SUBORDINATE CLAUSES AND FUNCTIONAL PROJECTIONS IN ST'ÁT'IMCETS

Henry Davis (UBC)
Lisa Matthewson (UBC and SCES/SFU)[1]

0. Introduction

This paper investigates subordination in St'át'imcets (Lillooet Salish).[2] In particular, we examine the number, categorial status and semantic type of the functional heads which introduce subordinate clauses. The specific questions we will address are summarized in (1).

1. a. Which of the functional heads Complementizer (C), Determiner (D) and Inflection (I) are distinguished in St'át'imcets?
   b. What is the relation between these functional categories and the lexical projections (N,V) with which they are associated?
   c. What is the function of the nominalizer *s=* in subordinate clauses?

0.1. Functional heads which are distinguished

We argue that C and D form distinct categories in St'át'imcets, but D and I do not.[3] We provide morphophonological, syntactic and semantic evidence for this conclusion. We propose that the nominalizer *s=* constitutes a distinct functional head, F (for finiteness).

Morphophonological evidence for a separate category C is based on the existence of a phonologically distinct set of complementizers. On the other hand, we show that, in spite of some superficial phonological differences, the determiner-like (D/I) elements which introduce clauses are non-distinct from those which introduce nominals.

Syntactically, we argue that C-elements are generated in the head position of a functional projection (CP) distinct from (and higher than) that of D/I-elements (DP/IP), while the nominalizer (F) heads its own functional projection, FP, below D/I and above NP/VP.

Turning to semantics, we demonstrate that the interpretive properties of functional heads mirror their syntax. Thus, the C-system, which encodes tense/mood, is distinct from the D/I system, which encodes assertion/non-assertion of existence (Matthewson 1996) and the F-system, which encodes finiteness. The absence of a distinct functional category of Tense correlates with the fact that temporal reference is encoded only indirectly in St'át'imcets, as a complex function of aspectual class, mood, speaker viewpoint, and spatio-temporal deixis (cf. Demirdache 1996a,b,c).

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[2] The current work builds on a number of previous investigations of subordinate clauses in St'át'imcets, including Davis, Gardiner and Matthewson (1993), Davis (1993, to appear), and Davis and Matthewson (1996).

[3] The category 'I' stands for all functional heads which could be argued to form the head of a clause, such as T(ense), M(ood), Asp(ect) or Subject Agreement (AgrS). Thus, we argue that none of these possible functional categories exist separately from D.

0.2. Relationship between functional categories and lexical categories

The absence of a distinction between D and I has interesting consequences for the relationship between functional and lexical projections. Previous work on St'át'ímcets has shown a robust N-V distinction both in the morphology and the syntax (see in particular Demirdache and Matthewson 1995, Matthewson and Davis 1995). The fact that this lexical distinction is not mirrored at the functional level indicates that the source of 'acategoriality' in St'át'imcets and perhaps in Salish more generally is linked to functional rather than lexical projections (contrary to the proposals of Kinkade 1983, Jelinek and Demers 1994).

This claim has more general consequences for the theory of categorial feature projection (Fukui 1986, Speas 1990, Grimshaw 1991, Déchaine 1993, Chomsky 1995), since the lexical categorial features of N and V must be 'visible' for purposes of selection even though the functional projections dominating them are non-distinct.

0.3. Clause types in St'át'imcets

Before proceeding with our analysis of subordinate clauses, we will introduce the range of clause-types for which we aim to account. We will not deal here with relative clauses; see Demirdache and Matthewson (1995), Matthewson and Davis (1995) for information on these.

There are five main types of non-relative subordinate clause in St'át'imcets, summarized in (2). Examples of each type are given in (3).

2.

	initial element	nominalizer	semantic type/environment
a.	*i*	no	temporal adjunct
b.	*lh*	no	subjunctive/temporal/locative adjunct
c.	*ku/kw*	sometimes	complement of negation, intensional verb, ...
d.	*t(i)...a*	yes	factive, 'because' clauses
e.	*Ø*	yes	complement of 'why', 'then' clauses, ...

3. a. *i*=clause (temporal adjunct):[4]

nɬɬ=maɬ=tɬ7 šqʷəqʷɬ-ən-č-áš nɬ=n=škɬxəz7=a ...
nɬlh=malh=ti7 sqweqwl'-en-ts-ás ni=n=skɬcez7=a ...
foc=adhort=deic tell-tr-1sg.obj-erg det=1sg.poss=mother=exis ...
'My mother told me that ...'

... [7ɬ=wá=n wa7 šǩʷúǩʷm̓ɬt]
... [ɬ=wá=n wa7 sk'úk'wm'it]
... [**when**=prog=1sg.conj prog child]
'... when I was a child.' (van Eijk 1985:272)

[4] All St'át'imcets examples are presented in both a phonemic orthography and the practical orthography of the language (see van Eijk 1981). Abbreviations are as follows: adhort=adhortative, appl=applicative, caus=causative, compl=complete speaker knowledge, conj=conjunctive, deic=deictic, det=determiner, erg=ergative, exis=assertion of existence, foc=focus, intr=intransitivizer, neg=negative, nom=nominalizer, obj=object, ooc=out-of-control, pl=plural, poss=possessive, prog=progressive, quot=quotative, redup=reduplication, refl=reflexive, sg=singular, subj=(indicative)subject, tr=transitivizer. A dash (-) indicates an affix boundary and an equals sign (=) a citic boundary.

b. *lh*=clause (subjunctive):

[ɬ=xʷʔáz=aš=ka kʷ=š=ʕʷúyt=šu], ...
[**lh**=cw7áoz=as=ka kw=s=gúy't=su], ...
[**if** =neg=3sg.conj=would det=nom=sleep=2sg.poss] ...
'If you hadn't slept, ...'

... lán=ka=tu? wa? xzum ʔɬ=nkʷʌ́ústəɬ=šw=a
... lán=ka=tu7 wa7 xzum i=nkwt'ústen'=sw=a
... already=would=compl prog big pl.det=eye=2sg.poss=exis
'... your eyes would have been big already.' (van Eijk 1985:233)

c. *kw*=clause (complement of *know*):

wáʔ=ɬkan zəwát-ən [kʷ=š=ʌ́ɬq=š]
wá7=lhkan zewát-en [**kw**=s=t'íq=s]
prog=1sg.subj know-tr [**kw**=nom=arrive=3sg.poss]
'I know that s/he came.' (van Eijk 1985:270)

d. *ti*=...=*a* clause (factive complement):

ʔáma [t=š=ʌ́ʃq=šw=a]
áma [**t**=s=t'íq-sw-a]
good [**t**=nom=arrive-2sg.poss=**exis**]
'It is good that you came.' (Your coming is good) (van Eijk 1985:271)

e. Ø=marked clause (complement of *why):*

kán-əm [šu=qlɬl]
kán-em [su=qlɬl]
how-intr [Ø=2sg.poss=angry]
'Why are you angry?' (van Eijk 1985:271)

While clauses introduced by *lh*= and *i*= are usually adjuncts, and those introduced by *ku/kw*=, *ti*=...=*a*, and Ø= are usually complements, there are exceptions to both generalizations. *Lh*= and *i*=clauses may be selected as interrogative complements, either with an accompanying *wh*-word, as in (4a), or without, as in (4b) and (5):

4. a. xʷʔáz kʷ=ən=š=wá zwát-ən [ɬ=štámɬ=aš kʷ=a šk!ʕʷ]
cw7aoz kw=en=s=wá zwát-en [**lh**=stám'=as kw=a skig'w]
neg det=1sg.poss=nom=prog know-tr [**lh**=what=3sg.conj det=prog skig'w]
'I don't know what a 'skig'w' is.'
(van Eijk and Williams 1981:24: ML)

b. xʷʔáz kʷ=š=zwát-ən-aš [ɬ=w=aš kaš [ɬ=w=aš q̓ʷəl]
cw7aoz kw=s=zwát-en-as [**lh**=w=as kas [**lh**=w=as q'wel]
neg det=nom=know-tr-erg [**lh**=prog=3conj how [**lh**=prog=3conj cooked]
'She didn't know how to cook it (how it was when it was cooked).'
(van Eijk and Williams 1981:24: ML)

5. ʔáz kʷ=ən=š=wá zwát-ən [ʔɬ=ʌ́ʃq=aš]
aoz kw-en-s-wá zwát-en [i=t'íq=as]
neg kw=1sg.poss=nom=prog know-dir [**when**=arrive=3sg.conj]
'I didn't know when he arrived.'

Conversely, while clauses headed by *ku/kw*=, *ti*=...=*a* usually occur as propositional complements, *ti*=...=*a* clauses may also act as adjuncts meaning 'because':[5]

6. xʷʔáz kʷ=ən=š=wá kʷúɬən kʷu=šqlʌ́ẇ
cw7aoz kw=en=s=wá kúlhen ku=sqlaw'
neg det=1sg.poss=nom=prog borrow det=money
'I don't borrow money, ...

[tɬ=š=xʷʔáy=š=a kʷ=ən=š=wá ka=p̓ʌ́ɲt-š=a]
[**ti**=s=cw7ay=s=a kw=en=s=wá ka=p'án't-s=a]
[**ti**=nom=neg=3sg.poss=exis det=1sg.poss=nom=prog ooc=return-caus=ooc]
... because I can't return it.' (van Eijk 1981:71)

In other words, the distinction between *ku/kw*= and *ti*=...=*a* on the one hand and *lh*= and *i*= on the other does not appear to reduce straightforwardly to the adjunct-argument distinction.

Leaving aside for the moment bare nominalized complements (e), we will now turn to a closer examination of clauses introduced by an overt subordinating element. We will argue that out of the four elements which introduce subordinate clauses, *lh*= and *i*= are categorially complementizers, while *ku/kw*= and *ti*=...=*a* are categorially determiners.

1. Complementizers versus determiners in St'át'imcets

The elements *lh*= 'if, when, where' and *i*= 'when' (past) form a unique subsystem of functional categories in the grammar of St'át'imcets. Phonologically, they are neither systematically related to determiners nor to prepositions.[6] Moreover, there are a series of syntactic and semantic differences between *lh*= and *i* = on the one hand and *ku/kw*= and *ti*=...=*a* on the other, which clearly indicate that they are members of different functional categories. These differences are outlined in sections 1.1 and 1.2.

