FOOTNOTES

1. "Warm Springs Sahaptin Verse Analysis." The same paper was presented at a session on Native American Literature organized by Jerrold Ramsey at the Modern Language Association Annual meeting in New York City, December 28, 1981. An expanded version to include subsequent research was presented under the same title at the "Workshop on Native American Discourse" in Austin, Texas, April 9-11, 1982. This workshop was organized by Joel Sherzer and Anthony Woodbury.

2. I am indebted to the members of that class for their hard work, rich data, keen insights and continual intellectual stimulation as we worked together discovering the linguistic features used by the people whose stories and other verbal performances they had recorded. Special thanks go to Charlotte Ross, Doug DeNatale, Susan Vorscheimer and Pter Lowry whose data are either cited or specifically referred to in this paper. The contributions of Mario Montano and Charlene Poirier whose respective work on Mexican Spanish and French Canadian narratives added a dimension to our work, and of Bonnie Blair, Pat Amos and Maggie Craig are all gratefully acknowledged as is that of the unnamed friend from New Jersey whose story is quoted.

3. Charlotte Ross generously shared recordings of her own and Cratis Williams' tellings of Mutsamag with our class. As was true for me in Sahaptin, working with a highly organized traditional narrative more easily gave understanding of the rhetorical patterns which one then finds used also in other oral genres. The arrangement of its lines cited here was arrived at jointly during an informal seminar during the spring term.


5. Susan Vorscheimer ms.

6. From a transcription made by a family member.


8. They say, "Ii, pūl au xāsaita auku." 'Yes, snow is falling, now then.' The usual way to speak of falling snow is to use the verb to snow, twanān-. Pūl refers to snow on the ground. Of course, it is the fallen snow that threatens the people with starvation, keeping the hunters from catching deer. Perhaps pūl is well chosen here.

9. Though both Bullhead and Crayfish are introduced in this verse it is the second, Crayfish, who is subject of an SV sentence. In conjoined nouns it is the second that takes the suffix showing they are a pair, and all other suffixes.

REFERENCES


Important treatments of clause types in the Salish language, with particular reference to questions of subordination and adjunction, have appeared in recent work.\(^1\) In "Complex Expressions in Bella Coola" (1981, MS.), Davis and Saunders claim that Bella Coola lacks embedding as a grammatical process, having only adjoined clauses of the type Hale (1976) has identified as very typical in Australian languages. Davis and Saunders suggest that since clausal adjunction is a prominent feature of Bella Coola as well as of certain Australian languages, that it is "not an areal phenomenon, but represents a more broadly distributed language type" (p. 10). Thompson and Thompson, in their recent comprehensive grammar of the Thompson language (1981, MS.) review the processes of subordination in Thompson, and observe:

Vagueness of subordinations. It is important to note that these subordinating devices in Thompson do not correspond directly to particular types of English subordination. For example, it seems impossible to identify a particular Thompson structure that would meaningfully be designated a relative clause. (pp. 330-331.)

And on sentence types:

The opposition of subordination and coordination is less sharply drawn in Thompson than, for example, in English. Above the clause level most elements are probably best considered in coordinate relationship. From the English point of view, some of the clause particles discussed above (36.3) seem to introduce now an independent, now a dependent clause. These distinctions appear to have little meaning for Thompson sentence structure. (p. 340).

Our purpose here is to define clause types in another Salish language, Lummi, in order to show that Lummi also has no embedded clauses, thus supporting the claims of Davis and Saunders on Bella Coola. It is frequently the case in the study of a language that problems of analysis are intertwined to such an extent that solutions to certain problems depend upon the solutions to others. That is, it often happens that a particular proposal has analytical consequences for the treatment of other problems in the language. We present in this paper an analysis of adjoined clauses in Lummi that bears on the following topics: the question of a fundamental noun/verb distinction in Lummi; the syntactic function of the "articles" or determiners; and the question of the clausal status of nominal adjuncts. We propose that the absence of embedding as a grammatical device in Lummi shows that Lummi is an extreme or "perfect" non-configurational language (Hale, 1982). In Australia, according to Hale (1976, p. 78), clausal adjunction has the "principal responsibility for productive recursion in syntax". In Lummi, adjunction is the only source of recursion. Finally, we survey the kinds of syntactic structures that Lummi employs to do the work that embedding does in other languages; in particular, to build sentences "about" sentences. This will enable us to give a unified functional account of a variety of features of Salish syntax that seem unrelated at first glance.
1. Adjoined vs. embedded clauses: defining features. Subordinate clauses may be either adjoined to or embedded within main clauses in contrast to conjoined or coordinate clauses, which are of equal syntactic rank. Informally, embedded clauses are constituents of matrix clauses, while adjoined clauses are merely dependent upon main clauses. Some matrix clauses are syntactically incomplete without the embedded clause, which constitutes a direct argument to the matrix predicate.

(1) a. [For Tom to be late] annoys me.
   b. I believe [that Tom is late.]

There are other complex sentences where the main clause is a syntactically complete sentence; that is, the predicate lacks neither a subject nor an object without the subordinate clause. In one construction of this type, the subordinate clause is an oblique argument to the predicate of the main clause.

(2) I spoke to Tom (,) about his being late.

Across languages, oblique clausal arguments are often nominalized forms with possessive affixes marking person subject, as shown in (2). In this example, (,) indicates an optional pause that shows the syntactic marginality of these oblique clausal arguments. Clauses that are direct arguments to the predicate of the matrix clause, as in (1), are not separated from the matrix clause by a pause in normal style.

In the case of relative clauses, the main clause is syntactically complete without the relative clause, which is itself neither a direct nor an oblique argument to the main clause predicate, but constitutes only a part of some argument. The question then is whether the relative clause is syntactically and phonologically integrated into the main clause (embedded) or merely paratactically attached (adjoined) to it. Compare the following:

(3) a. The man who was late annoyed me.
   (Restrictive; embedded)
   b. I was annoyed by the man, who was late.
   (Non-restrictive; adjoined)
   c. I was annoyed by the man who was late.
   (Either; ambiguous)
   d. The man, who was late, annoyed me.
   (Non-restrictive; adjoined)

Non-restrictive relative clauses are not syntactically integrated into the main clause; when sentence medial, they may be said to be parenthetically inserted, and are set off by prosodic features.

An example of an adjoined relative clause in Walbiri (Hale, 1976, p. 76) is as follows:

(4) natjulu-ju ą-ga yankiri pant-qa, kutja-lpa ą-pa-qa-qa.
   (I-erg AUX emu spear-past, COMP-AUX water drink-past)
   'I speared the emu which was/while it was drinking water.'

