Bella Coola Syntax

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0.1 In this paper we outline the syntax of Bella Coola, a Salishan language spoken in Bella Coola(nux̣alk), British Columbia.[1] In earlier times the language was spoken as far west as Kwatna, approximately fifty miles west of Bella Coola on Kwatna Inlet, and as far east as Stuie(stuix), approximately forty miles east on the Bella Coola River. To the north, Bella Coola was spoken in Kimsquit(nuλ'l) at the mouth of the Dean River; and to the south it was spoken at Tallio, on the South Bentinck arm of the Dean Channel. Voegelin and Voegelin(1964) cite 200-400 as an estimate of the present number of native speakers. The total number of registered Bella Coolas in 1966 was 578, and of these only the middle aged and older speak the language. This number is closer to 200.[2]

The framework we adopt for the presentation of the syntax is generally that of Chomsky 1965. The main portions of that theory which we use are the distinction of deep and surface structure and the concomitant base and transformational rules. Our suggested base structures are more semantic than those in Chomsky 1965, and in this our framework is closer to that of Chafe 1970a and 1970b. We adopt a provisional base component that seems best suited to the exposition of Bella Coola grammar.

0.2 Bella Coola is a VSO language. Compare the following sen-
tences:

    (1)   k'xis ti?imlktx cixnascx [3] 'The man sees the woman'
            (see-he/her Prox-man-Art Prox-woman-Art)

    (2)   sp'tis ti?immTkitx wawac'uksc 'The boy is hitting
                the dogs'
            (hit-he/them Prox-boy-Art Prox-dog-Plural-Art)

The verbs[4] here k'x 'see' and sp' 'hit', exhibit a set of affixes
that incorporate the subject and object of (1) and (2).[5] The af-
fixes appear to mark not only a subject and direct object but also
the subject and indirect object as in

    (3)   naptis cixnascx wa?imlkuksc xtism+ktx 'The woman
                is giving the men the fish'
            (give-she/them Prox-woman-Art Prox-man-Plural-Art
            Prox-fish-Art)

(The peripheral term, tism+ktx, is marked by the preposition x-.)
The subject-object affixes then copy onto the verb the information
of person and number from the first two adjacent nouns. The agree-
ment of (3) is (employing the usual terms) between the subject and
indirect object. But in

    (4)   sp'is cixnascx ti?imlktx xtistntx 'The woman is
                hitting the man with the stick'
            (hit-she/him Prox-woman-Art Prox-man-Art Prox-
            stick-Art)

the middle noun is the direct object, and the peripheral term,
tistntx again marked by x-, is the instrument. The second nouns
in (1)-(4) are treated identically in Bella Coola as are the third
nouns in (3) and (4). We assume this same formal treatment to
indicate a semantic identity. The notions of subject, direct ob-
ject, indirect object, and instrument as usually (and informally)

understood do not coincide with the distinctions made within

Bella Coola. We will call the first term(e.g., cixnascx in (4))

the Agent; the second term(e.g., ti?imIktx in (4)), the Patient;

and the third term(e.g., xtistntx in (4)), the Adjunct. The

designation of Bella Coola as VSO is then correct with the equa-

tion of S with Agent and of O with Patient.

0.3 Utterances in Bella Coola are basically predicative consist-

ing of two principal terms we label Comment and Topic. Sentences

(1)-(4) involve at least two terms(Agent and Patient) within the

Topic, but they are otherwise structurally identical to sentences

with only an Agent within the Topic:

> (5)   ƛ'apaw waƛ'mstac   'The people are going'
>   (go-they Prox-person-Art)
>
> (6)   staltmx ti?imIktx   'The man is chief'
>   (chief Prox-man-Art)
>
> (7)   waks tiƛ'aptx   'Who is going'
>   (who Prox-go-Art)

where ƛ'ap 'go', staltmx 'chief', and waks 'who?' are predicated

of their respective Topics. The principal syntactic difference

between sentences (1)-(4) and (5)-(7) lies only in the presence

of two(or more) terms within the Topic versus the presence of one

term and the respective application of Agent-Patient Agreement

versus the Agent Agreement rule. The Comment associated with a

one-term Topic---that is always the Agent---announces a property

predicated of that Agent. In a two-termed Topic, the Comment

predicates a relationship between the Agent and Patient. All

sentences in Bella Coola seem to be of this structure or to be
derivable from combinations of it by embedding. The elemental
base structure within Bella Coola is assumed to be

