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QUANTIFICATION IN STRAITS SALISH*

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0. Introduction. The question of whether there is a distinction between noun and verb as lexical categories in Salish has long been a lively issue. The lack of such a contrast has been argued by Kinkade 1983, Jelinek and Demers 1982, Jelinek 1984, 1988 and elsewhere. My purpose here is not to rehearse these previous arguments; I hope to add a new perspective on the question through an examination of the syntax of quantification in Central Salish.

Quantificational notions find expression in a variety of con struction types across languages. There are typological differences in quantificational structures, and some aspects of quantification in the Salish languages are clearly relevant to the question of whether there is a contrast between noun and verb as lexical categories. If a language lacks lexical nouns, it cannot have construction types where quantifiers are elements that are syntactically dependent upon lexical nouns. The goal of this paper is to argue that this is the case in Straits Salish.

This paper is based upon field work with speakers of Lummi and Samish. As far as I have been able to determine, the syntax of quantification in a number of other Salish languages seems to be broadly similar, but not all the generalizations given here apply universally within the family.

I am assuming the following basic syntax for Salish:

1) a. Words are based on underlying roots, elements with "lexical" meaning.

   b. All words are predicates: a root plus its internal arguments, if any.

   c. Both simple and derived predicates occur with Subjects (and Tense/Aspect/Modality) to build sentences.

A predicate is something that combines with a subject to produce a sentence. It may include other derivational material, such as the valence markers and affixes that mark voice alternations. These generalizations apply to all words except adverbials, which have a special syntax that will be defined below, and a few indeclinable closed list items. The crucial feature of Straits Salish syntax in determining the inventory of lexical categories is:

2) a. The arguments (both internal and external) of a predicate are exclusively inflectional; pronominal affixes and clitics.

   b. The maximal projection of a root is a predicate, and the maximal projection of a predicate is a sentence.

The fact that all words are predicates means that there are no words that belong to lexical categories like verb and noun, and no maximal projections of these categories, NP and VP. There are no words or phrases that occupy argument positions.

3) a. There are Determiner Phrases that are adjoined subordinate clauses, headed by Demonstrative pronouns.

   b. Only Determiner Phrases and pronouns are referring expressions.

In relative clauses, the pronoun that derives the Determiner Phrase binds a variable argument in the clause under its scope. In the following sections of this paper, I will examine the syntax of quantification in Straits Salish. I will conclude with a summary on how these facts are evidence in support of the preceding view of Straits Salish syntax and the noun/verb question.

1. Determiner vs. Adverbial Quantification. Partee (1988) identifies a primary division within quantificational structures: the contrast between Adverbial or A-Quantification, vs. Determiner or D-Quantification. A-Quantification has scope over predicates, while D-Quantification has scope over arguments. Work in progress on quantification in natural language suggests that while all languages have A-Quantification, only some languages have D-Quantification.[1] English has both types:

2) a. He always works late. A-quantification
   b. He works late every day. D-quantification

English has lexical nouns and is rich in D-Quantification, as well as other quantifiers syntactically related to nouns.

3) a. Determiners every man; two men
   b. Noun modifiers the most fish
   c. NP modifiers all, both the canoes
   d. Ns or NPs anyone; whatever

The absence of D-Quantification in Salish. Salish entirely lacks Determiners corresponding to each, every, most, some, few, no, numerals, etc. The class of Determiners in the Salish languages is restricted to deictic elements, many of which may also serve as free pronouns.

4) a. x̌či-t-sən k^{w}Θe'ə
   know-TR-3A-1sNOM that (Fem)
   I know her, that one.

b. χčí-t-sən k^{w}Θe'ə sɬeniy̓
know-TR-3A-1sNOM that woman
I know her, that woman.