This Walbiri sentence is parallel to certain constructions in English which Chomsky (1964) has identified as structurally ambiguous.

(5) a. We saw the boy eating the ice cream cone.
   b. We saw the boy who was eating the ice cream cone.
   c. We saw the boy while he was eating the ice cream cone.
Chomsky views (5a) as ambiguous between the readings shown in (5b) and (5c) because (5a) may be derived from either (5b) or (5c); that is, either (5b) or (5c) is the underlying form for (5a).

Hale's position is that there is no justification for either derivation in the Australian sentence, where the adjoined clause is simply undifferentiated between temporal and (non-restrictive) relative clause interpretations. Hale observes also that whereas clauses that are temporally related need have no co-referential elements, this is not the case with adjoined relative clauses:

(6) a. I speared the kangaroo, while John slept.
   (temporal)

b. I speared the kangaroo, which was/while it was
   drinking water.
   (temporal or relative)

This co-referentiality of elements in main and subordinate clauses is a crucial feature of relative clauses, whether they are adjoined or embedded. Because of this co-referentiality, there is redundancy, and the co-referential term may be omitted. This deletion of co-referent terms may lead to ambiguity:

(7) a. I saw him, out walking.

b. I saw him while he was out walking.

c. I saw him while I was out walking.

This kind of ambiguity would not occur in Lumi, where the adjoined clause is a nominalization that is obligatorily marked for person subject by a possessive affix:

(8) len-nox'wan k' s-sat-jo s
    I saw him when he was
    1  2  3  4  5  6  7  8 walking.
    1 - see  4 - complementizer  7 - medio-passive
    2 - trans.  5 - derivational  8 - 3rd poss.
    3 - 1st pers.  6 - walk

One difference between adjoined and embedded clauses noted by Hale is phonological. In Walbiri, as in English, adjoined clauses may be sentence initial:

(10) While it was drinking water, I speared the kangaroo.

Hale points out that sentence initial adjoined clauses have prosodic features which separate them from the main clause; but if the adjoined clause is sentence final, the intonational features may be absent. Therefore, while pause and intonational features can prove that a clause is adjoined, they cannot prove that it is embedded, since some adjoined clauses have the same prosodic features as embedded ones.

A second difference between adjoined and embedded relative clauses is syntactic: embedded clauses are syntactically integrated into the main clause. Hale views a Walbiri clause that is preceded and followed by other elements of the main clause as embedded, whereas a clause that precedes or follows the main clause may be only adjoined.

Another syntactic difference between embedded and adjoined clauses identified by Hale is as follows: embedded clauses in the Australian languages he is concerned with are non-finite (that is, lack an AUX constituent) whereas adjoined clauses may or may not have AUX (be finite). Here again, only negative evidence can
be adduced; if a clause in these Australian languages has AUX, it is not embedded. But other languages, for example English, have finite embedded clauses:

(11) I don’t believe [that Tom has left.]

In Lumi, as we will show, all subordinate clauses lack an AUX constituent. Therefore, the absence of AUX cannot be taken as evidence that a clause is an embedded subordinate clause, as opposed to an adjoined subordinate clause, as is the case in Walbiri.

The third kind of difference between adjoined and embedded clauses noted by Hale is semantic. Hale proposes that while certain clauses may be syntactically adjoined, they are semantically embedded, and that it is a grammatical imbalance of this kind that has led in some cases to historical change in a language family whereby embedded clauses develop from adjoined ones. Givón (1981) has proposed a similar historical change in Hebrew and other languages. We assume that what Hale means by a “semantically embedded” relative clause is a restrictive relative clause; consider example (1) above, repeated here for convenience:

(3) b. I was annoyed by the man, who was late.
   (Non-restrictive)

c. I was annoyed by the man who was late.
   (Ambiguous)

A clause that is set off by prosodic features is non-restrictive. But a clause that is not set off by prosodic features may be ambiguous as to its restrictiveness. Therefore, the fact that a relative clause is restrictive or semantically embedded cannot be adduced as proof of syntactic embedding. Embeddedness can only be ruled out on phonological and syntactic grounds.

The defining features of embedded clauses may be summarized as follows:

(12) Clauses that constitute direct arguments to the predicate of another clause are embedded, since the matrix clause is syntactically incomplete without them.

(13) Clauses that constitute oblique arguments, clauses that constitute part of an argument (relative clauses), or clauses that adverbially modify the predicate of another clause are not embedded if they are not phonologically and syntactically integrated into the main clause.

Adjoined clauses in Walbiri are not embedded by virtue of (13).

In the next section, we will present evidence showing that in Lumi a) there are no clause types that are direct arguments to the predicates of other clauses, and b) there are no subordinate clause types that may not be optionally set off by a pause and other prosodic features. We conclude that Lumi lacks embedding as a grammatical process.

2. Clause types in Lumi: predicates and arguments. Each clause type in Lumi may be defined by a particular set of particles that appear with predicates in that clause type. In the following sections, we will identify the particles that are specific to each clause type. We will begin our survey with main clauses.

2.1. Main clauses: AUX. Main clauses in Lumi are imperative or indicative: it is the latter we will be concerned with here. Indicative clauses are composed of the Predicate-AUX complex. The inventory of AUX in Lumi is as follows:
The set of clitics that mark person-subject, and render a clause indicative (finite):

-\(\text{-s}\) 1 pers. sg.
-\(\text{-sx}\) 2 pers. (sg. or pl.)
-\(\text{-f}\) 3 pers. (sg. or pl.)

The interrogative particle that occurs only in clauses with the person-marking clitics given in (14):

-\(\text{-a}\) - interrogative

The predicate states some attribute that applies to some individual; elements appearing in AUX identify that individual by clitics that mark person-subject. In Lumi, this set of person markers appears only in main clauses, and marks the clause as indicative or finite. That is, the speaker may use such a clause to make an assertion; the clause is declarative in mood. Another AUX particle differentiates (yes/no) interrogative sentences.