1.1. Syntactic differences between C and D/I

Syntactically, the complementizer-like elements *lh*= and *i*= differ from the determiner-like elements *ku/kw*= and *ti*=...=*a* in the following ways:

7. a. *lh*= and *i*= may only introduce clauses, never nominals. *Ku/kw*= and *ti*=...=*a* introduce both nominal and clausal constituents.

b. Clauses introduced by *lh*= and *i*= are focused in a parallel fashion to PPs. Clauses introduced by *ku/kw*= and *ti*=...=*a* are focused in the same way as DPs.

c. *lh*= and *i*= select conjunctive or indicative subject clitics. Clauses headed by determiners select either possessive subject clitics or conjunctive suffixes.

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[5] 'Because' clauses are very often introduced by the focus predicate *nilh*; however, the pattern in (6), without introductory *nilh*, is at least as common. Of course, we could always say that *nilh* in these cases is freely deletable, thereby preserving the generalization that all *ti...a* clauses are syntactically arguments of some predicate. However, this would simply be a stipulation, since *nilh* cannot be deleted when it is used to focus a true (theta-marked) argument with *ti...a*; see (12) below.

[6] There is partial homonymy between realis *i*= and the plural determiner *i*=...=*a*, and likewise between irrealis *lh*= and the preposition *lhl* ='from', but these seem more likely to be cases of accidental homophony than indications of a systematic relationship.

We will expand on each of these points below.

1.1.1. Clausal vs. nominal complements

In contrast to *ku/kw=* and *ti=…=a*, *lh=* and *i=* never introduce nominals:

8. a. lan wa? ƛɬq tɬ=šqáyxʷ=a
lan wa7 t'iq **ti**=sqáycw=**a**
already prog come **ti**=man=**a**
'The man already came.'

b. * lan wa? ƛɬq ɬ=šqayxʷ
* lan wa7 t'iq **lh**=sqáycw
already prog come **lh**=man

c. * lan wa? ƛɬq ʔɬ=šqáyxʷ
* lan wa7 t'iq **i**=sqáycw
already prog come **i**=man

9. a. xʷʔaz kʷ=š=ƛɬq kʷu=šqáyxʷ
cw7aoz kw=s=t'iq **ku**=sqáycw
neg det=nom=come **ku**=man
'No man came.'

b. * xʷʔaz kʷ=š=ƛɬq ɬ=sqayxʷ
* cw7aoz kw=s=t'iq **lh**=sqaycw
neg det=nom=come **lh**=man

c. * xʷʔaz kʷ=š=ƛɬq ʔɬ=sqáyxʷ
* cw7aoz kw=s=t'iq **i**=sqáycw
neg det=nom=come **i**=man

1.1.2. Focusing behaviour

Clauses introduced by *lh=* and *i=* may serve as the focused element of an adjunct cleft. In this construction, a temporal or locative adjunct (the latter generally a PP) appears sentence-initially, followed by the clause from which it has been extracted. The residue of extraction is itself introduced by *lh=* (or optionally *i=*, if the focused element is itself an *i=*clause) which in turn induces conjunctive morphology on the embedded predicate:

10. a. čaẇ-án=ɬkan tɬ=kɬáh=a [ʔɬ=nátxʷ=aš]
ts'aw'án=lhkan ti=káoh=a [**i**=nátcw=**as**]
wash-tr=1sg.subj det=car=exis [**when**=day=**3sg.conj**]
'I washed the car yesterday.'

b. [ʔɬ=nátxʷ=aš] [ʔɬ=čaẇ-án=an tɬ=kɬáh=a]
[**i**=nátcw=**as**] [**i**=ts'aw'-án=**an** ti=káoh=a]
[**when**=day=**3sg.conj**] [**when**=wash-tr=**1sg.conj** det=car=exis]
'Yesterday was when I washed the car.' (van Eijk 1981: 51)

11. a. xʷúz'=ɬkan čaẇ-án tɬ=n=kɬáh=a [ɬ=nátxʷ=aš]
cúz'=lhkan ts'aw'-án ti=n=káoh=a [**lh**=nátcw=**as**]
going.to=1sg.subj wash-tr det=1sg.poss-car=exis [**lh**=day=**3sg.conj**]
'Tomorrow I'm going to wash my car.'

b. [ɬ=nátxʷ=aš] ɬ=xʷúz'=an čaẇ-án tɬ=n=kɬáh=a
[**lh**=nátcw=**as**] [**lh**=cúz'=**an** ts'aw'-án ti=n=káoh=a
[**lh**=day=**3sg.conj**] [**lh**=going.to=**1sg.conj** wash-tr det=1sg.poss=car=exis
'Tomorrow is when I'm going to wash my car.'

In contrast, adjunct clauses headed by a determiner behave like DPs when focused. Both are obligatory arguments of the focus predicate *nilh*, as shown in (12).

12. a. *(nɬɬ) tɬ=kʷúkʷpɬʔ=a ʔáčx-ən=an
*(nilh) **ti**=kúkwpi7=**a** áts'x-en=an
*(foc) **det**=chief=**exis** see-tr=1sg.conj
'It was the chief that I saw.'

b. *(nɬɬ)=ƛuʔ t-š-én=a q̓ʔ-ál̓mən ɬ=an naš
*(nɬlh)=t'u7 **t**=s-én=**a** q'7-ál'men lh=an nas
*(foc)=just **det**=nom=1sg.poss=**exis** food-want lh=1sg.conj go

kʷu=xʷəman-álhcw=a
ku=cweman-álhcw=a
det=store-house=exis
'It's because I'm hungry that I'm going to the store.'

1.1.3. Differing morphology in subordinate clause

Both *lh=* and *i =* select conjunctive clitics in the clause they introduce. The examples from (3a,b) above can be used to illustrate this:[7]

3. a. nɬɬ=maɬ=tɬʔ šqʷəqʷɬ-ən-č-áš nɬ=n=škɬxəzʔ=a …
nɬlh=malh=ti7 sqweqwl'-en-ts-ás ni=n=skɬcez7=a …
foc=adhort=deic tell-tr-1sg.obj-erg det=1sg.poss-mother=exis …
'My mother told me that …'

… [ʔɬ=wá=n waʔ škʷúkʷm̓ɬt]
… [i=wa=**n** wá7 sk'úk'wm'it]
… [**when**=prog=**1sg.conj** prog child]
'… when I was a child.' (van Eijk 1985:272)

b. [ɬ=xʷʔáz=aš=ka kʷ=š=ʕúẏt=šu], …
[**lh**=cw7áoz=**as**=ka kw=s=gúy't=su], …
[**if** =neg=**3sg.conj**=would det=nom=sleep=2sg.poss] …
'If you hadn't slept, …'

… lán=ka=tuʔ waʔ xzum ʔɬ=nkʷ̓ƛúštəɬ=šw=a
… lán=ka=tu7 wa7 xzum i=nkwt'ústen'=sw=a
… already=would=compl prog big pl.det=eye=2sg.poss=exis
'… your eyes would have been big already.' (van Eijk 1985:233)

[7] There is also,a special use of *lh=* with indicative clitics to mean 'before', as illustrated in (i).
i. čúɬ=xɬ(t)-č-aš tɬ=čɬʔ=a [ɬ=ʔáčx-ən=ɬkan]
tsúlh-ci(t)-ts-as ti=ts'ɬ7=a [**lh**=7áts'x-en=**lhkan**]
point-appl-1sg.obj-3erg det=deer=exis [**before**=see-tr=**1sg.subj**]
'S/he pointed out the deer to me before I saw it.' (van Eijk 1981:74)

In contrast, *ku/kw=* and *ti=…=a* never select conjunctive clitics. Instead, they take possessive clitic subjects in intransitive complements, and either possessive clitics or conjunctive suffixes in transitive complements. The intransitive pattern is illustrated in (3c,d) above, repeated here:

3. c. wá?=ɬkan zəwát-ən [k^{w}=š=ƛɬq=š]
wá7=lhkan zewát-en **[kw=s=t'iq=s]**
prog=1sg.subj know-tr **[kw=nom=arrive=3sg.poss]**
'I know that s/he came.' (van Eijk 1985:270)

d. ?áma [t=š=ƛɬq=šw=a]
áma **[t=s=t'íq-sw-a]**
good **[t=nom=arrive-2sg.poss=exis]**
'It is good that you came.' (Your coming is good) (van Eijk 1985:271)

In (13), the same elements incorrectly attempt to select conjunctive clitics.

13. a. * wá?=ɬkan zəwát-ən k^{w}=š=ƛɬq=aš
* wá7=lhkan zewát-en **kw=s=t'íq=as**
prog=1sg.subj know-tr **kw=nom=arrive=3sg.conj**
'I know that s/he came.'

b. * ?áma t=š=ƛɬq=ax^{w}=a
* áma **t=s=t'íq=acw=a**
good **t=nom=arrive=2sg.conj=exis**
'It is good that you came.' (Your coming is good)

(14-15) show parallel cases with transitive predicates. (14) shows the possessive subject pattern, (15) the conjunctive subject suffix pattern.[8] The verb *t'iq* 'come' is employed here as an auxiliary in order to distinguish between clitic and suffix subjects.

14. a. wá?=ɬkan zəwát-ən [k^{w}=š=ƛɬq=šu ?ačx-ən-túmuɬ]
wá7=lhkan zewát-en **[kw=s=t'íq=su** ats'x-en-túmulh]
prog=1sg.subj know-tr **[kw=nom=arrive=2sg.poss** see-tr-1pl.obj]
'I know that you have come to see us.'

b. ?áma [t=š=ƛɬq=šw=a ?ačx-ən-túmuɬ]
áma [t=s=t'íq-sw-a ats'x-en-túmulh]
good [t=nom=arrive-**2sg.poss=exis** see-tr-1pl.obj]
'It is good that you came to see us.'

15. a. wá?=ɬkan zəwát-ən [k^{w}=š=ƛɬq ?ačx-ən-túmuɬ-ax^{w}]
wá7=lhkan zewát-en **[kw=s=t'iq** ats'x-en-túmulh-**acw]**
prog=1sg.subj know-tr **[kw=nom=arrive** see-tr-1pl.obj-**2sg.conj]**
'I know that you have come to see us.'

b. ?áma [t=š=ƛɬq=a ?ačx-ən-túmuɬ-ax^{w}]
áma [t=s=t'íq=a ats'x-en-túmulh-**acw]**
good [t=nom=arrive=**exis** see-tr-1pl.obj-**2sg.conj]**
'It is good that you came to see us.'

[8] These are in more or less free variation, though the latter is perceived, at least amongst Upper St'át'imc speakers, to be the 'correct' version.

