

*The chief of the united states* SENTENCES IN ST'ÁT'IMCETS (LILLOOET SALISH)  
A CROSS-LINGUISTIC ASYMMETRY IN THE TEMPORAL INTERPRETATION OF NOUN PHRASES  
AND ITS IMPLICATIONS\*

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The goal of this paper is twofold. First, I establish and explain a cross-linguistic asymmetry in the temporal interpretation of DPs: whereas DPs in English allow temporally *free* readings, DPs in St'át'imcets (Lillooet Salish - henceforth, ST') only allow temporally *bound* readings. Second, I examine the implications of this asymmetry for the semantics of DPs in ST'.

The initial question I address is whether the temporal interpretation of a DP in ST' is dependent or independent of the temporal interpretation of the main predicate of its clause. I conclude that the temporal interpretation of a DP is NOT independent of the temporal interpretation of the matrix predicate. In fact, the temporal interpretation of a DP can itself fix the temporal interpretation of the main predicate, as established by Davis & Saunders (1975) for Bella Coola.

Musan (1995) derives the temporal readings of NPs from an ontology where the domain of entities consists of individuals and stages, as in Carlson (1977): quantification over individuals yields temporally independent NPs whereas quantification over stages yields temporally dependent NPs. Under this proposal, the absence of temporally independent DPs in ST' entails that DPs in ST' do not introduce whole individuals but stages of individuals, where a stage is *a time-space slice of an individual that can be of considerable length*. Put in simple words, this means that a sentence in ST' such as *the chief left* can be (informally) construed as *he left when he was a chief*.

A recurring debate within the Salishan literature<sup>1</sup> is whether or not there is a noun-verb distinction and in particular, whether there is evidence for the existence of the lexical categories N and

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Examples are presented in van Eijk's orthography (see Appendix for key). Abbreviations used: 1, 2, 3 = 1st, 2nd, 3rd person, SG = singular, PL = plural, COLL = collective, POSS = possessive, SUBJ = subject, OBJ = object, DET = determiner, DEIC = deictic, ABS = absolutive, ERG = ergative, NOM = nominalizer, PROG = progressive, NEG = negation, TR = transitivizer, INT = intransitivizer, COMP = completed, FOC = focus, CONJ = conjunctive, PART = particle.

<sup>1</sup> See Bloomfield (1933), Beck (1995a, b), Davis & Matthewson (1995), Davis & Saunders (1974), Demirdache & Matthewson (1995a), van Eijk and Hess (1986), Jelinek (1993a, 1993b, 1993c, 1995), Jelinek & Demers (1992, 1994), Kinkade (1983), Krober (1991), Kuipers (1968), Mattina (1994, 1996), Thompson & Thompson (1980), and references therein.

V and their syntactic projections NP and VP. I intend this paper as a contribution to this debate. The issue I address, however, is not whether the lexical/syntactic category N/NP exists but what type of entities do NPs denote in ST'. Assuming Carlson's ontology where the domain of entities is hierarchically organized into three types of individuals - stages, objects and kinds - I argue that NPs in ST' denote either stages (spatially and temporally bounded manifestations of individuals) or kinds (classes of individuals). This entails that ST' lacks the most familiar type of entity, *objects* - that is, what we prototypically think of as a noun. Whether there are categorial distinctions is separate questions since stages, objects and kinds can all be syntactically realized as NPs.

I argue that the parametric difference between ST' and languages like English is not an *inherent* difference in the semantics of noun phrases: it is not that nouns in English can denote permanent (individual-level) properties whereas nouns in ST' only denote temporary (stage-level) properties - or alternatively, ST' lacks a Noun-Verb distinction as in Kinkade (1983), Jelinek (1993a, b, c, 1995), Jelinek & Demers (1994), Partee (1991) and references therein. This is not the case for two reasons. First, because of the existence of (bare) NPs in ST' that name kinds, that is classes of individuals. Second, because the locus of parametric variation 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' determiners partly locate the temporal reference of a clause. In particular, determiners in ST' encode deictic features and, thus, supply entities with spatio-temporal boundaries. Consequently, the entities to which predicates apply are *spatio-temporally bounded slices of individuals*.

Finally, I argue that the proposal that DPs introduce stage-denoting entities correlates with - and should ultimately derive - the following five semantic properties of noun phrases in ST'.

- i. The absence of abstract nouns.
- ii. The absence of atemporal generic sentences and the absence of generic sentences with non-existentially quantified subjects.
- iii. The absence of presuppositional determiners; cf. Matthewson (to appear a, b), Jelinek (1993a, b, c) Jelinek (1995) and Jelinek & Demers (1994).
- iv. "Determiners encode an assertion of existence distinction", as proposed in Matthewson (to appear a, b). If a determiner supplies an entity with spatio-temporal boundaries, then this entity 'exists' (cf. Carlson 1977).
- v. The absence of temporal free readings for DPs.

## I PRELIMINARIES

In this section, I briefly summarize certain aspects of the syntax of St'át'imcets that will be relevant to the argumentation. ST' sentences are predicate initial, as shown in (1a). Overt subject and object arguments are optional, as shown in (1b), and marked by obligatory pronominal affixes on the predicate, as shown in (2).

1a. [qwatsáts-Ø] [ti smúlhats-Ø-a]  
leave-3ABS DET woman-3ABS-DET  
'The woman left'

b. [qwatsáts-Ø]  
leave-3ABS  
'S/he left'

ST' is morphologically split-ergative: third person arguments induce ergative-absolutive marking on the predicate, as in (2a-a'), whereas first and second person arguments are inflected on a nominative-accusative pattern, as in (2b-b').

2a. [flal-Ø] a'. [tup-un'-Ø-ás] b. [flal-kacw] b'. [tup-un'-ts-kacw]  
cry-3ABS hit-TR-3ABS-3ERG cry-2SG.SUBJ hit-TR-1SG.OBJ-2SG.SUBJ  
'S/he cried' 'He hit him' 'You cried' 'You hit me'

Lets now turn to the temporal interpretation of sentences. First, in the absence of any aspectual marking, an eventive predicate is ambiguous between a present and a past tense interpretation, as shown by the contrast between (3a) and (3b). (3a) and (3b) contrast only in the presence of the aspectual clitic *tú7* (glossed by van Eijk as 'something is over and done with'). In contrast, a stative predicate (be it stage level as in (3c) or individual-level as in (d)) has unambiguously a present tense interpretation. Finally, a temporal adverb can fix the temporal reference of a sentence, as shown in (3g-j). Temporal adverbs disambiguate the two readings of (3a) as in (3g-h) respectively, and shift the temporal reference of the stative predicates in (3e-f) into the past as in (3i-j), respectively.

3a. flal ti sqáycw-a b. flal tú7 ti sqáycw-a  
cry DET man-DET cry COMPL DET man-DET  
'The man cried' 'The man is crying'  
\* 'The man is crying'

c. táyt ti sqáycw-a d. plísmen ti sqáycw-a  
hungry DET man-DET policeman DET man-DET  
'The man is hungry' 'The man is a policeman'  
\* 'The man was hungry' \* 'The man was a policeman'

e. sécsec ti sqáycw-a f. á7xa7 ti sqáycw-a  
silly DET man-DET strong DET man-DET  
'The man is a fool' 'The man is powerful'  
\* 'The man was a fool' \* 'The man was powerful'

g. flal ti sqáycw-a lkhúnza h. flal ti sqáycw-a icín'as  
cry DET man-DET now/today cry DET man-DET a long time ago  
'The man is crying now' 'The man cried a long time ago'

i. sécsec ti sqáycw-a icín'as j. á7xa7 ti sqáycw-a icín'as  
silly DET man-DET a long time ago strong DET man-DET a long time ago  
'The man was a fool a long time ago' 'The man was powerful a long time ago'

## II ENÇ (1981, 1986): THE TEMPORAL INTERPRETATION OF NPS IS FREE

Enç (1981, 1986) argues that the temporal interpretation of NPs is free - that is, the temporal interpretation of an NP in a clause is independent of the temporal interpretation of the main predicate

of its clause. Thus, only discourse context determines which past or present president the DPs in (4) range over: the temporal reference of the DP in subject position is not determined by the temporal reference of the main predicate but by the context of utterance and/or world knowledge. For instance, (4b) with a past tense matrix predicate can be used to make a statement about the present president (I henceforth assume Clinton to be the present president of the US) whereas (4d) with a present tense predicate can be used to make a statement about a past president (e.g. Reagan).

4a. The president was a fool b. The president was governor of Arkansas  
c. The president is a fool d. The president has Alzheimer's disease

Likewise, the temporal reference of the verb in (5) does not fix the temporal reference of the QP in subject position. In particular, Enç argues that (5) can have either of the three readings summarized in (5a-c). Note that (5a) is a bound reading: the time of being a sophomore always overlaps with the time of crying. In contrast, (5b-c) are free readings: the time of being a sophomore is distinct from the time of crying.

5. Every sophomore cried

Bound reading:

a. true if individuals who are sophomores at a past time *t* cried at that same past time *t*

Free readings:

b. true if individuals who are sophomores now cried at some past time

c. true if individuals who are sophomores at a past time *t* cried at a distinct past time *t'*.

### II.1 The Individual Concept Reading

Finally, definite descriptions can have an Individual Concept Reading (henceforth ICR; see Enç 1981).

In particular, the sentence in (6a) is ambiguous. The DP in (6a) can have a directly referential reading where it is used to refer to a particular individual (e.g. Clinton). But it can also have an ICR, where it does not refer to any particular individual. Under the ICR, the sentence in (6a) is used to assert that whoever is president is powerful. Crucially, *the president* in (6a) must be evaluated at different time intervals since it does not pick out a single individual.

6a. The president of the US is powerful  
b. For any time *t*, whoever is president at *t* is powerful at *t*.

Note that the ICR, as illustrated in (6b), is a bound reading: the evaluation time of the subject DP is dependent on the evaluation time of the matrix predicate (the time of being a president always intersects with the time of being a president). Enç argues that ICR need not be a bound reading, and gives the following example to establish this claim. In (7a), *the president* has an ICR since it is evaluated at different times. This reading, however, is not a bound reading since *the president* and *marries* are respectively evaluated at distinct times, as shown in (7b).

- 7a. The president marries an influential woman in order to get elected to his first term.  
 b. For any time *t*, whoever is president at *t* married an influential woman at some prior time *t'*.

Having briefly presented the temporal properties of DPs in languages like English, I now turn to ST'. The goal of the next two sections is to establish whether or not the temporal interpretation of a DP is dependent or independent of the temporal interpretation of the matrix predicate of its clause. I will proceed as follows. In section III, I simply give the temporal interpretations that a given sentence may or may not have. I conclude that the evaluation of a DP is not freely determined by discourse context as is the case in English. In section IV, I construct sentences or discourse sequences that force the evaluation time of the matrix predicate to be distinct from the evaluation time of the DP and show that such sentences or discourse sequences are ungrammatical.

### III THE TEMPORAL INTERPRETATION OF NPS IN ST'ÁT'IMCETS IS NOT FREE

Consider the following sentence where the matrix predicate must be evaluated in the present since it is stative (as established in (1e-f) above). Note that the subject DP in (8a) cannot be evaluated at some past time: *the chief of the United States* in (8) can only refer to the present chief (e.g. Clinton). Further, (8) does not allow an ICR, as will be discussed in section III.1.

- 8a. á7xa7 [ti kel7áqsten-s-a ti United-States-a] Only:  
 strong DET chief-3 SG.POSS-DET DET US-DET Clinton is powerful  
 'The president of the United States is powerful' Whoever is the chief now is powerful now
- b. sécsec [ti kel7áqsten-s-a ti United-States-a] Only:  
 silly DET chief-3 SG.POSS-DET DET US-DET Clinton is a fool  
 'The president of the United States is a fool' Whoever is the chief now is a fool now

In sum, the temporal reference of the DP in (8) is not independent of the temporal reference of the matrix predicate since the evaluation time of both the subject and the predicate in (8) must be the present time.

The fact that the DP in (8) only refers to the present president does not, however, entail that the DP in (8) is *Directly Referential* - that is, that it always serves to pick out a certain person. In particular, an *attributive* reading - where the DP picks out whoever satisfies its descriptive content at the time of utterance - is available. The DP in (8) can be used to refer to whoever is the present president - the speaker need not know who the president is and, thus, has no specific individual in mind.

In order to make a statement about a past president, we can replace the discontinuous determiner *ti...a* in (8) by the determiner *ni...a*. van Eijk (1985) defines the former as the known, present determiner and the latter as the known, absent determiner. The absent determiner can only be used when the referent of the DP is distant (not visible) from the discourse location. Substitution of the absent determiner *ni* for *ti* yields (9-10).