The -\(\text{s}\) which appears on third person transitive predicates is an ergative suffix.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Equivalent</th>
<th>AUX</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>know</td>
<td>1st pers.</td>
<td>2</td>
<td>trans.</td>
</tr>
<tr>
<td>2</td>
<td>trans.</td>
<td>1st pers.</td>
<td>3</td>
<td>man</td>
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<tr>
<td>3</td>
<td>erg.</td>
<td>1st pers.</td>
<td>4</td>
<td>deter.</td>
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</tbody>
</table>

This ergative suffix is not an AUX particle since it does not occur in the same position as the person markers given in (14). Compare:

The suffixes that mark tense/aspect in Lumi sometimes appear in the AUX constituent, but they also occur elsewhere:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Equivalent</th>
<th>AUX</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>go</td>
<td>1st pers.</td>
<td>2</td>
<td>future</td>
</tr>
<tr>
<td>2</td>
<td>future</td>
<td>1st pers.</td>
<td>3</td>
<td>2nd person</td>
</tr>
</tbody>
</table>

Therefore, we conclude that these tense/aspect particles are not AUX elements. The distribution of these particles is comparable to that of the negative particle in English, which may appear in the AUX constituent of the sentence, where it attaches to some AUX element, or may appear elsewhere:

(22) I can't go.

(23) Not everyone can go.

In labeling the constituent of a sentence that renders it finite AUX, we follow the usage originated by Hale (1973) when he applied the term to a second position constituent of Walbiri sentences composed of particles and clitics that specify sentence mood. The label AUX is intended to capture the parallels between the function of these second position particles in many languages and the function of auxiliary verbs in others. Confusion arises because many languages have other auxiliary or "helping" verbs which serve to build complex predicates, not sentences:

<table>
<thead>
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<td>1st pers.</td>
<td>3</td>
<td>2nd person</td>
</tr>
<tr>
<td>3</td>
<td>1st pers.</td>
<td>4</td>
<td>det.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>det.</td>
<td>1st pers.</td>
<td>5</td>
<td>deter.</td>
</tr>
</tbody>
</table>
In (14), ?ameʔ is an auxiliary or "helping" predicate, but it is not a part of the Lummi AUX constituent, which is composed of particles. Some languages, including some Salish languages, may not have a syntactic category AUX. We therefore do not claim AUX to be a syntactic universal, but an important typological feature and a significant cross-language parallel. Klokeid (1974) gives an interesting analysis of AUX in Nitinaht (Nootkan) and Demers (1980, 1981) has argued for AUX in Lummi. We will recognize an AUX constituent in the analysis of Lummi sentences given here, but we would like to emphasize that if the reader prefers, he or she can substitute the longer label "second position indicative particle sequence" for the more controversial term "AUX". In Lummi, as we will show, all subordinate clauses lack an AUX constituent. Therefore, the absence of AUX cannot be taken as evidence that a clause is an embedded subordinate clause, as opposed to an adjoined subordinate clause, as is the case in Walhiri.

There are modal particles in Lummi that also appear both in indicative and subordinate clauses, and are also not AUX particles:

(25) ?ameʔ-q-1a-san "I might have come"
   1 - come  2  3  4
   1 - past.

(26) ʔeʔi-t-son kʔ ons-ʔameʔ-q-1a "I know you might have come"

There are other particles in Lummi that may occur in several clause types.

Since third person marking is zero in indicative sentences, the question arises as to how such sentences can be identified as indicative. The answer is that if a construction is not marked subordinate, and if it does not carry first or second person subject marking, it may be identified as a third person finite indicative clause. The Predicate-AUX complex constitutes a complete sentence, what Hikari (1976) termed the "proposition"; no nominal arguments are required to make a complete sentence. Since third person marking is phonologically null, an intransitive predicate that appears alone, as in Lummi

(27) yeʔ "He goes"

(28) ʔeʔiʔ-gaʔ "He's a man"

may be interpreted as a complete sentence, as a predicate with a third person subject. If a predicate is transitive, it is overtly marked as having more than one argument, by virtue of a transitive suffix:

(29) ʔeʔi-t-s "He knows it"

Salish languages have a set of such transitive suffixes, which mark differences in the degree of control of the agent. (See Thompson, 1978; Thompson and Thompson, 1981; Saunders and Davis, 1978; Galloway, 1978; and others.)

2.2. Nominals: the iota operators. It has been argued that nominal complements or adjuncts that appear in Salish sentences are not a part of the same clause in which the predicate appears, but separate clauses in their own right. This view has been most clearly developed by Kinkade (1978) in his important paper on
the lack of a noun/verb distinction in Salish. When non-oblique nominals occur in a sentence, they may be interpreted as anaphorically linked to some pronominal argument that is invariably marked in the Predicate-AUX complex. They are optional additions to the main clause, which is syntactically complete without them; they are never syntactically integrated into the Predicate-AUX complex. Furthermore, in Lummi they may always be set off optionally by a pause and other prosodic features that mark them as adjoined.

(30) x̂i-t-s, co sμayʔqα? "He knows him, the man." = He knows the man.

The crucial feature of nominal adjuncts in Salish is that they may be formed from any predicate, by means of the freely productive deictic particles that serve as determiners, and serve to distinguish this clause type. Salish languages typically have a set of such deictic determiners that mark distinctions in gender, visibility, distance, known vs. unknown, etc. Since these determiners are freely productive with all predicates, they correspond exactly to the logician's iota operator; an operator which builds a term out of a predicate.

(31) co veʔ? "the (one that) goes" x(Fx)
    co sμayʔqα? "the (one that is a) man" x(Fx)
    co x̂i-t "the (one that) knows it" x(Fx,y)

The set of such determiners in Lummi that distinguish these clause types includes:

(32) Masculine   Feminine
    co   so   term specifier (def., indef.)
    kʷ   kʷ  remote, invisible
    kʷco kʷso remote, but may or may not be visible

Less frequently occurring are:

(33) Masculine   Feminine
    xo   xo   certain; special
    čo   čo   only, just a part
          (čo sμayʔqα? = a bachelor)
          čo smayʔqα? = just a part of
                        the meat)

In Lummi, these determiners or iota operators serve to build two kinds of nominals from predicates, corresponding to the types identified for Squamish by Kuipers (1967). We will follow Kuipers' terminology here.

2.2.1. "Subject centered" nominals. In these constructions, the nominal is comparable to the "headless" relative clause as identified by Hale and Platero (1975). Since the subject is always the "missing" third person head of the relative clause — or, in other terminology, may be viewed as having been extracted — it is never marked on the nominal.3 Examples are as in (31) above.

2.2.2. "Object centered" nominals. In these constructions, the object is always the "missing" third person head of the relative clause — the element that has been extracted. Accordingly, it is never marked on the nominal, while the subject is marked. Examples:

(34) co x̂i-t-ʔαn "the (one that) I know" y(Fx,y)
    co x̂i-t-ʔαʔ "the (one that) you know" y(Fx,y)
Intransitive predicates of course can never be inflected as object-centered nominals, since they have no objects to extract. The examples given in (31) and (34) show how the iota operator notation captures the syntactic notion of extraction in these derived nominal expressions.