In contrast, in (16) determiners incorrectly select conjunctive clitic subjects:

16. a. * wá?=ɬkan zəwát-ən [k^{w}=š=ƛɬq=ax^{w} ?ačx-ən-túmuɬ]]
* wá7=lhkan zewát-en **[kw=s=t'íq=acw** ats'x-en-túmulh]
prog=1sg.subj know-tr **[kw=nom=arrive=2sg.conj** see-tr-1pl.obj]
'I know that you have come to see us.'

b. * ?áma [t=š=ƛɬq=ax^{w}=a ?ačx-ən-túmuɬ]]
* áma **[t=s=t'íq=acw=a** ats'x-en-túmulh]
good **[t=nom=arrive=2sg.conj=exis** see-tr-1pl.obj]
'It is good that you came to see us.'

Thus, the subject morphology associated with determiners is quite distinct from that associated with *lh=* and *i=* The latter always select subject clitics, as in (3); the former never do.

1.2. Semantic differences between C and D/I

In this section we turn to interpretive differences between and *lh=* and *i=* on the one hand, and *ku/kw=* and *ti=…a=*, on the other, beginning with a brief description of the range of semantic functions associated with subordinate clauses introduced by *lh=* and *i=*.

In addition to its role in interrogative complements (see (4) above)*lh=* introduces a broad range of other clause types. These include conditionals (see (3b)) as well as both temporal and locative adjuncts. Temporal adjuncts with *lh=* usually have either a future/irrealis interpretation (17a) or a habitual interpretation (17b).

17. a. [ɬ=ƛɬq=aš tɬ=šqácəz?=a] x^{w}?ɬ=kəɬ k^{w}u=š?ɬɬən=lap
[lh=t'íq=as ti=sqátsez7a=a] cw7it=kelh ku=s7ílhen=lap
[when=arrive=3sg.conj det=father=exis] many=will det=food=2pl.poss
'When your father arrives, there'll be a lot of food for you.'
(van Eijk and Williams 1981: 53: BE)

b. wá?=k^{w}u? l=č?a tɬ=nḱyáp=a
wá7=ku7 l=ts7a ti=nk'yáp=a
prog=quot at=here det=coyote=exis
'There was this here coyote...

wa? xáƛ-mɬṅ-aš ka=?áčx-əm=a [ɬ=aš štšt]
wa7 xát'-min'-as ka=7áts'x-em=a **[lh**=as sitst]
prog want-appl-3erg ooc=see-intr=ooc **[when**=3sg.conj night]
...he wanted to be able to see at night.' (van Eijk and Williams 1981:10: RJ)

(18) shows *lh=* introducing a locative adjunct:[9]

18. nɬɬ=ƛu? múta? š=?áta?=š xaẇxaẇxáẇna
nílh=t'u7 múta7 s=7áta7=s xaw'xaw'xáw'na
foc=then again nom=to.there=3sg.poss low.down(redup)
'So he went along down low, …

[9] This is one of many areas where St'át'imcets conflates expressions of time and space; see Davis (1996), Demirdache (1996a,b, c) for others.

[ɬ=ʌ́ák=aš ɬa?=š=a=ʌ́ú?=a tɬ=q^{w}ú?=a]
[**lh**=t'ák=as lha7=s=a=t'ú7=a ti=qú7=a]
[**where**=go.along=3sg.conj close=3sg.poss=exis=then=exis det=water=exis]
… where it was close to the water.' (van Eijk and Williams 1981:5: RJ)

The range of environments in which *lh*= occurs indicates that it is more of a general purpose subordinator than a marker of a particular mood or tense. In contrast, *i*=clauses are used exclusively to refer to past events, where 'past' is evaluated relative to utterance time rather than event time. Thus, just like past-tense *when* clauses in English, adjunct *i*=clauses may be interpreted as either simultaneous or anterior to the time of the event in the clause which they modify, depending on the aspectual class of the predicate, the presence of aspectual modifiers, and other semantic and pragmatic factors. Examples (3a, 11) above illustrate a simultaneous interpretation; (19) illustrates one in which the main event follows the event denoted by the *i*=clause.

19. wá?=k^{w}u? ?ayɬ látɬ? čuẇ.čəẇ-ən-čút
wá7=ku7 aylh láti7 tsuw'.tsew'-en-tsút
prog=quot then there kick(redup)-tr-refl

[?ɬ=ka=xál=aš=a tɬ=twə́ẇ.ẇət=a]
[**i**=ka=cál=as=a ti=twéw'.w'et=a]
[**when**=ooc=get.to.brow.of.hill=3sg.conj=ooc det=boy(redup)=exis]
'When the boy reached the top of the hill, he thrashed and kicked around.'
(van Eijk and Williams 1981:48: ML)

It is difficult to tell whether *i*= in these cases is marking past tense or realis mood. In particular, the kind of 'punctual present' examples used by Baker and Travis (1995) to argue for a mood-based rather than a tense-based analysis of inflection in Mohawk are lacking in St'át'imcets. Nevertheless, the fact that *i*=appears to be incompatible with an irrealis interpretation, even when it is embedded in a past tense context, provides at least one clue that the relevant distinction is likely to be one of mood rather than of tense. Compare (6), repeated here as (20a), with its irrealis counterpart in (20b):

20. a. ?az k^{w}=ən=š=wá zwát-ən [?ɬ=ʌ́ɬq=aš]
aoz kw=en=s=wá zwát-en [**i**=t'íq=as]
neg kw=1sg.poss=nom=prog know-dir [**when**=arrive=3sg.conj]
'I didn't know when he arrived.' (But he did arrive at some point).

b. ?az k^{w}=ən=š=wá zwát-ən [ɬ=ʌ́ɬq=aš]
aoz kw=en=s=wá zwát-en [**lh**=t'íq=as]
neg kw=1sg.poss=nom=prog know-dir [**if**=arrive=3sg.conj]
'I didn't know if/when he arrived.' (And he may not have arrived at all).

On the other hand, if *i*= is a realis mood marker, the fact that it always takes conjunctive (rather than indicative) clitics is puzzling, since in the absence of an overt selecting element, conjunctive morphology is associated with 'optative' or 'subjunctive' (i.e., irrealis) mood (van Eijk 1985).

Moreover, even if *i*= does encode realis mood, we have already seen that *lh*= cannot be reduced in a parallel fashion to irrealis mood. Thus, though either mood or tense or both may be implicated in the semantics of and *lh*= and *i*=, at this point it is unclear exactly how they interact. For our present purposes, we will simply conclude that *lh*= and *i*= encode tense and/or mood, leaving a more detailed analysis for future research.

Let us now turn to the interpretation of clauses introduced by *ku/kw*= and *ti*=…=*a*. Examples of *ku/kw*= clauses are given in (21). These clauses function as the complements of negation, intensional verbs, and verbs of thinking and saying. In these examples, *ku/kw*= co-occurs with nominalization of the following predicate:

21. a. x^{w}?az [k^{w}=n=š=ʌ́ɬq]
cw7aoz [**kw**=n=s=t'iq]
neg [**kw**=1sg.poss=**nom**=arrive]
'I did not arrive.' (van Eijk 1981:39)

b. šq^{w}ál'-ən=ɬkan [k^{w}=š=hú́ẏ=šu ʌ́ɬq]
sqwál'-en=lhkan [**kw**=s=húy'=su t'iq]
tell-tr=1sg.subj [**kw** =**nom**=going.to=2sg.poss arrive]
'I told him you would come.' (van Eijk 1981:44)

c. wa? xáʌ́-mɬn̓-əm [k^{w}=š=nú́k^{w}?-an-č-ɬm]
wa7 xát'-min'-em [**kw**=s=núkw7-an-ts-im]
prog hard-appl-1pl.subj [**kw**=**nom**=help-tr-2sg.obj-1pl.subj]
'We want to help you.' (van Eijk 1981:45)

Ti=…=*a* clauses are generally interpreted as factives. *Ti*=…=*a* always co-occurs with nominalization on the following predicate:

22. a. ?áma [t=š=ʌ́ɬq=šw=a]
áma [**t**=s=t'íq=sw=**a**]
good [**t**=**nom**=arrive=2sg.poss=**exis**]
'It is good that you came.' (Your coming is gone.) (van Eijk 1985:271)

b. plan x^{w}?az k^{w}=a=š kʌ́'zúš-əm k^{w}=š=Bill,
plan cw7aoz kw=a=s kw'zús-em kw=s=Bill,
already neg kw=prog=nom work-intr kw=nom=Bill,
'Bill does not work any more, …'

nɬɬ [t=š=plán=š=a wa? qəɬməmən̓-?úɬ]
nilh [**t**=s=plán-s=**a** wa7 qelhmemen'-7úl]
foc [**t**=**nom**=already=3sg.poss=**exis** prog old-too]
'… because he is too old already.' (van Eijk 1985:218)

Temporal distinctions can be indirectly encoded by determiners (see §2.3 below and Demirdache 1996a,b), but they do so not via mood or tense but via 'assertion of existence' (see Matthewson 1996, §2.2 below). The 'assertion-of-existence' determiners (characterized by an encliticized =*a*, as in *ti*=…=*a*) typically induce a past tense/realis mood interpretation when they take a clausal complement, since the event referred to by the embedded clause is naturally interpreted as having taken place if it is asserted to exist (as in (22a)). This is by no means necessary, however; an intention rather than an event may be asserted to exist, in which case a future/irrealis interpretation obtains:

23. a. ?áma tɬ=š=x^{w}úz'=šw=a q^{w}ačáč
áma **ti**=s=cúz'=sw=**a** qwatsáts
good **ti**=nom=going.to-2sg.poss=**exis** leave
'It's good that you are (going to be) going away.'

b. kʷúkʷ=ɬkan=kɬ ɬ=ʕáp=aš,
kúkw=lhkan=kelh lh=gáp=as,
cook=1sg.subj=will lh=evening=3sg.conj
'I'm going to cook tonight ...

nɬɬ tɬ=š=xʷúz'=š=a ƛɬq n=šqácəz7=a
nilh **ti**=s=cúz'=s=a t'iq n=sqátsez7=a
foc **ti**=nom=going.to=3sg.poss=exis arrive 1sg.poss=father=exis
... because my father is going to come.'

Conversely, though the non-assertion of existence determiner *ku/kw=* is often found in future or irrealis contexts (since the event it denotes is not asserted to have taken place), it is quite compatible with an event which must be interpreted as past or realis, as long as it is under the scope of a non-factual operator:

24. ʔáy=ƛu? kʷ=ən=š=zwát-ən ʔɪ=nátxʷ=aš
áy=t'u7 kw=en=s=zwát-en i=nátcw=as
neg=just kw=1sg.poss=nom=know-tr when=day=3sg.conj
'I didn't know yesterday ...

kʷ=š=lán=ƛu? wa? zuqʷ nɪ=skɬcza7=s=a
kw=s=lán=t'u7 wa7 zuqw ni=skɬcza7=s=a
kw=nom=already=just prog die det=mother=3sg.poss=exis
... that her mother had already died.'