Montler (1986) identifies a total of twenty-one demonstratives for Saanich, and provides a feature analysis. Salish determiners mark relative distance, gender, visibility, and the like; however, they do not mark the following quantificational features:

5) a. Definite vs. indefinite
b. Singular vs. plural
c. Count vs. mass
d. Cardinality expressions (numbers, some, many, few,..)
e. Strong quantifiers (each, every, most, all...)

The Salish Determiners/Demonstratives are definite pronouns, that head Determiner phrases of the kind seen in (4b) and (6).

6) a. swəy̓qə' cə t'iləm
man-3A DET sing
The (one who) is singing is a man.

b. t'iləm cə swəy̓qə'
sing-3A DET man
The (one who) is a man is singing.

Both the free pronoun and the Determiner Phrase it derives are referring expressions in Straits Salish. In these adjoined subordinate clauses, the Determiner binds a variable that fills an argument possition of the subordinated predicate. Determiner Phrases correspond to the logician's lambda expressions, and are identical to what have been (incorrectly) termed "headless" relatives, commonly seen in the languages of Native America.2

A-Quantification. Because of the absence of D-Quantification, the inventory of quantifier words is smaller in Salish than in some other language families. A-Quantification is clearly present in Salish. There is a small class of adverbial predicates in these languages that express quantificational notions; these predicates have a special syntax. They do not take individuals as arguments, but have scope over another predicate, and can be designated second-order predicates ($PRED_2$). For example:

7) a. mək^{w}-ɬ 'əẇ ye'
all-1pNOM LINK go
We all went.

b. mək^{w}-sx^{w} 'əẇ ŋa-t
all-2sNOM LINK eat-TR-3A
You ate them all.

In (7), the predicate mək'w corresponds to the universal quantifier. It is followed by the subject clitic, and then by the LINK particle 'əw. The crucial feature of the syntax of second order predicates in Central Salish is that they occur linked to another predicate, over which they have scope, by the LINK particle. Since the subject clitic follows the second order predicate, the "main" predicate has no subject marking; however, the "main" predicate includes its internal arguments, like the object argument in (7b).

This structure may be schematized as follows:

8) $PRED_2$-AUX LINK PRED .....

The term "AUX" in the sentence schema given in (8) designates the second-position clitic sequence where Tense/Aspect/Modality and the Subject appear. This clitic sequence corresponds to INFL in the Government and Binding framework. The LINK particle has three distinct but related syntactic functions.

9) a. To link main and subordinate clauses:
təs s-'əẇ ɬeel-s 'ə tsə t'Θχit
arrive-3A SUBORD-LINK go ahore-3SBD OBL DET beach
He got there and went ashore onto the beach.

b. Utterance initial, to show an inferential connection between sentences in discourse:

'əẇ χčí-t-sən k^{w} ns-ye'
LINK know-TR-3A-1sNOM DET 2sPOSS-go
(And, so) I know you went.

c. To link a $PRED_2$ to a following predicate.

mək^{w}-ƛə'-lə-sx^{w} 'əẇ ŋa-t cə sƛeenəx^{w}
all-MODAL-PERF-2sg LINK eat-TR DET fish
Apparently you ate them all, the fish.

The structure seen in A-Quantification is (9c). Note that in this example the universal quantifier is followed by a modal particle, an aspectual particle, and the subject clitic. This example demonstrates that the entire second-position clitic sequence follows the clause initial second-order predicate, the A-Quantifier.

It is also possible to make use of the LINK particle to adjoin a second order predicate to the right end of the sentence. In this position, the second order predicate is not followed by the INFL clitic sequence, which is always in second position. Compare (10a) and (10b).

10) a. mək^{w}-sx^{w} 'əẇ ŋa-t
all-2sNOM LINK eat-T-3A
You ate them all.

b. ŋa-t-sx^{w} 'əẇ mək^{w}
eat-T-3A-2sACC LINK all
You ate them all.

The universal quantifier can be linked before a main clause that contains an initial modal predicate.