The set of person markers that appear in object-centered nominals are those given in (34). This set of "reduced" person markers is distinct from the person marking clitics that appear in AUX in finite or indicative clauses.

2.3. Nominalizations and derived predicates. The third Luumi clause type to be surveyed here is also a derived nominal expression. We will term these expressions nominalizations, in order to differentiate them from nominals, which result from the concatenation of a determiner and a simple predicate. Nominalizations result from the concatenation of a determiner (or iota operator) and a derived predicate; a predicate with the prefix s-.

Nominalizations, like nominals, occur with the set of possessive person marking affixes, as follows:

(35) sa na-ten "my mother" so ten-s "his mother"
     so ?an-t’en "your mother" sa ten-Y "our mother"

In (35), these affixes occur with a nominal and mark possession.

(36) k’? na-s-ye? "my going" k’? s-ye?-s "his going"
     k’? ?an-s-ye? "your going" k’? s-ye?-Y "our going"

In (36), these affixes may be said to mark the subject of the nominalization. Across languages, possessive affixes often serve this function, as the English translations indicate.

Recall that nominals (Det + Predicate) refer to individuals and may be translated as "the one who [is] X". Nominalizations (Det + s- + Predicate) refer to propositions as individuals; that is, they refer to some proposition, without asserting that it is the case, in contrast to finite indicative clauses with AUX.

Nominalizations make it possible for the Luumi speaker to refer to propositions, in the same way that other objects may be referred to. If the derived predicate on which the nominalization is built is transitive, then the object of that predicate is marked just as it is in main clauses:

(37) a. k’? na-s-?a-t-ŋ "my knowing him"
     b. k’? na-s-?a-t-oŋas "my knowing you"
     c. k’? s-?a-t-oŋŋ "his knowing us"

Derived predicates often appear without a possessive person marker:

(38) a. ?aŋŋ?qam? "It’s a man."
     b. ?aŋŋ?am? "It’s a woman."
     c. ?aŋŋ?to? "It’s Raven."

Some derived predicates apparently have no corresponding undervived forms; that is, these predicates are rare or non-occurring without s-. The examples in (38) seem to fall in this class, and therefore we do not hyphenate the s-.

It is worth emphasizing here that predicates with s- are not nouns, or derived nouns, even when a corresponding undervived form is
lacking. Derived predicates with s- function syntactically like any other predicate:

(39) no-s-ki? k' no-s-yo? "It is my wish that I go; I want to go."

Lummi predicates are simply undifferentiated semantically between "noun", "verb", "adjective", etc., and correspond closely to the predicates of predicate logic. It is the determiner which builds a nominalization from a derived predicate, and thus determines the syntactic role of the construction.

Note that it is not the case that the derived nominals and nominalizations are built upon finite sentences; the AUX elements that build finite sentences are excluded from them. A predicate plus AUX is a finite sentence; a predicate preceded by a determiner is an adjoined subordinate clause. In this sense, Lummi not only lacks a noun/verb contrast, it lacks a word/phrase contrast.

(40) a.  x̱i-t-sx' "You know it" (Finite sentence)
    b.  x̱i-t-s-sx' "Do you know it?" (Finite sentence)
(41) a.  k' x̱i-t-sx' "the one that you know" (Non-finite nominal expression)
    b.  k' x̱i-t-sx' "your knowing it" (Non-finite nominal expression)

These examples show that the role of the predicate is the same in all these constructions; that is, it assigns some attribute, or is "predicational", just as all verbs, nouns, adjectives, etc. in other languages are. It is the grammatical particles, or syntactic operators, that serve to build sentences or nominal expressions. Predicates are neither nouns, verbs, nor sentences — they are the lexical items upon which the grammatical particles operate to produce syntactic categories or structures. Predicates are true of individuals; therefore, a predicate preceded by a determiner may be used to specify some individual. Propositions or sentences are true of the world; therefore a predicate plus an AUX element that identifies the individual of which the predicate is true can be used to make an assertion about the world. Alternatively, propositions can be referred to as objects of discourse; this is the function of nominalizations.

Davis and Saunders (1981) make the important observation that Bella Coola clauses with the s- prefix merely mention some proposition, as opposed to the assertion of a proposition that is the work of a main clause. This contrast between mention and assertion is precisely the work of AUX. Main clauses have sentence mood, have illocutionary force; in the case of statements, finite sentences state that some proposition matches up with the world; in the case of a yes/no question, finite sentences are used to ask whether the proposition matches the world. In Lummi nominals, (cf., co x̱i-t-an, "the one that I know") there is a presupposition as to some state of affairs, as in all definite descriptions; but assertion is not the function of a nominal. It is the deictic and modal features marked in AUX, including tense in languages such as English, that serve to give a sentence a truth value, so that a finite sentence can be used to assert or to ask; whereas non-finite clauses may be used only to mention some possible state of affairs.
Since a grammar needs only to mark the contrast between finite and non-finite clauses, it is redundant to have grammatical mechanisms showing both a) that some clauses are finite (via AUX), and b) showing that other clauses are non-finite (nominalized clauses, subjunctives, conditionals, etc). Therefore, some languages have only one of these mechanisms. Lummi has both: it explicitly marks some clauses as finite, with AUX, and it explicitly marks some clauses as non-finite, with determiners. Because of this redundancy, determiners may in some cases be omitted in rapid speech; but they are always optionally present, whereas determiners and AUX are always mutually exclusive.

Nominals, as described in Section 2.2, above, are either "subject centered" or "object centered". There are no nominals that are "oblique centered". If a nominal adjunct is to correspond to some oblique argument of a predicate, then this adjunct must be a nominalization. For example, the predicate iJan, "eat" in Lummi is intransitive:

(42) iJan a ca sōminaxw  "he ate (fed on) the salmon"
    1  2  3  4
    1 - eat   3  - det.
    2  - obl. part. 4  - salmon

(43) stem k' s-iJan-s  "what was it, that on which he fed? = what did he eat?"
    1  2  3  4  5
    1  - what  4  - eat
    2  - det.  5  - 3rd poss.
    3  - nom.

Note that in (43), the nominalization is not introduced by the oblique marker o, as the nominal in (42) is. Nominalizations with a possessive affix that serves to mark the subject of the derived predicate are never marked oblique in our data.

