in (40).

a.	wa	17	láti?	[ti	púk ^w −š−a	š-Mary]			
in In Altai	wa au 'Th * 'Th	.7 x nat's Ma nat's Ma	láti7 deic ary's boo ary's boo	[ti [det ok' (she ok' (the	púkw-s-a book-3sg.poss-det owns it) one she wrote)	s-Mary] nom-Mary]			
b.	wa	17	láti?	[ti	píkča-š-a	š-Mary]			
	wa	17	láti7	[ti	píktsa-s-a	s-Mary]			
	au Tl	aux deic [det picture-3sg.poss-det nom-Mary] "That's Mary's picture' (she owns it) "That's Mary's picture' (she is in it)							
1	? "Ti	nat's Ma	ary's pic	ture' (sl	he took it)				

Finally, possessives are ungrammatical in combination with the non-referential determiner \mathbf{ku} , as shown in (41). We hypothesize that this follows from the semantics of the determiners; the possessive affixes are referential, and hence clash with \mathbf{ku} .

4 1.	a.	xáử-miù-+kan xáť-min'-lhkan hard-appl-1sg.subj 'I want Mary's food'	[š-Mary [s-Mary [nom-Mary	ti ti det	š-?í∔ən-š-a] s-7ílhen-s-a] nom-eat-3sg.poss-det]	
	b. *	xák-min- i kan	[š-Mary	ku	š-? 11 ən-š]	
	*	xát'-min'-lhkan hard-appl-1sg.subj 'I want Mary's food'	[s-Mary [nom-Mary	ku det	s-7ilhen-s] nom- c at]	

4.2. Possessor scrambling

We now turn to the finer details of the scrambling operation in St'át'imcets. This is a complex area which has not been studied before (nor has it, to our knowledge, been looked at in detail in any other Salish language). Further investigation is required on possessor scrambling, especially in the areas where there are speaker variation; we present only preliminary results.

Scrambling is strictly DP-internal; possessors may not escape DP under any circumstances, as shown in (42) (cf. Davis et al. 1993, Gardiner et al. 1993). (42a) shows the ungrammaticality of focussing of a possessor, (42b) 15

shows questioning a possessor, (42c) shows relativizing a possessor, and (42d) shows separation of the possessor from its possessed NP by an adverbial phrase.

42.	a.	*	nit nilh foc 'It was M 'It was M	[s-Mary] [s-Mary] [nom-Mary] ary that John's ary's dog that b	<u>kal-a</u> n-as t'aol-áon-as bite-tr-3erg dog bit'; 'It wa bit John'; * 'It w	[s-John [s-John [nom-John s Mary that bit vas Mary's dog	ti det John's o that Joh	sqáxa?-s-a] sqáxa7-s-a] dog-3sg.poss-det] dog' in bit'
	b.	*	swat	k [₩] u ?áċ <u>x</u> -	-ən−ax [₩]	[k ^w u skixz	:a?-s]	
		*	swat ku áts'x-c who det see-tr 'Whose mother did you		en-acw -2sg.conj see?'	[ku skícz [det moth	a7-s] ler-3sg.poss]	
	c.	*	ta	sm _ú i l ač−a	ta ?aċ <u>x</u> ·	-ən-án-a	ta	skixza?-s-a
		*	ta det 'the wom	smúlhats-a woman-det an whose moth	ta ats'x- det see-tr ler I saw'	en-án-a -1sg.conj-det	ta det	skícza7-s-a mother-3sg.poss-det
	d.	*	təx ^w p-m	Ín- 1 kan	[š-Mary]	?inátx [₩] aš	[na	k <u>á</u> h-š-a]
	•	*	tecwp-mi buy-appl- 'I bought	n-lhkan 1sg.subj Mary's car ves	[s-Mary] [nom-Mary] terday'	inátcwas yesterday	[na [det	káoh-s-a] car-3sg.poss-det]

Where is the landing site for possessor scrambling? Evidence suggests that possessors scramble (in the Upper dialect) to adjoin to DP. To see this, we must look at the interaction of possessor scrambling with other DP-internal elements, such as strong quantifiers, demonstrative pronouns, and relative clauses.