- 9a. á7xa7 [ni kel7áqsten-s-a ti US-a ]  
 strong DET.ABSENT chief-3SG.POSS-DET DET US-DET
- b. 'The (past) president was powerful' ✓Carter was powerful  
 c. \* 'The (past) president is powerful' \*Carter is powerful  
 d. \* 'The (present) president was powerful' \*Clinton was powerful
- 10a. sécsec [ni kel7áqsten-s-a ti US-a ]  
 silly DET.ABSENT chief-3SG.POSS-DET DET US-DET
- b. 'The (past) president was a fool' ✓Carter was a fool  
 c. \* 'The (past) president is a fool' \*Carter is a fool  
 d. \* 'The (present) president was powerful' \*Clinton was powerful

In (9-10), the subject DP ranges over any past president. Note that the only difference between (8) where *the chief* is evaluated in the present and (9-10) where *the chief* is evaluated in the past is the choice of determiner. Crucially, however, the evaluation time of the matrix predicate in (9-10) is also located in the past: (10) cannot be used to assert either i) that some contextually relevant past chief of the US (e.g. Reagan) is powerful now, or ii) that the chief at the time of utterance (Clinton) was powerful at some time prior to utterance time.

In sum, the absent determiner can restrict to the past the temporal reference of the matrix predicate *itself*. This is all the more surprising since a sentence with a stative predicate (and no aspectual clitic) unambiguously has a present tense interpretation, as was established in (3c-d) above. A DP headed by the absent determiner can, thus, have the effect of a past time temporal adverb on the temporal interpretation of the matrix predicate: it shifts the temporal reference of the whole sentence into the past, just as the adverb *icín 'as* 'a long time ago' in (3h-j) did.

There is, however, another interpretation available for either (9a) or (10a). Recall that the absent determiner is used to pick out an individual who is invisible to the speaker - that is, *distant* from the location of the discourse. In (9-10), the determiner picks out an individual who was chief at a time that is *distant* from the time of the discourse (utterance time), because spatial deixis correlates with temporal deixis. However, temporal deixis need not correlate with spatial deixis, as illustrated below. (11a/9a) can be used to assert that the present (not visible) president is powerful. Note, however, that (11a) only allows a bound reading: both the subject and the predicate are evaluated at the time of utterance.

- 11a. á7xa7 [ni kel7áqsten-s-a ti US-a ]  
 strong DET.ABSENT chief-3SG.POSS-DET DET US-DET
- b. 'The (present) president is powerful' ✓Clinton is a fool  
 c. \* 'The (present) president was powerful' \*Clinton was a fool

We have seen that when we use the absent determiner *ni*, the noun phrase *chief* can be evaluated at a past time. Crucially, however, the matrix predicate must then also be evaluated in the past. In order to

make a statement about a past president, we can also add the completed clitic *tu7* to the sentence. There are two options. We can either insert the clitic inside the subject DP itself, thus creating a relative clause (e.g. *the one who was chief of the US*), as in (12). Or we can add the clitic to the matrix predicate as in (13). These two options do not yield the same range of readings.

When we insert *tu7* inside the DP, we get exactly the same readings as in (9-10) with the absent determiner *ni*.

- 12a. á7xa7 [ti7 tu7 (ti) kel7aqsten-s-a ti US-a]  
powerful DEM COMPL DET chief-3SG.POSS-DET DET US-DET  
'The (past) president was powerful'  
\* 'The (past) president is powerful' √Carter was powerful  
\*Carter is powerful
- b. sécsec [ti7 tu7 ti kel7aqsten-s-a ti US-a]  
fool DEM COMPL DET chief-3SG.POSS-DET DET US-DET  
'The (past) president was a fool'  
\* 'The (past) president is a fool' √Carter was a fool  
\*Carter is a fool

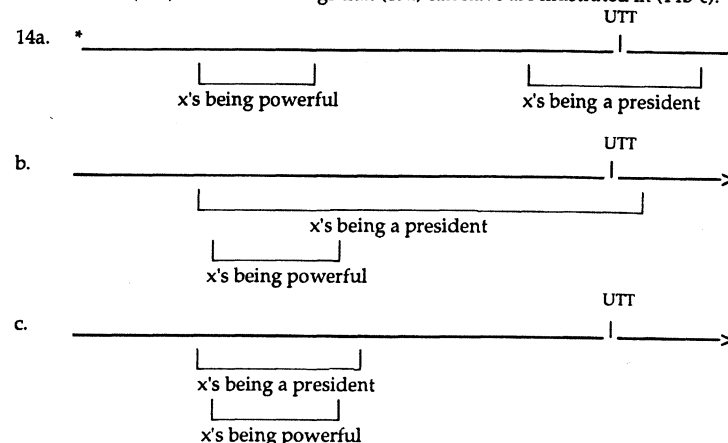
In sum, when we either use the absent determiner or insert the completed clitic inside the DP, the nominal ranges over any past president. Crucially, however, the evaluation time of the matrix predicate in (12a-b) is also located in the past: (12a) cannot be used to assert either that some contextually relevant past president (e.g. Reagan) is powerful now or that the president at the time of utterance (Clinton) was powerful at some past time. There is, however, one difference between these two constructions. The predicate and the nominal in (12) can only be evaluated in the past. In contrast, (9a/11a) with the absent determiner can also yield the reading *the (present, invisible) president is powerful now*.<sup>2</sup>

In contrast, adding *tu7* to the matrix predicate yields the following readings.

- 13a. á7xa7 tu7 [ti kel7aqsten-s-a ti US-a]  
strong COMPL DET chief-3SG.POSS-DET DET US-DET  
'The president was powerful' Carter was powerful  
Clinton was powerful
- b. sécsec tu7 [ti kel7aqsten-s-a ti US-a]  
silly COMP. DET chief-3SG.POSS-DET DET US-DET  
'The president was a fool' Carter was a fool  
Clinton was a fool

Once *tu7* is added to the matrix predicate, the evaluation time of the matrix predicate is located in the past. Note, however, that this time, the DP ranges over any past or present president. Crucially, however, if the DP is used to refer to the present president, the evaluation time of *president* must overlap with the past evaluation time of the matrix predicate: (13a) cannot be used to say that Clinton

was powerful at some past time before he was president. The reading that (13a) cannot have is illustrated in (14a). The two readings that (13a) can have are illustrated in (14b-c).



In section III, I will present detailed evidence to establish that the temporal reference of a DP always overlaps with the temporal reference of the matrix predicate and, thus, that the reading in (14a) is ungrammatical. For the time being, let's see what happens when we add a temporal adverb to our chief of the United States sentences, as in (15-16).

In (15), the adverb *ni pal7-a zánucwem*, 'last year, one year ago' will locate the time of matrix predicate in the past year. Note this past time adverbial is introduced by the absent determiner *ni...a*.

- 15a. náplit [ti kel7aqsten-s-a ti US-a] (ni pal7-a zánucw-em)  
priest DET chief-3SG.POSS-DET DET US-DET DET.ABSENT one-DET year INT  
b. 'The chief of the United States was a priest (last year/a year ago)' or  
c. 'There was a chief who was a priest (for one year)' or  
d. 'There was a priest who was a chief (for one year)' or  
e. 'He was a chief and a priest (for one year)'
- 16a. plísmen [ti kel7aqsten-s-a ti US-a] (icín'as)  
policeman DET chief-3SG.POSS-DET DET US-DET a long time ago  
b. 'The chief was a policeman (a long time ago)' or  
c. 'There was a chief who was a policeman (a long time ago)' or  
d. 'There was a priest who was a policeman (a long time ago)' or  
e. 'He was a chief and a policeman (a long time ago)'

<sup>2</sup>Unfortunately, there is a paradigm that I have not yet elicited: when the clitic *tu7* is inserted inside the DP, it can also directly suffix onto the nominal.

One would expect the time of being a chief and the time of being a policeman (/priest) to be easily construed as distinct times in (15a/16a). Note, however, the volunteered interpretations of these ST' sentences. As the reader can see, it is impossible to establish whether the evaluation time of the matrix predicate could be distinct from the evaluation time of the subject since the speaker freely reanalyses the noun phrase in subject position as the main predicate of the clause or construes the subject NP and the matrix predicate as a complex predicate nominal. I have put the adverbial in parenthesis in (15-16) to indicate that this happens whether the adverbial is present or absent.

I now turn to quantified DPs in ST'.

### III.1 The Temporal Interpretation of Quantified DPs in St'át'imcets

Recall that in English, the evaluation time of a quantified DP can be independent of the evaluation time of the matrix predicate of the clause in which it occurs - as illustrated in (5), where the set of (past or present) sophomores that we are quantifying over is determined by the discourse context. Let's now turn to the temporal reference of quantified DPs, as illustrated by the sentences in (17-8).

- 17a. á7xa7 tákem [i kel7áqsten-a] b. á7xa7 tákem [nelh kel7áqsten-a]  
strong all PL.DET chief-DET strong all PL.ABSENT.DET chief-DET  
'All the (present) chiefs are powerful' 'All the (past) chiefs were powerful'
- 18a. sécsec tákem [i kel7áqsten-a] b. sécsec tákem [nelh kel7áqsten-a]  
silly all PL.DET chief-DET silly all PL.ABSENT.DET chief-DET  
'All the (present) chiefs are fools' 'All the (past) chiefs were fools'

The set of chiefs that we are quantifying over in (17-8) is not freely determined by discourse context as was the case with the English examples in (5) above. In particular, (17a) can only be used to assert that all the (different) present chiefs are powerful whereas (15b) asserts that all the (different) past chiefs were powerful. Note, once again, that (14a) crucially contrasts with (14b) only in the choice of the determiner: *i...a* vs. *nelh ...a*. The latter is the plural counterpart of the 'absent' determiner *ni...a*, illustrated in (9-11) above. Note finally that the quantified DPs in (17-18) do not allow the ICR. (17a) cannot be used to assert that any past, present or future chief is powerful, but only that all the present chiefs are powerful. Likewise, (17b) only asserts that all the past chiefs were powerful.

### III.2 The Individual Concept Reading in St'át'imcets

Finally, recall also that definite descriptions are ambiguous between a ICR and a direct reference reading. On the ICR, the noun phrase *the president* in (19a) is evaluated at different times and, thus, does not refer to any particular individual. In particular, (19a) can be used to assert that for any time *t*, whoever is president or chief at *t* is powerful. In contrast, the DP in (19a) can be used referentially (that is, to refer to a particular individual that the speaker has in mind - i.e. Clinton) or attributively (that is, to refer to whoever is the present president - the speaker need not know who the president is

and, thus, has no specific individual in mind). Crucially, however, the DP in (19a) cannot have an ICR: (19b) does not assert that any past, present or potential president is powerful.

- 19a. The president of the US is powerful  
b. á7xa7 [ti kel7áqsten-s-a ti United-States-a]  
strong DET chief-3 SG.POSS-DET DET US-DET  
'The president of the United States is powerful'

In sum, neither the quantified DPs in (17-8) nor the DP in (19a) allow the ICR. The ICR is only possible with a non-referring NP - i.e. an NP introduced by *ku* - under the scope of the adverb *pápt* 'always' (which is obligatorily present).

20. \*(pápt) á7xa7 [ku kel7áqsten-s ti United-States-a]  
always strong NON.REF chief-3SG.POSS DET US-DET  
'A president of the United States is always powerful'

As will be discussed in section IX.2, *ku*-NPs have the following correlated properties (established by Matthewson to appear b): they are syntactically very restricted in their distribution (for instance they are excluded from simple declarative sentences but allowed in intentional contexts) and they never have a referential reading.

### III.3 Conclusion

To recapitulate, I have argued that the temporal reference of DPs in ST' is not freely determined by discourse context. In (8), (11), (17a) and (18a) both the matrix predicate and the DP must be evaluated in the present. In (9), (10), (12), (17b) and (18b), both the matrix predicate and the DP must be evaluated in the past. Further, in (9-10) and (17/8b), the evaluation time of the DP is *restricted* by the determiner: the subject DP is assigned a past evaluation time via the 'absent' determiner *ni/nelh*, because spatial deixis (distance in space) correlates with temporal deixis (distance in time). The temporal reference of the subject then fixes the temporal reference of the *whole sentence*. In this respect, determiners in ST' behave like certain temporal adverbials in English. For instance, the temporal locative PP in (21) (from Musan 1995) fixes the temporal reference of both the matrix predicate and the subject NP. (21) can only have the reading where all professors in the forties were young in the forties.

21. In the forties, professors were young.

### IV DPs IN ST'ÁT'IMCETS ARE TEMPORALLY BOUND

The data that I have presented so far does not convincingly establish that the evaluation time of the DP is bound by the evaluation time of the predicate (or conversely that the evaluation time of the predicate is bound by the evaluation time of the DP). In particular, can we establish that the subject and the matrix predicate have to be evaluated at the *same* time interval? For instance, in a situation

where they are both evaluated in the past, can we show that they cannot be (respectively) evaluated at distinct past time intervals?

Thus, consider (22). In (22), the temporal adverb fixes the temporal reference of the predicate: the time of hitting was last year. Now let's turn to (23). What we want to find out is whether the temporal adverb *izánucwmas* 'last year' fixes the evaluation time of both the matrix predicate and the DP in object position - that is, whether both the time of hitting and the time of being a president must be located in the past year. Note that the DP in (23) contains the progressive auxiliary *wa7* in parenthesis. This is to control for whether the presence of the auxiliary - which forces the DP to be construed as a relative clause (*the one who was chief*) - could affect the temporal interpretation of the nominal.

