

Lexical Categories in the Salish and Wakashan Languages

1. Background: What is a ‘Lexical Category’?

Crucial Question 1:

What does it really mean to say that a language does/doesn’t make a distinction between ‘nouns’, ‘verbs’ and ‘adjectives’?

(1) Lexical Category

A *lexical category* is a set of lexical items which

- (i) have a common syntactic distribution, and
- (ii) cannot be characterized by any independent semantic, phonological or morphological properties.

(2) Some Evidence for Lexical Categories in English

(a) Verbs

Only Vs can be the main (tensed) predicate of a clause.

Dave knows. * Dave mans. * Dave intelligents.

(b) Nouns

Only Ns must/can be complement to D when functioning as a predicate.

Dave is a man. * Dave is an intelligent. * Dave is a know.

(c) Adjectives

Only As must appear (i) with a copula, but (ii) without a D, when functioning as a predicate.

Dave is smart. * Dave is man. * Dave is know.

IMPORTANT POINT:

There are no semantic / phonological / morphological properties that distinguish the English word-classes in (2).

You *have* to appeal to a purely syntactic property (N-hood, V-hood, A-hood) to make generalizations about them.

Crucial Question 2:

So, how do we know/show that a ‘syntactic category’ exists in a language?

Well, you need to show that

- (i) some ‘rule’ of the language appears to distinguish a class of lexical items
- (ii) that class of lexical items cannot be characterized in any semantic, phonological, morphological terms.

That is, you need to show that the ‘rule’ really *is* sensitive to N/V/A-hood, and not (say)

- some semantic property (e.g. whether the word is a *stative* predicate)
- some morphological property (e.g. whether the word appears with tense morphology)

2. The Case for the Absence of Lexical Categories in Salish (Jelinek & Demers 1994)

Background:

The notion that there are no lexical category distinctions in the Salishan, Wakashan and Chimakuan languages goes back at least to Boas’s work on Kwawkwaka and Sapir’s work on Nuu-chah-nulth (both in 1911).

The issue, however, was most precisely formulated by Jelinek & Demers (1994), who proposed a formal model of the grammar of Straits Salish *that made no appeal to lexical category distinctions whatsoever*.

2.1 The Model

2.1.1 The Lexicon

Contains two kinds of elements:

PREDICATES (no N/V/A sub-types) *(cf. Predicates in FOL)*

PARTICLES/CLITICS

Tense, modals (and other stuff we can ignore)

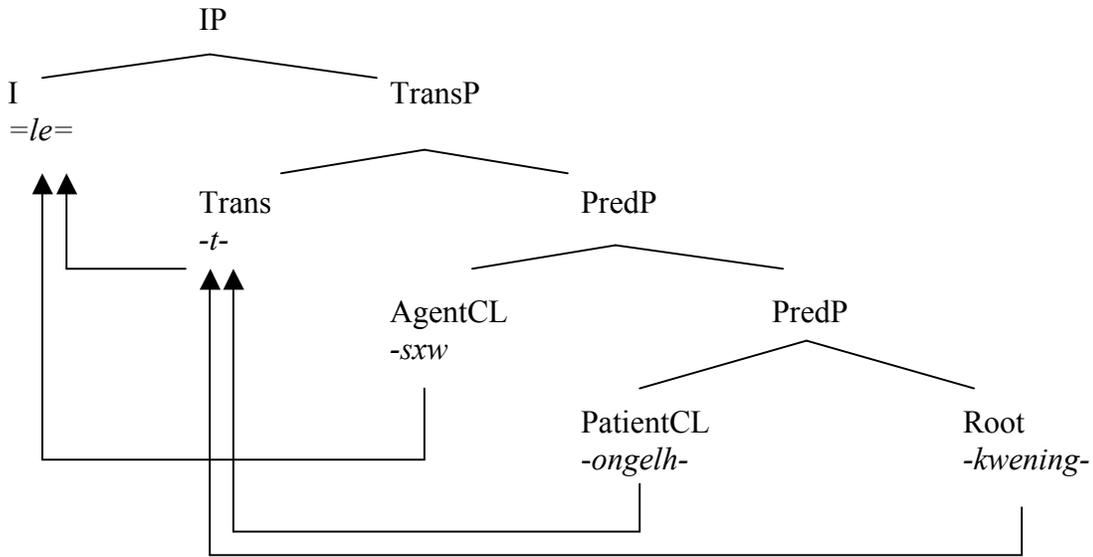
ARGUMENT CLITICS *(cf. variables in FOL)*

2.1.2 The Structures Projected by Lexical Items

PARTICLES: *none*

PREDICATES: *all predicates (regardless of whether they are ‘verb-y’ or ‘noun-y’) project a clausal IP structure as below*

(3) Structure Projected by a Predicate in Straits Salish



kwening-t-ongelh=le-sxw
 help-TRANS-1pACC-PAST-2sNOM
 You helped us.

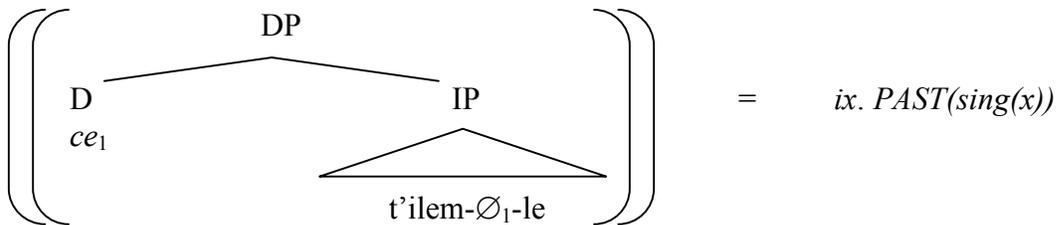
(Jelinek & Demers 1994; p. 707)

2.1.3 The Syntactic Environments of Clauses

What can then ‘happen’ to the IP structure projected by a predicate?