Strong quantifiers (tákem 'all' and zí7zeg' 'each' in St'át'imcets) can be shown to adjoin to DP.⁹ Notice in (43) that a possessor may scramble to either side of tákem.¹⁰

	43.	a.	pzán-ikan pzán-lhkan meet(dir)-1sg.subj 'I met all John's relatives'	tákəm š- tákem s- all no	-John John om-John	?i i pl.det	šnak ^w núk ^w a?-š-a snek'wnúk'wa7-s-a friend(redup)-3sg.poss-det
Ċ		b.	pzán-tkan pzán-lhkan meet(dir)-1sg.subj 'I met all John's relatives'	š-John s-John nom-John	tákən táken all	i ?i i pl.det	šnək ^w núk ^w a?-š-a snek'wnúk'wa7-s-a friend(redup)-3sg.poss-det

This implies that possessors, like universal quantifiers, may adjoin to DP.

Now let us look at the interaction of possessives with demonstrative pronouns, which we will argue in the next section occupy Spec, DP. Notice in (43) that when a demonstrative pronoun is present, a possessor may only scramble to precede it, not to follow it.

⁹ See Demirdache et al (1994) for much of the argumentation. While these authors place strong quantifiers in Spec, DP, Davis and Matthewson (1995), Matthewson (in prep.) give evidence that the quantifiers must be adjoined rather than in Spec position.

¹⁰ The pair in (43) was provided by our most liberal speaker with regard to possessor scrambling. Further research is required with other speakers. The same is true of the data in (44).

3.	a.	təx ^w p-min-ikan tecwp-min-lhkan buy-appl-1sg.subj 'I bought that car of Mar	[ti? ti7 [dem y's'	ti ti det	k <u>a</u> h-s káoh-s car-3s	-a s-a g.poss-	-det	s-Mary] s-Mary] nom-Mary]	
	b. * *	təx ^w p-min- i kan tecwp-min-lhkan buy-appl-1sg.subj "I bought that car of Mar	[ti? ti7 [dem ry's'	s-Mar s-Mar nom-I	y y Mary	ti ti det	k <u>a</u> h-s káoh- car-3s	s-a] s-a] sg.poss-det]	
	с.	təx ^w p-min-ikan tecwp-min-lhkan buy-appl-1sg.subj I bought that car of Mar	[s-Ma [s-Ma [nom- y's'	ry ry Mary	ti? ti7 dem	ti ti det	k <u>a</u> h-s káoh- car-3	s-a] -s-a] sg.poss-det]	

The data in (44) imply two things: first, that the demonstrative is in a different position from the quantifiers (we claim that the former is in Spec, DP and the latter adjoins to DP), and second, that possessives may not scramble to follow Spec, DP, but must adjoin to DP.

Next observe that a possessor may scramble inside an an NP-final relative clause.

45.	pzán- i kan	[ti	1 <u>ə́x</u> 1ə <u>x</u> -a	š-John	škúza?-š]
	pzán-lkan meet-1sg.subj	[ti [det	léxlex-a smart-det	s-John nom-John	skúza7-s] child-3sg.poss]
	'I met John's ser	nsible so	n'		

According to the structures given in (23) or (24) for the NP-final RCs, the only available landing site between the clausal part of the relative and the final NP is adjoined to NP.¹¹ It seems we have to alter our analysis of scrambling to say that a scrambled possessor may adjoin either to DP or to NP.

There is a problem with this analysis, however. If possessors can scramble to Spec, NP, we mistakenly generate many impossible orders, as shown in (46).

46. base order:

[ti tsitcw-s-a ti kúkwpi7-a] [det house-3sg.poss-det det chief-det] 'the chief's house'



The scrambling operation in (46) generates the ungrammatical * ti ti kúkwpi7a tsítcwsa. One way out of this difficulty would be to invent a (not implausible) filter against sequences of two determiners, such as * ti ti. However, this seems to miss the point, and may not solve the entire overgeneration problem. Alternatively, we could say that scrambling is always to adjoin to DP, and that the NP-final relatives are in fact DP-final (cf. discussion in §3). This option runs into the problem that scrambling is possible within possessive phrases which are in predicate position; by hypothesis, DP in St'át'imcets does not appear in predicate position, while NP does (see Matthewson and Demirdache this volume, Matthewson in prep.). We adopt the hypothesis that scrambling is always to adjoin to DP, leaving the predicate-scrambling problem and the NP-final relative problem unsolved for now. Further elicitation from a wider range of speakers may shed light on the correct analysis.