Thus, unlike *lh=* and *i=*, neither *ku/kw=* nor *ti=...=a* directly encodes mood or tense.

1.3. Clausal structure and the C-D distinction

We have now presented a series of morphophonological, syntactic and semantic differences between *lh=* and *i=* on the one hand, and *ku/kw=* and *ti=...=a* on the other. These indicate that these two sets of subordinating elements must be treated as members of separate closed-class categories. The question now arises as to what these categories are, and how they are structurally related.

Setting aside for a moment the status of *ku/kw=* and *ti=...=a*, we will adopt the hypothesis that *lh=* and *i=* are complementizers. Evidence for this conclusion is provided by the following facts:

25. a. *lh=* and *i=* always introduce clauses, never nominals (8,9).
b. adjunct clauses introduced by *lh=* and *i=* are focused like PPs (10,11).
c. *lh=* and *i=* always take clitic subjects (3a,b).

(25a) follows from the definition of a complementizer as an element which introduces subordinate clauses.

(25b) is predicted if we take C as the clausal equivalent of P, rather than of D. Some models of categorial structure - notably that of Emonds (1985) - make precisely this claim. Others (e.g. Fukui (1986), Speas (1990), Déchaine (1993)) prefer to treat K (=Kase) as the equivalent of C in the nominal system, reserving P for lexical categorial status.

The St'át'imcets facts seem to favour functional rather than lexical status for P. To start with, as in many Salish languages, there are very few prepositions. The complete inventory is given in (26):

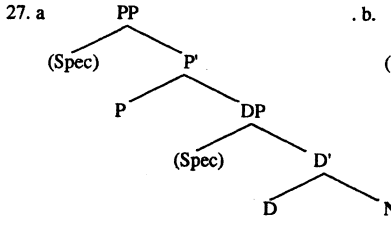
26.

	central	peripheral
locational	***l=*** 'at, in, on'	***kn=*** 'around'
directional	***e=*** 'to'	***lhl=*** 'from'

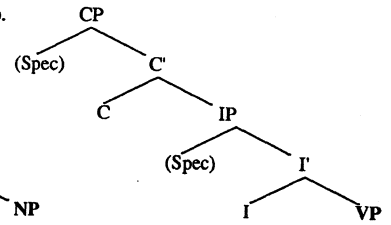
Thus, P in St'át'imcets not only constitutes a closed class, but a very small closed class. This would appear more compatible with functional than with lexical categorial status. Moreover, note that PP in St'át'imcets cannot function as an independent predicate (unlike in English). Instead, a predicative PP must either be supported by the auxiliary *wa7* (Davis 1996) or be extracted via the PP cleft construction (see §1.1 above). If predicative status is diagnostic of lexical categorial status, then PP (just like CP) fails the test. Finally, note that there is no evidence at all in St'át'imcets for a separate category K: all overt case-marking is carried out by *e=* and *l=*, both members of the category P.

Let us then conclude that P in St'át'imcets is a functional category, the nominal equivalent of clausal C.[10] The extended projections associated with N and V respectively will then be as in (27):[11]

27. a.



. b.



Next, consider (25c). If *lh=* and *i=* are complementizers, then we expect them to select for features of I, which we take (following Chomsky 1981, 1995 and a great deal of work in between) to be the locus of subject agreement. The fact that *lh=* and *i=* always select for *clitic* subjects can be accounted for if we make the further assumption that subject clitics are generated directly in I (Davis forthcoming). This will mean that they will be either identical or equivalent to D, depending on whether I and D are separate categories occupying parallel functions in different extended projections (as in (27)) or instantiations of the same category (as we will argue in §2).

[10] An obvious question now arises: are C and P merely parallel, or are they non-distinct? The evidence seems to favour separate status. Aside from the fact that the two classes are phonologically distinct, there are also selectional differences between them: while *i=* and *lh=* select subject clitics as in (3a,b), prepositions obligatorily select determiners:

i. ʔušt-š=kán=ƛu? ʔɪ=kʷɬɬ-alč=a ɬəl=nɪ=nátxʷ=a
ust-s=kán=t'u7 i=k'wɬlh-al'ts=a **lhél=ni**=nátcw=a
throw.out-caus=1sg.subj=just pl.det=left.over-food-det **from=det**=day-det
'I threw out the leftovers from yesterday.'

ii. * ʔušt-š=kán=ƛu? ʔɪ=kʷɬɬ-alč=a ɬəl=nátxʷ=aš
* ust-s=kán=t'u7 i=kw'ɬlh-al'ts=a **lhel**=nátcw=as
throw.out-caus=1sg.subj=just pl.det=left.over-food-det **from**=day-3sg.conj
'I threw out the leftovers from yesterday.'

[11] In (27), we assume that D and I are distinct, pending discussion of this issue in §2.

In conclusion, there is a set of unambiguous complementizers in St'át'imcets, namely *lh=* and *i=*. This correctly predicts that the phrasal projection CP differs in distribution, structure, and interpretation from the phrasal projection DP/IP.[12] We now turn to the question of whether a similar distinction can be established between IP and DP.

2. Inflection versus Determiners in St'át'imcets

The examples we have given so far of *ku/kw=* and *t(i)=...=a* have all surfaced as *kw=* and *t=...=a*. These surface forms are phonologically similar, but not obviously identical to, the determiners *ku=* and *ti=...=a* which introduce nominals, as shown in (28).

28. a. x̣ʷúz'=kʷu? č?aš [kʷu=wá? čunám̓-xal]
cúz'=ku7 ts7as [**ku**=wá7 tsunám'-cal]
going.to=quot come [**det**=prog teach-intr]
'A teacher is coming.'

b. təx̣ʷp=kán [ti=púkʷ=a]
tecwp=kán [**ti**=púkw=**a**]
buy=1sg.subj [**det**=book=**exis**]
'I bought [a book].'

The question now arises as to whether the D-like elements which introduce clauses, as in (3c,d) above, are the same elements as the determiners which introduce nominals, as in (28). There has been debate in other Salish languages about whether such phonologically reduced elements are a separate set from the determiners, or are the same as determiners (see for example Kroeber 1994a,b).

In this section, we will provide evidence that the elements *ku/kw=* and *t(i)=...=a* which introduce subordinate clauses in St'át'imcets are the same elements which introduce nominals, namely determiners.

2.1. I vs. D: phonological evidence

As seen above, the element which introduces subordinate clauses after negation and intensional verbs generally surfaces as *kw=*, while there is a determiner which surfaces as *ku=*. It is possible that the determiner *ku=* and the clausal subordinator *kw=* are simply variants of one another; on the other hand, it could be the case that they are separate items, one of which corresponds to INFL, and one of which is a determiner.

At first glance, the *kw=* which introduces clauses appears to differ crucially from the corresponding determiner *ku=*. *Kw=* cannot be substituted for *ku=* inside nominals:

29. * wá?=ɬkan x̱áǩ-mɬɬ̓ [kʷu/*kʷ=ǩ̓áx]
* wá7=lhkan xát'-min' [**ku** / ***kw**=t'éc]
prog=1sg.subj hard-appl [**ku** / ***kw**=sweet]
'I want some honey/sweet stuff.'

A possible first hypothesis might be that *ku=* introduces a nominal, while *kw=* introduces a clause. This analysis would be incorrect, however, since *ku=* can also introduce a clause, as shown in (30b).

[12] Kroeber (1994a) also argues that there is a D/C distinction in Nɬeʔkepmxcín (Thompson). However, our conclusions differ from his in that we propose that subordinate cluses may be introduced by D (see §2 immediately below).

30. a. šwat kʷu=xʷʔa̱z [kʷ=š ʔɬɬən=š]
swat ku=cw7áoz [**kw**=s flhen=s]
who det=neg [**kw**=nom eat=3sg.poss]
'Who hasn't eaten?'

b. šwat kʷu=xʷʔa̱z [kʷu=š ʔɬɬən=š]
swat ku=cw7áoz [**ku**=s flhen=s]
who det=neg [**ku**=nom eat=3sg.poss]
'Who hasn't eaten?'

The data in (29-30) are compatible with a second hypothesis, whereby nominals allow only *ku=*, but clauses allow either *ku=* or *kw=*, in free variation. This second hypothesis is also incorrect, however, as shown by the meaning difference in (31), where the choice between *ku=* and *kw=* has a semantic effect. This shows that *ku=* and *kw=* are not in free variation.

31. a. xʷʔa̱z [kʷ=š=ʔɬɬən]
cw7aoz [**kw**=s=flhen]
neg [**kw**=nom=eat]
'S/he hasn't eaten.'

b. xʷʔa̱z [kʷu=š-ʔɬɬən]
cw7aoz [**ku**=s-7flhen]
neg [**ku**=nom-eat]
'There isn't any food.'

The difference between (31a) and (31b) is one of syntactic vs. lexical nominalization. In (31a), the syntactic nominalizer (an enclitic) co-occurs with *kw=*, and the event described by the verb is negated. In (31b), the lexical nominalizer (a prefix) has been added to the verb *flhen* 'eat' in the lexicon, giving rise to the noun *s7flhen* 'food'. When the resulting predicate nominal is negated, the meaning in (31b) results.

From (31) we see that when the syntactic nominalizer is present, the clause-initial element surfaces as *kw=;* when the lexical nominalizer is present, the item surfaces as *ku=*.

In fact, all the data in this section can be derived from the claim that there is only one underlying element, whose surface form is dependent on its phonological environment. There are two possible versions of this analysis, depending on whether we postulate the underlying form to be *ku=* or *kw=*.

If the item has the underlying form *ku=*, it must optionally reduce to *kw=* just in case it is immediately followed by a clitic such as the syntactic nominalizer *s=*. If no clitic is present, no reduction takes place.

Alternatively, if the element in question has the underlying form *kw=*, it must obligatorily vocalize to *ku=*, unless it is immediately followed by a clitic element with which it can combine (such as the syntactic nominalizer). Note, however, that *kw=* may vocalize to *ku=* before a clitic as well, as in (31b). Therefore, vocalization is optional before a clitic, and obligatory when no clitic is present.

Phonologically, it seems more natural to postulate the underlying form as *ku=*, with optional reduction to *kw=* just in case a clitic immediately follows. The situation is schematized in (32).