- (i) *It can function as an independent, main clause (cf. (1))*
- (ii) *It can function as a subordinate, propositional argument*
- (ii) *It can be complement to a DET, and function as a free relative*

(4) Free Relative in Straits Salish



2.2 Arguments for the ‘Category Neutrality’ of Predicates in Straits Salish

The Central Question for Today:

Why do J&D propose an undifferentiated class of ‘PREDICATES’?

*Why **not** group the predicates of Straits Salish into different syntactic classes (N, V, A)?*

2.2.1 Predicate / Argument Flexibility

As we saw under (2), one of the core diagnostics for distinguishing Ns, Vs and As in Indo-European languages is their ability to function either as ‘main predicates’ or as ‘arguments’.

In all Salish, Wakashan (and Chimakuan) languages, however, any predicate can equally well serve as either the main predicate of the clause or as an argument (complement of D).

(5) Predicate / Argument Flexibility in St’át’imcets (Same Facts in Straits)

a. Noun-Like Roots

(i) t’ak [ti=**nk’yáp**=a]
go.along DET=**coyote**=DET
The/a coyote goes along.

(i) **nk’yap** [ti=t’ák=a]
coyote DET=go.along=a
The one going along is a coyote.

b. Adjective-Like Roots

(i) **emh-ál’qwem’** [ti=pelalhtsítcw=a]
good.looking DET=stranger=a
The stranger is good looking.

(ii) pelalhtsítcw [ti=**emh-ál’qwem’**=a]
stranger DET=**good.looking**=a
The good looking one is a stranger.

c. Verb-Like Roots

(i) **núk’w7antsas** [ti=kúkwpí7=a]
helped.me DET=chief=DET
The/a chief helped me.

(ii) kúkwpí7 [ti=**núk’w7antsas**=a]
chief DET=helped.me=DET
The one that helped me is a chief.

(Davis & Matthewson 1999; p. 38-39)

2.2.1.1 Challenge to Predicate / Argument Flexibility, Part 1: A Null Copula?

Potential Rebuttal to the Argument from Pred/Arg Flexibility:

How do we know that the Adjective-Like and Noun-Like roots really are ‘acting alone’ as predicates in (5b) and (5c)?

How do we know that there isn’t a phonologically null copula in these sentences, as in their English correlates in (2b) and (2c)?

(6) Null Copula Analysis of (5ai)

[IP [VP [NP nk’yap] Ø] [ti=t’ák=a]
 coyote COP DET=go.along=a

The one going along is a coyote.

Possible (Weak) Answer 1:

There isn’t any independent evidence **for** such a copula.

Possible (Strong) Answer 2: (Jelinek & Demers 1994)

There is evidence against the existence of such a copula.

(7) Common, Cross-Linguistically Robust Environments for Copulas

a. In ‘Equational’ Sentences (‘DP is DP’)

- (i) Dave **is** Superman
- (ii) The doctor **is** your lawyer.

b. In ‘Locative’ Predications (‘DP is PP’)

- (i) Dave **is** in the house.
- (ii) Dave **is** on a plane.

(8) Prediction of a Null Copula Analysis of (5b,c)

If the structure of (5ai) is really like (6), with a null ‘is’, then we would predict that Straits Salish would also allow structures like the following:

(a) [IP [VP DP Ø] DP] (cf. (7a))

(b) [IP [VP PP Ø] DP] (cf. (7b))

That is, Straits Salish should also appear to allow DPs and PPs as main predicates.

(9) **The Truth: Straits Salish Does Not Allow DPs and PPs as Main Predicates**

a. No 'Equational' Sentences (with DPs) in Straits Salish

* [DP ce si'em] [ce swey'qe']
DET chief DET man

The man is the chief.

b. No 'Locative' Predication (with PPs) in Straits Salish

* [PP 'e ce 'elang]=sen.
P DET house

I am in the house.

(Jelinek & Demers 1994; p. 712)

General Observation:

A 'null copula' analysis as in (6) is too strong: it's not the case that *everything* can function as a main predicate in Straits Salish.

Rather, only *bare, open-class lexical items* can function as main predicates.

And so, the best way to capture this is to simply allow any open-class item to function (alone) as a main predicate.

2.2.1.2 Challenge to Predicate / Argument Flexibility, Part 2: *Every* Open-Class Item?

Potential Skeptical Response to the Data in (5):

How deep does the pattern in (5) really extend?

Is it really the case that any open class item can function as a predicate?

The Answer:

Yes!... Good God Almighty, YES!!!

(10) **Some Other Things that Regularly Function as Predicates in Salish Languages**

a. Numerals

cese=se=lh

two=FUT=1pNOM

We'll be two (in number).

(Jelinek & Demers 1994; p. 699)

b. Wh-Words

wet=le=∅?

who=PAST=3ABS

Who was it?

(Jelinek & Demers 1994; p. 729)

c. Quantifiers

mekw'-t-∅-le-sen

all-TRANS-3ABS-PAST-1sNOM

I took all of them/it.

(I 'alleged'/'totalled' them.)

(Jelinek & Demers 1994; p. 711)

d. Pronouns

nekw-tsw-∅

2sg-TRANS-3ABS

Let it be you. ('YOU do it.')

(Jelinek & Demers 1994; 715)

e. Proper Names (St'át'imcets)

Lisa-∅

ti=ats'cenan=a

Lisa-3ABS

DET=I.saw.her=DET

The one I saw is Lisa.

(Davis & Matthewson 1999; p. 39)

2.2.1.2 Challenge to Predicate / Argument Flexibility, Part 3: Zero-Derivation?

Potential Skeptical Response to the Data in (5):

*OK, we accept that every **root** can function equally as a main predicate or a complement to D.*

But, maybe this just represents highly productive zero-derivation in the language?

That is, maybe the right analysis of sentences (5ai) is something like the following:

(11) **Zero-Derivation Analysis of the DP in (5ai)**

[_{IP} [_{VP} nk'yap] [_{DP} ti [_{NP} t'ák] a]]
coyote DET go.along

The one going along is a coyote.