- 23a. *túpunas* *i-zánucw-m-as*  
hit-3ERG. DET-last year-INT-3SG.CONJ  
b. 'He hit him last year'
- 23a. *túpunas* [*ti* (*wa7*) *kel7áqsten-s-a* *ti* *US-a*] *i-zánucw-m-as*  
hit-3ERG. DET PROG chief-3SG.POSS-DET DET US-DET DET-last year-INT-3SG.CONJ  
b. 'He hit the president of the US last year'  
c. 'He hit the one who was chief of the US last year'

To establish whether the temporal interpretation of the DP can be independent of the temporal interpretation of the verb, we cannot simply add another temporal phrase to (23). This leads to ungrammaticality as shown in (24): a clause cannot contain more than one temporal adverbial phrase, whatever the order of the adverbials (This in itself tells us something).<sup>3</sup>

- 24a. \**sk'úk'm'it* *i-1940-as* [*ti* (*wa7*) *kel7áqsten-s-a* *ti* *US-a*] *lhkúnza*  
child DET-1940-3SG.CONJ DET PROG chief-3SG.POSS-DET DET US-DET now  
b. 'The one who is chief of the US now was a child in 1940'
- 25a. \**túpunas* [*ti* (*wa7*) *kel7áqsten-s-a* *ti* *US-a*] *izánucwmas* *i-1940-as*  
hit-3ERG. DET PROG chief-3SG.POSS-DET DET US-DET last year DET-1940-3SG.CONJ  
b. 'Last year, he hit the one who was chief of the US in 1940'  
c. 'In 1940, he hit the one who was chief of the US last year'

<sup>3</sup>I did however manage to illicit the intended reading of (24a), as given in (24b). Mrs. Thevargé volunteered the following very surprising structures. Note crucially that the relative clause in subject has been fronted to a predicate initial position pied piping the adverbial. In ST, only quantifiers can appear in sentence initial position. Demirdache et al. (1994) and Demirdache & Matthewson (1995b) analyse the order Q V NP (NP) or QP V (NP) as S-structure QR; see Matthewson (to appear b) for the syntax of quantified sentences. I have to establish to what degree, (i-ii) are grammatical sentences.

- i. [[ *ti* *wa7* *kel7áqsten-s-a* *ti* *US-a*] *lhkúnza*] *wa7* *tu7* *sk'úk'm'it* *i-1940-as*  
DET PROG chief-3SG.POSS-DET DET US-DET now PROG COMPL child in 1940  
'The one who is chief of the US now was a child in 1940'
- ii. [[ *ni* *wa7* *kel7áqsten-s-a* *ti* *US-a*] *i-1990as*] *wa7* *tu7* *sk'úk'm'it* *i-1940-as*  
DET.ABS PROG chief-3SG.POSS-DET DET US-DET in 1990 PROG COMPL child in 1940  
'The one who was chief of the US in 1990 was a child in 1990'

We can, however, embed (23) in a discourse context that forces the time of hitting to be distinct from the time of being a president, as in (26). This yields an ungrammatical discourse sequence (irrespective of whether the DP is construed as a relative clause or not), as shown in (26b). In (26c), I quote the very telling comments of my consultant Mrs. Laura Thevargé. Note that her comments clearly identify the source of the ungrammaticality of the sequence in (26): the problem is precisely that the past time of hitting cannot be distinct from the past time of being a chief.

- 26a. *túpun-as* *s-john* *ti* *sqáycw-a* *icín-as*.  
hit-3ERG. NOM-John DET man-DET long time ago  
'John hit a man a long time ago.....'
- b. \**túpunas* *ti* (*wa7*) *kel7áqsten-s-a* *ti* *US-a* *izánucwmas*  
\**túpunas* *ni* (*wa7*) *kel7áqsten-s-a* *ti/ni* *US-a* *izánucwmas*  
hit-3ERG. DET PROG chief-3SG.POSS-DET DET US-DET DET-last year-INT-3SG  
'He hit the one who was president of the US last year'
- c. Laura Thevargé: "Are you sure you want 'túpunas' in there because it doesn't work...these sentences are separate sentences...they are not a story...they can't be a conversation...the problem is that he was a president last year and john hit him last year. he couldn't have hit him a long time ago...these are 2 separate sentences" (Couldn't translate the sequence into ST)

In (27), I have merely switched the order of the temporal adverbs. The sequence of two sentences is still ungrammatical because the DP and the VP cannot be evaluated at distinct past times.

- 27a. *túpun-as* *s-john* *ti* *sqáycw-a* *i-zánucw-m-as*  
hit-3ERG. NOM-John DET man-DET DET-last year-INT-3SG  
'John hit a man last year.....'
- b. \**túpunas* *ti/ni* *wa7* *kel7áqsten-s-a* *ti* *US-a* *i-cín-as*.  
hit-3ERG. DET PROG chief-3SG.POSS-DET DET US-DET long time ago  
'He hit the one who was president of the US a long time ago'
- c. "No. It doesn't make sense because first its last year, then its a long time ago...its not a conversation...its 2 separate sentences where he hits the man last year and a separate sentence where he hits the man a long time ago"

When I asked Mrs. Thevargé how to save either (26) or (27). She gave me the above ST with the second adverbial omitted. Note crucially that the NP *the chief* in (28b) is literally translated as the temporal adjunct clause *when he was a chief*. It is thus not surprising that a DP - just like a temporal adverb - can fix the temporal reference of a whole sentence.

28a. túpun-as s-john ti sqáycw-a izánucwmas  
hit-3ERG. NOM-John DET man-DET DET-last year-INT-3SG  
John hit a man last year.....

b. túpunas ti/ni wa7 kel7áqsten-s-a ti US-a  
hit-3ERG. DET PROG chief-3SG.POSS-DET DET US-DET  
He hit him *when* he was president of the US'

Volunteered gloss

Below, I give three other paradigms that further establish that the temporal reference of a DP is not free. Recall that the absent determiner *ni* can locate both the evaluation of the NP that it introduces and the evaluation time of the matrix predicate in the past, as illustrated in (29a). In (29b), we see that the present time adverb *lhkúnza* cannot be added to the sentence with the reading in (29a). This shows us that the determiner cannot restrict the temporal reference of the subject without restricting the temporal reference of the matrix predicates - e.g. the reading 'the one who *was* president of the US is a fool *now*' is ungrammatical. Once again, I draw the reader's attention to Mrs. Thevarge telling comments on the source of the ungrammaticality of (29b).

29a. sécsec ni (wa7) kel7áqsten-s-a ti US-a  
fool DET PROG chief-3SG.POSS-DET DET US-DET

a' 'The one who was president of the US was a fool'

b. \*sécsec ni (wa7) kel7áqsten-s-a ti US-a lhkúnza.  
fool DET PROG chief-3SG.POSS-DET DET US-DET today  
'The one who was president of the US is a fool now'

c. Laura Thevarge: "No! You've got two separate sentences in there!"

The paradigm in (30) makes the same point: the only difference between (29) and (30) is the aspectual class of the main predicate: in (29), the predicate is stative whereas in (30) it is eventive.

30a. flal ni (wa7) kel7áqsten-s-a ti US-a  
crying DET PROG chief-3SG.POSS-DET DET US-DET

'The one who was president of the US was crying'

b. \*flal ni (wa7) kel7áqsten-s-a ti US-a lhkúnza.  
crying DET PROG chief-3SG.POSS-DET DET US-DET today  
'The one who was president of the US is crying today'

When I asked Mrs. Thevarge to translate into ST' the intended reading of (30b), she volunteered the following sentence.

31. flal ti kél7-a ti kel7áqsten-s-a ti US-a lhkúnza  
crying DET before-first DET chief-3SG.POSS-DET DET US-DET today  
'The former president of the US is crying today'

(32) is the paradigm that I obtained when attempting to illicit *the child is president now*. This reading is unavailable for (32a), since the nominal and the matrix predicate cannot be evaluated at distinct times.

In (32b), I give the sentence that was volunteered as a translation for the intended reading of (32a) (e.g. the one who was a child is president now). Note that the sentence initial particles in (32b) are obligatory. van Eijk defines the particle *aylh* as "next, this time, and then. (...used when reference is made to a new event, or when new information is supplied)". I thus conjecture that (32b) can be analysed exactly as its volunteered translation suggests: *he was a child and then (/next) he was (/became) a teacher*. Note that this conjecture is supported by the ungrammaticality of (32c) where the present determiner has been substituted for the absent determiner. (32c) is illicit because this time, the evaluation times of the nominal and the predicate cannot be construed sequentially. (32c) has the ungrammatical interpretation: *he is child and then (/next) he was (/became) a teacher*.

32a. teacher ti sk'úk'm'it-a b. \*(lan) \*(aylh) teacher ni sk'úk'm'it-a  
teacher DET child DET already and then teacher DET.ABS child DET  
'He is a child and he is teaching now' 'The child (has grown up) and become a teacher'

c. \*lan aylh teacher ti sk'úk'm'it-a  
already and then teacher DET child DET  
'The child has become a teacher'

Finally, I give two tests with possessive noun phrases proposed by Strang Burton (p.c.). First, note that (33a) followed by (34b) is not an acceptable discourse sequence: (33b) cannot be embedded in the context provided by (33a). Why? Because, the time of the meeting between the speaker and the individual referred to by *my wife* in (33b) is located three years ago and, thus, cannot overlap with the time of being the speaker's wife since, as Mrs. Thevarge explicitly states, "She wasn't your wife then [three years ago]".

33. Context: The speaker and Martina got married this year.

a. nilh s-Martina n-sem7am-a  
FOC NOM-Martina 1SG.POSS-friend-DET  
'Martina is my wife' (or 'It's Martina whose my wife)

b. \*kalhas maqa7 lhel-ni s-pzan-an-a kw-s n-sem7am-a  
three year from-DET.ABS NOM-1SG.CONJ-DET DET-NOM 1SG.POSS-friend-DET  
'I met my wife three years ago' 'She wasn't your wife then' (LT)

In contrast, (33c) can be embedded in the context provided by (33a): (33a) followed by (33c) is a well-formed discourse sequence. Why does substitution of *Martina* for *my wife* in (33b) make the sentence grammatical? Because the property of being a wife is a temporary-property whereas the property of being Martina is what Musan (1995) would call a "life time- property": the property of being Martina holds of an individual through out her life time. Hence, in (33c), the matrix predicate and the nominal will be evaluated at the same time interval - the time of meeting Martina will be a subinterval of the time of being Martina.

- 33c. kalhas maqa7 lhel-ni s-pzan-an-a kw-s Martina  
 three year from-DET.ABS NOM-1.SG.CONJ-DET DET-NOM Martina  
 'I met Martina three years ago'

The ungrammatical sentence in (34) makes the same point. (34a) locates the time of meeting the individual referred to by *my friend* two years ago. In (34b), we find out, however, that the property of being the speaker's friend cannot be truly predicated of that individual two years ago (since it only came into existence last year). Hence, (34) is illicit because the time of meeting the individual referred to by *my friend* cannot overlap with the time of being the speaker's friend because, as Ms. Thevarge explicitly states, "he 's not your snúk'wa [friend] then".

- 34a. nilh t'u7 án'was zánucwem lhel-ni s-pzan-an-a ti n-snúk'w-a  
 FOC PART two year from-DET.ABS NOM-1.SG.CONJ-DET DET 1SG.POSS-friend-DET  
 'I met my friend two years ago... (or 'It was two years ago that I met my friend)
- b. \*t'u7 pála7 maqa7 t'u7 aylh kw-a-s n-snúk'w-a  
 just one year PART and then DET-PROG-NOM 1SG.POSS-friend-DET  
 but we didn't become friends until last year' "because he 's not your snúk'wa [friend] then"

However, once we substitute *man* for *friend* as in (34c-d), the sentence becomes grammatical. The property of being a man is a property that can hold of an individual at least through most of his life time. Hence, (34c-d) is licit because the time of being the speaker's friend is a subinterval of the time of being a man.

- 34c. nilh t'u7 án'was zánucwem lhel-ni s-pzan-an-a ti sqáycw-a  
 FOC PART two year from-DET.ABS NOM-1.SG.CONJ-DET DET man-DET  
 'I met the man two years ago... (or 'It was two years ago that I met the man...
- d. t'u7 pála7 maqa7 t'u7 aylh kw-as n-snúk'w-a  
 just one PART and then DET NOM -friend-DET  
 but we didn't become friends until last year'

Before closing this section, I would like to recall to the reader's attention the volunteered translations of (15), repeated below.

- 35a. náplit ti kel7áqsten-a (ni pal7-a zánucw-em)  
 priest DET chief-DET DET.ABS one-DET year INT  
 'The chief was a priest (last year)' or  
 'There was a chief who was a priest (for one year)' or  
 'There was a priest who was a chief (for one year)' or  
 'He was a chief and a priest (for one year)'.