63

Our analysis fares better with the stacked possessor facts introduced above, repeated here.

- 36. təx^wp-min-ikan [ni čítx^w-š-a š-Mary na šnúk^wa?-š-a]
 tecwp-mín-lhkan [ni tsítcw-s-a s-Mary na snúk'wa?-s-a]
 buy-appl-1sg.sub [det house-3sg.poss-det nom-Mary det friend-3sg.poss-det]
 'I bought Mary's friend's house'
 - tecwpmínlhkan ni tsítcwsa sMary na snúk'wa7sa
 - b. tecwpmínlhkan ni tsítcwsa na snúk'wa7sa sMary
 - c. * tecwpmínlhkan sMary ni tsítcwsa na snúk'wa7sa
 - d. tecwpmínlhkan sMary na snúk'wa7sa ni tsítcwsa
 - e. * tecwpmínlhkan na snúk'wa7sa ni tsítcwsa sMary
 - f. tecwpmínlhkan na snúk'wa7sa sMary ni tsítcwsa

47.

The base order is (36b), shown in (47), and the predictions of our analysis for each order are given underneath.



¹¹ Strictly speaking, the possessor could be landing in Spec, NP, but for parallelism with DP, we claim that it would have to adjoin. 17

- scrambling of sMary to adjoin to the minimal DP containing it: predicted to be good a. base order: predicted to be good b.
- scrambling of sMary out of its containing DP, across many c. intervening maximal projections. This long-range movement is ruled out in most syntactic theories: predicted to be bad
- scrambling of the whole lower DP na snúkwa7sa sMary to d. adjoin to its minimal containing DP (the highest DP), followed by scrambling of sMary within its minimal DP: predicted to be good
- extraction of na snúk'wa7sa out of its minimal DP, stranding its e. complement. Adjunction of heads to maximal projections disallowed: predicted to be bad
- scrambling of the whole lower DP to adjoin to the higher DP: f. predicted to be good

As was noted above, this pattern was given by the most liberal Upper speaker we have come across so far. It is important to stress that although there is speaker variation, the results are neither random (indicating breakdown of the system under English influence, for example) nor directly influenced by English (since English does not allow scrambling of this sort). On the contrary, the variations are systematic, such that the patterns allowed by the least liberal speakers are always a proper subset of those allowed by a more liberal speaker.

5. **Demonstrative** pronouns¹²

The final component of DP is the demonstrative pronouns, which are given in (48) (van Eijk 1985:198).

48.		visible		invisible			
-	proximal	medio- proximal	distal	proximal	medio- proximal	distal	
singular	č?a	ti?	t?u	k [₩] ?a	ni?	k [₩] u?	
plural	?izá	?iz'	?izú	k [₩] ŧa	nət	k ^w ∔	

First we show that the demonstratives act syntactically unlike any other elements in the language. Following that, we argue that the demonstratives occupy Spec, DP.

Demonstratives, unlike open-class items, may not function as main predicates, as shown in (49); they contrast in this with locative and temporal deictics (50).

49.	a.	*	tí?- 1 kax ^w
-----	----	---	------------------------------------

b.

tí7-lhkacw that-2sg.subj 'You are that one'

ti? ti ámh-a ti7 ti ámh-a that det good-det * 'The good one is that' 'That good one':

50. a. 1č?á-1kan

lts7á-lhkan here-1sg.subj 'I am here'

(van Eijk 1985:206)

láni? 21 pún-an b.

> láni7 pún-an

> > when find(tr)-1sg.conj

"That is when I found it' ('When I found it was then')

(van Eijk 1985:206)

Demonstrative pronouns may appear in positions which are normally occupied by overt DPs. In (51a), ti7 (singular, visible, medio-proximal) appears in argument position, and in (52a) in focus position. In each case, ti7 apparently substitutes for a lexical DP (cf. (51b), (52b)).