Possible (Weak) Answer 1:

There isn't any independent evidence **for** such a zero-derivation. (And, how exactly is that different from saying that there aren't any lexical categories?)

Possible (Strong) Answer 2: (Jelinek & Demers 1994)

There is evidence against there being such zero-derivation to N in the DP.

(12) **Evidence for IP-Structure Even in 'Noun-y' DPs**

a. Tense can modify the predicate of even 'noun-y' DPs

ce *swey'qe'-∅-le*
DET man-3ABS-PAST
The late (deceased) man. (Jelinek & Demers 1994; p. 719)

b. Plurality in DP and in the clause are marked identically

(i) *slhen-slheniy-∅* (ii) *ce slhen-slheniy*
RED-woman-3ABS DET RED-woman
They are women. *The women.*

(13) **Some Further Indication that all DPs are Free Relatives (Have IP Structure)**

a. The Closest Thing to Free-Standing Pronouns

xen-ng *ce* *Bill* [*kwe 'es-es*]
act-MID DET Bill DET 1sg-3ABS
Bill acted for me. (Jelinek & Demers 1994; p. 714)

b. The Closest Thing to Free-Standing Names

nilh-∅ *nesne* [*kwe sDick-s*]
3-3ABS my.name DET Dick-3ABS
My name is Dick. (Jelinek & Demers 1994; p. 719)

c. Translation by Speakers

Kinkade (1983) reports that Lawrence Nicodemus, a fluent, native speaker of Coeur D'Alene, would systematically translate DPs in the language into English as clausal Free Relatives.

Interim / Something to Think About:

So far, we've found that – wherever we look – Straits Salish seems not to distinguish Ns/Vs/As, even in structural environments where these classes tend to be distinguished in other languages.

BUT:

*Suppose, as a thought-experiment, that we were eventually to find some evidence that Straits Salish does distinguish these syntactic classes. **How could we understand the facts above? That is, is there any way at all that we could make the facts observed above consistent with the assumption that Straits Salish does (after all) have lexical categories?***

2.2.2 Lack of D-Quantification

Another argument against the existence of lexical categories in Straits Salish that Jelinek and Demers (1994) put forward concerns the lack of D-quantification (adnominal quantifiers) in the language.

“D-quantification is obviously associated with NPs and A-quantification with VPs. If Straits Salish lacks lexical nouns, then we must predict the absence of determiner quantification; and this is exactly what we find.”
(Jelinek & Demers 1994; p. 725)

The Argument:

- P1) If there were no NPs, then you'd find no D-quantifiers (which must take NP arguments)
- P2) Straits Salish lacks adnominal quantifiers.

Hence, lacking NPs would provide an account of this fact!

Rebuttal:

It's not obvious that (P1) is true.

After all, in their own system, Ds take IPs as arguments, binding variables inside the IP (*cf.* (4))

There's no reason (outside of the PA-status of the language) to suppose that the language couldn't have D's with the meaning of *every*, *no*, *most*, but which take IP arguments...

(14) **Imaginable D-Quantifiers in (a Non-PA) Straits Salish**

[_{DP} EVERY₁ [_{IP} BOY-Ø₁]]

2.3 A Theory of the ‘Category Neutrality’ of Predicates in Straits Salish

Beyond simply arguing *for* the lack of lexical category distinctions in Straits Salish, Jelinek & Demers (1994) also put forth a theory of *why* the language might have this property.

Background:

(15) The GB Theory of the Nature of Lexical Categories (Stowell 1981)

Verb-hood: ‘Verbs **can** assign Case’ [I [see **him**]]

Noun-hood: ‘Nouns **cannot** assign Case’ * [a [picture **him**]]

(16) Case and Transitivity in Salish (Jelinek & Demers 1994)

Transitive-Preds **can** assign Case

Intransitive-Preds **cannot** assign Case

(17) Core Fact about Transitivity in Salish Languages (Jelinek & Demers 1994)

(For the most part) *No* root is inherently specified for transitivity.

All roots are basically intransitive / unaccusative.

All roots can be productively transitivized.

Transitive / Intransitive Alternation in St’át’imcets (Davis 2005)

- | | | | | | |
|----|--------|----------------|----|---------|-------------------------------------|
| a. | zuqw | <i>to die</i> | c. | qam’t | <i>to get hit (by throwing)</i> |
| b. | zuqw-s | <i>to kill</i> | d. | qam’t-s | <i>to hit s.o/s.t (by throwing)</i> |

(18) The Theory of Category Neutrality in Salish

- Having a N/V contrast *simply is* for a language to specify its roots as being inherently TRANSITIVE (Case-assigning) or INTRANSITIVE (Non-Case-assigning).
- English has a N/V contrast because its roots are specified in this way.
- Straits Salish *lacks* a N/V contrast precisely because its roots are not specified for transitivity (e.g. (17))

Criticism / Question:

Doesn’t this view hold that *intransitive* roots (in virtue of being intransitive) project a nominal structure, even in Straits Salish?

2.4 Evidence that Straits Salish *Does/Did* Have Lexical Category Distinction?

In his grammar of the Klallam dialect of Straits Salish, Timothy Montler (2001) provides the following diagnostic for V-hood.

(19) Evidence for the Category ‘Verb’ in Klallam Straits Salish

Only Vs in Klallam can be preceded by ‘auxiliaries’. If an As is to be preceded by an auxiliary, it must be prefixed with the ‘mutative’ prefix ‘txwa7-’.

- a. tl’ay=cn 7ilhn
 again=1sS eat
 I ate again.
- b. * tl’ay=cn sa7su7lh
 again=1sS happy
 I am happy again.
- c. txwa7-tl’ay=cn sa7su7lh
 MUT-again=1sS happy
 I am happy again.