As we shall see in the next section, the explanation for temporal dependency effects in ST' lies in the possible interpretations of (35a).

#### V MUSAN (1995) : ONLY STRONG DPS ALLOW TEMPORALLY FREE READINGS

Let's now examine more closely the distribution of temporally free and temporally independent readings in languages like English. Musan (1995) argues that Enç (1981) over generalizes: there are NPs that get dependent temporal interpretations. Typically, *there*-constructions yield temporally dependent readings. Thus, in (36a), the time of being a chief and the time of being powerful must overlap. Likewise, the weak NP in (36b) (quoted from Musan 1995) is not temporally free: the homeless people must be homeless at the time of rally.

36. *There*-constructions:  
 a. There was a powerful chief  
 b. There were many homeless people at the rally

In contrast, the evaluation time of the strong NP in (36c) is freely determined by discourse context. In (36c), the people could be homeless now but not homeless at the time of rally.

- 36c. Many of the homeless people were at the rally

Musan correlates the distribution of free vs. bound temporal readings of DPs with the weak (cardinal) vs. strong (presuppositional) distinction<sup>4</sup>. In particular, she argues that weak NPs only have temporally bound interpretations. Temporally independent readings are, thus, restricted to presuppositional DPs, as the following paradigms illustrates.

- 37a. Last year, some congressmen came to the party (from Musan 1995)  
 b. Last year, some of the congressmen came to the party

(37b) cannot have the reading *some individuals who are now congressmen were at last year's party*. In contrast (37a), can have the reading *some of the individuals who are now congressmen went to the party last year*. Musan concludes that it is the presupposition of existence triggered by a strong *determiner* which licenses temporally independent readings (see section VII, for a brief discussion of her analysis).

In sum, strong NPs are temporally free. In particular, the evaluation time of either a quantified DP or a definite description can be independent of the evaluation time of the matrix predicate of the clause in which it occurs. Thus, in (38a), the set of chiefs that we are quantifying over is determined by the discourse context. For instance, (38a) can be true if individuals who are chiefs now were powerful at some past time or if individuals who were chiefs at some past time *t* were powerful at some distinct past time *t'*. Likewise, in (38b): the time of being a chief and the time of being powerful need not overlap. In contrast, weak NPs are temporally bound. Thus, in (38c), the time of being a chief and the time of being powerful must overlap.

- 38a. Every chief was powerful b. The chief was a powerful c. There was a powerful chief

<sup>4</sup> More precisely, Musan's generalisation is: An NP can be temporally independent iff it is either presuppositional or the subject of an existence independent predicate. (Musan 1995, pages 81-83).



1 DPs in ST' do not have the range of temporal interpretations that are characteristic of presuppositional DPs. Given Musan's correlation, it is not surprising that *the chief* in (39) can freely be translated as a cardinal NP, as the readings in (39c-e) illustrate.

- 39a. náplit ti kel7áqsten-s-a ti US-a (ni pal7a zánucwem)  
 priest DET chief-3SG.POSS-DET DET US-DET one year  
 b. 'The chief was a priest (last year)' or  
 c. 'There was a chief who was a priest (for one year)' or  
 d. 'There was a priest who was a chief (for one year)' or  
 e. 'He was a chief and a priest (for one year)'

I will now provide strong support for Musan's generalization by showing that the absence of temporally bound readings correlates with another core property of DPs in ST' - namely, the absence of strong determiners. The thesis that there are no presuppositional determiners in ST' is one of the central claims made by Matthewson (to appear b) where a thorough analysis of the syntax and semantics of determiners and quantifiers in ST' is presented. I thus refer the reader to her work; see also Jelinek (1993a, b, c) Jelinek (1995) and Jelinek & Demers (1994). I will, however, present three arguments here to establish the absence of strong determiners.

## VI THERE ARE NO STRONG DETERMINERS IN SALISH

### VI.1 There are No Determiner-Quantifiers in Salish

The first argument is that all Salish languages lack determiner-quantifiers. This property was first established by Jelinek (1993a, b, c, 1995 and Jelinek & Demers 1994) for Straits Salish. Matthewson (1994) then demonstrated that no Salish language has a quantifier which is itself a determiner. In particular, while Salish languages allow quantifiers which attach to DPs (e.g. *all* DP), QPs with the structure [QP Q [NP]] (e.g. \*no man, \*every man, \*each man, \*most men, or \*few men) do not exist in Salish. The structure of QPs in ST' is illustrated in (40).

40. Structure of QPs in ST': [QP Q [DP Det [NP]]]

- a. [QP tákem [DP i [NP sqáyqeycw] a]] b. \*[QP tákem [NP sqáycw/sqáyqeycw]]  
 all DET.PL men DET all man/men

Demirdache & Matthewson (1995b) argue that if Salish languages lack determiner-quantifiers such as *every*, *most*, or *each*, then they lack the definite determiner *the*. More precisely, they lack all quantificational (strong) determiners (e.g. \*the man, \*every man, \*each man ...) in the sense of Milsark (1977) - for whom the definite determiner *the* is a universal quantifier quantifying over a singleton set. I will provide evidence for this hypothesis by showing that DPs in ST' lack two defining properties of definites.

### VI.2 There are No 'Definite Descriptions' in Salish.

#### vi.2.i Matthewson (to appear a, b): Determiners do not encode a definite-indefinite contrast

Matthewson (to appear a, b) demonstrates that no DP in Salish has the defining property of a definite: no DP presupposes its descriptive content (where the relevant notion of presupposition is that of pragmatic presupposition). In particular, she establishes that the Familiarity/Novelty Condition (Heim 1982) does not apply in Salish. This condition is illustrated in (41). In (41a-a'), we see that if a discourse referent is familiar to the discourse, a definite must be used. In contrast, if a discourse referent is novel to the discourse (and unfamiliar to the common ground) an indefinite must be used (cf. 41b vs. 41b').

- 41a. I saw a girl<sub>1</sub> today in the bus. The girl<sub>1</sub> was wearing a purple hat.  
 a'. I saw a girl<sub>1</sub> today in the bus. \*A girl<sub>1</sub> was wearing a purple hat.  
 b. I met a girl today vs. \*I met the girl today

Now, consider the Salish discourse sequences in (42). We see that the discontinuous determiner *ti...a* in ST' is used to introduce a novel discourse referent. Crucially, we see that the same determiner is used when a DP has the anaphoric reading of a definite. Thus, (42) illustrate that DPs in ST' do not encode a definite-indefinite contrast: the same DP is used felicitously *whether its referent is familiar or novel to the discourse*.

42. St'át'imcets (from van Eijk and Williams 1981, quoted from Matthewson to appear)  
 a. Húy-lhkan ptakwlh ptákwlh-min lts7a [ti smém'lhats- a] ...  
 going.to-1SG.SUBJ tell.story tell.story-APPL here DET woman- DET  
 'I'm going to tell a legend, a legend about [a girl]<sub>1</sub> ...'  
 b. ... Wa7 ku7 ilál láú7 [ti smém'lhats- a] ...  
 PROG QUOTE cry DEICE DET woman- DET  
 '... [The girl]<sub>1</sub> was crying there.'

We have seen that the Familiarity-Novelt condition does not constrain the distribution of a DP in ST'. In other words, a DP in Salish, unlike a DP in English, need not be associated with a discourse referent that is already in the domain of discourse. As Matthewson herself concludes, this means that,

43. "No determiner in Salish triggers the presupposition that the descriptive content of a DP is part of the common ground of the discourse"

vi.2.ii No DP is Ambiguous between a Direct Reference Reading and an Individual Concept Reading  
 As Enç (1981) states, the traditional philosophical literature claims that sentences with definite descriptions are ambiguous depending on whether the definite description has an ICR or a direct reference reading (cf. Cresswell 1973, Stalnaker 1978 and references in Enç 1981). On the directly referential reading, the definite in (44) refers to a particular individual. The definite can be used

referentially (it refers to a specific individual that the speaker has in mind) or attributively (it refers to whichever specific individual fits the description at the time of utterance). In contrast, on the ICR, the definite *the chief* in (44) is evaluated at different times and, thus, does not refer to any particular individual: (44) can be used to assert that for any time *t*, whoever is president or chief at *t* is powerful.

44. The chief of the United States is powerful

As was established in section III.2, the ST' equivalent of (44), repeated below, is not ambiguous. The DP in (45) can be used either referentially (to refer to a particular individual that the speaker has in mind - i.e. Clinton). It can also be used attributively (to refer to whoever is the present president *at the time of utterance*; the speaker need not know who the president is and, thus, has no specific individual in mind). Crucially, however, the DP in (45) cannot have an ICR: it cannot be evaluated at different times. (45) cannot be used to assert that any past, present or future chief is powerful.

45. á7xa7 [ti kel7áqsten-s-a ti United-States-a]  
 strong DET chief-3 SG.POSS-DET DET US-DET  
 'The chief of the United States is powerful'

Recall also that the ICR is only possible with a non-referring NP - i.e. an NP introduced by *ku* - under the scope of the adverb *pápt* 'always' (which is obligatorily present).

46. \*(pápt) á7xa7 [ku kel7áqsten-s ti United-States-a]  
 always strong NON.SPEC chief-3SG.POSS DET US-DET  
 'A president of the United States is always powerful'

As established by Matthewson (to appear a, b), *ku*-NPs have the following correlated properties. First, they are syntactically very restricted in their distribution (e.g. licensed only under the scope of certain operators such as modality, negation, adverbs of quantification, or intentional verbs; see section IX.2). Second, they never have existential force, as illustrated by the contrast in (47). The DP in (47a) - introduced by the discontinuous determiner *ti...a* - must have existential force (it must have wider scope than negation). In contrast, the *ku*-NP in (47b) only has narrower scope than negation. I refer the reader to Matthewson (to appear a, b) for a detailed investigation of the syntax and semantics of *ku*-NPs.

47a. cw7aoz kw-s áts'xen-as [ti kel7áqsten-a] (quoted from Matthewson to appear)  
 NEG DET-NOM see-3 ERG DET chief - DET  
 'She didn't see a/ the chief' Only reading: there is a chief that she didn't see

b. cw7aoz kw-s áts'xen-as [ku kel7áqsten]  
 NEG DET-NOM see-3 ERG DET chief - DET  
 'She didn't see a chief' Only reading: she didn't see a chief

If we assume, following the traditional philosophical literature, that definite descriptions can have either an ICR or a direct reference reading, then no DP in ST' qualifies as a definite description since

no DP in ST' is ambiguous between a directly referential reading and an ICR. DPs such as *ti kel7áqstena* 'the/a chief' can be used referentially or attributively but never have the ICR of a definite description. Conversely, the ICR is possible with a *ku*-N. However, a *ku*-NP is never ambiguous between an ICR and a direct reference reading since it never refers in the first place. (In section IX.4, I will argue that the reading in (45) is in fact not an ICR but a universal reading).

In sum, we have seen that DP in ST' lack three properties of definite descriptions: 1) DPs do not trigger the presupposition that their descriptive content is part of the common ground of the discourse, as established by Matthewson; 2) DPs are not ambiguous between an ICR and a directly referential reading and, 3) DPs do not have the range of temporal interpretations that are characteristic of definite descriptions.

If we assume, following Milsark (1977), that the definite determiner is a strong determiner, then the absence of temporally bound readings in ST' provides strong support for Musan's generalization: it correlates with another core property of DPs in ST' - namely, the absence of strong determiners.

## VII MUSAN (1993): QUANTIFICATION OVER INDIVIDUALS VS. QUANTIFICATION OVER STAGES

Musan (1995) derives the temporal readings of NPs from an ontology where the domain of entities consists of individuals and stages, as in Carlson (1977): quantification over individuals yields temporally independent NPs whereas quantification over stages yields temporally dependent NPs. On the basis of this proposal, I will argue that the absence of temporally independent DPs in ST' entails that DPs in ST' do not introduce whole individuals but stages of individuals, where a stage is *a time-space slice of an individual that can be of considerable length*. Put in simple words, this means that a sentence in ST' such as *the chief left* can be (informally) construed as *he left when he was a chief*.

More generally, assuming Carlson's ontology where the domain of individuals is hierarchically organized into three types of entities - stages, objects and kinds - I will argue that referential DPs in ST' introduce stage-level entities and that *ku*-NPs denote kinds (classes of individuals). This entails that ST' lacks the most familiar type of entity, *objects* - that is, what we prototypically think of as a noun.

I first summarize the core idea underlying Musan's analysis.

### VII.1 The Problem

Recall that a weak NP such as *president* in (48a) is not temporally free. How do we derive this lack of temporal freedom? In particular, why can't the predicates *powerful* and *president* in (48a) be evaluated at distinct time intervals? In contrast, why can they be evaluated at distinct times in (48b)?

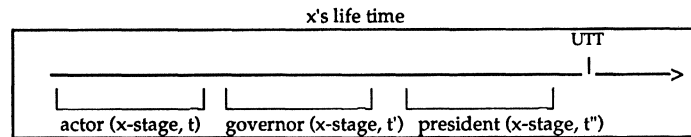
48a. There was a powerful president 48b. The president was powerful

Though I will not adopt the specifics of Musan's analysis, I will summarize the simple idea underlying her analysis, since it will be the foundation of my analysis of DPs in ST'.