51.	a.	?áma	ti?
		áma	ti7
		good	that
		That's g	good!'

then

b.	''ama	lti	š-?álkšt-šw-al
	áma	[ti	s-7álkst-sw-a]
	good	[det	nom-work-2sg.poss-det]
	'Your w	ork is go	ood'

52.	a.	nit	ti?	ti	?aċ <u>x</u> -ən-án-a	
	n	ilh	ti7	ti	ats'x-en-án-a	
	f	foc	dem	det	see-dir-1sg.conj-det	
	']	lt was th	nat one t	hat I sa	it I saw'	

b.	ni 1	[ti	smú l ač-al	ti	?aċ <u>x</u> -ən-án-a
	nilh	ti	smúlhats-a	ti	ats'x-en-án-a
	foc	det	woman-det	det	see-dir-1sg.conj-det
	'It was	the wom	an that I saw'		~

The demonstratives may form a constituent with a following DP, as in (53), and may also detach from their DP. encliticizing to second position, as shown in (54).

53.	a.	nit	[ti?	k ^w u	smú l a	č]	pzán-t	ali		ta	sqáyx ^w −a
		nilh	[ti7	ku	smúlh	ats]	pzán-t	ali		ta	sqáycw-a
		foc	[dem	det	woma	n]	meet(c	lir)-deto	р	det	man-det
		It was that	at woma	in that i	net the	man'					÷
	b.	ni l -s	q ^w ačá	č-s		[ti?	ti	sqáyx	√-a]		
		nilh-s	awats	áts-s		ſti7	ti	saávev	v-al		
		foc-nom	leave-	3sg.pos	s	dem	det	man-d	et		
		'And then	the ma	n left'				(van	Eijk and	d Willia	ıms 1981:58)
54.	a.	nit	k [₩] u?	х̀и?	<u>ti?</u>	s-x ^w ú	ləl-s		ti	sám?-	a
		nilh	ku7	ťu7	ti7	s-cúlel	l-s		ti	sám7-	a
		foc	quot	part	dem	nom-r	un.away	/-his	det	white.	man-det
		'So then (as I was	s told) t	he white	e man ra	an away	1			
	b.	huỷ	<u>ti?</u>	láti?	máys-	n-as	ti	k ^w tám	č-s-a		
		huv'	ti7	láti7	mávs-i	n-as	ti	kwtám	ts-s-a		
		aux	dem	dem	fix-tr-	3erg	det	husbar	1d-3sg.r	ooss-det	İ
		'She was	gonna g	o fix he	r husba	nd'		(van	Eijk an	d Willia	ams 1981:24)
									-		

¹² Parts of this section were first discussed in Davis and Matthewson (1995). 19

c.	nit	<u>ti?</u>	kála?	sáqu l	1č?a	Lillooet-a	<u>k"u</u>	<u>smúlač</u>	
	nilh	ti7	kéla7	ság'ulh	lts7a	Lillooet-a	<u>ku</u>	<u>smúlhats</u>	
	foc	dem	first	half	here	Lillooet-det	det	woman	
	'She was	the first	half-bro	eed woman	in Lillooet'	(van Eijk an	d Willi	ams 1981:70))

Demonstratives are semantically pronominal in the sense that they are variables at Logical Form. Thus, a sentence containing a bare demonstrative requires either prior mention of the element being discussed, or pointing by the speaker. To the discourse-initial utterance of (55a,b), without pointing, consultants reply with Swat? Stam'? ('Who?' 'What?'), and state that a previous context is required.

55. a. ?ík-əm ti?

b.

ít'-em ti7 sing-intr dem 'S/he is singing'

?1^{*}k-əm ni? 1^{*}t'-em ni7 sing-intr dem 'S/he is singing'

Although demonstratives are similar to pronouns in this respect, their syntactic behaviour differs from pronominal person markers. For example, clitic subject pronouns either encliticize to the first predicative element in a clause, or precede it, as shown in (56a,b). They may not follow sentence-level particles such as t'u7, as shown in (56c).

56.	a.	wá?- <u>ikan</u>	х̀и?	tayt
		wá7- <u>lhkan</u>	t'u7	tayt
		I am still hungry	,' '	nungry

- kan tayt <u>kan</u> tayt 1sg.subj hungry 'I am hungry'
- c. * wá? ku? <u>łkan</u> tayt wá7 t'u7 <u>lhkan</u> tayt prog-1sg.subj still hungry 'I am still hungry'

Demonstratives, on the other hand, may appear following such particles.