(Davis 2005 (Handout); p. 8 – 9)

IMPORTANT QUESTION HERE:

Is there absolutely no way of *semantically* categorizing the relevant classes in Klallam?

3. The Case for the Presence of Lexical Categories in (Some) Salish Languages

3.1 An Early Argument (van Eijk & Hess 1986)

Step 1:

There exists in St’át’imcets and Lushootseed a distinction between (let’s call them) TYPE 1 and TYPE 2 predicates (so as not prejudice anything).

TYPE 1: Can take possessive affixes directly

Examples: land, father, house (only ones mentioned)

TYPE 2: Cannot take possessive affixes directly
 can only take possessive affixes if prefixed with *s-* (‘stative’ / ‘nominalizer’)

Examples: sing, bring, eat, inform, help (only ones mentioned)

Step 2:

This distinction between TYPE 1 and TYPE 2 predicates is relevant to other aspects of the grammar as well.

TYPE 2: Some can undergo ‘final reduplication’ (denotes ‘on-going’ process)
Examples: boil, one (only ones mentioned)

 Some can undergo ‘s-prefixation’ (denotes a ‘state’)
Examples: boil (only ones mentioned)

 Some can undergo ‘glottal-stop-insertion’ (denotes ‘inchoative’)
Examples: melt, loose (only ones mentioned)

TYPE 1: NONE can undergo any of these operations

Conclusion:

We want to appeal to the classes dubbed ‘TYPE 1’ and ‘TYPE 2’ above in our grammar for these languages....

...they (almost) perfectly coincide with English ‘Verbs’ and ‘Nouns’...

... why *not* just call them verbs and nouns?

Rebuttal / Question:

Have van Eijk & Hess truly shown that the grammatical distinctions in question are *not* tied to some semantic property? The ‘TYPE 2’ predicates do seem to generally be eventive...

3.2 The Case for Lexical Categories in St’át’imcets (Demirdache & Matthewson 1995, Davis & Matthewson 1999)

Overarching Claim of Both Papers:

- (i) Based upon their syntactic properties, roots in St’át’imcets can be grouped into three separate categories.
- (ii) **There is no obvious semantic generalization that will capture which root falls into which class (thus, these are purely *syntactic* classes).**
- (iii) **Given antecedent theories of the nature of ‘nouns’, ‘verbs’ and ‘adjectives’ (in languages like English), some of the syntactic characteristics of these classes might be explained if we assume that they are, in fact, N V and A.**

3.2.1 An Important Preliminary: Not All DPs in ST' are Free Relatives

Before they present their argument for the existence of lexical categories in ST', Demirdache & Matthewson (1995) first attempt to establish the following.

Important Preliminary Argument

Unlike what Jelink & Demers (1994) claim for Straits Salish, *not all DPs in ST' are free relatives.*

Question: Why is this important?

Answer: D&M's arguments that ST' has NPs will often be based upon properties of the *internal* syntax of DPs.

That is, they argue that in (some) structures of the form [D ... X ...], X is an N.

Thus, their evidence for NPs in the language would *also* be evidence against a J&D94 'free-relative'-style theory of ST' DPs.

Thus, *it would be comforting to know that there are independent arguments against such a 'free relative' analysis of (all) ST' DPs.*

The Argument that Some Complements to D in ST' are NOT IPs

Point 1: ST' has structures that look *prima facie* to be head-final relative clauses (20).

(20) **Head-Final Relative Clauses in ST'**

a. ast'xen-lhkan [ti wa7 alkst-Ø-a sk'úk'wmi7t]
see-1sNOM DET PROG work-3ABS-DET child
I saw the child who was working.

b. ast'xen-lhkan [ti tupun-Ø-táli-ha sqaycw]
see-1sNOM DET hit-3ABS-ERG.EX-DET man
I saw the man who hit him. (Demirdache & Matthewson 1995; p. 7)

Point 2: The ‘initial (non-final) material’ in these constructions has real markers of clausality:

- (i) pre-verbal ‘functional’ heads like *wa7* ‘PROG’ (21a)
- (ii) extraction marker *táli* (21b), which otherwise only appears in extraction constructions (relative clauses, wh-questions, topicalizations, *etc.*)

(21) **Head-Final Relative Clauses in ST’**

- a. ast’xen-lhkan [ti **wa7** alkst-Ø-a sk’úk’wmi7t]
 see-1sNOM DET PROG work-3ABS-DET child
I saw the child who was working.
- b. ast’xen-lhkan [ti tupun-Ø-**táli**-ha sqaycw]
 see-1sNOM DET hit-3ABS-ERG.EX-DET man
I saw the man who hit him. (Demirdache & Matthewson 1995; p. 7)

Point 3: The final lexical head in these constructions *cannot* be a relative clause (i.e., cannot display the clausal structure that the ‘initial’ material displays in (21).

(22) **Head-Final Relative Clauses in ST’**

- * ast’xen-lhkan [ti sqaycw-Ø-a tupun-Ø-**as**]
 see-1sNOM DET man-3ABS-DET hit-3ABS-3ERG
I saw the hitting one who is a man. (Demirdache & Matthewson 1995; p. 8)

Point 4: In sentences like (21b), the final lexical head *cannot* be interpreted as the absolutive argument of the ‘initial clause’.

(23) **Head-Final Relative Clauses in ST’**

- * ast’xen-lhkan [ti [_{IP} tupun-Ø-**táli**-ha sqaycw]]
 see-1sNOM DET hit-3ABS-ERG.EX-DET man
 * *I saw the one who hit a/the man.* (Demirdache & Matthewson 1995; p. 7)

Point 5: In sentences like (21b), if you add the DET *ti...a* to the final lexical head, it *must* be interpreted as an argument of the ‘initial clause’.