11) mək'w 'əẇ xwəŋ-sən 'i' 'anəxwtxw tsə s'iʔəən
all LINK able-1sNOM LINK stop-T-3ABS DET food
I can stop all the food/completely stop the food.

Example (11) shows the adverbial universal quantifier linked to a first order modal predicate to which the subject is encliticized. After this complex there is an occurrence of the second LINK particle, 'i', linking the modal predicate to a following first order predicate. This second LINK particle can also serve as a conjunction, glossed "and". The two LINK particles may cooccur.

12) 'i' 'əw' sas-əŋ
surface-MIDDLE-3A
And (so) she came up out of the water.

Scope of the Universal Quantifier. The second order predicate mək^{w} does not quantify over arguments; it is an example of Unselective Adverbial quantification (Lewis 1975, Partee 1987).

13) mək^{w} 'əẇ p'əq cə sp'eqən
all-3A LINK white DET sprout
They are all/completely white, the flowers.

14) mək^{w}-ɬ 'əẇ ŋa-t cə sčeenəx^{w}
all-1pNOM LINK eat-T-3A DET fish
We ate all the fish. Or: We all ate the fish.
Or: We ate the fish up completely.

The various glosses given for (14) are intended to show that the second-order predicate has scope over the "main" predicate, and that this scope can extend over any argument of the main predicate that is not overtly marked singular. Compare the examples in (10); if the second person subject is singular, then the universal quantifier cannot have scope over the subject. In (14) the subject is plural and the object is unmarked as to number, and the universal quantifier can have scope over either argument, by virtue of having scope over the main predicate. The following sentence is from a long text:

15) a. mək'w=sxwhe...lə 'əẇ kwən-nəxw tsə sčeenəxw
all-2p...NOM LINK get-TR-3A DET fish
A...ll of you will get fish.

The [...] in Ex. (15) is intended to show that the vowel in the clitic marking second person plural subject was stretched and given a high falling pitch contour for emphasis. It is common to mark emphasis in this way in Straits Salish discourse. The placement of the emphasis here demonstrates that the universal quantifier may have scope over the second

person plural subject. Without the emphasis feature, either argument may be interpreted as under the scope of the universal quantifier. The emphasis feature is optional, but when it appears on the subject clitic, the sentence can not be interpreted as

15) b. * You (pl) will get all the fish.

Another illustration of the variable scope of A-Quantification can be seen in the two glosses suggested for (16).

16) x̌'e-sən 'əẇ t'əm'-t
again-1sNOM LINK hit-T-3A
I hit him again/I also hit him.

Hale (1988) discusses this kind of adverbial quantifier scope in the Pama-Nyungan language family of Australia.

Second order predicates in Straits Salish include:

17) a. yas always c. 'ən'an very
b. x̌'e again d. ɣ̌əlel almost

There are in addition a few first order predicates that may function also as second order predicates, as shown by the presence of the LINK particle.

18) a. si'it-sən 'əẇ ɬčiq^{w}ʔs
be:true-1sg LINK tired
I'm really tired.

b. ɣ̌eyn-sən 'əẇ ɬčiqwəs
be:straight-1sg LINK tired
I'm really tired.

c. hay-sən 'əẇ ɣ̌-telə
finish-1sg LINK POSS-money
I have all the money.

All the examples in (18) show A-Quantification. The predicate hay "finish" in (18c) is functioning as a universal quantifier, with the notion of "completeness" seen in mək'w.

Negation: The NEG predicate 'əwə can appear either as a first order predicate (Ex. 19a) or second order predicate (Ex. 19b).

19) a. 'əwə-sən s-əw'-ye'
NEG-1sNOM IRREAL-LINK-go
I'm not going.

b. 'əwə-s nə-sx̌'e' kwə ye'-ən
NEG-3A-IRREAL 1sg POSS-like DET go-1sSBD
I don't want to go.

The universal quantifier can be transitivized, whereupon it is a first order predicate with the meaning "take completely".