## VII.2 The Core Idea

To derive the temporal readings of NPs, Musan distinguishes between quantification over individuals and quantification over *stages* of individuals. This distinction is based on Carlson 1977. The domain of entities consists of stages, individuals (which correspond to objects in Carlson 1977) and kinds as primitives. An individual is a set of many stages that can overlap. A stage is a spatio-temporal realization of an individual. Note that a stage need not be of minimal length, neither momentary nor of short duration. Musan then assumes that the entity that a weak NP introduces is not a whole individual but a stage of an individual. For instance, the cardinal NP *president* in (48a) does not refer to a whole individual  $x$  but to the president stage of that individual  $x$ , as graphically illustrated in (49).

49.



What is the temporal length of the stage  $x$  introduced by the cardinal NP *a president*? Musan makes the straightforward assumption that the temporal length of this stage is the time interval during which  $x$  is a president. More precisely, the temporal length of this stage does *not extend beyond the time interval during which the property of being a president is asserted to hold of  $x$* . The time interval during which applying the predicate *president* to  $x$  yields true is the predication time of *president*.

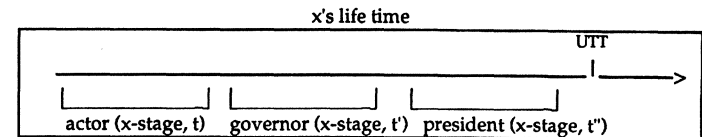
Why must cardinal NPs yield temporally bound readings? The cardinal NP *president* in (48a) introduces a stage. The entity of which the predicate *powerful* is predicated is, thus, not the whole individual  $x$  but the stage of the individual picked out by the noun *president*. Since this stage cannot start before or extend beyond the time of  $x$ 's being a president, the time of being powerful will either coincide with or be contained within the time of being a president.

In contrast, a strong NP (informally) introduces an entity that has 'a history' (cf. Musan 1993). A strong NP triggers a presupposition of existence which licenses reference to further stages of the individual. For instance, *the president* in (48b) introduces a whole individual (or a stage of the individual  $x$  that is bigger than the president stage of  $x$ ). The predicate *powerful* in (48b) can thus be predicated of a stage other than the stage covered by the predication time of *president*. The time of being powerful and the time of being president need not intersect in (48b) because *powerful* is not solely predicated of the president stage of  $x$  but of the whole individual  $x$  (or of a bigger stage than the stage covered by *president*). Finally, Musan argues that it is the presupposition of existence triggered by a strong determiner which licenses temporally independent readings. In particular, she states that "reference to other stages of an individual is licensed only if the NP has an existence presupposition."

## VII.2 The Core Idea

To derive the temporal readings of NPs, Musan distinguishes between quantification over individuals and quantification over *stages* of individuals. This distinction is based on Carlson 1977. The domain of entities consists of stages, individuals (which correspond to objects in Carlson 1977) and kinds as primitives. An individual is a set of many stages that can overlap. A stage is a spatio-temporal realization of an individual. Note that a stage need not be of minimal length, neither momentary nor of short duration. Musan then assumes that the entity that a weak NP introduces is not a whole individual but a stage of an individual. For instance, the cardinal NP *president* in (48a) does not refer to a whole individual  $x$  but to the president stage of that individual  $x$ , as graphically illustrated in (49).

49.



What is the temporal length of the stage  $x$  introduced by the cardinal NP *a president*? Musan makes the straightforward assumption that the temporal length of this stage is the time interval during which  $x$  is a president. More precisely, the temporal length of this stage does *not extend beyond the time interval during which the property of being a president is asserted to hold of  $x$* . The time interval during which applying the predicate *president* to  $x$  yields true is the predication time of *president*.

Why must cardinal NPs yield temporally bound readings? The cardinal NP *president* in (48a) introduces a stage. The entity of which the predicate *powerful* is predicated is, thus, not the whole individual  $x$  but the stage of the individual picked out by the noun *president*. Since this stage cannot start before or extend beyond the time of  $x$ 's being a president, the time of being powerful will either coincide with or be contained within the time of being a president.

In contrast, a strong NP (informally) introduces an entity that has 'a history' (cf. Musan 1993). A strong NP triggers a presupposition of existence which licenses reference to further stages of the individual. For instance, *the president* in (48b) introduces a whole individual (or a stage of the individual  $x$  that is bigger than the president stage of  $x$ ). The predicate *powerful* in (48b) can thus be predicated of a stage other than the stage covered by the predication time of *president*. The time of being powerful and the time of being president need not intersect in (48b) because *powerful* is not solely predicated of the president stage of  $x$  but of the whole individual  $x$  (or of a bigger stage than the stage covered by *president*). Finally, Musan argues that it is the presupposition of existence triggered by a strong determiner which licenses temporally independent readings. In particular, she states that "reference to other stages of an individual is licensed only if the NP has an existence presupposition."

# VIII DPS IN ST'ÁT'IMCETS INTRODUCE STAGE DENOTING ENTITIES.

The core idea underlying Musan's analysis is that there that there are temporal dependency effects between the subject NP and the matrix predicate of a clause whenever the matrix predicate is being applied to a stage of an individual. I have argued that DP's in ST' are not temporally independent of the matrix predicate of their clause. I thus conclude that temporal dependency effects arise in ST' because the entities that predicates are predicated of in ST' are not whole individuals but stages of individuals- where a stage is a space-time slice of an individual that can be of considerable length. I stress that it does not need to be of minimal length, neither momentary nor of short duration.<sup>5</sup>

Thus, in (50), the noun phrase *the chief* introduces a variable which does not range over individuals but over stages of individuals. The predicates *chief* and *priest* are stage-level predicates since they are predicates that are applied to a stage of an individual.

50. náplit [ ti kel7áqsten-a ]  
priest DET chief -DET  
'The chief is a priest'

The temporal length of the stage *x* introduced by the noun phrase *the president* in (50), is the interval of time during which the property of being a president is asserted to hold of *x*. This is why NP's in ST' can be literally translated as temporal adjuncts, as in (30), repeated below. In (51), the DP introduces a stage *x* of an individual. The maximal temporal length of this stage is the time when *x* was a president.

- 51a. túpnas ti/in (wa7) kel7áqsten-s-a ti US-a  
hit-3ERG. DET PROG chief-3SG.POSS-DET DET US-DET  
b. 'He hit the (one who was) president' 'He hit him when he was president'

Compare the interpretation of (51a) where the NP is translated as a *when* clause with (52) which is provided by Partee (1991) to illustrate that any individual can be construed as a stage.

52. From the riddle song "I Gave My love a Cherry": Partee (1991)  
How can there be a cherry that has no stone?... A cherry *when it's blooming*, it has no stone.

Note, also, that the proposal that DP's introduce stage-level entities explains why (50) can have the existential readings given in (53).

53. náplit [ ti kel7áqsten-a ]  
a. 'There was a chief who was a priest' or  
b. 'There was a priest who was a chief' or  
c. 'He was a chief and a priest'.

<sup>5</sup>I set aside *ku*-NP's until section IX.2. Obviously, a *ku*-NP does not denote a stage of individuals since it never has existential force.

In Carlson (1977), the existential reading arises precisely whenever a claim is made about some stage of the subject. Thus, both (54a) and (54b), quoted from Carlson, have an existential reading and a generic /characteristic property reading. (54a) has a generic reading where it is characteristic of the kind dinosaur that they ate kelp, and (54b) has a generic reading where it is characteristic property of Max that he ate kelp in the past. The existential reading obtains whenever a predicate is applied to a stage. On this reading, (54a) is true iff some dinosaurs stages ate kelp and (54b) is true iff Maxwell has a stage which ate kelp, i.e. if Maxwell ate kelp some time in the past.

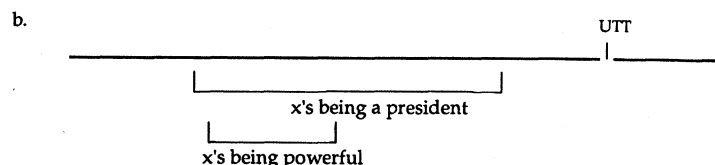
- 54a. Dinosaurs ate kelp b. Maxwell ate kelp

## VIII.1 Temporal Dependent Reading in St'át'imecets

I will now informally sketch how temporally dependent readings arise in ST'. For instance, consider (55a), where the subject NP is introduced by the absent determiner *ni*. The absent determiner fixes the temporal interpretation of both the subject NP and the matrix predicate. (55a) can have the reading illustrated in (55b). It can be used to assert that some contextually relevant past president was powerful. It cannot be used to assert that some contextually relevant past president *is* powerful. Why?

The NP *chief* in (55a) introduces a time-space slice of an individual *x*. This time-space slice is located in the past by the absent determiner. The predicate *powerful* is predicated of this stage. The temporal length of this stage cannot start before or extend beyond the past time interval during which *x* was a chief. The time of being powerful will thus either coincide with or be contained within the *past* time of being a chief.

- 55a. á7xa7 [ni kel7áqsten-s-a ti US-a ]  
strong DET.ABSENT chief-3SG.POSS-DET DET US-DET  
'The (past) president was powerful'  
√ Carter was powerful  
\*Clinton was powerful  
\*Carter is powerful



The analysis just sketched extends to (56), repeated from (12) above, which only has the reading illustrated in (55b). The time of being powerful in (56) must be a subinterval of the time of being a chief, which is itself located in the past by completed clitic *tu7* inside the DP.

56. á7xa7 [ti7 tu7 (ti) kel7áqsten-s-a ti US-a ]  
powerful DEM COMPL DET chief-3SG.POSS-DET DET US-DET  
'The (past) president was powerful'  
\* 'The (past) president is powerful'  
√ Carter was powerful  
\* Carter is powerful

The initial question that we addressed in this paper was whether the temporal interpretation of a DP was restricted by the temporal interpretation of the matrix predicate of its clause. We concluded that in fact, the temporal interpretation of the matrix predicate can itself be restricted by the temporal interpretation of a DP in ST'. The informal account of temporally dependent readings in ST' that I have just sketched relies on one assumption - namely, that the *maximal temporal length* of the individual *x* introduced by an NP is the interval of time during which the property denoted by the noun is asserted to hold of *x*.

### VIII.2 The 'Present' Determiner

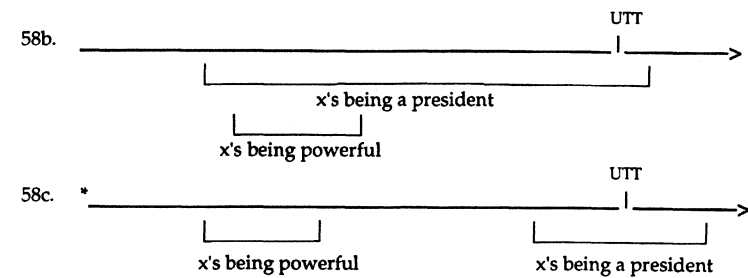
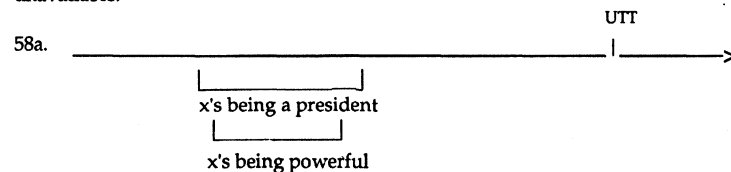
Before closing this section, I would like to make some observations about the present determiner *ti*. The behavior of the absent determiner is quite straightforward: the absent determiner picks out either a present or a past time-space slice of an individual depending on whether spatial deixis correlates with temporal deixis, as will be discussed in the next section.

The behavior of the present determiner, however, is puzzling. As expected, the present determiner picks out a present stage of an individual. Recall, however, that when the matrix predicate is in the past, as in (13) repeated below, an NP introduced by the present determiner can range over either the present chief or any past chief of the United States.

57. á7xa7 tu7 [ti kel7áqsten-s-a ti US-a]  
strong COMPL DET chief-3SG.POSS-DET DET US-DET  
'The president was powerful'

Carter was powerful  
Clinton was powerful

The two readings that (57) can have are illustrated in (58a-b). In (58b), the DP introduces a stage of an individual that is located in the past; in (58a) this stage extends into the present. In either case, the time of being powerful will be a subinterval of the time of being a president. Once again, this assumption is crucial since it explains why (57) cannot be used to assert that Clinton was powerful at some past time before he was president. In other words, why the reading illustrated in (58c) is unavailable.