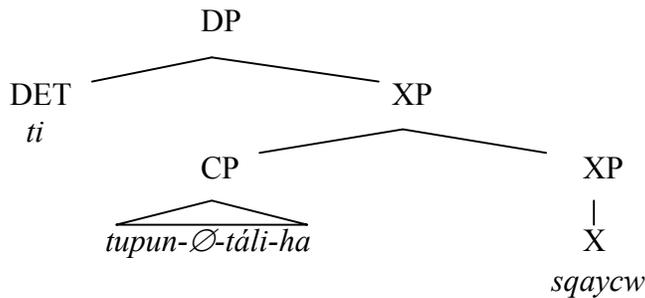
(24) **Head-Final Relative Clauses in ST’**

- ast’xen-lhkan [ti tupun-Ø-táli-ha ti sqáycw-a]
 see-1sNOM DET hit-3ABS-ERG.EX-DET DET man-DET
I saw the one who hit a/the man.
 * *I saw the man who hit him.* (Demirdache & Matthewson 1995; p. 7)

SO WHAT?

Well, all of these facts make sense if the proper analysis the structures in (20) is as below, where only the ‘initial material’ of the DP is clausal, and the ‘final head’ is simply a root.

(25) **Modification Analysis of the ST’ ‘Head-Final Relative Clauses’**



Under the Analysis in (25):

- The ‘initial material’ is truly clausal (cf ‘Point 2’)
- The ‘final head’ is *not* clausal (cf ‘Point 3’)
- The ‘final head’ is *modified* by the relative clause.
 Thus, it can’t be interpreted as the absolutive argument of the relative clause
 Thus, it cannot appear with a D (for semantic reasons?) [but...(26)...]

*In addition, it would seem difficult to understand the facts in (21) – (24) if these structures were simply ones where you have two IPs underneath a single D.
 (particularly the facts under ‘Point 3’)*

CONCLUSION:

Determiners in ST’ *can* take bare roots as arguments. The complement of a DET needn’t project an IP structure.

3.2.2 Evidence for the Category ‘Noun’ in St’át’imcets

Altogether, Demirdache & Matthewson (1995) and Davis & Matthewson (1999) put forth *five* (morpho-)syntactic environments that appear to distinguish a particular class of lexical items in St’át’imcets.

So as not to prejudge anything, let us call this class of lexical items ‘NOUNS?’

3.2.2.1 Headed Relative Clauses

ST’ appears to have both head-final and head-initial relative clauses.

(26) Head Final Relative Clauses in ST’

wa7 láti [ti ats’xenán=a (ku=)smúlhats]
 PROG DEIC DET I.saw=DET DET=**woman**
*There’s the **woman** that I saw.* (Davis & Matthewson 1999; p. 44)

(27) Head Initial Relative Clauses in ST’

wa7 láti [ti smúlhats=a [ti ats’xenán=a]]
 PROG DEIC DET **woman**=DET DET I.saw=DET
*There’s the **woman** that I saw.* (Davis & Matthewson 1999; p. 44)

Argument for Syntactic Categories:

In both these constructions, only a NOUN? can function as the modified head.

(28) Only NOUN?s May be the Modified Head of a Head-Initial Relative Clause

* wa7 láti [ti ats’xenán=a [ti sqáycw=a]]
 PROD DEIC DET I.saw=DET DET man=DET
*There’s the **one** I saw who is a man.* (Davis & Matthewson 1999; p. 45)

(29) Only NOUN?s May be the Modified Head of a Head-Final Relative Clause

* wa7 láti [ti sqáycw=a (ku=)áts’xenan]
 PROG DEIC DET man=DET DET=I.saw
*There’s the **one** I saw who is a man.* (Davis & Matthewson 1999; p. 44)

(30) Only NOUN?s May be the Modified Head of a Head-Final Relative Clause

* wa7 láti [ti smúlhats=a (ku=)lélex]
 PROG DEIC DET woman-DET DET=**intelligent**
*I saw the **intelligent one** who is a woman.* (Davis & Matthewson 1999; p. 44)

Note: No obvious semantic generalization (both ‘woman’ and ‘intelligent’ are stative/I-level)

3.2.2.2 Complex Predicates

In ST', it is possible for the main predicate of a clause to be a *string* of simple, bare roots.

(31) Complex Predicates in ST'

- a. [áma léxlex smúlhats]=∅ kw=sMaggie.
good intelligent woman=3ABS DET=Maggie
Maggie is a good, intelligent woman.
- b. [smúlhats kúkwi7]=∅ kw=sRuby.
woman chief=3ABS DET=Ruby
Ruby is a female chief. (Davis & Matthewson 1999; p. 41 – 42)

Argument for Syntactic Categories

In such 'complex predicates', the final member of the string of predicates must be a NOUN?.

(32) Only NOUN?s May be the Final Head in a Complex Predicate

- a. * [smúlhats áma léxlex]=∅ kw=sMaggie.
woman good intelligent
- b. * [áma smúlhats léxlex]=∅ kw=sMaggie.
good woman intelligent
- c. * [smúlhats léxlex áma]=∅ kw=sMaggie.
woman intelligent good
- d. * [léxlex smúlhats áma]=∅ kw=sMaggie.
intelligent woman good
- (Davis & Matthewson 1999; p. 41 – 42)

Note 1:

Sentences like (31b) show that it is in principle possible for a NOUN? like *smúlhats* to be non-final in a complex predicate, *just so long as the final member of that predicate is a NOUN?*

Note 2:

It's very difficult to see a semantic generalization that would cover the data in (31) and (32).

3.2.2.3 Demonstrative Attributives

In ST', deictic demonstratives take DPs as arguments.

(33) Deictic Demonstratives in ST'

átsxen=lkan [ti7 [ku=sqaycw]]
see=1sNOM DEM DET=man
I saw that man.

(Davis & Matthewson 1999; p. 43)

Argument for Syntactic Categories

In such 'demonstrative attributives', the DP complement of the DEM must contain a NOUN?