20) a. mək^{w}-t-yəq-sx^{w}
all-TR-3A-MODAL-2sNOM
Wish you would take them all.

This transitive predicate may appear in a Determiner Phrase.

21) b. cə mək^{w}-t-x^{w}
DET all-TR-3ABS-2sSBD
the (ones) you took all (of)/"totalled"

Examples (18 - 21) show that at least some predicates can be either first or second order in function. The inventory of adverbials and their syntax is quite variable across the Salish languages.

Sequences of PRED2. A second order predicate may have scope over another second order predicate, in a "stacked" structure.

22) $PRED_2$-AUX LINK $PRED_2$ LINK PRED .....

Some examples of two linked adverbial predicates:

23) 'əwə-sən s-əẇ-yas 'əẇ ye'
NEG-1sNOM IRR-LINK-always LINK go
I won't go every time. (I refuse)

24) 'əwə-s-əẇ-mək^{w} 'əẇ p'əq
NEG-3A-IRR-LINK-all LINK white
Not all of them are white.
Or: They aren't completely white.

Ex. (24) could be used to describe a collection of items that aren't all of the same color, or where each one is mixed in color (say, white flowers with a pink center). Compare:

25) mək^{w}-əẇ 'əwə-s-əẇ-p'əq
all-3A-LINK NEG-IRR-LINK-white
All of them aren't white.

2. "Strong" vs. "Weak" Quantifiers. A second kind of division within the class of quantifiers across languages is the contrast between what have been termed the "strong" vs. the "weak"

quantifiers (Milsark 1977). The strong quantifiers include items like each, every, most, and all, while the weak quantifiers include the cardinality expressions: the numerals, and words like many and few. This major division within the domain of quantifiers has a number of syntactic reflexes across languages. For example, strong quantifiers cannot occur in existential contexts, while weak quantifiers can:

26) a. *There are all (each, every, most) men in the boat.
b. There are many (few, seven, some) men in the boat.

The examples in (26) show that in English, both strong and weak quantifiers appear in D-Quantification, but the strong quantifiers are excluded from existential contexts. In Salish, the contrast between strong and weak quantifiers is marked in the syntax as follows:

27) a. Weak quantifiers are first order predicates.
b. Strong quantifiers are second order predicates.

The associated syntactic structures are:

28) a. Weak quantifiers are "main" predicates, and can serve as the single predicate in a clause. They take individuals as arguments.

b. Strong quantifiers are adverbial, and are connected to the sentence with a LINK particle. They have scope over another predicate.

English does not have the kind of quantificational structure where cardinality expressions alone (without a copula) are predicates. This structure is illustrated in Ex. (25).

29) ŋəṅ ce sčeenəx^{w}
be:many-3A DET fish
They are many, the fish. [ŋeṅ = first-order predicate]

Example (30) is an ungrammatical sentence, where a second order predicate occurs alone in a main clause.

30) *mək^{w} cə sčeenəx^{w}
all-3A DET fish
[*they are all, the fish] [mək^{w} = second-order predicate]

Other examples of cardinality expressions as first order "main" predicates, alone and with adjoined Determiner Phrases:

31) a. čəsə'
be:two-3A
They are two.

b. čəsə' cə t'iləm
be:two-3A DET sing
They are two, the (ones who) sang.

32) a. ŋəṅ-ɬ
be:many-1pNOM
We are many.

b. ŋəṅ cə leŋ-n-ən
be:many-3ABS DET see-TR:NC-1sSBD
They are many, the (ones) I saw.

33) a. x̌'əwx̌'ə-sx^{w}helə
be:few-2pNOM
You are few.

b. x̌'əwx̌'ə cə leŋ-n-oŋəs
be:few=3ABS DET see-NC:TR-LOC:OBJ
They are few, the (ones who) saw me.

Existential Constructions. There are affirmative and negative first order existential predicates. The affirmative existential is also a locative predicate, as is often seen across languages.