The puzzling question, however, is why the *present* determiner in (57) can pick out either a past chief stage as in (58a), or a past chief stage that extends into the present, as in (58c). Obviously, the behavior of the determiners in ST' suggests a parallel with tense. Tense has been analysed as establishing a relation between two times. Likewise, we could think of the present determiner in (58) as establishing a relation between two times, the time during which the property denoted by the noun *chief* holds of *x* and the time during which the property denoted by the adjective *powerful* holds of *x*. Now if we make a parallel between determiners in ST' and tense, then the behavior of the *present* determiner is no longer puzzling. In particular, I will make a parallel between the behavior of the present determiner in (57) and PRESENT tense in complement clauses in languages like English.

Complement clauses with morphological present tense embedded under a past tense matrix clause yields a so-called double access reading (Enç 1987). Under this reading, the complement clause must be evaluated at the time of utterance *and* at the time at which the matrix clause is evaluated. Thus, in (59) the time of Rosa's sickness is a time interval that includes *both* the past time of Max's saying and the time of utterance. Note that this is precisely the reading of (57) illustrated in (58b): the DP is evaluated both at the time of utterance and at the time at which the matrix predicate is evaluated. The time of being a president includes the past time of being powerful and the time of utterance.

59. Max said that Rosa is sick

Stative complement clauses embedded under a past matrix tense can also yield a simultaneous reading. In English, this reading surfaces when the complement clause has morphological past tense. However, in other languages (e.g. Russian, Polish, Japanese), the simultaneous reading obtains only when the complement clause has morphological present tense. Under this reading, the time of the complement clause in (60) is simultaneous with the time of the matrix clause: Max says at a past time

that Rosa is sick at that same past time<sup>6</sup>. A well known approach to the simultaneous reading assumes that the complement clause semantically has present tense, as in (60b). Under this (sequence of tense) analysis, the simultaneous reading arises because the PRESENT tense in (60b) introduces a time that is identical to the time of the matrix clause - in (60b), Rosa is sick when Max says she is sick. Note the reading in (58a) is a simultaneous reading: the time of being a chief is simultaneous with the past time of being powerful.

60a. Max said that Rosa was sick                      b. LF: PAST [ Max say [ PRESENT Rosa be sick]]]

I have merely drawn a parallel between the present determiner in ST' and PRESENT tense in complements clauses: both can yield either a double access reading as in (58a) or a simultaneous reading as in (58b). Although I think the parallel I have made is correct, I do not think that determiners in ST' should be analysed as tense (applying to individuals). As the following section should establish, any analysis of determiners in ST' must capture the spatial dimension of determiners: the temporal aspect of determiners in ST' is inherently linked to their spatial aspect.

### VIII.2 Determines Supply Entities with Spatio-Temporal Boundaries

I have proposed that DPs in ST' introduce stage denoting entities. I now turn to the question of why this is the case. In Musan (1993, 1995), the strength of the determiner determines the type of entity that the matrix predicate is predicated of: weak determiners quantify over stages of individuals whereas strong determiners quantify over whole individuals.<sup>7</sup> Now, we could adopt this proposal to derive the absence of temporally dependent readings since we argued that the determiner that introduces a description in ST' is not the equivalent of the strong determiner *the* in English.<sup>8</sup> I will not pursue this line of analysis, however. Instead, I will argue that DPs in ST' introduce stage denoting entities because determiners are deictic. I will then argue that the absence of a presuppositional (/definite) determiner should itself be derived from the deictic nature of determiners (see section IX.1).

The claim that temporal dependent readings arise because determiners locate the referent of a noun phrase in space, and consequently in time, is made by Davis & Saunders (1975) for Bella Coola Salish (see also Davis & Saunders 1974). In particular, these authors state that,

<sup>6</sup> (60) can also have a past shifted reading. This reading is irrelevant to the parallel that I am making since it requires the matrix and the complement to be evaluated at distinct past times.

<sup>7</sup> More precisely, in Musan (1995), strong determiners quantify over stages that extend beyond the predication time of the NP introduced by the determiner.

<sup>8</sup> More generally, recall Matthewson's (to appear) central thesis: ST' lacks all presuppositional determiners.

61. ... the time reference of a sentence with a bare verbal stem acquires a temporal locus by virtue of the deixis of the Agent and/or patient. In English gloss, this locus is expressed by the tense of the verb. In Bella Coola, it is better considered a property of the whole predication.[emphasis added]

As shown in (62), Bella-Coola determiners mark distance in space relative to the speaker, encoding a six-way distinction in proximity with respect to the speech act.

### 62. BELLA COOLA DETERMINERS AND DEMONSTRATIVES (quoted from Davis & Saunders 1975)

I	II	III	IV	V	VI
Non-demonstrative	Demonstrative	Demonstrative	Non-demonstrative	Non-demonstrative	Demonstrative
Visible	Visible	Visible	Invisible	Invisible	Invisible
Near	Near	Distant	Near	Distant	Distant
Present time	Present time	Present/ Near Past time	Near Past time	Distant Past time	Distant Past time
ti....tx	ti....t'ayx	ta....t'ax	ta....t	ta....t'x	ta....tax

Likewise in ST', determiners encode proximity/distance in space with respect to the speech act, as illustrated in (62); cf. van Eijk (1985), Matthewson (to appear b). Note that whereas (62) collapses determiners and demonstratives in Bella-Coola, the two sets are presented separately for ST'.

### 63a. ST'AT'IMCETS DETERMINERS (from Matthewson to appear, adapted from van Eijk 1985)

	present	absent	remote	
singular	ti....a	in....a	ku....a	ku
plural	i....a	nelh....a	kwelh....a	
collective		ki....a		

### b. ST'AT'IMCETS DEMONSTRATIVES (from Matthewson & Davis 1985, van Eijk 1985)

	proximal	visible medio-proximal	distal	proximal	invisible medio proximal	distal
singular	ts7a	ti7	t7u	kw7a	ni7	kwu7
plural	7izá	7iz	7izú	kwlha	nelh	kwlh

Note that the primary deictic distinctions that determiners encode are *spatial* as explicitly stated by van Eijk (1985). Two paradigms that he gives to illustrate this distinction are given in (63d-g).

63c. ... the distinction between present and absent depends on whether or not the thing meant is present (i.e. can be pointed out) in the situation of speech, and also, if it is absent, on whether its absence is relevant in the given situation<sup>9</sup>

- d. p-ún - lhkan [ti n- lkh'wál'us - a ]  
find-TR-1SG.SUBJ DET 1SG.POSS-basket-DET  
'I found my basket' (i.e. when showing the basket to the addressee)
- e. p-ún - lhkan [ni n- lkh'wál'us - a ]  
find-TR-1SG.SUBJ DET.ABS 1SG.POSS-basket-DET  
'I found my basket' (i.e. when the basket is absent from the situation of speech)
- f. áts'x- en - lhkan [ti skícza7- sw - a ]  
see - TR-1SG.SUBJ DET mother-2SG.POSS-DET  
'I saw your mother' (i.e. at a certain unspecified moment)
- g. áts'x- - en - lhkan [ni skícza7- sw - a ]  
see- - TR-1SG.SUBJ DET.ABS mother-2SG.POSS-DET  
'I saw your mother' (i.e. just a minute ago, while I was at the store)

The fact that determiners spatially locate the individual introduced by an NP entails that the individual is temporally located. To understand this correlation between space and time, consider the following hypothetical English tenseless sentence, assuming that it was grammatical. The locative PP *at the rally* locates the referent of *a man* in space. Hence, it locates it in time: the referent of the noun phrase was at the rally at the time of the rally.

64. There be a man at the rally

However, the fact that determiners pick out spatially (and, hence) temporally bounded manifestations of individuals does not mean that they *explicitly* locate the predication time of an NP. For instance, (64) gives us no explicit information about the time of the rally - whether it was in the past or the present - since the sentence is tenseless. Likewise, the absent determiner *ni* locates the chief in time and space (he cannot be *at* the discourse location). However, the determiner does not locate the predication time of the noun *chief*: we have no explicit information about the time of being a chief - whether it was in the past as is the case with the reading in (65a) or the present as is the case with the reading in (65b).

65. á7xa7 [ni kel7áqsten-s-a ti US-a ]  
strong DET.ABSENT chief-3SG.POSS-DET DET US-DET
- a. The (past) president was powerful' Carter/\*Clinton
- b. The (absent) president is powerful' \*Carter/Clinton

<sup>9</sup>This means that the present determiner can be used when the absence of the referent of the NP is not relevant, as in (63e) for instance.

Temporal dependency effects arise in ST' because determiners encode spatial distinctions and, hence, supply individuals with spatial and temporal boundaries. In (65), the matrix predicate *powerful* is predicated of the stage picked out by the determiner. Thus, although there is no morphological tense in (65) that explicitly locates the time of being powerful, this time interval will nonetheless be a subinterval of the time of being a president (whether the latter is a past or a present interval).

The reading in (65a) arises when distance in space correlates with distance in time: the determiner picks out a stage whose spatial and temporal location is distant from the spatial and temporal location of the discourse (e.g. the time of being a chief is remote from the utterance time). Note that this correlation between spatial and temporal deixis - which ST' exploits to express temporal relations - surfaces in English. For instance, Cooper (1976) argues that,

- 66a. ... the reportative sense of the present tense not only requires that things happening *now* but also *here*, namely at the discourse location [emphasis added].
- b. ... the reportative or "sports reporter" sense of the present tense ... might be a case where we can exploit the fact that the semantics uses *space-time* locations (as opposed to just time locations, such as points or intervals of time).

I concur with Cooper's conclusion in (66b). In order to adequately explain temporal reference in Salish, our semantics must exploit the *spatio-temporal* location of both stages of individuals and events. This issue, however, is far beyond the scope of this paper (see Demirdache in prep.).

In conclusion, I have argued that the parametric difference between ST' and languages like English is not an *inherent* difference in the semantics of noun phrases: it is not that noun phrases in English are individual-level predicates whereas noun phrases in ST' are stage-level predicates - or alternatively, ST' lacks a Noun-Verb distinction as in Kinkade (1983), Jelinek (1993, 1995), Jelinek & Demers (1994), Partee (1991) and references therein. Determiners in ST' encode spatial distinctions. Hence, when they combine with an NP, they supply the entity denoted by that NP with spatio-temporal boundaries. Consequently, the entities to which predicates apply are *spatio-temporally bounded slices of individuals*. Any predicate (including an NP) that applies to a stage of an individual is a stage level predicate.

The locus of parametric variation 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' determiners partly locate the temporal reference of a clause.

#### IX FIVE SEMANTIC PROPERTIES OF NOUN PHRASES IN ST'ÁTIMCETS

I will now provide evidence for the proposal that DPs in ST' introduce stage-denoting entities by arguing that this proposal correlates with - and, hence, should ultimately derive - the following five semantic properties of noun phrases in ST': i) the absence of presuppositional determiners; see

Matthewson (to appear a, b), Jelinek (1993a,b,c, 1995) and Jelinek & Demers (1994); ii) Matthewson's proposal that "Determiners encode an assertion of existence distinction"; iii) the absence of abstract nouns, iv) the absence of atemporal, 'unbounded' generic sentences; and v) the lack of temporally free DPs (which we have already established).

#### ix.1 The Absence of Presuppositional DPs:

##### Deixis and Anaphora are in Complementary Distribution

In section VI, we argued that DPs in ST' lack three properties of definite descriptions: 1) DPs do not trigger the presupposition that their descriptive content is part of the common ground of the discourse, as established by Matthewson; 2) DPs are not ambiguous between an ICR and a directly referential reading and, 3) DPs lack temporally independent readings (recall that for Musan (1993, 1995), it is precisely the presupposition of existence triggered by a strong determiner which licenses temporally independent readings). We concluded that ST' lacks all strong determiners including the definite determiner *the* (cf. Matthewson & Demirdache 1995, Matthewson to appear a, b). I will now argue that the absence of a presuppositional (/definite) determiner should also be derived from the deictic features of the determiner.

The informal proposal I will make is based on the following assumptions: 1) there are two uses of the definite determiner in (for instance) English: an anaphoric use and a deictic use; 2) presuppositions belong in the realm of anaphora; and 3) determiners in ST' morphologically encode deictic features; and 4) anaphora and deixis are in complementary distribution.

Informally, I propose that the difference between English and ST' resides in how NP-denotations are linked to the domain of discourse. In English, NP-denotations can be *anaphorically* linked to the domain of discourse (for instance, via the presupposition that a determiner triggers). In contrast, in ST', NP-denotations are not *anaphorically* but *deictically* linked to the domain of discourse: a determiner in ST' never anchors the referent of an NP into the domain of discourse by triggering a presupposition of existence but by locating it in space (and hence in time) relative to the speaker.

Why then does ST' lack a presuppositional determiner? Because deixis and anaphora are in complementary distribution, as the following is intended to illustrate.

67a. Either 'I know her' or 'I know HER'

b. Either 'I know that man' or 'I know THAT man'

Either a determiner *deictically* anchors the referent of an NP into the domain of discourse by locating it in space (and, hence, time) relative to the speaker, or it *anaphorically* anchors the referent of an NP into the domain of discourse, but it cannot do both at the same time. In ST', a determiner must deictically

anchor a discourse referent into the domain of discourse because it morphologically encodes deictic distinctions.<sup>10</sup>

#### ix.2 Stages and Existence

Matthewson (to appear b) divides ST' determiners into two classes. In particular, she distinguishes between discontinuous determiners with an enclitic *-a* (e.g. *ti...a*) on the one hand and the determiner *ku* on the other.