(34) Deictic Demonstratives can only Take DPs Headed by NOUN?s

* átsxen=lkan [ti7 [ku= qwatsáts / tayt / emhál'qwem']]
see-1sNOM DEM DET= leave hungry handsome

(Davis & Matthewson 1999; p. 43)

Note:

Again, given the presence of 'handsome', it's difficult to imagine a semantic generalization that would capture these facts.

3.2.2.4 Possessive Arguments

In ST', it is possible for the main predicate of a clause to be marked by possessive morphology.

(35) Possessive Predicate as Main Predicate in ST'

a. máw-su=∅ [ti=ámh=a]
cat-2sPOSS=3ABS DET=good=DET
*The good one is **your** cat.*

(Davis & Matthewson 1999; p. 46)

b. s-kúza-su=∅ [ti=ámh=a]
NOM-child-2sPOSS=3ABS DET=good=DET
*The good one is **your** child.*

(Davis & Matthewson 1999; p. 46)

Argument for Syntactic Categories

Such 'possessive predicates' can only be NOUN?s.

(36) **Main Predicate Possessives Must be NOUN?s**

* s=t'iq-su=∅	[ti=ámh=a]
NOM=arrive-2sPOSS=3ABS	DET=good=DET
<i>The good one is your arrival.</i>	(Davis & Matthewson 1999; p. 46)

Note:

Difficult to make a morphological generalization here. Although the bad examples contain the 'nominalizer' *s-*, so do some of the good examples (35b) (where, admittedly, it's been lexicalized).

Note:

Is it obvious that no semantic generalization is possible here?...

3.2.2.5 Inchoative and Developmental Affixes

ST' possessive two affixes, one called an 'inchoative' (*-p / -7-*) and one called a 'developmental' (*wil'c*).

The two affixes are essentially synonymous, and both are translatable as 'become'.

(37) **Inchoative and Developmental Morphology in ST'**

a. t'egw- p hard- INC <i>become hard</i>	b. q'ix- wil'c hard- DEV <i>become hard</i>
c. q'u- 7-ts fat- INC <i>become fat</i>	d. q'u- wil'c fat- DEV <i>become fat</i>

(Davis & Matthewson 1999; p. 47)

Argument for Syntactic Categories:

The inchoative affix cannot appear on NOUN?s, though the developmental affix can.

(38) **Developmental, but not Inchoative Affix can Appear on NOUN?s**

- | | | | |
|----|--------------------------------|----|---|
| a. | * sá-7-ma7
white.person-INC | b. | sáma7-wíl'c
white.person-DEV
<i>become a white person</i> |
|----|--------------------------------|----|---|

(Davis & Matthewson 1999; p. 47)

Note:

Given that both the affixes are semantically identical, and that all the predicates appear to be stative, it's hard to think of a semantic generalization that can capture these facts.

3.2.2.6 The Overall Argument

The syntactic environments described in Sections 3.2.2.1 – 3.2.2.5 pick out a uniform class of lexical items, which we are temporarily dubbing NOUN?s.

This class of items does not seem to be definable semantically (or morphologically, or phonologically). But, *the grammar of ST' is clearly sensitive to this category.*

CONCLUSION:

There is at least *one* syntactic category in ST', the NOUN?s.

3.2.2.7 'NOUN?' or Noun?

Question:

Must we necessarily conclude that the syntactic category NOUN? in ST' just *is* the syntactic category 'noun' familiar from languages like English?

Weak Answer:

Sure! I mean, we know that (i) NOUN? is a syntactic category and (ii) it seems to correspond pretty well with the category 'noun' in English... *why wouldn't we say that they are nouns?*

Stronger Answer (Demirdache & Matthewson's answer):

YES!

Given certain independent theories of "what it means to be a 'noun'", we might be able to account for certain features of the class NOUN? by assuming that they are nouns.

Demirdache & Matthewson's (1995) Account of the Properties of Nouns in ST'

Background Assumptions:

- (a) What underlying distinguishes 'nouns' across languages is that *only they* – and not Vs or As – can function as arguments alone, without the help of a higher DP. (Williams 1981)
- (b) In a relative clause, the modified head is *predicated* by the relative clause, and functions as a (syntactic?) argument of the relative clause.

Consequently:

- (a) *Only an NP can serve as the modified head in a relative clause.*
Since only NPs can function as arguments without a D.

... thus, we might understand the data concerning relative clauses in (26) – (30)
- (b) If we suppose that the right-most predicate in ST' complex predicates like (31) is *modified* by the predicates to its left...

... we might similarly understand the condition that only Ns occupy that right-most position (32)

Rebuttal:

Not clear if we really want to buy into the background assumptions they use (in what sense, *really*, is the head of the relative clause an argument of the relative clause?).

*... anyway, we don't even really understand for English why lexical categories have the properties that distinguish them (why **can't** adjectives be modified by relative clauses?)... so, this attempt at a 'Stronger Answer' is probably over-reaching...*

3.2.3 Evidence for the Category ‘Verb’ in St’át’imcets

In his handout “Lexical Categories in Salish”, Davis argues that there is *one* environment in ST’ that appears to distinguish a syntactic category distinct from NOUN?s / nouns.

Let’s preliminarily call this class ‘VERB?’.

The property that largely distinguishes this class is the ability to function as a post-nominal modifier.

(39) VERB?s Can Function as Post-Nominal Modifiers (Without a Preceding D)

- a. qwal’úts-kacw=ha [ta=**t’íq**=a sqaycw]
speak-2sNOM=Q DET=arrive=DET man
Did you speak to the man who came?
- b. qwal’úts-kacw=ha [ta=sqaycw=a **t’íq**]
speak-2sNOM=q DET=man=DET arrive
Did you speak to the man who came? (Davis 2005; p. 11)

(40) Non-VERB?s Cannot Function as Post-Nominal Modifiers (Without a D)

- a. qwal’úts-kal’áp=ha [nelh=**qlíl**=a sqáyqeycw]
speak-2pNOM=Q DET=angry=DET men
Did you speak to the angry men?
- b. * qwal’úts-kal’áp=ha [nelh=sqáyqeycw=a **qlíl**]
speak-2pNOM=Q DET=men=DET angry
Did you speak to the angry men? (Davis 2005; p. 11)

Note:

Since all the predicates involved are S-level, it’s hard (perhaps) to imagine a purely semantic generalization that will capture the difference between (39) and (40).