57.	ni 1	k [₩] u?	х̀и?	<u>ti?</u>	s-x ^w úləl-s	<u>ti</u>	sám?-a
	nilh	ku7	.t'u7	ti7	s-cúlel-s	ti	sám7-a
	foc	quot	still	dem	nom-run.away-3sg.poss	det	white.man-det
	'So then	(as I was	s told) t	he white	e man ran away'		

The demonstratives also act unlike independent pronouns, which are predicative.

58. a. snúwa [ti ?aċx-ən-án-a]
snúwa [ti ats'x-en-án-a]
2sg.emph [det see-dir-1sg.conj-det]
'You're the one I saw' ('the one I saw is you')

s?énča [ta q^wus-xi(t)-táli-ha] s7éntsa [ta qus-ci(t)-táli-ha] lsg.emph [det shoot-appl-detop-det] 'I am the one who shot him' ('the one who shot him is I')

b.

60.

b.

Finally, demonstrative pronouns are not determiners, for some obvious reasons. First, while two determiners cannot co-occur, demonstratives easily co-occur with determiners. Second, determiners are proclitics and cannot appear without an accompanying nominal, unlike demonstratives. And third, determiners, unlike demonstratives, cannot be discontinuous from their complements.

So far we have seen that demonstratives may form a constituent with a lexical DP, cliticize away from their DP, or substitute for a DP. We have not yet discovered which syntactic position they occupy, although it is somewhere on the left edge of DP, preceding the determiner. To ascertain the exact position of the demonstratives we examine the interaction of demonstratives with strong quantifiers, which also appear on the left edge of DP.

Demonstratives may only appear following a quantifier, as shown in (59).

59.	a.		lán- I kan lán-Ihkan already-I 'I already	tu tu det looked	wa? wa7 be at all t	páq ^w -ənš páqw-ens look-tr hese books'	[tákər [táker [all	n n i	?iz' iz' dem	?i i pl.det	púk ^w -a] púkw-a] book-det]	
	b.	*	1án- 1 kan	tu	wa?	páq ^w -ənš	[?iz'	tákəm		?i	púk ^w -a]	
	+ 2	*	lán-lhkan already-I	tu det	wa7 be	páqwens look-tr	[iz' [dem	tákem all		i pl.det	púkw-a] book-det]	
			'I already	looked	at all t	hese books'						

The facts so far are amenable to several quite different analyses, outlined in (60). According to (60a), the demonstrative occupies Spec, DP. In (60b), a DP is adjoined to the demonstrative, which is a pro-DP. A 'combined version' of the two analyses has the demonstrative occupying Spec, DP, as well as rightward adjunction, as in (60c). In each case, we assume that a quantifier would be left-adjoined to the highest DP, as it ranges over the entire DP.







All analyses correctly predict the attested word order. All analyses have a way to account for the existence of bare demonstratives as well as demonstratives accompanied by a determiner and its complement (see below). We propose that depending on determiner choice, both (60a) and (60c) are available.

5.1. Two structures for demonstratives: ti...a vs. ku

Either a referential or a non-referential determiner can follow a demonstrative, as shown in (61).¹³

61. a. k^wúk^wpi? [ti? ti šqáyx^w-a] kúkwpi7 [ti7 ti sqáycw-a] chief [dem det man-det] 'That man is the chief', 'That man is a chief'
b. k^wúk^wpi? [ti? k^wu šgáyx^w]

> kúkwpi7 [ti7 ku sqaycw] chief [dem det man] 'That man is a chief'

We offer several arguments for a difference in structure between (61a) and (61b), and propose that (61a) corresponds to (60a), while (61b) corresponds to (60c).

5.1.1. Ku licensing

c.

If (61a) and (61b) both had the structure in (60a), where the determiner heads the whole DP, (61b) would pose a problem. It would constitute the only environment in the language where a non-referential determiner is permissable, as head of a DP in argument position, underneath a 'fact' modality (see §1). The presence of ti7 would have to somehow license ku; however, ti7 is inherently referential (since an individual which is visible in proximal distance certainly exists). As such, ti7 is unlikely to license, and in fact seems to clash with, the strict non-referentiality of the determiner ku. However, ku is independently known to be possible in *non-argument* (adjunct) positions, independent of modality (see Matthewson in prep.). Hence, an adjoined analysis of (61b) presents far less of a problem than the (60a) analysis.