##### 68. Determiners in ST'

(from Matthewson to appear)

	PRESENT	ABSENT	REMOTE	
singular	ti....a	ni....a	ku....a	ku
plural	i....a	nelh....a	kwelh....a	
collective	ki....a			

In (69a), we see that an NP introduced by a discontinuous determiner such as *ti-a* only has a wide scope when embedded under negation as in (69a) or an opacity inducing predicate as in (69b).

69a. cw7aoz kw-s áts'xen-as [ti kel7áqsten-a]  
NEG DET-NOM see-3 ERG DET chief - DET

'She didn't see a/the chief'

--> There is a chief that she didn't see

b. cwíl'en-as [ti kel7áqsten-a]  
look for-3 ERG DET chief - DET

'She is looking for a/the chief'

--> There is a chief that she is looking for

In contrast, NPs introduced by *ku* only have narrow scope readings in these contexts, as shown in (70).

70a. cw7aoz kw-s áts'xen-as [ku kel7áqsten]  
NEG. DET-NOM see-3 ERG DET chief

'She didn't see a chief'

--> Non-referential reading only

b. cwíl'en-as [ku kel7áqsten]  
look for-3 ERG DET chief

'She is looking for a chief'

--> Non-referential reading only

Crucially, the examples in (69-70) are unambiguous: in (69), there must be a referent for the DP whereas in (70), the DP has no referent. Matthewson concludes that determiners *encode an assertion of existence* distinction: in (69), the speaker asserts the existence of a referent for the DP - this referent can be familiar or novel to the discourse. In contrast in (79), the speaker does not assert the existence of a referent for the DP. More generally, Matthewson argues that assertion of existence is the *only*

<sup>10</sup>Once again, I think that the locus of parametric variation should ultimately be 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' determiners partly locate the temporal reference of a clause



distinction that determiners in ST' encode: they do not encode definiteness vs. indefiniteness (since the familiarity/novelty condition does not hold - cf. section VI.1; nor specificity; see Matthewson (to appear) for arguments).

Matthewson's proposal correctly predicts that the ICR is only possible with a *ku*-NP.

71. \*(pápt) á7xa7 [ ku kel7áqsten-s ti United-States-a ]  
 always strong NON.REF chief-3SG.POSS DET US-DET  
 'A president of the United States is always powerful'

The adverb quantification *pápt* 'always' is obligatory in (71) because *ku*-NPs must be licensed by what Matthewson calls a non-factual operator (but see section x.2.1 below).

Now, if we examine the classification of determiners in (69), we see that the relevant difference between these two classes of determiners is whether or not they encode spatio-temporal deixis: the non-assertion of existence determiner *ku* does not encode spatio-temporal information; in contrast, *assertion of existence* determiners encode spatio-temporal distinctions. The correlation between deixis and assertion of existence then follows straightforwardly from Carlson (1977). In particular, Carlson argues that 'existence' is entailed by 'having a stage': any sentence which makes reference to a stage of an NP entails the existence of the referent of that NP. In Carlson's own words,

72. ... there is a close relationship between an entity having a stage in a world at a time, and existence. In fact, for material objects, it appears that 'having a stage' is very close to what we mean by 'existence'....

If we argue about whether or not King Arthur ever existed... If someone comes up with convincing evidence that King Arthur, at such and such a time, ran between London and Bath, we would thereby be convinced that King Arthur existed. This is because running between London and Bath is true of a stage of King Arthur, and if he has a stage in this world at a given time, he existed at that time.

In sum, determiners which assert existence are those determiners which supply entities with spatio-temporal boundaries. *ku* does not encode deixis and, as such, never supplies an entity with spatio-temporal boundaries<sup>11</sup>. A *ku*-NP is not a stage-denoting entity. Hence, a *ku*-NP cannot be used in a context that induces existential force (e.g. a simple declarative sentence). It will be restricted to contexts in which the speaker does not assert the existence of a referent for the NP.

### IX.2.1 Kind Denoting NPs

I have assumed Carlson's ontology where the domain of individuals is hierarchically organized into three types of entities, stages, objects and kinds. An *object* is what ties individual stages together as

<sup>11</sup> I henceforth assume that a *ku*-NP is a bare (determinerless) NP. Note that in certain environments *ku* is optional, see section IX.2.1.

spatio-temporal manifestations of the same unique entity. Finally, *kinds* name kinds of things -that is, classes of things (be it classes of stages or classes of objects). I have argued that determiners that make an existential claim about the referent of their argument NP introduced stage denoting entities. What about *ku*-NP? What type of entity does a *ku*-NP denote? As our example in (71) repeated below clearly illustrates, *ku*-NPs name kinds: the referent of the NP in (71) is neither an object (that is, a specific individual), nor the spatio-temporal manifestation of an object (that is, a stage). *ku-kel7áqsten-ti US-a* names the kind chief of the US.

71. \*(pápt) á7xa7 [ ku kel7áqsten-s ti United-States-a ]  
 always strong NON.REF chief-3SG.POSS DET US-DET  
 'A president of the United States is always powerful'  
 For any time t, whoever is president at t is powerful at t.

If *ku*-NPs are kind-referring terms, then they will be syntactically restricted to contexts in which no existential claim is made about the referent of their argument NP, such as those in (70-1). The problem, however, is that *ku*-NPs are not restricted to intentional contexts. Matthewson (to appear b) argues that *ku*-NPs appear in basically two types of environments. First, *ku*-NPs appear in argument positions under the scope of a non-factual operator (e.g. negation as in (70a), an intentional verb as in (70b), an adverb of quantification as in (71), as well as modality and question particles). Second, *ku*-NPs appear in secondary predication environments. The distribution of *ku* is quite puzzling and I refer the reader to Matthewson for an analysis and an extensive discussion. Although the proposal that *ku*-NPs are kind-referring entities will not derive the range of distribution of *ku*, I believe that it does to *some* extent unify the two types of environments in which *ku*-NPs are licensed, as I will illustrate with a few examples.

*Ku* introduces the object of middle verbs, yielding a generic, non-specific interpretation of the object (see Davis to appear). Middle verbs are morphologically derived intransitive verbs denoting activities. The generic reading of a middle verb is illustrated in (73), quoted from Davis & Demirdache (1995).

73. k'ác-cal- ku s-ts'wán  
 dry-INT salmon  
 'She is drying salmon, She did some salmon-drying'

The analysis of the generic reading of (73) that I will adopt is based on Porterfield & Srivastav (1988)'s analysis of bare NPs (in object position) in Hindi. The bare NP *kita:b* 'book' in (74a) can have either the existential reading illustrated in (74b) or the generic reading paraphrased as in (74c). Note that the latter reading is precisely the reading that obtains in (73): the object has a non-specific, generic interpretation. H & V derive the ambiguity of (74a) as follows. When (74a) has the existential reading in (74b), 'book' denotes an object-level entity; the VP has the logical form in (74b'), which says that John has the property of reading *x*, where *x* is the variable associated with some familiar book. In

contrast, when (74a) has the generic reading in (74c), 'book' denotes a *kind*-level entity; the VP has the logical form in (74c'), which attributes to John the property of book-reading; he may be reading one or more books.

- 74a.  $\text{John} \quad \text{book} \quad \text{is reading}$   
 b. 'John is reading a (particular) book'  
 c. 'John is book-reading'
- b'. [read (x)] (j)  
 c'. [read (B)] (j)

Clearly, the analysis of the generic reading in (74c) can be extended to middle construction in (73). This illustrates how the assumption that *ku*-NPs are kind denoting can to some extent unify the contexts to which *ku*-NPs are restricted: it derives the fact that *ku*-NPs appear under the scope of intentional operators but also yields generic-object readings with middle verbs.

Finally, *ku* (optionally) appears in environments of restrictive noun modification. In particular, *ku*-NP introduces the restricted noun in a head-final restrictive relative as in (75a)<sup>12</sup>, or a complex nominal predicate as in (75b)<sup>13</sup>, quoted from Matthewson (to appear b).

- 75a.  $\text{áts'x-} \quad \text{-en-lhkan} \quad [\text{ti} \quad \text{xzúm-a} \quad (\text{ku}) \quad \text{spzúza7}]$   
 see- -TR-1SG.SUBJ DET big-DET bird  
 'I saw the bird that is big'
- b.  $[\text{gélgél} \quad (\text{ku}) \quad \text{sqáycw}] \quad [\text{ti} \quad \text{ats'x-} \quad \text{-en-án-a}]$   
 strong man DET see- -TR-1SG.CONJ-DET  
 'The one that I saw was a strong man', 'I saw a strong man'

It is not surprising that *ku* introduces restricted nouns since restricted nouns denote classes of things. The *ku*-NPs in (75) denote the class of things that have (respectively) the property of being a bird or the property of being a man.<sup>14</sup>

<sup>12</sup>There are two types of relative clauses in ST: 1) head-final relative clauses where the restricted noun is either a bare NP or introduced by *ku*; 2) head-initial relative clauses where both the restricted noun and the relative clause are introduced by a discontinuous determiner. The latter type is illustrated below. (Note that head initial relatives do not have the semantics of appositives).

(i)  $[\text{ti} \quad \text{spzúza7-a}] \quad [\text{ti} \quad \text{xzúm-a}]$   
 DET bird-DET DET-big-DET 'the bird that is big'

<sup>13</sup>Note that in (75b), the past tense interpretation of the clause comes from the DP (*the one I saw*) since the matrix predicate is stative. Recall that stative matrix predicates have a present tense interpretation (see 3), that can get shifted in the past when the subject DP is itself evaluated in the past (see 9, 10, 12). The DP in (75b) can be evaluated in the past since it contains an eventive predicate and eventive predicates are ambiguously past or present (see 3a-b). Thus, in (75b), the DP picks out a very short past stage to which the matrix predicate is applied

<sup>14</sup>Note that Demirdache & Matthewson (1995a) analyse complex predicate nominals such as (75b) as reduced relatives: the noun *man* introduces an individual variable of which *strong* in (75b) is predicated. This explains why the head of a complex predicate must be a noun (i.e. why APs and VPs are not complex predicates, as is also the case in English).

### IX.3 The Absence of Abstract Nouns

If determiners in ST supply spatio-temporal boundaries for entities, then the entities to which predicates apply in ST will be *spatio-temporally bounded slices of individuals*. This predicts the absence of abstract nouns such as 'intelligence' - more precisely, the absence of those nouns denoting entities "for which existence is debatable, but patently have no obvious stages in the world" (Carlson 1977). This prediction is correct since abstract nouns in ST are first, altogether rare, and second, morphologically derived from a verb via nominalization. For instance, *s-ptínus-em* 'thought, mind' is a nominalization of the verb *ptínus-em* 'to think, worry, ponder, plan'. Thus, note the intransitivizer *-em* and the nominalizer *s-* in (76).

76.  $\text{áma} \quad \text{ti} \quad \text{s-} \quad \text{ptínus-em} \quad \text{-sw} \quad \text{-a}$   
 good DET NOM-think-INT-2SG.POSS-DET  
 'Your thought is good'

### IX.4 The Absence of 'Atemporal' Generic Sentences and of Generic Sentences with Non-Existentially Quantified Subjects.

In this section, I will argue that the proposal that DPs introduce stage denoting entities in ST predicts that generic sentences are never 'atemporal' and always have existentially quantified subjects. The proposals developed in this paper, however, make very specific predictions with respect to which type of generic statements are possible. The following discussion aims more than anything else at clarifying what these predictions are. Before doing so, let me comment briefly on *ku*-NPs.

#### ix.4.1. Kind-referring NPs

Since I have analysed *ku*-NPs as kind-denoting, that is, as generic terms, one might expect *ku*-NPs to license generic sentences. Recall, however, that *ku*-NPs in argument positions<sup>15</sup> must be licensed by a "non-factual operator" (in Matthewson's terms). Consequently, the following sentences will be ungrammatical, if the adverb of quantification *pápt* 'always' is omitted.

- 77a.  $\text{pápt} \quad \text{á7xa7} \quad [\text{ku} \quad \text{kel7áqsten-s} \quad \text{ti} \quad \text{United-States-a}]$   
 always strong NON.SPEC chief-3SG.POSS DET US-DET  
 'A president of the United States is always powerful'
- b<sup>16</sup>.  $\text{wa7} \quad \text{t'u7} \quad \text{zác-al'qwem} \quad \text{pápt} \quad [\text{ku} \quad \text{kúkwpí7}]$   
 PROG PART long-appearance always NON.SPEC chief  
 'The chief is always tall'
- c.  $\text{wa7} \quad \text{t'u7} \quad \text{úcwalmicw} \quad \text{pápt} \quad [\text{ku} \quad \text{kúkwpí7}]$   
 PROG PART person always NON.SPEC chief  
 'The chief will always be an Indian'

<sup>15</sup>Further, *ku*-NPs in transitive sentences cannot appear in subject position (see Matthewson to appear b)

<sup>16</sup>(77b-d) as well as (83) and (84) are taken from the data base.