Conclusion:

There is another syntactic class in ST’: the VERB?s

Question:

Must we necessarily conclude that the syntactic category VERB? in ST’ just *is* the syntactic category ‘verb’ familiar from languages like English?

Weak Answer:

Sure! I mean, we know that (i) VERB? is a syntactic category and (ii) it seems to correspond pretty well with the category ‘verb’ in English... *why wouldn’t we say that they are verbs?*

Stronger Answer (Davis's answer):

YES!

Given a certain theory of "what it means to be a 'verb'", we might be able to account for the facts in (39) and (40).

NOTE:

Interestingly, it's possible for non-VERB?s to be post-nominal modifiers IFF they appear with the special aspectual auxiliary 'wa7'.

(41) **Non-VERB?s Can Function as Post-Nominal Modifiers (With a 'Wa7')**

qwal'uts-kal'áp=ha [nelh=sqáyqeycw=a [wa7 qlíl]]
speak-2pNOM=Q DET=men=DET AUX angry

Davis's Account:

Suppose that

- (a) post-nominal modifiers must have clausal structure
- (b) verbs always project clausal structure, while non-verbal predicates need an auxiliary to project clausal structure (as in English, with the copula).

CONSEQUENCE: We predict that (i) verbs should always be permissible post-nominally (39) and that (ii) non-verbs *won't* be permissible post-nominally (40), *unless* (iii) they appear with an AUX (41)

Rebuttal: If only verbs can project clausal structure in ST', then what do we say about the famous PRED/ARG flexibility facts as in (5)??

3.2.4 Evidence for the Category 'Adjective' in St'át'imcets

Fact: (a) Not all open-class lexical items in ST' qualify as either Nouns or Verbs.

- (b) Since Nouns and Verbs are *syntactic* categories, it's not semantically predictable whether a given root will qualify as either a Noun or a Verb, *or Neither*.

Conclusion: The 'Neither' category *is also a syntactic category*...

... for lack of a better name, let's call them ADJECTIVES!

(This kind of coheres with the proposal by Baker (2003) that the essential, underlying property of 'Adjectives' is that they lack the properties characteristic of either Vs or Ns...)

4. The Case for the Absence of Lexical Categories in Wakashan Languages

Like their Salishan neighbors, the Wakashan languages also exhibit the kind of rampant ‘Predicate/Argument’ flexibility seen above.

(42) Predicate Argument Flexibility in Nuuchahnulth

- a. **mamuuk-7is cakup-7i** b. **hiixwathi-7is mamuuk-7i**
work-3sS man-DET cranky-3sS working-DET
The man is working. *The working one is cranky.*
- c. **cakup-7is hiixwathi-7i**
man-3sS cranky-DET
The cranky one is a man.
- (Wojdak 2001; p. 1-2)

Unlike Jelinek & Demers (1994) penetrating treatment of Straits Salish, no one has really provided any more detailed arguments that Wakashan languages lack lexical categories.

5. The Case for the Presence of Lexical Categories in (Some) Wakashan Languages

5.1 Some Early Morphological Arguments

As early as the late 1970’s, certain observed morphological patterns lead linguists to doubt whether a N/V distinction was *really entirely* absent from Wakashan languages.

Rose (1981) *So-called ‘continuative’ aspect in Nuuchahnulth applies only to Vs and As*
So-called ‘graduative’ aspect in Nuuchahnulth applies only with Vs.

Jacobsen (1979) *Possessive suffixes in Makah can only occur on Ns.*
Future tense and irrealis morphemes can only occur on Vs.

SIDENOTE:

For some Wakashan languages, it would be very difficult to maintain that all their DPs are free relatives, since their relative clauses have a rather specific and distinctive form.

(43) Relatives and Free Relatives in Nuuchahnulth

- a. ‘a‘ac’ikn’uk-7is [lhuucma-7i [**yaq7itq t’i‘as**]]
good.with.hands-3sS woman-DET REL sit.on.ground
*The woman **who is sitting on the ground** is good with her hands.*
- b. ‘a‘ac’ikn’uk-7is [**yaq7itq t’i‘as**]
good.with.hands-3sS REL sit.on.ground
*The **one who is sitting on the ground** is good with his/her hands.*
- (Wojdak 2001; p. 630)

5.2 The Case for Lexical Categories in Nuu-chah-nulth (Wojdak 2001)

Wojdak (2001) applies some of the ‘tests’ developed for ST’ by Demirdache & Matthewson (1995) to complex modificational structures in Nuu-chah-nulth.

RESULT: Some of the same syntactic environments that distinguish a class of ‘nouns’ in ST’ also distinguish a syntactic class of ‘nouns’ in NCN.

5.2.1 Complex Predicates

As in ST’, NCN allows the creation of complex predicates, as in (44a) below.

However, also as in ST’, NCN requires that the rightmost head of a complex predicate be a noun.

(44) Complex Predicates in NCN Must have Nouns as Rightmost Member

a. [qwac’almaq-7is **lhuucma**] Susan
 very.beautiful-3sS **woman** Susan
 *Susan is a very beautiful **woman**.*

b. * [qwac’almaq-7is **tlulh**] Susan
 very.beautiful-3sS **good** Susan
 *Susan is a very beautiful **good-hearted one**.*

c. * [qwac’almaq-7is **nunuuk**] Susan
 very.beautiful-3sS **singer** Susan
 *Susan is a very beautiful **singer**.*

(Wojdak 2001; p. 624)

Note:

Given that the right-most predicates in (44a) and (44b) are arguably both stative (I-level) predicates, it’s difficult to capture these facts with a purely semantic generalization.