32. a. *ku=* + *s* (clitic) + [XP] → *kws XP*
b. *ku=* + [*s*-XP] → *ku sXP*

Since phonological issues are not the main focus of this paper, we will not provide a full account of the reduction process. Intuitively, the reason why *ku=* does not reduce unless it is followed by a clitic is connected with syllable structure. If *ku* =reduces to *kw=*, it cannot be syllabified by itself: it must combine with following material. In a case where what follows is a main predicate or a lexical noun, syllabification is blocked by lexical boundaries. On the other hand, *kw=* can be syllabified together with a following clitic, to form a type of 'minor syllable' which is independently attested in St'át'imcets (Shaw 1993).

Further support for our analysis of *ku=* and *kw=* is provided by *wh*-questions. Certain types of *wh*-extraction induce syntactic nominalization; in these cases, either *kw=* or *ku=* is possible:

33. a. štaṁ [kʷ=š q̓ʷəlá̓ẇ-əm=šu]
stam' [**kw=s** qw'eláw'-em=su]
what [**det=nom** pick-intr=2sg.poss]
'What did you pick?'

b. štaṁ [kʷu=š q̓ʷəlá̓ẇ-əm=šu]
stam' [**ku=s** qw'eláw'-em=su]
what [**det=nom** pick-intr=2sg.poss]
'What did you pick?'

In a *wh*-question without syntactic nominalization, on the other hand, *kw=* is impossible and *ku=* is required:

34. a. * šwat [kʷ=ǩɬq]
* swat [**kw=t'iq**]
who [**det=arrive**]
'Who arrived?'

b. šwat [kʷu=ǩɬq]
swat [**ku=t'íq**]
who [**det=arrive**]
'Who arrived?'

This is predicted by our analysis, since it is only when a clitic appears adjacent to *ku/kw=* that reduction is possible.[13]

Note that it is not only the syntactic nominalizer which induces *kw=;* our analysis correctly predicts that other clitics, for example the first person singular possessive *n=*, also allow reduction of *ku=*.

35. xʷ7az kʷ=ən=š=zwát-ən
cw7aoz kw=en=s=zwát-en
neg det=1sg.poss=nom=know-tr
'I don't know.'

[13] There is one apparent set of counter-examples to this generalization, involving the use of the determiner *kw=* with proper names. In the Upper dialect, proper names in non-predicative positions are always nominalized, so the determiner shows up as *kw=s=*. This is expected, since the nominalizer provides the correct environment for reduction of underlying *ku=*. However, in the Lower dialect nominalization is absent when *kw=* is used with a proper name. Contrary to expectations, the determiner never shows up as *ku=*; instead, it is either realized as *kw=* or (more frequently) is further reduced to *k=*. We leave these puzzling facts for future investigation.

The table in (36) summarizes the environments for *ku=* and shows that it is not the nominal/ clausal distinction which determines whether *ku=* or *kw=* appears. There is only one underlying element involved, with predictable surface manifestations.

36.	with syntactic nominalization	without
[__NP]$_{DP}$	--	*ku*
subord. clause in *wh*-question	*kw* or *ku*	*ku*
subord. clause in negative sentence	*kw* or *ku*	*ku*
clausal complement of V	*kw* or *ku*	*ku*

Let us now turn to the remaining element which introduces subordinate clauses, namely *t(i)=...=a*. This element usually surfaces as *t=...=a* rather than *ti=...=a* on factive clauses, as shown in (3d, 22) above. This phonetic reduction is also common on nominal arguments. Both surface realizations are possible, whether introducing clauses or nominals:

37. a. ʔáma [t(i)=š=ǩɬq=šw=a]
áma [**t(i)=s=t'íq=sw=a**]
good [**t(i)=nom=arrive=2sg.poss=exis**]
'It's good that you came.' (Your coming is good)

b. ʔáma [t(i)=šq̓ʷúṁč=šw=a]
áma [**t(i)=sq'úm'ts=sw=a**]
good [**t(i)=ball=2sg.poss=exis**]
'Your ball is good.'

Again, there is no evidence of a clausal/nominal distinction playing any part in the choice between *t=...=a* and *ti=...=a*. There is simply optional phonetic reduction.

38.	with syntactic nominalization	without
[__NP]$_{DP}$	--	*ti...a* or *t...a*
introducing factive clause	*ti...a* or *t...a*	--

In conclusion, the difference between *kw=* and *ku=* and between *ti=...=a* and *t=...=a* is phonologically regulated. There is no phonological evidence for distinct categories.

39. a. *ku=* → *kw* / __ clitic (optionally)
b. *ti=* → *t =* (optionally)

We have argued in this section that there is no phonological distinction between I and D. We are therefore left with two options. *Ku=* and *ti=...=a* are either homophonous between I and D, or else the I/D distinction simply does not exist. If the former option is correct, then we should find syntactic and semantic differences between I and D that are irreducible to independent differences between the lexical projections (N and V) which they select. On the other hand, if there is no I/D distinction, we should find that the I/D element makes precisely the same syntactic and semantic contribution to verbal and nominal extended projections. In order to ascertain precisely what these predictions entail, we will now turn to a more detailed discussion of the properties of determiners in St'át'imcets, basing our discussion on the extensive investigation of Salish determiner systems in Matthewson (1996).

2.2. Determiner distinctions in St'át'imcets

The full set of St'át'imcets determiners is given in (40).

40. St'át'imcets determiners (Matthewson 1996):

	assertion of existence X...a			non-assertion of existence
	present	absent	remote	
singular	*ti...a*	*ni...a*	*ku...a*	***ku***
plural	*i...a*	*nelh...a*	*kwelh...a*	***(kwelh)***
collective	*ki...a*			

The major division in the system is between the set of determiners which are glossed 'assertion of existence' (which contain an enclitic *...a*), and the one determiner which lacks the enclitic, namely *ku=*. The assertion of existence distinction will be defined immediately below.

In addition to the assertion of existence distinction, the system also encodes number and proximity to the speaker. See van Eijk (1985), Matthewson (1996) for detailed discussion of these distinctions and for extensive data. In this paper, we concentrate on the two highlighted determiners, *ti=...=a* and *ku=*.

An informal definition of assertion of existence is given in (41).

41. **Assertion of existence** (informal definition):
the speaker's intent to 'refer to' or 'mean' a nominal expression to have non-empty references - i.e. to 'exist' - within a particular universe of discourse (i..e not necessarily within the real world) (Givón 1978:293-4).

When a St'át'imcets speaker uses an assertion of existence determiner, s/he commits himself or herself to the existence of the individual thus described. An example is given in (42).

42. təxʷp-mín=ɬkan [tɪ=púkʷ=a] ɬkúnša
tecwp-mín=lhkan [**ti**=púkw=**a**] lhkúnsa
buy-appl=1sg.subj [**det**=book=**exis**] today
'I bought a/the book today.'
∃x, book (x), I bought x today.

The existential interpretation of an assertion of existence DP holds even when the DP appears under the scope of an intensional operator, such as the modal *=kelh* 'might' in (43):

43. təxʷp-mín=ɬkan=kəɬ [tɪ=púkʷ=a] natxʷ
tecwp-mín=lhkan=kelh [**ti**=púkw=**a**] natcw
buy-appl=1sg.subj=might [**det**=book=**exis**] tomorrow
'I might buy a/the book tomorrow.'
∃x, book (x), I might buy x tomorrow.

With the non-assertion-of-existence determiner *ku=*, on the other hand, no existential force obtains. *Ku=* is possible in a sentence containing a modal, as shown in (44). (44) differs in meaning from (43) in that in (44), the speaker does not have to even know whether any book exists that s/he might buy.

44. təxʷp-mín=ɬkan=kəɬ [kʷu=púkʷ] natxʷ
tecwp-mín=lhkan=kelh [**ku**=púkw] natcw
buy-appl=1sg.subj=might [**det**=book] tomorrow
'I might buy [a book] tomorrow.'

The determiner *ku=* is ungrammatical in ordinary declarative sentences, as shown in (45). This accords with its non-assertion of existence status. In languages like English, where the existential interpretation or otherwise of indefinites is controlled by syntactic environment (Heim 1982, Kamp 1981), a declarative sentence as in (45) is the canonical environment where indefinites must receive existential force.

45. * təxʷp-mín=ɬkan [kʷu=púkʷ] ɬkúnša
* tecwp-mín=lhkan [**ku**=púkw] lhkúnsa
buy-appl=1sg.subj [**det**=book] today
'I bought a book today.'

! 'I bought a book today, but I do not assert that a book exists that I bought.'

Ku= inside argument DPs is thus restricted in its syntactic distribution. In particular, it must fall within the scope of a non-factual operator, such as negation, a *yes-no* question marker or a modal. The only other environment in which *ku=* is permitted is on the morphologically unlicensed 'object' of a middle (morphologically intransitive) verb, as illustrated in (46) (a minimal pair with the transitive (45)).

46. təxʷp=kan [kʷu=púkʷ] ɬkúnša
tecwp=kán [**ku**=púkw] lhkúnsa
buy=1sg.subj [**det**=book] today
'I bought a book today.'

Matthewson (1996) analyzes these cases of *ku=* as involving non-arguments, which incorporate into the main predicate at Logical Form (along the lines of de Hoop's 1992 treatment of objects which receive weak Case). For current purposes, the relevant facts are that the distribution of *ku=* is restricted, while that of *ti=...=a* and the other assertion of existence determiners is not.

In this section we have seen both syntactic and semantic effects of the major distinction encoded by St'át'imcets determiners: syntactically, assertion of existence determiners such as *ti=...=a* are unrestricted (appearing in any argument position of any predicate type), while the non-assertion of existence determiner *ku=* is syntactically restricted to appearing within the scope of a non-factual operator. Semantically, the former set of determiners commit the speaker to the existence of the relevant individuals, while *ku=* does not. In the following section, we will examine the extension of both these syntactic and semantic properties to determiners which head subordinate ciauses.

2.3. Determiners which head subordinate clauses

Recall that we are trying to decide whether the morphophonological identity of D and I in St'át'imcets is due to homophony or to a more profound conflation of the two categories. The proposal that St'át'imcets lacks a distinction between D and I predicts:

47. a. The syntactic distribution of D/Is which introduce clausal constituents will parallel the syntactic distribution of Ds when they introduce nominal constituents.

b. The function of D/Is with respect to a clausal constituent will be like the function of D with respect to a nominal constituent. The D will modify the reference of a clausal constituent (i.e. its event variable).

c. If D/I marks tense distinctions in a clause, D will also mark them on a nominal.

The next three subsections will deal with (47a-c) respectively.