5.1.2. Determiner choice in adjuncts

Conversely, it is unlikely that *both* (61a) and (61b) have the adjoined structure, since most adjuncts in the language take *only* the non-referential determiner ku. Hence, the referential ti...a is unlikely to appear in either the structure in (60b) or 60c). This is shown in (62) for an adverbial phrase, which can only appear with ku.¹⁴

¹³ The semantic difference between (61a) and (61b) is extremely subtle.

¹⁴ Referential determiners are possible inside locative adjuncts, but usually only in the presence of a preposition, as in (i).

i.		?álkšt−kan	1-ta	ləp-xál-tən-a
	•	alkst-kan	l-ta	lep'-cal-ten-a
		work-1sg.subj	in-det	dig-intr-instr-det
		'I worked in the ga	rden'	U U
		, e		

62.	a.		x ^w ? <u>a</u> z	k [₩] −š	škák imx-əč	[k [₩] u	tí?tə <u>x</u> ₩]
			cw7aoz neg 'S/he doe	kw-s det-nom sn't speak St'a	st'át'imc-ets st'át'imc-mouth át'imc properly'	[ku [det	tí7texw] correct]
	b.	*	x ^w ? <u>a</u> z	k [₩] -š	škák imx-əč	[ti	tí?tə <u>x</u> ^w -a
		*	cw7aoz neg 'S/he doe	kw-s det-nom sn't speak St's	st'át'imc-ets st'át'imc-mouth át'imc property'	[ti [det	tí7texw-a] correct-del

5.1.3. Categorial asymmetries

When demonstratives are present, there are some interesting asymmetries in the possible categories of phrases which may follow ku. Note first that under normal circumstances in which a non-referential ku is licensed, any open-class item (N, V, or A) can follow ku. With non-nouns, a prior context is preferred, as in (63).

63.	X₩?it	х̀и?	?i	zúma	k-a	l-ti	šak-á	tq ^w ?−a.	
	Cw7it t'u7 i zúmak-a l-ti sat'-átqw7-a. many still pl.det spring.salmon-det in-det sat'-wat								
	'There's	a lot of s	pring sa	almon i	n the Fr	aser.			
	<u>X</u> ák-mir	- 1 kan		λu?	[k ^w u	ď₩uď	wuġwč]		
	Xát'-min hard-app I want so	l'-lhkan ol- 1sg.su ome fat o	bj nes.'	t'u7 still	[ku [det	q'uq' fat]	wts].		

However, in the presence of a demonstrative, only nouns may follow ku, as shown in (64). Even the presence of a prior context or pointing cannot save (64b,c).¹⁵

a.		təx [₩] p-mîn- 1 kan	[ti?	k [₩] u	k <u>a</u> h]	
		tecwp-mín-lhkan buy-appl-1sg.subj 'I bought that car'	[ti7 [dem	ku det	kaoh] car]	
b.	*	təx ^w p-mîn- i kan	[ti?	k ^w u	<u>x</u> zum]	
	*	tecwp-mín-lhkan buy-appl-1sg.subj 'I bought that big one'	[ti7 [dem	ku det	xzum] big]	
c.	*	təx ^w p-mîn- i kan	[ti?	k ^w u	хак	knáti?
	*	tecwp-mín-lhkan buy-appl-1sg.subj 'I bought that one that's g	[ti7 [dem going by	ku det there'	t'ak go	knáti7] deic]
	a. b.	a. b. * * c. *	 a. təx^wp-min-ikan tecwp-min-ikan buy-appl-1sg.subj 'I bought that car' b. * təx^wp-min-ikan * tecwp-min-ikan buy-appl-1sg.subj 'I bought that big one' c. * təx^wp-min-ikan * tecwp-min-ikan buy-appl-1sg.subj 'I bought that one that's g 	 a. təx^wp-min-ikan [ti? tecwp-mín-lhkan [ti7 buy-appl-1sg.subj [dem T bought that car' b. * təx^wp-min-ikan [ti? * tecwp-mín-lhkan [ti7 buy-appl-1sg.subj [dem T bought that big one' c. * təx^wp-min-ikan [ti? * tecwp-mín-lhkan [ti7 buy-appl-1sg.subj [dem T bought that one that's going by 	 a. təx^wp-min-ikan [ti? k^wu tecwp-min-ikan [ti? k^wu [dem det] b. * təx^wp-min-ikan [ti? k^wu * tecwp-min-ikan [ti? k^wu buy-appl-1sg.subj T bought that big one' c. * təx^wp-min-ikan [ti? k^wu * tecwp-min-ikan [ti? k^wu 	 a. təx^wp-min-ikan [ti? k^wu kah] tecwp-min-ikan [ti7 ku kaoh] buy-appl-1sg.subj 'I bought that car' b. * təx^wp-min-ikan [ti? k^wu xzum] * tecwp-min-ikan [ti7 ku xzum] buy-appl-1sg.subj I bought that big one' c. * təx^wp-min-ikan [ti? k^wu kak * tecwp-min-ikan [ti7 ku tak buy-appl-1sg.subj I bought that one that's going by there'