34) a. ni' cə sčeenəx^{w}
exist-3A DET fish-3A
There's (the) fish.

b. ni'-ə-lə
exist-QUESTION-PERF-3A
Were there any?

35) 'əwənə-yəx^{w} cə sčeenəx^{w}
not:exist-MODAL-3A DET fish
Apparently there's no fish.

These predicates create existential contexts. In (26) above we saw that existential contexts in English exclude the strong quantifiers. This holds for Salish also.

36) a. ni' cə ŋəṅ
exist-3A DET many
There are [the] many. (ŋəṅ = Weak Quantifier)

b. * ni' cə məkʷ
exist-3A DET all
* There are [the] all. (məkʷ = Strong Quantifier)

Neither the weak quantifiers nor the existential quantifiers can ever function as second order (adverbial) predicates.

37) a. *ŋəṅ-sən 'əẇ ŋat cə sčeenəx^{w}
many-1sNOM LINK eat DET fish

b. *ni'-sən 'əẇ ŋat cə sčeenəx^{w}
exist-1sNOM LINK eat DET fish

3. Evidence from Hypothetical Clauses and Propositional Clauses on subject inflection. Among the subordinate clause types in Salish is one we may call hypothetical. In these clauses, a proposition is mentioned but not asserted; its truth value is called into question. In these clauses, third person subject inflection is overt, and we see further proof that the quantifiers are predicates, since they inflect in the same way other predicates do. Consider first the hypothetical clauses constructed upon "ordinary" lexical predicates, that correspond semantically to verbs, adjectives or nouns in other languages.

38) čte-t-ŋ-sən k^{wə} t'əṁ-t-ən
ask-C:TR-PASS-1sgNOM DET hit-C:TR-3A-1sSBD
I was asked if I hit him.

39) čte-t-ŋ-sən k^{wə} 'əy-x^{w}
DET good-2sSBD
I was asked if you were good.

40) čte-t-ŋ-sən k^{wə} swiẇləs-əs
DET be:young man-3SBD
I was asked if he were a young man.

41) čte-t-ŋ-sən kwə nə-sx̌'e'-əs
DET isPOSS-like-3SBD
I was asked if I like him/it.

Next, consider hypothetical clauses with Quantifier predicates.

42) čte-t-ŋ-sən k^{wə} ŋəṅ-əs
ask-C:TR-PASS-1sNOM DET be:many-3SBD
I was asked if there were many.

43) čte-t-ŋ-sən k^{wə} ni'-əs
DET exist-3SBD
I was asked if there were any.

44) č̓te-t-ŋ-sən k$^{w\partial}$ 'əwəné́-əs
DET not:exist-3SBD
I was asked if there weren't any.

In the complex sentence shown in (45), the negative existential quantifier appears in an adjoined Propositional subordinate clause, where it is inflected for second person Possessor subject.

45) 'əsḱ$^{w\partial}$y k$^{w\partial}$ staŋ-ɬ k$^{w\partial}$ n-s-'əwənə
impossible-3A DET do:what-1pl DET-2sgPOSS-SBD-NEG:exist
It's impossible, that we do something, [and] you don't exist. (We can't do anything without you.)

Hypothetical and Propositional subordinate subject marking is important evidence on the argument structure of Salish predicates, and is evidence that the syntax of all first-order predicates is the same when there is no AUX, which is limited to main clauses.

4. Evidence from Wh-words. The class of Wh- words is generally recognized as a subclass of the quantifiers. In Salish, Wh-words are first order predicates.

46) a. steŋ
be:what
What is it?

b. steŋ k^{w}ə n-s'i̓ləṇ
be:what-3A DET 2sgPOSS-eat
What are you eating?

47) a. wet-lə
be:who-PERF-3A
Who was it?

b. wet cə swiẇləs
be:who-3A DET be:young man
Who is he, the young man?