2.4. Hypotheticals. The fourth Lummi clause type to be surveyed here is the hypothetical. This clause type corresponds to clauses which have been termed "unrealized", or "conditional", etc., in other Salish languages. These clauses are non-finite; they lack AUX. Like nominals and nominalizations, they are marked subordinate with a determiner. They resemble object-centered nominals in that they occur with the "reduced" person-markers given above in (34). They resemble nominalizations in that they refer to propositions, but they do not require the s-prefix. The distinguishing features of hypothetical clauses are as follows:

(44) a. They occur only with the determiner k' (remote, invisible = abstract), or with the clause particle of, "if, when";
    b. They never carry possessive affixes;
    c. Person subject is marked on intransitive as well as transitive forms, via the "reduced" person markers; that is, there is no "object centered" vs. "subject centered" contrast.
    d. They convey that the proposition mentioned is hypothetical.

Examples:

(45) Transitive
    a. k' xţi-t-on  "if I know it"
    b. k' xţi-t-on'  "if you know it"
    c. k' xţi-t-os  "if he knows it"
    d. k' xţi-t-I  "if we know it"
In the examples given in (45), all these hypothetical forms are homophonous with certain object-centered nominals, and may also be interpreted as "the remote one that I (you, he, we) know". Recall that the object-centered nominals carry no subject marking, no ergative suffix, and have only third person subjects.

(46) k' x̱i-t
"the remote one that knows him"
Intransitive predicates in a hypothetical construction differ from intransitive nominals also in person-marking:

(47) Intransitive
   a. k' yeʔ-on "if I go"
   b. k' yeʔ-ox' "if you go"
   c. k' yeʔ-as "if he goes"
Intransitive nominals never carry person marking, and of course occur only in the third person:

(48) k' yeʔ- "the remote one that goes"
An example of the contrast between a hypothetical clause and a nominalization is as follows:

(49) x̱̱iʔt ku ṉiʔ a̱l q̱aliʔ-al-as "That one brags whenever he talks."
   (hypothetical)
1 - brag 5 - talk (repeated activity)
2,3 - that one (male) 6 - 3rd pers. (non-finite)
4 - whenever

(50) ley-t-ən k' a̱l q̱aʔ-al-s "I saw him when he talked."
   (nominalization)
1 - see 5 - derivational
2 - trans. 6 - talk
3 - 1st person 7 - 3rd poss.
4 - comp.

This completes the list of clause types in Lümî. To summarize: Lümî has main clauses – declarative and interrogative (marked with AUX); and subordinate clauses – nominals, nominalizations, and hypotheticals (marked with determiners, and further differentiated as described above). Parenthetically, we may observe that Lümî imperative sentences lack both AUX and determiner, and are non-finite main clauses. There are no imperative suffixes or particles, and there is no distinctive imperative intonation.

As the preceding discussion of the syntactic function of predicates and particles in Lümî shows, we are of the opinion that Kinkade (1978) is correct in his claim that there is no contrast between simple nouns and verbs in Salish, as Thompson and Thompson have repeatedly claimed. There are predicates, and there are particles; some of the latter are syntactic operators which serve to determine clause types.

Lümî derived nominal expressions have some syntactic properties that parallel those of simple nouns in languages that have a noun/verb contrast. Across languages, both clauses and nouns may carry case marking. Lümî nominal expressions have case; they are absolute:

(51) a. s̱iʔ-ʔeʔt tiʔa mahōʔ "Put these baskets away!"
   1 2 3 4 5
1 - be high 4 - demon.
2 - medio-passive 5 - basket
3 - caus.

b. ?uʔ ?omot cp s̱ek'ʔ "Raven is at home."
   1 2 3 4
1 - connective part. 3 - det.
2 - sit 4 - Raven
or oblique:

(52) a. ʔəl-son a ca əwəŋʔəq? "I believed the man."
    1 2 3 4 5
    1 - believe 4 - det.
    2 - 1st pers. 5 - man
    3 - oblique

b. ilən-son a ca təq? "I ate the salmon."

In some Salish languages, nominal expressions may be interpreted as ergative when there is an accusative pronoun in the clause. The following Lushootseed examples are taken from Hess (1973, pp. 91-93):

(53) ?əxəs'a-t-s ti čəxs "The boy clubbed me."
        clubbed-
        transitive-me

(54) ?əxəs'a-t-sid ti čəxs "The boy clubbed you."
        clubbed-
        transitive-you

Lummi lacks sentences corresponding to (53, 54) because of the agent hierarchy. 6

3. Subject marking vs. subject agreement. We noted earlier that Salish predicates are conveniently indexed for the analyst according to the number of non-oblique arguments they have. We need not have recourse to the lexical entry for the predicate; morphological material attached to the predicate shows the number of non-oblique arguments. If the predicate has no suffix or the suffix -n (middle voice or intransitivizer), it is intransitive, and has a single non-oblique argument:

(55) a. ʔəmə? "He comes"
    b. ʔəcə-ʔ "He sneezes"

If the Lummi predicate has the suffix -t or the suffix -nəx' (-nə) (according to the degree of control on the part of the agent), it is transitive, and has two non-oblique arguments:

(56) a. ʔəsə-t-s "He hit it (on purpose)"
    b. ʔəsə-nə-s "He hit it (accidentally)"

There are no "di-transitive" predicates in Lummi such as give, teach, etc. The corresponding Lummi predicate has an additional oblique argument.

(57) ?əqəs-t-son a əxəni? a əkə səcə:na:x'
    1 2 3 4 5 6 7 8
    1 - give 5 - woman
    2 - trans. 6 - oblique
    3 - 1st pers. 7 - det.
    4 - det. 8 - salmon

"I gave the woman the salmon." (I presented the woman with the salmon)

In some Salish languages, there are certain predicates with an "in-directive" or causative affix that do have three non-oblique arguments. 7 The following example in Spokane is given by Carlson (1980, p. 25):

(58) ?əwə-ʔ-t-an In? Albert əkəčis
    lostitthim: DET his:dog
    PRED DIRECT GOAL

"I lost Albert's dog" (Compare the English "I lost Albert his dog")

In this example, the suffix -t- adds a third non-oblique argument to the transitive predicate. In all these cases, the number of arguments is clearly marked on the predicate, and these predicates in isolation may be interpreted as full sentences. Therefore, it may be argued that these predicates have pronominal arguments, to
which any nominal adjunct is anaphorically linked. This anaphoric linkage, we have seen, is a necessary condition for non-temporal adjoined clauses.

Where nominals are set off with a pause or break in intonational contour in a Lumi sentence, they are clearly adjoined:

(59) k'olb̪̱-t-s, ca moyʔas  "He shot it, the deer."
    1  2  3  4  5
    1 - shoot  4 - det.
    2 - trans.  5 - deer

All nominal expressions in Lumi may optionally be set off in this way.