This categorial asymmetry does *not* hold with the referential determiners; any category can follow ti...a, whether or not a demonstrative is present.

Sometimes the preposition is droppable, which means that there are some adjuncts which do allow referential determiners. One of our consultants even accepts (62b). The status of determiners in adverbials and adjuncts is a topic requiring further investigation.

¹⁵ There are some interesting interactions with aspect and auxiliaries; some of the cases that are ruled out with **ku**, as in (64), become good if the auxiliary **wa7** (which represents progressive or habitual) is inserted. We have no explanation for these cases at this stage.

65.	a.	təx [₩] p-mîn- 1 kan	[ti?	ti	k <u>á</u> h-a]
		tecwp-mín-lhkan	[ti7	ti	káoh-a]
		buy-appl-1sg.subj	[dem	det	car-det]
		'I bought that car'			
	b.	təx [₩] p-mîn- 1 kan	(ti?	ti	<u>x</u> zúm-a]
		tecwp-mín-lhkan	[ti7	ti	xzúm-a]
		buy-appl-1sg.subj	[dem	det	big-det]
		'I bought that big one'			-
	c.	təx [₩] p-mîn- 1 kan	[ti?	ti	kák−a knáti?]
		tecwp-mín-lhkan	ſti7	ti	t'ák-a knáti71
		buy-appl-1sg.subj	[dem	det	go-det deic]
		'I bought that one that's	going by	y there'	

While we do not have an explanation as yet for why the restriction to nouns suddenly appears in (64), we do take the contrast between (64) and (65) as possible evidence for a structural asymmetry between the referential and the non-referential cases. In addition, the contrast between (63) and (64) could indicate that when a demonstrative is present, the non-referential determiner \mathbf{ku} does not occupy the same position as it does in an ordinary DP (i.e. head of DP).

5.1.4. Word order

There is some word order evidence that the adjoined analysis is not available for the referential cases. Notice in (68) that the quantifier must precede the demonstrative, not follow it.

68.	a.	plán-ikan plán-lhkan already-1sg.subj 'I already read all	paq ^w -alíkšt-min paqw-alíkšt-min watch-leaf-appl the books I got'	tákəm tákem all	?iz' iz' dem	?i i pl.det	n-š-k ^w ám-a n-s-kwám-a 1sg.poss-nom-take-det	puk ^w pukw book
	b. *	plán- i kan plán-lhkan already-1sg.subj 'I already read all	paq ^w -alikšt-min paqw-alikst-min watch-leaf-appl the books I got'	?iz' iz' dem	tákəm tákem all	?i i pl.det	n-š-k ^w ám-a n-s-kwám-a 1sg.poss-nom-take-det	puk ^w pukw book

If the structure in either (60b) or (60c) were correct, we would expect (68b) to be possible, since there would be nothing to stop the right-adjoined DP itself containing a quantifer.

As far as examples corresponding to (68) with **ku** go, we are limited in testing these by the fact that **ku** is generally incompatible with quantification anyway.

We have seen several asymmetries both between the referential and non-referential determiners when they cooccur with demonstratives, and between the behaviour of \mathbf{ku} when it appears in an ordinary DP and when it cooccurs with a demonstrative. On the basis of this, we claim that the cases where a demonstrative co-occurs with \mathbf{ku} have an adjoined structure, while in the referential cases, the demonstrative occupies Spec, DP and the determiner heads the phrase. For concreteness, we assume (60c) rather than (60b); this enables us to claim that the demonstrative always occupies Spec, DP. However, we have no evidence as yet to distinguish between (60b) and (60c).