48) a. 'axen-sə
be:where-FUT-3A
Where will it be?

b. 'axen cə t'iləm
be:where-3A DET sing
Where is he, the (one who) sang?

49) txwin-sxw kwač̓ə
go where-2sNOM PARTICLE [Request Inform]
[So, tell me] where did you go? (Montler 1986)

Third person subject for Wh- predicates in hypothetical clauses is overt.

50) č̓te-t-ŋ-sən kwə steŋ-əs
ask-TRANS-PASS-1sgNOM DET be:what-3SBD
I was asked what it was.

51) č̓te-t-ŋ-sən k$^{w\partial}$ wet-əs
DET be:who-3SBD
I was asked who it was.

52) č̓te-t-ŋ-sən k$^{w\partial}$ 'axen-əs
DET be-where-3SBD
I was asked where it/he was.

Wh-words cannot occupy argument positions, and there is no Wh- movement. Wh- words are predicates that take external arguments.

5. Complex Predicates: No Link particle. In earlier examples, we have seen main clauses where second order predicates appear linked to a first order predicate. It is also possible to build complex predicates in Salish, by the simple process of stringing two first- order predicates together, with no LINK particle. We have seen an example of complex predicate formation above in Example (16), where the first predicate is the Negative, followed by the IRREALIS particle and a second predicate. The sentence schema for basic complex predicate constructions is:

53) $PRED_1$-AUX $PRED_1$.....

54) a. 'əy-sx^{w}
be:good-2sNOM
You're good.

b. swəy̓qə'-sx^{w}
be:man-2sNOM
You're a man.

c. 'əy-sx^{w} swəy̓qə'
be:good-2sNOM man
You're a good man.

Example (54c) shows a complex predicate, interrupted by AUX. Some of the predicates that appear first in complex predicate constructions describe qualities. Other complex predicates look more like serial verb constructions.

55) 'ane-sx^{w} leŋ-t-ŋ
come-you see-TR-PASS
You were visited. (Somebody came-to-see you.)

The universal Quantifier mək'w can combine with a Wh- predicate to produce a complex second-order predicate. The sentence schema is:

56) PRED2-AUX Wh-PRED LINK PRED....

57) 'əẇ mək'w-sən-sə stəŋ 'əẇ č̓aqw-t
LINK all-1sNOM-FUT what LINK burn-C:TR-3A
(So) I'm gonna burn everything/ things up completely.

58) mək'w-ə-q-lə wet 'əẇ ye'
all-Q-MODAL-PERF-3A who LINK go
Could they all have gone?

Complex second-order predicates are not referring expressions.

6. PRED$_2$ and Complex Predicates within Determiner Phrases. Both kinds of multi-predicate constructions that we have identified here also occur in subordinate clauses (Determiner Phrases). Neither LINK nor AUX appears within Determiner Phrases.

59) čey cə 'əy swəy̓qə' (Quality)
work-3A DET good man
He worked, the good man.

60) .....cə čəsə' swəy̓qə' (Cardinal)
They worked, the two men

61) .....cə məkʷ swəy̓qə' (Universal)
They worked, all the men.

Note that when the Negative predicate occurs within a Determiner Phrase, it does not create a construction corresponding to "no N", which would be an instance of D-Quantification.

62) cə 'əwə-s swəy̓qə' (Negative)
DET NEG-IRR man
the one who isn't a man [not: "no man"]

There is no way to say something corresponding to "no man".

7. Clitics and Sentence particles as Quantifiers. Finally, we need to consider other means of marking quantificational notions in Salish. Modal operators have a complex semantic structure that includes quantificational notions. We have seen second position clitics that are Modals. Included are in the class of modal clitics are:

63) -yəq Optative
-yəxʷ Evidential
-čə' Probability
-q Conditional

Across languages, modal operators are frequently seen in INFL or second position clitic sequences. In addition to these clitics, Salish also shows a small closed set of sentence particles that mark various adverbial (temporal and modal) notions. These particles have no syntactic reflexes; they are not followed by the clitic sequence, but simply vacuously occur first in the sentence. Examples:

64) a. 'i'wəwə meləq-t=sxʷ
maybe forget-C:TR-3A-2sg
Maybe you forgot it.

b. təwə čečəs-ɬ
still follow-1pl
We are still following.