- d. wa7 t'u7 emh-al'qwem' pápt [ku kúkwpi]  
 PROG PART good-appearance always NON.SPEC chief  
 'All the chiefs will always be good looking'

First, note that the sentences in (77) have neither a generic reading nor an ICR. In particular, (77a) was elicited as the translation of *any chief, at any time, (past, present and future) is powerful*. In other words, (77a) has a universal reading, as expected since it falls under the scope of adverb *pápt* which licenses the noun phrase. In contrast, both the generic reading and the ICR (according to Enç 1981) attribute a characteristic property to a kind - hence, do not require that all realizations of that kind have that property.

Second, the fact that *ku*-NPs do not license generic statements is independently due to fact that they obligatorily occur under the scope of an operator (which in turn requires an explanation, see Matthewson (to appear b)). Note that if assume that genericity is caused by an implicit generic quantifier, then why are *ku*-NPs not licensed by such an invisible operator?; that is, why is the overt operator *pápt* obligatory in (77)? Alternatively, the question to ask might be, why is there no generic (present) tense in ST? I leave these questions open here.

#### ix.4.2 Stage-referring NPs

Let's now turn to stage-denoting NPs - that is, to NPs introduced by deictic determiners. I will consider singular and plural DPs in turn. Thus, first consider (78). The singular DP in (78) cannot have a generic reading as predicted by our analysis: if the determiner picks out a spatially and temporally bounded instance of an individual, then the DP can only have an existential reading.

78. á7xa7 [ti kel7áqsten-s-a ti US-a]  
 strong DET chief-3 SG.POSS-DET DET-US-DET  
 'The (present) president of the United States is powerful'

The proposal that DPs introduce stage-level entities does not entail that we can never statements in ST where a characteristic property is attributed to a single entity. Thus, consider (79). Note first the presence of the adverb *pápt* 'always'; and second, that (79) is a generic sentence. As the gloss clearly indicates, a characteristic/generic property is predicated of the denotation of the subject.

79. pápt t'u7 wa7 mán'c - em [ti kel7áqsten-a]  
 always PART PROG smoke-INT DET chief - DET  
 'The chief smokes a lot'

(79) describes a generic habit: the chief repeatedly engages in the activity of smoking. Very informally, we can analyse generic statements such as (79) as follows. (79) involves adverbial quantification over events: there are a series of events of smoking of which the subject is the agent which take place over a bounded period of time. In particular, each event of smoking is required to takes place within the

interval of time defined by the predication time of chief - that is, within the past or present (depending on the determiner) time of being a chief (e.g. *he smoked a lot when he was a chief*).

In sum, I have argued that the assumption that DP introduces stages correctly predicts that (78) cannot have a generic reading. I have also suggested that it does not preclude a generic reading when the matrix predicate is under the scope of an adverb of quantification. A parallel example in English would be, *she used to smoke a lot when she was young*.

#### ix.4.3 Plurals

Finally, let's turn to plural which are very interesting. Thus, consider (80a-c) with plural subjects and (80c-d) with plural quantified subjects (repeated from (17)).

- 80a. á7xa7 [i kel7áqsten-a] b. á7xa7 [nelh kel7áqsten-a]  
 strong PL.DET chief-DET strong Pl. ABS.DET chief-DET  
 'The (present) chiefs are powerful' 'The (past) chiefs were powerful'
- c. á7xa7 tákem [i kel7áqsten-a] b. á7xa7 tákem [nelh kel7áqsten-a]  
 strong all PL.DET chief-DET strong all Pl. ABS.DET chief-DET  
 'All the (present) chiefs are powerful' 'All the (past) chiefs were powerful'

The plural DPs in (80) (whether they are quantified or not) do not give rise to *atemporal* generic sentences: the sentences in (80) do not (respectively) describe requirements for anyone who *might* be a chief. (80a) cannot be used to make a statement about either past or potential chiefs, but only about present chiefs. The fact that each of the individuals picked out by the plural DP is powerful could, thus, be circumstantial or accidental. Likewise, in (80b), we are making a statement about past but not present or potential chiefs. Finally, (80c) (where the subject is universally quantified) cannot be used to assert that every past, present or future chief is powerful, but only that all the present chiefs are powerful; and (80c) only asserts that all the past chiefs were powerful.

The fact that (80a-d) only have temporally restricted readings does not entail, however, that they are not generic sentences: generic NPs can (and sometimes must) be temporally bound, as illustrated in (81), quoted from Musan (1995).

81. In the forties, professors were young.

The temporal locative PP in (21) fixes the temporal reference of both the matrix predicate and the subject NP. (21) can only have the reading where all professors in the forties were young in the forties. Note that this bound reading arises because of the sentence initial position of the locative which Musan assumes to be syntactically part of the NP. In conclusion, plural DPs do not give rise to atemporal generic readings: the truth value of the sentences in (80) can only be checked with respect to a particular localized time, as is the case in (81).

The next question is whether plurals DPs in ST' can have temporally dependent *generic* interpretations? The answer, I believe is no. Note that whenever I test the temporal interpretation of a plural DP introduced by the present determiner *ti...a* (whether it is quantified or not, see (17) and (80)), I use the DP *i kel7áqstensa* 'the chiefs'. I purposely avoid the DP *i kel7áqsten-s-a ti USa* 'The chiefs of the United States' (compare (78) with (80)). The reason is simple: (82) is infelicitous because the DP must pick out a collection of individuals and the speaker knows that there can only be one present of the United States in existence at the time of utterance. In contrast, (82b) can be true even though there is only one president of the states in existence at the present time.

82a. \*á7xa7 [i kel7áqsten-s-a ti US-a]  
 strong PL.DET chief-3 SG.POSS-DET DET-US-DET  
 'The (present) presidents of the United States are powerful'

b. Presidents of the United States are powerful now/today.

However, as is well known, generic statements are possible with existentially quantified subjects. The question is whether (83) or (80) can be used to express a characteristic/generic property of existentially quantified present (/ past) chiefs?

83. mán'c - em [nelh kel7áqsten-a]  
 smoke-INT PL.DET.ABS chief - DET  
 Intended reading: The past chief smoked a lot (they used to smoke a lot when they were chief)

With a singular, the characteristic property reading is only possible under the scope of the adverb *pápt* 'always', as in (79) above. With a plural, this reading also arises under the scope of *pápt*, as illustrated in (84): the DP picks out a particular group of women to which a characteristic property is attributed. The interesting question is whether plurals can give rise to this reading without *pápt*.

84. pápt wa7 álkst [i smúlhats-a]  
 always PROG work PL.DET chief - DET  
 'The women always work'

I will not answer this question here since I have not tested whether existential generics are possible.

Note finally that we might expect plural DPs to behave differently from singulars if the entity represented by a plural DP is a *kind* - that is, a class of stages that belong to different individuals. Thus, the plural DP *the chiefs* would name a particular entity all of whose stages are stages of someone being chief (see Carlson 1977, Musan 1995).

To conclude, the proposal that DPs introduce stage-level entities predicts that generic sentences must be temporally bound and must have existentially quantified subjects. Further research is required to determine whether plural DPs can introduce kinds of stages.

## ix.5 DPs are Temporally Bound

Finally, the proposal that DPs introduce stage denoting entities explains why DPs are not temporally free, and more importantly why a determiner can fix the temporal reference of a whole sentence, as was established in sections I-VIII.

## X CONCLUSION

To conclude, I discuss the implications of the proposals made in this paper for *The Pronominal Argument Hypothesis* and for the debate on the existence of a noun-verb distinction in Salish (see references cited in footnote 1).

## X.1 Implications for The Pronominal Argument Hypothesis

Under the PAH (Jelinek (1984), (1993a, b, c), (1995), Baker (1991), 1993)), lexical DPs are base-generated in adjunct positions and bind (respectively) a pronominal in an argument position. I set aside the question of whether the PAH is the correct analysis for lexical arguments in ST' - that is, whether ST' has all the diagnostics of a pronominal argument language; see Davis (1993, 1994) for an extensive discussion of this issue. There are two possible interpretations of the PAH (as far as I can see).

Under one interpretation, DPs in a PA language are analysed as left-dislocated NPs. Indeed, Baker makes an explicit parallel between overt arguments in a PA language and clitic-left dislocation. The left-dislocation/topicalisation interpretation of the PAH is not compatible with the proposals made in this paper or in Matthewson (to appear) since syntactic topics have been argued to be strong (quantified) (cf. Milsark 1977) and to carry existential presuppositions (cf. Reinhart (1982) or Valdúvi (1990)).<sup>17</sup>

Under Jelinek's version of the PAH, DPs in Salish are clausal adjuncts. For instance, the DP *the chief* in (51) below has the structure [Det [IP pro is chief]].<sup>18</sup> The proposal that DPs introduce stage-denoting entities provides conceptual support for this interpretation of the PAH *in so far as* DPs are analyzed as *temporal* clausal adjuncts. In particular, recall that NPs in ST' can be literally translated as temporal adjuncts, as was illustrated in (51), repeated below.

<sup>17</sup>cf. Demirdache & Matthewson (1995b), Demirdache (to appear) and Matthewson (to appear b).

<sup>18</sup>Note that there is no way of telling whether the DP in (85) contains a *bare* uninflected predicate of the category NP (i.e. [DET [NP chief]]), or contains a clause: [DET [IP pro is chief]] since there is no copula and 3rd absolutive is null. A clausal structure containing an intransitive predicate is thus phonologically identical to a bare predicate NP. Note also that Jelinek derives the PAH from the proposal that DPs are covert clauses saturated by a determiner.

- 85a. túpunas ti/ni (wa7) kel7áqsten-s-a ti US-a  
 hit-3ERG. DET PROG chief-3SG.POSS-DET DET US-DET  
 b. 'He hit the (one who was) president' 'He hit him *when he was president*'

In (85), the DP introduces a stage *x* of an individual. The maximal temporal length of this stage is the time when *x* was a president. The PAH could elegantly capture the idea that DPs in ST' are stage denoting entities. Note, on the other hand, that *ku*-NPs are clearly not analyzable as temporal adjuncts since they never denote stages.<sup>19</sup>

## X.2 Implications for the "Are there Nouns and Verbs?" Question

This paper is intended as a contribution to the debate on the existence of categorial distinctions in Salish. Following Davis & Matthewson (1995) and Demirdache & Matthewson (1995b), I assume that there is evidence for a three-way distinction in the syntax between NP, AP and VP. The issue, thus, is not whether the syntactic projection NP exists but what are the type of entities that noun phrases denote. Assuming Carlson's ontology where the domain of entities is hierarchically organized into three types of individuals, stages, objects and kinds, I conclude that ST' lacks the most familiar type of entity, *objects* - that is, what we prototypically think of as a noun.

Whether there are categorial distinctions is a separate question since stages, objects and kinds can all be syntactically realized as NPs. In my view, the more interesting question is whether there is a correlation between syntactic types and types of individuals in ST'. I think that there is evidence for such a correlation. In particular, all the evidence presented in Demirdache & Matthewson (1995) for the existence of the syntactic category NP concerns exclusively *ku*-NPs, which as I have claimed name kinds of things.<sup>20</sup>

Finally, I have argued that the parametric difference between ST' and languages like English is not an *inherent* difference in the semantics of noun phrases: it is not that nouns in English can denote permanent (individual-level) properties whereas noun in ST' only denote temporary (stage-level) properties. This is not the case for two reasons. First, because of the existence of (bare) NPs in ST' that name kinds, that is classes of (whole) individuals. Second, because the locus of parametric variation 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' determiners partly locate the temporal reference of a clause.

<sup>19</sup>This, however, is not an issue for Jelinek since Straits lacks the equivalent of *ku*.

<sup>20</sup>See also Matthewson & Demirdache (1995b). Note that this is not the position taken by Davis & Matthewson (1995): they argue that both *ku*-NPs and those DPs which I have analysed here as introducing stage denoting entities - provide evidence for the category NP.

## Appendix

### Key to St'át'imcets (van Eijk) orthography

orthography	phonemic script	orthography	phonemic script
P	p	q'w	q' <sup>w</sup>
p'	p̥	x	x
m	m	xw	x' <sup>w</sup>
m'	m̥	r	g
t	t	r'	g'
ts	c	g	ʃ
ts'	c̥	g'	ʃ'
s	s	gw	ʃ' <sup>w</sup>
n	n	g'w	ʃ' <sup>w</sup>
n'	n̥	h	h
t'	t̥	w	w
lh	l̥h	w'	w̥
l	l	y	y
l'	l̥	y'	y̥
k	k	z	z
k'	k̥	z'	z'
kw	k' <sup>w</sup>	ʔ	ʔ
k'w	k̥' <sup>w</sup>	a	a
c	x	e	ə
cw	x' <sup>w</sup>	i	i
q	q	u	u
q'	q̥	v	ʌ
qw	q' <sup>w</sup>		

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