2.3.1. Syntactic parallels between nominal DPs and subordinate clauses

As outlined in §2.2, nominal DPs containing the non-assertion of existence determiner *ku=* appear only under the scope of a non-factual operator (such as negation or an intensional verb), or on the complement of a morphologically intransitive verb (see Matthewson 1996).

Paralleling this, clausal constituents introduced by *ku=* also appear as complements of non-factual or intransitive verbs:

48. a. *negation:*
x̣ʷʔaz [kʷ=n=š=ƛɬq]
cw7aoz [kw=n=s=t'iq]
neg [kw=1sg.poss=nom=arrive]
'I did not arrive.' (van Eijk 1981:39)

b. *intensional verb:*
x̣áƛ-mɬɲ̓=ɬkan [kʷ=š=x̣aɲ̓ [tɬ=šmém̓ɬač=a]]
xát'-min'=lhkan [kw=s=xan' [ti=sném'lhats=a]]
hard-appl=1sg.subj [kw=nom=get.hurt [det=girl=exis]]
'I want the girl to fall.'

c. *intransitive verb:*
čut-ánwaš=kan [kʷ=š=čuẇ-n-áš [ta=máw=a] [ta=šmúɬač=a]]
tsut-ánwas=kan [kw=s=tsuw'-n-ás [ta=máw=a] [ta=smúlhats=a]]
say-inside=1sg.subj [kw=nom=kick-tr-3erg [det=cat=exis] [det=woman=exis]]
'I thought the woman kicked the cat.'

On the other hand, nominals containing *ti=...=a* can appear in argument position where there is no non-factual operator present. So can clausal constituents introduced by *ti=...=a:*

49. a. ʔáma [t=š=ƛɬq=šw=a]
áma [t=s=t'íq=sw=a]
good [t=nom=arrive=2sg.poss=exis]
'It is good that you came.' (Your coming is good) (van Eijk 1985:271)

b. * ʔáma [kʷ=š=ƛɬq=šu]
* áma [kw=s=t'íq=su]
good [kw=nom=arrive=2sg.poss]
'It is good that you came.'

In other words, the distribution of clausal constituents introduced by *ti=...=a* and *ku=* parallels the distribution of their nominal counterparts.

2.3.2. Semantic parallels between nominal DPs and subordinate clauses

We have seen that Ds in St'át'imcets distinguish individuals which are asserted to exist from individuals which are not asserted to exist. Therefore, we predict that subordinate clauses will also distinguish these two categories, this time relative to events, rather than individuals. This should mean that the determiner *ti=...=a* will be used when an event is asserted to have taken place, while the determiner *ku=* will head clauses in which no event is asserted to have taken place.

This prediction is upheld, as shown in (21) above, repeated here. In none of these cases is an event asserted to have taken place.

21. a. x̣ʷʔaz [kʷ=n=š=ƛɬq]
cw7aoz [kw=n=s=t'iq]
neg [kw=1sg.poss=nom=arrive]
'I did not arrive.' (van Eijk 1981:39)

b. šqʷál̓-ən=ɬkan [kʷ=š=húẏ=šu ƛɬq]
sqwál'-en=lhkan [kw=s=húy'-su t'iq]
tell-tr=1sg.subj [kw=nom=going.to=2sg.poss arrive]
'I told him you would come.' (van Eijk 1981:44)

c. wa? x̣áƛ-mɬɲ̓-əm [kʷ=š=núḵʷʔ-an-č-ɬm]
wa7 xát'-min'-em [kw=s=núkw'7-an-ts-im]
prog hard-appl-1pl.subj [kw=nom=help-tr-2sg.obj-1pl.subj]
'We want to help you.' (van Eijk 1981:45)

Conversely, clauses headed by the assertion of existence determiner *ti=...=a* should always introduce events which are asserted to have taken place. This also is upheld, as shown in (50).

50. a. ʔáma [t=š=ƛɬq=šw=a]
áma [t=s=t'íq=sw=a]
good [t=nom=arrive=2sg.poss=exis]
'It is good that you came.' (Your coming is good) (van Eijk 1985:271)

b. plan x̣ʷʔaz kʷ=a=š ḵʷzús-em kʷ=š=Bill,
plan cw7aoz kw=a=s k'wzús-em kw=s=Bill,
already neg kw=prog=nom work-intr kw=nom=Bill,
'Bill does not work any more, ...

nɬɬ [t=š=plán=š=a wa? qəɬməməɲ̓-ʔúl]
nilh [t=s=plán=s=a wa7 qelhmemen'-7úl]
foc [t=nom=already=3sg.poss=exis prog old-too]
... because he is too old already.' (van Eijk 1985:218)

Paralleling the analysis outlined above for nominal DPs, we can say that the clauses headed by *ku=* must take narrow scope with respect to a non-factual operator. To formalize this notion, we make use of an EVENT ARGUMENT (see Davidson 1967, Higginbotham 1985, Kratzer 1989, Parsons 1990).[14] An event argument is necessary under a theory where verbs (in a parallel fashion to common nouns) stand not for a *particular* action, but for a *kind* of action. A simple sentence containing a verb says that a particular instance of that kind of action took place (i.e. that an event took place). This is represented by existential quantification over the event argument, as in (51):

51. a. Brutus stabbed Caesar.

b. For some event e,
e is a stabbing, and
the agent of e is Brutus, and
the object of e is Caesar, and
e culminated at some time in the past.

[14] We take no position here as to the exact representation of event arguments. The formalism adopted here from Parsons (1990) is for expository convenience only.

(indicating a past president, in (58)), then the temporal interpretation of the entire sentence must be past:

58. ʔáχaʔ [nɬ=kəlʔáqštən-š=a tɬ=United.States=a]
á7xa7 [ni=kel7áqsten=s=a ti=United.States=a]
powerful [det=chief=3sg.poss=exis det=United.States=exis]
'The past president was powerful.'
* 'The past president is powerful.' (Demirdache 1996)

Evidence such as this leads Demirdache to propose that determiners take over part of the function which would otherwise be performed by Tense:

> The locus of parametric variation [between English and St'át'imcets] is ultimately the presence vs. absence of tense as a *grammatical* category: whereas in English morphological tense partly locates the temporal reference of a clause, in [St'át'imcets] determiners partly locate the temporal reference of a clause (Demirdache 1996b, emphasis original).

Demirdache's arguments provide crucial support for the claim that D and I are non-distinct in St'át'imcets.

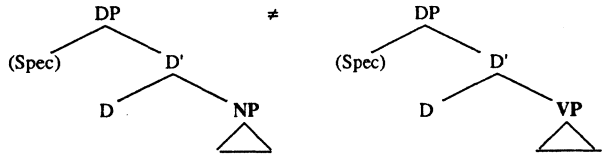
3. The relationship between functional and lexical heads

The analysis presented so far claims that in St'át'imcets, there is a separate category C, and a category which comprises a D/I combination. D/I may introduce either nominals or clauses. These claims have certain consequences for the theory of phrase structure, and in particular for the relationship between functional and lexical heads. In this section, we briefly outline the consequences for the theory.

Previous work on St'át'imcets has shown that there is a robust N-V distinction both in the morphology and the syntax (see in particular Demirdache and Matthewson 1995, Matthewson and Davis 1995). On the other hand, the work of Demirdache (1996a,b,c) and our current proposal entail that there is some neutralization of functional categories in St'át'imcets. This suggests that the source of 'acategoriality' in St'át'imcets and perhaps in Salish more generally is linked to functional rather than lexical projections. As also argued by Davis and Matthewson (1995, 1996), it is at the functional categorial level where St'át'imcets and English differ, not at the lexical categorial level.

This situation raises certain challenges for the theory of phrase structure. Notice in particular that DPs which contain nominal lexical projections and DPs which contain verbal lexical projections must still be distinguished, even though at the functional level, they are equivalent categories:

59.

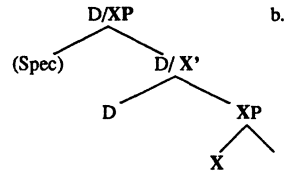


St'át'imcets evidence that the two types of DP in (59) must be distinguished comes from e.g., headed relative clauses, which must differentiate DPs headed by nouns from DPs headed by

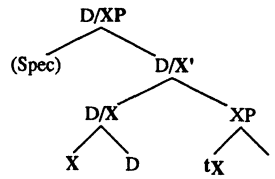
verbs (see Matthewson and Davis 1995).[15] In other words, the DP on the left in (59) is truly a nominal DP, while the DP on the right is a verbal DP; the features of N and V must be 'visible' for purposes of selection through the intervening D projection.

There are two main ways to instantiate this idea syntactically. The first is to allow features of N/V to 'percolate' directly to D, via some-feature passing-convention from complement to head. The second is to adjoin N/V to D (at Logical Form, since the effects are not surface-visible) and allow the interpretive component to 'see' both segments of the adjoined category. These possibilities are schematized in (60a,b) respectively (with X standing for N/V):

60. a.



b.



There are various ways in which to instantiate either (60a) or (b), depending on which syntactic framework one adopts. We will not attempt to choose between the options here.[16]

4. Syntactic nominalization in St'át'imcets

So far, all the clauses we have seen headed by *ti=...=a* or *ku=* have also contained the 'nominalizer' *s=*. We have not yet, however, given any account of either the semantic function or the structural position of this element. It is to these issues which we now turn.

First of all, recall that we must distinguish between two homophonous nominalizers in St'át'imcets (see §2.1). The first is the syntactic nominalizer, which is non-category changing, has phrasal scope and encliticizes to a determiner. The second is the lexical nominalizer, which is category-changing, has scope over a lexical head and is a prefix rather than a clitic.[17] We will be concerned exclusively with the syntactic nominalizer here.

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[15] Note crucially that nominalization is not required for DPs which contain VPs.

[16] It is, however, worth noting that neither (60a) nor (60b) is compatible with the 'Merge and Move/Attract' theory of phrase structure advocated by Chomsky (1995, Chapter 4). Within this model, there are two ways to build phrase-structure trees. The first is by *merger*, which combines two categories (or more specifically, bundles of features, including categorial features) into a single superordinate category. An unconstrained version of merger might yield the equivalent of (58a) above. However, Chomsky's version is constrained by the requirement that when two categories merge, only a *single* set of features (those of the selecting head) may project. But if so, there is no way of making the necessary distinction between (59a) and (59b): both simply have the (undifferentiated) features of the selecting head, D. The only alternative is to move, which will result in an adjoined structure like (60b). However, Chomsky's model only allows one set of features to project from the adjoined structure, those of the target of adjunction (D) and not the adjoining category N or V. This means that once again there is no way for lexical categorial information (N vs. V) to be available across an intervening functional head (D) without encoding the information directly into the head itself, thus effectively re-establishing the very same I/D contrast which we have claimed is neutralized in St'át'imcets. Thus, either our analysis of St'át'imcets or Chomsky's version of phrase-structure must be wrong.