Still other adverbial notions are expressed via restrictive subordinate clauses.

65) q̓əq̓ənəɬ-sən kʷə nə-s-šət-ŋ
slow-1sg DET 1sgPOSS-NOM-walk-MIDDLE
I'm slow, walking. (I walk slowly)

8. Definites and Generics. I am claiming that the Determiners/ Demonstratives that build Determiner Phrases, the adjoined nominalized clauses that appear in Salish sentences, are definite pronouns. This means that the nominals they introduce are also definite, or at least all capable of a definite reading. Consider the following example sentence:

66) 'əwə-s-əw̓ t'iləm cə sčeenəxʷ
NEG-3A-IRR-LINK sing DET fish
The fish didn't sing. OR: Fish don't sing.

The fact that this sentence can have these two readings is highly instructive. Across languages, generics are often plural or mass nouns, but plurality is optionally marked in Salish, mass is not marked, and temporal reference can be left open. In many languages, including English, a definite noun phrase can be a generic:

67) The African elephant has big ears.

In the two readings for (66), the subject is either singular definite or generic. On the generic reading, the nominalized clause is a generalized quantifier; on the singular definite reading, it is a referring expression. The two interpretations of (66) exemplify the process of type-shifting (Partee 1987).

None of the Salish Determiners is restricted to an indefinite interpretation. This is consistent with the fact that proper nouns take Determiners.

68) tečəl cə Tim.
arrive-3A DET Tim
Tim arrived.

Names are also predicates with an argument structure. Without a Determiner, we do not have a referring expression, only a predicate. There are no bare indefinite nouns such as are required as complements of the "strong" D-Quantifiers like each, every, most, any, etc. Thus, we have an explanation for the absence of these quantifiers in terms of the absence of a lexical category noun.

How to avoid indefinite arguments. It is very instructive to look at the syntactic devices that Salish employs in constructions that correspond to sentences with indefinite arguments in

other languages. For example, one environment where indefinite objects often appear is Possessive sentences. Salish uses the following kind of construction instead: the Relational prefix creates a possessive sentence. Consider the following contrast:

69) a. sɬeniy̓-sxʷ
female-2sNOM
You are a woman.

b. č-sɬeniy̓-sxʷ
REL-female-2sNOM
You have a wife/woman.

In (69b), the root is preceded by the prefix c-, which marks the following predicate as a relatum. The subject clitic which follows the derived predicate identifies the relator.

70) č-ŋənə'sən
REL-child-1sg
I have a child.

Indefinite arguments also typically appear in intensional contexts, in Desideratives, for example. When a want or desire is expressed, it need not be some particular unique object that is desired, but some just member of the class named by the indefinite noun. As Quine (1971) observed, one who says, for example, that he wants a sloop, has no specific sloop in mind; he just wants "relief from slooplessness." In Central Salish, the Desiderative suffix may be used in just this way:

71) snəxʷəɬ'elŋən-sən
canoe-DESIDERATIVE-1sg
I want a canoe/to make a canoe.

Here the root is followed by a derivational suffix.

Indefinites. We are left with the following question: What, in Salish syntax, corresponds to indefinites? The answer is that it is the simple first order predicate. Across languages, indefinite nouns are predicational, not referential, in function.

72) si'em' cə nə-men
chief-3A DET my-father-3A
My father is a chief.

In Salish, there is no need for indefinite nouns, since the basic predicate itself fills this function. A first order predicate can describe entities, events, acts, or states, according to its semantic structure. Some Salish predicates that describe perceived aspects of experience as entities correspond to indefinite nouns in other languages.