Consider the following contrast:

(60) ?u? q̂i-t-san ca moyʔqap k' s-yeʔ-s
    I know it/him, (the one who is a) man, (who is) going
    "I know the man who is going"

(61) ?u? q̂i-t-san k' s-yeʔ-s ca moyʔqap
    "I know it/him, (that he is) going, (the one who is a) man
    "I know that the man is going"

As the clause-by-clause translations show, no embedding need be postulated to account for this contrast. In both examples, the two nominalized clauses are sisters under NOM, and it is the order of the nominal expressions that determines their interpretation. The proposed structure for both (60) and (61) is:

(62)

We conclude that there are no cases in Lumi where a nominal adjunct can be shown unambiguously to be syntactically integrated into the main clause. Nominal adjuncts are simply sisters to the main clause under 5; and Lumi, despite its fixed word order, can be recognized as a clear example of what Hale (1982) calls a non-configurational, or "one-bar" language. A crucial feature of this type of "shallow" syntactic structure is the fact that the subject of the sentence may be read off the predicate or Predicate-AUX complex, thus obviating the necessity for the kind of "two-bar" syntactic structure involving government that languages such as English have. In Hale's framework, the Salish languages, like the Australian languages, have the single endocentric rule schema XI → ...X..., with relatively "flat" phrasemarkers. Lumi shows other attributes of non-configurational languages listed by Hale:
1) "pronoun drop" (zero third person); 2) lack of an NP-movement transformation; 3) lack of pleonastic words ("it", "there" as abstract subjects: cf., "it's raining"); 4) a Predicate-AUX complex; 5) "looseness" of grammatical organization (we may include here adjoined rather than embedded clauses), etc. In contrast, languages like English have deep hierarchical structure, government, "tight" grammatical organization, etc.

All of these syntactic features of non-configurational languages may follow from the fact that these languages lack a Subject syntactic category. The subject of the sentence is marked in the Predicate-AUX complex, but there is no PS rule corresponding to S → NP VP. Therefore, there is no subject position for other
elements to be moved into; no need for "dummy" or pleonastic subject elements; the possibility of a phonologically null subject marking in AUX for some person, etc. And the unusual feature of Salish syntax that we are concerned with here, the lack of embedded clauses, also follows from this shallow syntactic structure. Subject and object are marked in main clauses, but there are no NP argument positions in main clauses that a subordinate clause could occupy.

4. Propositional attitudes. We turn now to the question of how Lummi speakers are able to build sentences about sentences, to express propositions about propositions. The pragmatic functions of the Lummi clause types that we have surveyed so far may be summarized as follows:

(63) 1. Main clauses: used to assert or question some proposition. \([- (F(x); ?(F(x))

2. Nominals: used to identify some individual by means of some attribute. \[\forall x(F(x)); \exists x(F(x,y); \exists y(F(x,y)

3. Nominalizations: used to mention some proposition relative to some context. \[\exists (F(x)\ldots

4. Hypotheticals: used to mention some proposition relative to some context, and to convey that the state of affairs it describes is hypothetical. \[\exists (F(x)\ldots

To this we may add, parenthetically:

(64) 5. Imperatives: used to instruct the hearer to perform or not to perform some action. \(1(F(x))\}

\[\text{to-de} \quad \text{su-\text{deq}} \quad \text{co} \quad \text{to-\text{pe-ta-ta}}\]

1 2 3 4 5 6 7 8

Lummi has two clause types, therefore, that can be used to mention propositions without asserting them: nominalizations and hypotheticals.

(65) n̄s-\text{s}l?  k\text{ }\text{?an-s-ye} "I want you to go"

The nominalization in (65) refers to some state of affairs without asserting that it describes some actual event.

(66) čse-t-\text{n-t-}\text{san} k\text{ }\text{ye}an "I was told to go"

The adjoined clause in (66) mentions some state of affairs and identifies it as hypothetical.

Examples (65) and (66) are sentences about sentences. Constructions that have this semantic property — that enable us to mention some proposition in order to comment about it, without committing ourselves as to its truth or falsity — express what Russell (1940) called "propositional attitudes". Across languages, complex sentences with embedded clauses are typically used in the expression of propositional attitudes. Lummi speakers obviously are able to express propositional attitudes, to build sentences about sentences. If there is no embedding in Lummi, we need to show what grammatical mechanisms Lummi employs to do the work of embedding in other languages. We will need to show how these Lummi constructions differ syntactically from embedding constructions in other languages, and we will also need to show that they
have the same logical and pragmatic properties as embedding constructions.

In this section, we will survey the grammatical devices that Lunmi employs to do the work of embedding. Each of these construction types deserves lengthy treatment; our purpose here is only to identify them as grammatical devices which languages may use in the place of embedding. In doing so, we are able to give a unified functional account of a variety of features of Lunmi syntax.

4.1. Single clause expression of propositional attitudes. There are no subordinate clauses in these constructions, but rather elements that serve to build complex predicates.

4.1.1. Predicative particles. Included here are suffixes and/or clitics that may attach to the predicate. Some of them are modal elements:

(67) ye? x? "It seems that he went"

And desideratives:

(68) ye?-yoq-son ?ol "I just wish I could go"

Nouns such as these are frequently expressed by embedding in other languages, as the English translations show.

4.1.2. Auxiliary or "helping" predicates. Some predicates — as distinct from the particles referred to in 4.1.1. — also serve to build complex predicates. These are primarily directional.

(69) ye? t?k q. "He went home"

(70) ?aw?-son les-n-n. "He came to see me"

These complex predicates do not involve embedding, in contrast to the English translation of (70). Constructions with complex predicates might be described as showing "semantic embedding", in the sense of Ross' (1967) analysis of the English auxiliary verbs and modals. We are concerned here with syntactic rather than semantic structure, and our claim is that there are no clause boundaries unless there is some syntactic evidence for such boundaries. In Lunmi, subordinate clauses are introduced by a determiner. Determiners are excluded between a predicative particle and the predicate, or between an auxiliary predicate and the main predicate.

In this respect, constructions with complex predicates resemble other constructions involving modification in Lunmi, as in the following single clause construction:

(71) ?ay?-sx W SW3Y?qa? 1 2 3
1 - be good
2 - you
3 - man

"You're a good man"

There are also complex predicates with the linking particle ?u?: these constructions are often translatable with adverbs and quantifiers:

(72) yos ?u? ?ij?an, co ?g?to? "Raven always eats"

In this example, there is a main clause with a complex predicate with ?u?, and an adjoined subordinate clause, the adjunct.