We also assume that from their base structures, the demonstratives can undergo optional movement at P(honetic) F(orm) to a prosodically defined second position, deriving the data in (54).

When the demonstrative appears by itself without accompanying DP-internal material, we have to postulate that the residue of the DP is null, as shown in (69). Whether the D' has any internal structure is another question we leave for future research.



69.

i.

As a final note, recall the relative clause facts discussed in §3. We divided DPs into two groups, depending on whether they contain an NP complement or a null-headed relative clause complement. Now let us look at demonstrative pronouns inside relative clauses. We shall see that the demonstratives cannot be analyzed as replacing either type of DP within a relative clause. However, the analysis of the demonstrative as occupying Spec, DP accounts for the facts.

In a two-determiner relative, the head (containing an NP) must come first, and an NP may not follow the second determiner (see (16)). In (70), the demonstrative precedes a determiner which takes a clause as its complement; at first glance it might seem as if the demonstrative replaces the entire DP head.

70.	ka l as-zánux ^w	kа	[ti?	ti	wa?	?îlal]
	kalhas-zánucw	k'a	[ti7	ti	wa7	ilal]
	three-year	appar	[demon	det	prog	cry]
	The one who wa	as crying	; was maybe	three yea	ars old'	-

. .. .

However, in (71) we see that a demonstrative may also be followed by a determiner which selects an NP. No matter what sort of DP the demonstrative replaced, this would be an impossible relative clause (see (16,18)). However, the Spec, DP analysis correctly predicts both (70) and (71); it is irrelevant to the Specifier position what category the determiner selects.

71.	a.	k [₩] úk [₩] pi?	[ti?	ti	sqácza?-s-a]
		kúkwpi7 chief	[ti7 [demon	ti det	sqátsza7-s-a] father-3sg poss-det]
		His father	was a chief	uvi	144101 535.p035 401j

In addition, a demonstrative can occupy a position which is impossible for any full DP, but consistent with a Spec, DP position, as shown by the contrast in (72). Relative clauses may not 'iterate'; in (72a), there are three determiners and their complements inside the RC. In (72b), on the other hand, the demonstrative can be followed by a string of two DPs. This is further evidence that the demonstrative does not replace a DP within a relative clause, and once again, the Specifier analysis predicts that (72b) should be possible.¹⁶

72.	a.	*	nit	[ti	sqáyx ^w -a	ti	zwat-ən-án-a	ti	d₩əz-11x-a]	wa?	qlil
		*	nilh	[ti	sqáycw-a	ti	zwat-en-án-a	ti	q'wez-ilc-a]	wa7	qlil
			foc	[det	man	det	know-dir-1sg.cj-det	det	dance-body-det]	be	mad
			'It's the	e man that	I know that	is dan	cing that is angry'				

¹⁶ Demonstratives may also appear *inside* relative clauses, as in (i). These facts also follow from our analysis, but for reasons of space we do not give the whole paradigm.

ni 1	[ti?	ti	šqáyx ^w -a	t1?	ti	zwat-ən-án-a]	wa?	qlil
nilh	[ti7	ti	sqácyw-a	ti7	ti	zwat-en-án-a]	wa7	qlil
foc	[dem	det	man-det	dem	det	know-dir-1sg.conj-det]	be	mad
'It's	that man	that I	know who's ar	igry'				
				•••	26			

b.	nit	lti?	ti	sqáyx [₩] -a	ti	zwat-ən-án-a]	wa?	qlil	
	nilh	[ti7	ti	sqáycw-a	ti	zwat-en-án-a]	wa7	qlil	
	foc	[dem	det	man-det	det	know-dir-1sg.conj-det]	be	mad	
	'It is the man that I know that's dancing'								

Our proposal that ku introduces an adjoined phrase when a demonstrative is present makes various predictions about relative clauses containing ku which we have not yet tested.

6. Conclusion

The structure we propose for DPs in St'át'incets is given in (73). If a demonstrative is present, this structure represents only the case with a referential determiner (see (60c) for the non-referential case). For the relative clause structures we refer the reader back to (29-31).



possessor

While many questions are still remaining, we hope to have familiarized readers with all the components of DP in St'át'incets, along with their syntactic behaviour. We also hope that the data presented, particularly the new data on relative clauses and possessors, will invite future theoretical analysis, as well as comparison with similar structures in other Salish languages.

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