Introducing new referents in discourse. Statistical studies of the structure of discourse have demonstrated that new referents are introduced into discourse as indefinites, typically in absolutive function (intransitive subjects and transitive objects). Pronouns and definite expressions are coreferent with some previously mentioned referent. It is interesting to see how Salish accomodates these properties of discourse. Across languages, we see the

numeral "one" used to isolate a random member of a set identified by some predicate, and this device appears in Salish also. Texts may begin by fixing the location where the events to be narrated occurred. Then characters may be introduced as in the following:

73) ni-ɬ s-əẇ kwíl tsə na'ť'θə' swiẇləs
there-REL=3A SBD-LINK appear=3A DET one young man
So a young man appeared

74) 'ən'e p̓əkw čəle'ə tsə x̌'ɬeɬsə'
come=3A rise to come from DET saltwater
coming up out of the sea water.

The second part (74) of this long sentence (transcribed by Tim Montler) contains a series of three predicates, and illustrates how predicates may be strung together in long utterances in Salish. All these predicates are directional, and I am assuming that (107) represents a complex predicate or serialization construction. First and second person subjects are sometimes repeated in similar constructions, suggesting clause chaining.

9. Concluding Remarks. In this paper I have demonstrated the following:

75) a. Straits Salish lacks certain quantifiers that presuppose bare indefinite nouns: these are Determiner quantifiers equivalent to every, most, each, some, no.

b. Cardinality expressions are first order predicates. The Existential quantifiers and Wh-words are also first order predicates.

c. The Universal Quantifiers are adverbial, second order predicates that have scope over other predicates. This A-quantification is unselective.

d. Determiner Phrases in Straits Salish are adjoined clauses that are derived via Determiner/Demonstratives that are definite pronouns. The Determiner Phrases permit definite interpretations, and may function either as referring expressions or as generics, generalized quantifiers.

I conclude:

76) There are no quantifiers in Straits Salish that derive NPs, that require bare lexical nouns as complements.

A comparison with English is instructive.

77) a. English has A-Quantification: always, completely, never.

b. English has D-quantifiers that express both strong and weak quantification, and include a far richer range of quantifiers than that seen in Salish: notions such as each, every; indefinite a and any; numerals; the negative Determiner, as in no man. All

these D-Quantifiers occur with bare indefinite nouns.

c. English has items of every lexical category that express quantificational notions. Included are verbs, adjectives and nouns: exist, happen, few, somebody, whatever. Some of these lexical items in English function as predicates and others as arguments. In Straits Salish, lexical items expressing these quantificational notions are all first order predicates.

The absence of D-Quantification in Straits Salish constitutes important evidence for the claim that there is no distinction between noun and verb as lexical categories. Salish Determiners are pronouns, and derive Determiner phrases, subordinate clauses. If only pronominal affixes can occupy argument positions in Central Salish, then there should be no NP movement from argument positions, and this is the case. We would also predict the absence of Wh- or quantifier movement, and this is the case also. In a language with a noun/verb contrast, we see NPs, quantifiers, and Wh- words in argument positions. We see none of this in Straits Salish. Quantifiers and Wh- words are predicates, and Determiner Phrases are subordinate clauses, adjuncts to the sentence. All of these features of the syntax constitute importance evidence on the noun/ verb question.

NOTES

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1In the example sentences given here, the phonologically null third person Absolutive arguments are not shown in the Salish material, but are indicated in the interlinear gloss by the notation 3A. The abbreviation SBD means Subordinate; POSS, Possessor; TR, one of the set of Transitivizers; LOC:OBJ, Local Object (first or second person singular Accusative); PASS, Passive; MID, Middle.

2For a discussion of so-called "headless" relatives, see Jelinek 1987. Abney (1985) develops the view that NPs across languages are properly analyzed as Determiner Phrases.

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