[17] Ideally, of course, the two should be collapsed into a single morpheme whose interpretation varies with its syntactic position. We will not attempt such a reduction here.

c. *(∃ e) [stabbing (e) & Subj (e, Brutus) & Obj (e, Caesar) & culminate (e, before now)]* (cf. Parsons 1990:3, 6)

When applying this idea to St'át'imcets sentences containing subordinate clauses, we will adopt the simple hypothesis that in a subordinate clause introduced by non-assertion of existence *ku=*, the event argument of the lower clause will have narrow scope with respect to some non-factual operator. This is shown in (52).

52.
	x̣ʷ?a̲z	[kʷ=n=š=ƛ̓1q]
	cw7aoz	[**kw**=n=s=t'iq]
	neg	[**kw**=1sg.poss=nom=arrive]

'I did not arrive.' (van Eijk 1981:39)
¬ (∃ e) [arrive (e) & Subj (e, I)]

Since the event argument has narrower scope than the negative operator, the event is not asserted to 'exist'.

In a clause introduced by assertion of existence *ti=...=a*, on the other hand, the existential quantifier which binds the event argument must have scope over any non-factual operator. This is trivially satisfied in a sentence without an operator, as shown in (53):

53.
	?áma	[t=š=ƛ̓ʃq=šw=a]
	áma	[t=s=t'ʃq=sw=a]
	good	[t=nom=arrive=2sg.poss=**exis**]

"t is good that you came.' (Your coming is good) (van Eijk 1985:271)
(∃ e) [come (e) & Subj (e, you) & good (e)]

(54) shows a sentence containing a non-factual operator; here the existential quantifier binding *e* takes higher scope than that of the (negative) operator:

54.
	?a̲	kʷ=š=áma	[t=š=ƛ̓ʃq=s=a	tɬ=kʷúkʷpɪ?=a]
	ao	kw=s=7áma	[t=s=t'iq=s=a	ti=kúkwpi7=a]
	neg	det=nom=good	[**det**=nom=arrive=3sg.poss=exis	det=chief=**exis**]

'It's not good that the chief arrived.'
(∃ e) [arrive (e) & Subj (e, chief) & ¬ good (e)]

The analysis presented here has the consequence that complements to verbs of saying or thinking must be analyzed as containing a non-factual operator. Consider (55):

55.
	wa?	ptʃnuš-em	[kʷ=š=huy'=s	q̓ʷačáč]
	wa7	ptínus-em	[kw=s=huy'=s	qwatsáts]
	'rog	think-intr	[**det**=nom=going.to=3sg.poss	leave]

'He's thinking about leaving, he is planning to leave.' (van Eijk 1985:270)

The event of leaving is not asserted to exist in (55). Consequently, an analysis which simply treats the subordinate clause as introducing an assertion of existence of an event, as in (55'), will give incorrect results:

55'. *! (∃ e) [think (e) & Subj (e, he) & (∃ e') [leave (e') & Subj (e', he) & Obj (e, e')]* (cf. Parsons 1990:17)

(55') incorrectly entails that there was an event of thinking and an event of leaving. If on the other hand we treat the verb *ptínusem* 'think' as introducing an operator, we can achieve the correct results. We do not offer details of such an analysis, but the general idea is illustrated in

(55"), where we use a sentence operator 'Possibly'. We gloss over both the exact nature of the sentence operator introduced by *ptínusem* 'think', as well as the future tense contained inside (55).

55". *Possibly (∃ e) [leave (e) & Subj (e, he)]*

In this section we have sketched an analysis of the semantics of *ku=* and *ti=...=a* clauses, according to which the existential force of the event argument must have narrower scope than a non-factual operator for *ku=* clauses, but not for *ti=...=a* clauses.

2.3.3. Temporal reference and the D/I distinction

The final prediction of the claim that D and I are the same element in St'át'imcets is that if D/I marks tense distinctions in a clause, D will also mark them on a nominal (46c). Here, we merely briefly summarize independent work by Demirdache (1996a,b,c) which points to exactly this conclusion.

Demirdache (1996a,b,c) argues that the temporal reference of DPs in St'át'imcets is not independent of the temporal reference of the entire clause. Freedom of temporal reference by DPs is illustrated for English in (56). In (56), the time at which the individuals were/are homeless is independent of the time at which the rally took place (cf. also Musan 1995):

56. The homeless people were at the rally. (Demirdache 1996a,b)

a. true if the individuals who were homeless at the time of the rally were at the rally
b. true if the individuals who are homeless now were at the rally (i.e. they were not necessarily homeless at the time of the rally)

Demirdache argues that unlike in English, all DPs in St'át'imcets are temporally bound. In (57), for example, the DP cannot have a temporal interpretation which is independent of the temporal interpretation of the predicate (which is this case is 'past', due to the presence of the completive marker *tu7*).

57.
	?á̲xa?	tu?	[tɬ=kəl?áqstən=š=a	tɬ=United.States=a]
	á7xa7	tu7	[ti=kel7áqsten=s=a	ti=United.States=a]
	powerful	compl	[det=chief=3sg.poss=exis	det=United.States=exis]

'The president of the United States was powerful.' (Demirdache 1996c)

a. true if the individual who was the president at some past time was powerful at that past time
b. true if the individual who is the president now was powerful at some past time (while he was president) which overlaps with the present time
c. false if the individual who is the president now was powerful at some distinct past time (before he was president)

Notice that the definite DP in the English gloss for (57) can have a temporally free reading, being true in the context in (c). The English version of (57) can thus be used to assert that the current president (i.e. Clinton) was powerful at some time before he was president (e.g. when he was governor of Arkansas).

Not only is the temporal interpretation of an argument DP dependent on that of the matrix predicate, the determiner in St'át'imcets may give temporal information which influences the interpretation of the entire sentence, as in (58). The 'absent' determiner *ni=...=a* imparts either spatial absence, or by extension, temporal location in the past. If it has a temporal effect on its DP

4.1. The semantic function of the syntactic nominalizer

As a first observation, note that the syntactic nominalizer is not restricted to either *ku=* clauses or *ti=…=a* clauses, but appears in either type. This means that whatever its function, it does not encode or correlate with (non)-assertion of existence.

61. a. wá7=lhkan zewát-en [kw=s=t'iq=s]
wá7=lhkan zewát-en [**kw=s=t'iq=s**]
prog=1sg.subj know-tr [**kw=nom**=arrive=3sg.poss]
'I know that s/he came.' (van Eijk 1985:270)

b. ?áma [t=s=t'iq=sw=a]
áma [**t=s=t'iq=sw=a**]
good [**t=nom**=arrive=2sg.poss=**exis**]
'It is good that you came.' (van Eijk 1985:271)

Likewise, the function of the nominalizer must be distinguished from the tense/mood distinctions encoded by the complementizers *lh=* and *i=*. Clauses containing nominalization can be either past or present, realis or irrealis.

4.1.1. Nominalization, finiteness, and infinitivals

If the nominalizer neither encodes tense/mood nor (non-)assertion of existence, it must encode a third semantic distinction. Our claim is that this dimension is FINITENESS.

An obvious consequence of the existence of finiteness as a semantic distinction is the prediction that infinitival as well as finite complements should exist in St'át'imcets, contrary to the common assumption that infinitives clauses are impossible in Salish; see e.g. Kroeber (1991):[18]

> No Salish languages possess inflectional categories comparable to the infinitives or gerunds of some European languages, which mark clauses from which subjects are obligatorily absent.

Our prediction is upheld. An infinitive clause is shown in (62).

62. xʷ?az kʷ=n=š=wá zwát-ən [kʷu=wa? məč-xál]
cw7aoz kw-en-s-wá zwát-en [ku=wa7 mets-cál]
not det=1sg.pos=nom=prog know-dir [det=prog write-act]
'I don't know how to write.'

The basic idea behind the finite/infinitival distinction is that finite clauses refer to individual events, while infinitivals refer to sets of events.[19] Thus, note that in the English infinitival examples in (63a,b), there is no particular event of fishing or of fire-lighting, whereas their finite counterparts in (64) refer to a particular event (whether actually realized or not):

63. a. She likes [to go fishing].
b. John told Mary [to light a fire].

[18] Kroeber (1994b, p.c.) tentatively proposes that infinitives do exist in Nɬe?kepmxcín.
[19] Recall from section §2.3.2 that verbs by themselves do not denote particular events, but merely kinds of events.

64. a. She went fishing.
b. Mary didn't light a fire.

We propose that the notion of finiteness interacts with the existential force of the event argument in the following way ('a.o.e.' stands for 'assertion of existence'):

65.	a.o.e. of event	non-a.o.e. of event
finite	√	√
non-finite	*	√

If a clause is finite, a particular event can easily be asserted to have taken place, as in (66a). A clause can also be finite even if no clause is asserted to have taken place, as in (66b).

66. a. *finite, existential interpretation of event argument:*

Mary left.
(∃e) [leave (e) & Obj (e, Mary)]

b. *finite, non-existential interpretation of event argument:*

Mary didn't leave.
¬ (∃e) [leave (e) & Obj (e, Mary)]

A non-finite clause where no event is asserted to have taken place is also possible, as in (67a). However, a non-finite clause cannot involve the assertion of existence of a particular event, since non-finite clauses do not locate a particular event at all; cf. (67b).

67. a. *non-finite, no existentially interpreted event argument:*

Mary didn't want to leave.
¬ (∃e) [want (e) & Subj (e, Mary) & Obj (e, e') & leave (e') and Obj (e', Mary)]

b. * *non-finite, existential interpretation of event argument:*

* Mary to leave.
! (∃e) [leave (e) & Obj (e, Mary)]

Infinitives have the property that no particular event is situated, and therefore that no event is asserted to exist. However, it is possible to deny the existence of a particular event, or question a particular event, in which case no event is asserted to exist, but the clause will still be finite.

Applying these notions to St'át'imcets, we predict that finite subordinate clauses will be introduced by either *ti=…=a* (assertion of existence) or by *ku=* (non-assertion of existence), but that non-finite clauses will be possible only if introduced by *ku=*. This prediction is upheld. As predicted, infinitives are only available with *ku=;* equivalent examples with assertion of existence determiners have only a relative-clause reading:

68. a. zwát-ən=lhkan [ti=wa? məč-xál]
zwát-en=lhkan [ti=wa7 mets-cál]
know-dir=1sg.subj [det=prog write-act]
'I know who wrote/is writing.'
* 'I know how to write.'