5.2.2 Head-Final Relative Clauses

As in ST’, NCN appears to have a class of head-final relative clauses, as in (45) below.

(45) Head-Final Relative Clauses in NCN

tiicaci7atl-7is [haa wa7icil-7i **cakup**]
alive-3sS DEM sleep-DET **man**
*That sleeping **man** is in better health now.*

(Wojdak 2001; p. 625)

However, also as in ST', NCN requires that the final head of such relative clauses be a noun.

(46) **Head-Final Relative Clauses in NCN Must be Headed by Nouns**

- a. * cims-7is [haa tupkuml-7i haaw'aps]
bear-3sS DEM black-DET eat
That black *eating* one is a bear.
- b. * yaaca-7is [haa nunuuk-7i qwac'alhaq]
leave-3sS DEM sing-DET very.beautiful
That singing *very beautiful* one is leaving (Wojdak 2001; p. 625)

Note:

Given that the 'heads' in (45) and (46b) are arguably both stative (I-level) predicates, it's difficult to capture these facts with a purely semantic generalization.

5.2.3 The Overall Argument

The syntactic environments in (44) – (46) pick out a uniform class of lexical items.

This class of items does not seem to be definable semantically (or morphologically or phonologically). But, *the grammar of NCN is clearly sensitive to this category.*

Conclusion:

There is at least *one* syntactic category in NCN. Since this looks just like the category 'noun' in languages like English... let's just say they are nouns!

6. Some Theoretical Considerations

What We've Learned:

Despite their rampant Pred/Arg flexibility, ST' and NCN appear to possess real live syntactic categories.

...This raises the following 'difficult question':

Difficult Question:

Suppose that we assume Straits Salish *doesn't* have a lexical category distinction (as J&D argue).

What are the consequences for our theory of UG?

Option 1: Some languages possess lexical categories (English, ST'), but some don't (Straits Salish).

Problem: *How do you know whether your language has lexical categories or not?*

General Answer:

You determine whether there are any rules / constraints in the grammar that require reference to such a class (i.e., a class that cannot be defined either semantically or morpho-phonologically).

With this in mind, consider how problematic for a child-learner are the data that 'reveal' a lexical category distinction in ST' and NCN:

(47) **Problematic Features of the Evidence for Lexical Categories in NCN and ST'**

- a. The syntactic environments that distinguish the lexical classes are comparatively subtle (complex predicates, relative clauses, deictic modification).
- b. The data that ultimately reveal a lexical category distinction are **all negative data**. (the fact that non-Nouns *can't* head relative clauses, complex predicates, etc.)

One might think, then, that given the subtlety of the data supporting a lexical category distinction in these languages (after all, linguists didn't notice it until recently), that such a distinction should be diachronically unstable and perhaps unstable across speakers.

... but it isn't!

(Consider the fact that both ST' and NCN exhibit the patterns with relative clauses and complex predicates...)_

Option 2: No languages have lexical categories (not even English or ST')

Advantage: This solves the learnability problem!

Also, a version of this idea also enjoys a certain amount of popularity right now (Marantz 1997, Borer 2005).

The Core Proposal: No root 'comes packed' with information about its 'lexical category'
Whether a root is 'nominal' or 'verbal' is simply a matter of whether its (say) dominated by D or dominated by 'Little-v'

(48) The World of Category-Less Roots

- a. Root: RUN (neither V nor N)
- b. 'Nominal': [the [RUN]]
- c. 'Verb': [v [RUN]]

Question:

What about cases where D can't take a bare root alone? Aren't those by definition *not* nouns?

(49) Evidence For Category Distinctions in English

- a. * the destroy b. the destruction
- c. * the tall c. the tallness

Answer:

Patterns like that in (49) aren't indicative of lexical category distinctions (or lexical category-changing morphology), but simply reflect morpho-phonological 'readjustment'.

(50) Morpho-Phonological 'Readjustment' Rules in English

- a. DESTROY → [destruction] // D_____
- b. TALL → [tallness] // D_____

Note:

For theories of this kind, Salish and Wakashan languages are a dream come true...
... they're just the limiting case you'd expect, where no morpho-phonology like (50) takes place!...

Problem: *We've seen evidence that ST' and NCN do have lexical categories.*
(That is, regardless of whether any higher functional structure is present, roots seem to behave differently in ST' and NCN)

There are some difficult problems making this story work for English as well...

Question 1 (Davis & Matthewson 1999):

If the data in (49) simply reflect 'phonology', why does it seem like this 'phonology' has a very specific semantics?

(51) **The Peculiar Semantics of -Ness in English**

- a. [[man]] = individuals who are men / * the property of being a man
- b. [[tallness]] = the property of being tall / * the individuals who are tall

Question 2 (Davis & Matthewson 1999):

Given that there are different ways of 'nominalizing' a given root, you do have to admit the existence of *some* nominalizing heads (distinct from D).

(52) **Multiple Ways of Nominalizing in English**

- a. [A teach-**ing**] from the Bible
- b. [A teach-**er**] of French

Most importantly, when you look at the distribution of these 'nominalizers', it seems that they too aren't able to just combine with any old root...

(53) **Different Nominalizers Combine with Different Kinds of Stems**

- a. * A **red-er**
- b. A **red-den-er**
- c. * A **tall-er**
- d. A **tall-ify-er**

... rather, it seems you want to say that some can only occur with *Verbs*...

... and so you re-enter the problem of having to specify certain roots for syntactic category...

Option 3: ALL languages have lexical categories (even Straits Salish)

Advantage: This also solves the learnability problem!

If learners have a *bias* towards looking for lexical category distinctions, that might help us to understand how even very subtle distributional differences are learned reliably...

A Big Unanswered Question:

What about the fact that English looks so different from Salish and Wakashan languages?

If both English and ST' and NCN have lexical categories, what about this major difference w.r.t. 'predicate/argument flexibility'?

... to my knowledge, *no one* has addressed this question...