4.2. The expression of propositional attitudes by constructions with subordinate clauses.

4.2.1. Direct propositional adjuncts. There are propositional adjuncts in Lunmi that are anaphorically linked to a direct (subject
or object) argument marked on the predicate. In these cases, the
pronoun refers to a proposition as an individual. These cases
are precisely parallel to the adjoined relative clause in syntac-
tic structure.

4.2.1.1. "Subject-linked" propositional clauses. In these con-
structions, the predicate is intransitive. The single argument of
the predicate is the subject, which is anaphorically linked to
the adjoined clause. Some of these are impersonal:

(73) ?aw?-la kʷ ?an-s-len-i-t co sway?qa?
   "It's not the case that you saw the man" =
   "you didn't see the man"

(74) ?ey -gi kʷ si?it-es co s-qʷel-s
   1 2 3 4 5 6 7 8 9
   1 - good 4 - to be true 7 - derivational
   2 - counterfactual 5 - 3rd person 8 - speech
   3 - det. 6 - det. 9 - 3rd poss.
   "It would have been good if his speech were true"
   (Hypothetical)

(75) ?askay kʷ no-s-ye?
   "It's impossible for me to go;"
   1 2 3 4 5
   1 - to be impossible 4 - derivational
   2 - det. 5 - go
   3 - 1st poss.

Other subject-linked propositional clauses are related to some
individual, and carry possessive person markers:

(76) ?an-sli? kʷ no-s-ye? "You want me to go"

Compare (65) above. Also:

(77) nu-ye?utln? kʷ no-s-ye? "I don't like to go"
   1 2 3 4 5 6
   1 - 1st poss. 4 - 1st poss.
   2 - to dislike 5 - derivational
   3 - det. 6 - go

4.2.1.2. "Object-linked" propositional adjuncts. In these con-
structions, the predicate is transitive. The object argument of
the predicate is a third person pronoun that is anaphorically
linked to the adjoined subordinate propositional clause.

(78) ?u? ?si-t-san kʷ ?an-s-toy? "I know that you are
   good"

(79) len-1-t-san kʷ s-ŋwɔl-s "I saw him talking"

4.2.2. "Oblique-linked" propositional adjuncts. Here the adjoined
subordinate clause corresponds to an oblique argument of the predi-
cate. Oblique arguments are not marked on the predicate, so there
is no pronominal argument to which the subordinate clause is
linked. There is a different kind of linkage here: the preposi-
tion or case particle specifies the connection of the subordinate
clause to the predicate.

   PREP
   "You don't talk while eating"

(81) iʔan co akʷto? a co ʔoʔiwax
   PREP
   "Raven ate the salmon"

4.2.3. Simple adjunction. Some adjuncts resemble adjoined predic-
cates in other languages.

(82) sexʷ-ŋ-san kʷ no-s-ye? "I'm (too) lazy to go"

And temporal clauses:

(83) Quxnət-san kʷ no-s-liŋt-ŋ "I'm slow when I walk" or
   "I'm slow, walking"

And purpose constructions:

(84) ?ʔe?-tŋ co ʔaʔiwax ʔiʔan-s a co ʔəniiʔawŋə
   "The salmon was dried to have food for the winter"
Some constructions with simple adjunction employ a class of predicates that we will call "dicto-cognitive": they refer to acts or states of speech or cognition. 9 When we make some comment on something that is said or thought, we construct sentences about sentences, or propositions about propositions. Yet the curious thing about many of these predicates in Lummi (and other Salish languages) is that they are morphologically intransitive. Is it possible that they are syntactically transitive, although the predicate is marked only for a single argument? If this were the case, there would be no pronominal argument for the subordinate propositional clause to be anaphorically linked to, and it might be argued that the clause itself constitutes the argument to the predicate, and is therefore embedded. However, these subordinate clauses share the properties of all other such clauses in Lummi: they are not syntactically integrated into the main clause, and they may be optionally set off from the main clause by a pause and other prosodic features.

Examples of these intransitive dicto-cognitive predicates are as follows:

(85) jel-san k' n'a-s-len-n-onas
   "I believe that I see you"

(86) y'ok'en-o-sx k' ?n-s-?Iax, si?em?
   "Do you think that you (will) eat, sir?"

(87) mo?l-lo-san k' s-ye?-s
   "I forgot that he went"

(88) leg-n co sway?qa? k' s-?Iax-t-s-?a sa s?eni?
   "The man said that he knew the lady"

Evidence that these propositional subordinate clauses are not direct objects of these morphologically intransitive predicates is as follows: when a predicate such as jel "believe" is used in reference to an individual, that individual is marked oblique:

(89) jel-san a co sway?qa? "I believe the man"

Perhaps a better translation of this predicate would be "to be sure about, to be certain of". When the predicate is applied to a first or second person object, a transitivizer appears:

(90) jel-n-onas-san "I believe you (trust you?)"

Examples (89) and (90) show that the subordinate propositional clause is not the direct object of this predicate; we conclude that these propositional clauses are adjuncts to the main clause.

We noted in Section 2.3. above that there are no "oblique centered" nominal expressions, and that adjuncts that correspond to oblique arguments are expressed as nominalizations, with no oblique particle present. Examples (42) and (43) are repeated here as (91) and (92):

(91) iIfan la co s?enax'k "He ate (fed on) the salmon"
(92) sten k' s-iIfan-s "What did he eat? (What is it, that on which he fed?)"

Therefore, it is possible that the intransitive dicto-cognitive verbs under discussion here have oblique arguments, which would not be marked on the predicate, and to which the adjoined nominalizations correspond. In that case, better translations for examples (85, 86, 87) may be as in follows:

(93) I'm certain, (about) my seeing you.
(94) What do you think, (about) your eating, sir?
(95) I forgot, (about) his going.

Davis and Saunders (1981) propose that because of the association between forms with the s- prefix and oblique arguments in Bella Coola, that s- prefixed forms always correspond to some "peripheral" semantic role, in relation to the predicate. In Lumi, this is not the case; as we have seen, predicates with s- are simply derived predicates, and may serve as main clause predicates even with attached possessive markers, as in

(96) na-səšinaw? tiʔs sq'əqay? "That dog annoys me"

and in examples (76, 77) above.

A second group of dicto-cognitive predicates do take direct objects, but these objects are the individuals addressed, not the propositions conveyed. They correspond to English sentences like

(97) a. He ordered me to go.
   b. He told me to leave.
   c. He asked me if I went.