Recall that it was argued above that *ku=* when it introduces clausal complements is subject to the same licensing environments as when it introduces nominal complements. This predicts that we should be able to find cases where a *ku=* complement is ambiguous between a nominal phrase and an infinitive phrase. This is also correct, as shown in (69).

69.

	xw7az	k^{w}=ən=š	zwát-ən	[k^{w}u=máyš-alč]
	cw7aoz	kw=en=s	zwát-en	[**ku**=máys-alts]
	neg	det=1sg.poss=nom	know-tr	[**det**=fix-house]

'I don't know anyone that builds houses.'
or 'I don't know how to build a house.'

The following table summarizes the interaction of finiteness (encoded by the syntactic nominalizer) with assertion of existence (encoded in the determiner system):

70.

determiner	nominalizer	finite	a.o.e. of event	clause type
ti...a	√	√	√	factive
ti...a	-	-	√	*
ku	√	√	-	finite
ku	-	-	-	infinitival

In conclusion, the nominalizer turns a set of events (denoted by an infinitive) into a particular event (denoted by a finite clause). The event thus denoted need not be asserted to exist: hence, nominalization is compatible with either assertion or non-assertion of existence determiners. On the other hand, if an event is asserted to exist, it must be finite: hence, assertion of existence determiners necessarily take nominalized complements.[20]

4.2. Syntactic position of the nominalizer

Finally, we turn briefly to the syntactic position of *s=*. There are three possible hypotheses to consider.

71. a. *s=*.is generated in D.
b. *s=*. is generated in a functional projection above D
c. *s=*.is generated in a functional projection below D

The existence of nominalized clauses without accompanying determiners, as in (72), argues against (71a); it appears that while determiners and nominalizers often co-occur, they must be generated in different functional projections.[21]

72.

nɬɬ=k^{w}u?=ku?	š=čut-š	tɬ=pépəl?=a	ɬ=lák=ɬz' ...
nɬlh=ku7=t'u7	s=tsut-s	ti=pépel7=a	lh=lak=iz' ...
foc=quot=part	**nom**=say-3sg.poss	det=one(animal)=exis	from=lie=deic ...

'Then one of [the coyotes] said ...' (van Eijk and Williams 1981:3)

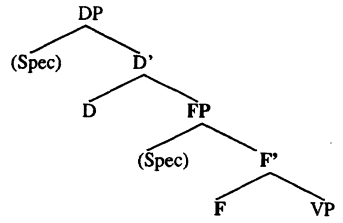
[20] Another way of looking at this is that the syntactic nominalizer is really a clausal 'argumentizer': it takes a set of events (a semantic predicate) and turns it into a particular event (a semantic argument). The claim that the nominalizer is an argumentizer in this sense correlates with its appearance in certain types of *wh*-extraction which are otherwise unlicensed (see Hukari 1994, 1995).

[21] An alternative would be to claim that in these cases there is a zero-determiner. See Matthewson (1996) for arguments against the existence of zero-determiners in St'át'imcets.

Possibility (71b) is ruled out by word order: in clauses containing determiners and a nominalizer, the determiner always occurs outside the nominalizer. (See e.g. (61, 62, 69), amongst many other examples throughout this paper.)

That leaves (71c), which is the option we will adopt here. More specifically, we propose that the syntactic nominalizer *s=* heads its own functional projection (see Chierchia 1984), below D and above VP, as in (73). We name this projection a *Finiteness Phrase* (FP) to capture its semantic content.

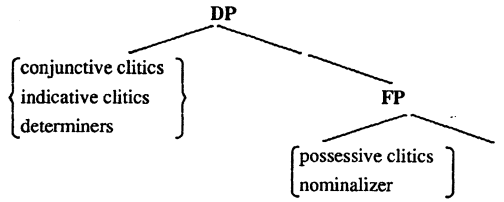
73.



It is an open issue whether the F-projection is present only in finite ('nominalized') clauses or whether it is also generated in infinitivals, with non-finite inflection realized by zero-marking. We will assume the latter, on the grounds that the presence of FP in infinitivals allows us to distinguish them structurally from homophonous headless relative clauses (see (69)).

A further consequence of the the existence of FP is that it accounts for certain distributional differences between conjunctive and indicative subject clitics on the one hand, and possessive subject clitics on the other. In particular, whilst conjunctive and indicative clitics are in complementary distribution with determiners, possessive clitics are clearly not, as can be seen in numerous examples throughout this paper. This can be accounted for if conjunctive and indicative subjects are generated as features of D itself (see Davis (to appear) for justification), but possessives are associated with F, more specifically with the [+finite] '(nominalized') value of F. This situation is schematized in (74) below:

74.



In effect, F creates a small clause within DP, whose subject is marked by possessive inflection. Note that (74) is deliberately vague about the precise location of subject inflection within DP/FP. There are two possibilities: inflection is either generated on the specifier, or on the head itself. We will not attempt to choose between these possibilities here: see Davis (forthcoming) for further discussion.

5. Conclusions

In this paper, we have argued for the following claims:

75 a. There is a separate functional category C in St'át'imcets. Cs encode mood and/or tense.
b. There is neutralization between D and I in St'át'imcets. A single functional category D/I may introduce both nominal and verbal extended projections.
c. D/I encodes (non-)assertion of existence.
d. The syntactic nominalizer *s=* encodes finiteness, and heads its own functional projection FP.
e. Both finite and infinitival complements exist in St'át'imcets.
f. Tense is is not grammatically marked as a separate category; its function is taken over partly by D/I, partly by C, and partly by F.

References

Baker, M. and L. Travis 1995. Mood as verbal definiteness in a "tenseless" language, ms. McGill University.

Chierchia, G. 1984. *Topics in the Syntax and Semantic of Infinitives and Gerunds*, University of Massachusetts, Amherst: Graduate Linguistics Students' Association.

Chomsky, N. 1981. *Lectures on Government and Binding*, Dordrecht: Foris.

Chomsky, N. 1995. *The Minimalist Program*, Cambridge, MA: MIT Press.

Davidson, Donal 1967. The logical form of action sentences, in N. Rescher (ed.),*The logic of decision and action*, Pittsburgh: University of Pittsburgh Press.

Davis, Henry 1996. Wa7 t'u7 wa7, paper presented at the fourth annual Salish Morphosyntax Workshop, Victoria.

Davis, Henry to appear. On agreement in St'át'imcets, *Proceedings of Langues et Grammaire* 2, Université de Paris 8.

Davis, Henry and Lisa Matthewson 1995. Ti7-time, paper presented at the third annual Salish Morphosyntax Workshop, Victoria.

Davis, Henry and Lisa Matthewson 1996. Determiners and non-finite clausal complements in St'át'imcets, paper presented at the fourth annual Salish Morphosyntax Workshop, Victoria.

Déchaine, R.-M. 1993. *Predicates across Categories*, University of Massachusetts, Amherst: Graduate Linguistics Students' Association.

de Hoop, Helen 1992. Case confiuration and noun phrase interpretation. Ph.D. dissertation, University of Groningen (Grodil 4).

Demirdache, Hamida 1996a. The temporal reference of noun phrases in St'át'imcets. Paper presented at the Linguistic Society of America, San Diego.

Demirdache, Hamida 1996b. The temporal reference of noun phrases in St'át'imcets and its implications. Paper presented at the 4th Annual Victoria Salish Morphosyntax Workshop, University of Victoria.

Demirdache, Hamida 1996c. Condition C. Paper presented at Holland Institute of Generative Linguistics conference on Atomism and Binding. To appear in *Atomism and binding*, ed. Hans Bennis, Pierre Pica and Johann Rooryck. Dordrecht: Foris.

Demirdache, Hamida and Lisa Matthewson 1995. On the universality of syntactic categories, *Proceedings of NELS* 25.

Emonds, J. 1985. *A unified theory of syntactic categories*, Dordrecht: Foris.

Fukui, N. 1986. *A Theory of Category Projection and its Application*, Ph.D dissertation, MIT.

Givón, Talmy 1978. Definiteness and referentiality, in Joseph Greenberg (ed.), *Universals of Human Language* 4, Stanford: Stanford University Press, 291-330.

Grimshaw, Jane 1991. Extended projections, ms., Brandeis University.

Heim, Irene 1982. *The semantics of definite and indefinite noun phrases*. Ph.D. dissertation, U. Mass., Amherst. University of Massachusetts, Amherst: Graduate Linguistics Students' Association. 1988.

Higginbotham, James 1985. On semantics. *Linguistic Inquiry* 16:547-93.

Jelinek, Eloise, and Richard Demers 1994. Predicates and pronominal arguments in Straits Salish. *Language* 70:697-736.

Kamp, Hans 1981. A theory of truth and semantic representation. Reprinted in *Truth Interpretation and Information*, ed. J. Groenendijk, T. Janssen and M. Stokhof 1984. Dordrecht: Foris.

Kinkade, M. Dale 1983. Salish evidence against the universality of 'noun' and 'verb'. *Lingua* 60:25-39.

Kratzer, Angelika 1989. Stage and individual-level predicates, in Papers on quantification, NSF grant report, U. Mass., Amherst.

Kroeber, Paul 1991. *Comparative syntax of subordination in Salish*, Ph.D. dissertation, University of Chicago.

Kroeber, Paul 1994a. Articles and/or complementizers in Thompson Salish. Paper presented at the American Anthropological Association.

Kroeber, Paul 1994b. Determiners and complementizers in Thompson. Paper presented at the University of British Columbia.

Matthewson, Lisa 1996. *Determiner systems and quantificational strategies: Evidence from Salish*, Ph.D. dissertation, UBC.

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

Musan, Renate 1995. *Temporal interpretation of NPs*. Ph.D. dissertation, MIT.

Parsons, Terence 1990. *Events in the semantics of English: A study in subatomic semantics*, Cambridge, MA: MIT Press.

Shaw, Patricia 1993. The prosodic constituency of minor syllables, *Proceedings of WCCFL*, University of California, Santa Cruz.

Speas, M. (1990). *Phrase Structure in Natural Language*, Dordrecht: Kluwer.

van Eijk, Jan 1981. *Cuystwí malh ucwalmícwts*, Mount Currie: Ts'zil Publishing House.

van Eijk, Jan 1985. *The Lillooet Language: Phonology, Morphology, Syntax*, Ph.D. dissertation, Universiteit van Amsterdam. To be published by the University of British Columbia Press.

van Eijk, J. and L.Williams 1981. *Lillooet Legends and Stories*. Mt Currie, B.C: Ts'zil Publishing House.