These English verbs may be said to have two objects or complements: the person addressed and the proposition. In this respect, they resemble English di-transitive verbs:

(98) a. He gave me the book.
   b. He told me the story.
   c. He asked me a favor.

But Lumi has no di-transitive predicates. Recall that with predicates like give, the person recipient is the direct object, and the gift is marked oblique. (See example (57) above.) It seems plausible, then, that in a Lumi sentence like

(99) čəse-t-son kʷ s-yeʔ-s "I ordered him to go" ("I commanded him, (as to) his going")

that the nominalization again corresponds to an unmarked oblique argument of the predicate. It has been proposed that such constructions in Salish show the operation of a "raising" rule, as has been proposed for its English equivalent. We see no need for a rule of this kind. Under our analysis, the main clause has a pronominal object, while the adjoined nominalization has a pronominal subject, and these items are co-referential.

Another example of a transitive predicate with the addressee as a pronoun argument, with an anaphorically linked nominal, and an adjoined nominalization:

(100) ʔiʔ qən-é-t-s kʷ na-səʔəyyətən
   kʷ s-ʔayʔ-s yeʔ-s yeʔ təʔsəʔəj?əj?yeʔ?
   "And she told my siblings that it would be good to go to church"

One sub-set of these predicates is often employed in a passive construction, so that the addressee is the subject, the single non-oblique argument, while the proposition is adjoined:

(101) čəse-t-ʔəʔən a Bill kʷ na-ʔiʔən
   "I was ordered by Bill to eat"

(102) qən-é-t-ʔəʔən kʷ yeʔ-ən tə-əl-ʔə-rəʔən a čə stəʔəməx
   "I was told to take my medicine"

(103) čəse-t-ʔəʔən a Bill kʷ yeʔ-ʔiʔə
   "We were asked by Bill if we went"

In sum, there are two ways of expressing propositions about propositions in Lumi: in single clause constructions with
predicational particles or "helping" predicates; and in complex constructions with adjoined propositional (nominalization or subjunctive) clauses. These adjoined clauses may be anaphorically linked to a pronominal argument marked in the PRED-AUX complex, oblique linked, or simply adjoined.

4.3. The logical and pragmatic properties of adjoined clauses.
We have shown how Lummi syntax excludes embedding as a grammatical device, and outlined the construction types that it employs to do the work of embedding. It remains to be demonstrated that the logical and pragmatic properties of these alternative constructions are the same. Compare the following:

(104) a. I shot the deer that was running.
   b. I shot the deer. It was running.

(105) a. I shot the deer while it was running.
   b. I shot the deer. At that time, it was running.

These examples show that sets of sentences can have the same truth conditions as single sentences, provided there are deictic and anaphoric elements that insure that the same events are being described. But problems arise with intensional contexts:

(106) a. John believes that I shot the deer. (But I didn't.)
   b. John believes it. I shot the deer. (But I didn't.)

(107) a. John wants Ed to shoot the deer.
   b. John wants it. Ed shoots the deer.

These examples show that a set of sentences may not have the same truth conditions as a single sentence with embedding, because the embedded clause does not have a truth function independently of the matrix predicate. But embedding is only one way to show this; another way is to mark some clauses non-finite, and adjoin them. Non-finite clauses are only mentioned, not asserted. Therefore, the proposition stated in the non-finite clause has no truth function, and the problems shown in (106, 107) do not arise.

Main clauses have another property, that of illocutionary force. Therefore, a set of sentences may have different pragmatic as well as truth-functional properties from a simple sentence. Other illocutionary force.

(108) I shot the deer. Was it running?
These problems also cannot arise with adjoined non-finite clauses, since they do not have the property of illocutionary force. Thus, if a language has grammatical devices for marking some clauses non-finite, it does not need embedding also, to build complex sentences that have the modal properties outlined here.

5. Conclusions. We have addressed the question of whether Lummi, a member of the Salish family, has embedded clauses; we conclude that it does not, thus supporting the claims advanced recently by Davis and Saunders on Bella Coola. We have defined Lummi clause types, shown that all but main clauses are non-finite, and shown how the lack of embedding, the lack of a noun/verb distinction, and the clausal status of derived nominal expressions are all connected. We have shown that complex sentences with adjoined clauses have the same logical and pragmatic properties as complex sentences with embedded clauses, thus making it possible for the Lummi speaker to build sentences "about" sentences. We have identified the devices that Lummi employs to do the work of
embedding. We have identified Lwmi as a non-configurational language, and pointed out other attributes that languages of this type share. These attributes seem to follow from the fact that non-configurational languages have no subject (or "NP") syntactic category that is independent of the predicate (or "VP"). Lwmi is an extreme case of this language type, since it has no nouns that are constituents of main clauses, either in a subject category or dominated by the predicate.

We want to close with an observation on which everyone who works on these languages would agree: the relatively "shallow" hierarchical structure and "loose" clausal adjunction would not prevent the Salish speaker from expressing ideas as intricate and elevated as those which can be expressed in any other language.

Footnotes
1. We would like to thank Mr. Aloysius Charles for his Lwmi language contributions. Elizabeth Bowman was kind enough to check several points of Lwmi grammar with Mr. Charles for us. Ken Hale provided stimulating and helpful remarks on the material in this paper. Finally, we would like to thank the Dean of Liberal Arts and the Vice-President for research of the University of Arizona for their financial support. In this paper, we generally provide interlinear translations of the Lwmi material, although such translations have not been given in some instances where repetitious material appears.
2. The analysis of AUX in this paper is revised from the Lwmi AUX proposed in Demers (1980, 1981). The revision is based on a deepened understanding of the function of AUX-like elements in natural language. For further discussion see Jelinek (1982).
3. The term extraction is used here as an expository device, and does not imply an analysis which includes movement transformations.
4. Kinkade (1978) suggests that the s- prefix in certain Salish languages marks an aspectual contrast, and is not a nominalizer.
5. The distribution of the subject enclitics is quite different in some other Salish languages. In Thompson, for example, the subject clitics occur only with intransitive predicates, while transitive predicates occur with "reduced" subject suffixes. See Thompson and Thompson, Ms.
6. See Jelinek and Demers (IJAL, forthcoming) "The Agent Hierarchy and Voice in some Coast Salish languages."

7. Although there is a causative affix -x"- in Lulmi, we have not as yet been able to elicit sentences with this affix that have three direct arguments.

8. See Jelinek (1982) for a discussion of SUBJECT and PREDICATE as syntactic categories in some languages.


References


Kinkade, M. Dale. (1978) "Salish Evidence Against the University of 'Noun' and 'Verb'", Ms.