(8)   S
           Comment   Topic
                               Agent Patient Adjunct
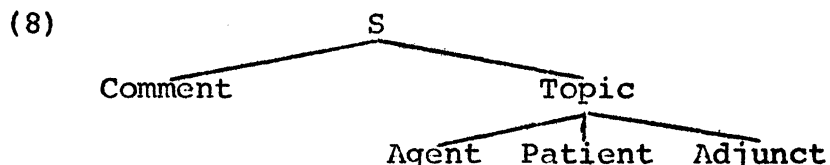
1.0 In the remainder of this paper we consider three sentence-
types involving complex structures that we label "adjectival
clauses"(1.1 and 2.1), "relative clauses"(1.2 and 2.2), and "com-
plex sentences"(1.3 and 2.3). These sentence-types exhibit
many of the principal syntactic phenomena of Bella Coola.

1.1 Consider the following:

    (9) (i)   k'xic tija ti?imlktx   'I see the good man'
               (see-I/him Prox-good Prox-man-Art)

         (ii) k'xic ti?imlk tijatx   'I see the good man'
               (see-I/him Prox-man Prox-good-Art)

The two are paraphrases. Formally, the -tx is restricted to one
occurrence, while the ti- occurs as many times as there are modi-
fying Comments; thus

    (10) k'xic tija ticācti ti?imlktx   'I see the good,
              young man'
         (see-I/him Prox-good Prox-young Prox-man-Art)

but

    (11) *k'xic tijatx ti?imlktx

The adjectival clause also occurs where the modified term
is Agent of an intransitive verb(12), Agent of a transitive
verb(13), Patient of a transitive verb(14), and Adjunct(15):

(12) (i) k'xíc ti?apsuɬ ti�'mstatx ?aɬt'aẋʷ 'I see the person living there' (see-I/him Prox-live Prox-person-Art there)

(ii) *k'xíc ti�'msta ti?apsuɬtx ?aɬt'aẋʷ[6]

(13) (i) *k'xíc tiqʷup'ɬt ti�'mstatx[7]

(ii) k'xíc ti�'msta tiqʷup'ɬttx 'I see the person who punched him' (see-I/him Prox-person Prox-punch-Past-he/him-Art)

(14) (i) *k'xíc tiqʷup'ɬit ti�'mstatx

(ii) k'xíc ti�'msta tiqʷup'ɬittx 'I see the person they punched' (see-I/him Prox-person Prox-punch-Past-they/him-Art)

(15) (i) *k'xíc tisnapíxʷ tisnā̱ẋtx[8]

(ii) k'xíc tisnā̱ẋ tisnapíxʷtx 'I see the slave you're giving him' (see-I/him Prox-slave Prox-Prep-give-you/him-Art)

The paraphrases of (9) are absent in (12)-(15). Only one sequence of modifier and modified occurs. In (12) only modifier-modified is acceptable; in (13)-(15), it is the reverse. If a formal distinction is made between Adjective and Nonadjective, it is possible to predict where paraphrases may occur and where they may not. To predict which of the fixed sequences occurs in (12)-(15), a further distinction must be made between the Intransitive Comment of (12) and the Transitive Comments of (13)-(15). Sentences containing nouns as modifying terms parallel (12):

(16) (i) k'xíc tistaltmx ti?imlktx 'I see the man who is chief' (see-I/him Prox-chief Prox-man-Art)

(ii) *k'xíc ti?imlk tistaltmxtx

Adjective/Nonadjective and Transitive/Intransitive are con-
sidered to be properties of each lexical item. Syntactically,
the distinction between Transitive and Intransitive Comments
can be derived from the occurrence of an Agent and Patient or
of an Agent alone.

1.2 Relative clause constructions are illustrated by the fol-
lowing:

(17) (i) ?a+k'juki+ swas tija ti?imIktx 'We know
the man who is good'
(know-we/him who Prox-good Prox-man-Art)

(ii) ?a+k'juki+ swas ti?imIk tijatx 'We know
the man who is good'

(18) (i) ?a+k'juki+ swas tiƛ'ap ti?imIktx 'We know
the man who is going'
(know-we/him who Prox-go Prox-man-Art)

(ii) *?a+k'juki+ swas ti?imIk tiƛ'aptx

(19) (i) *?a+k'juki+ swas tiqʷup'+t ti?imIktx[9]

(ii) ?a+k'juki+ swas ti?imIk tiqʷup'+ttx 'We
know the man who punched him'
(know-we/him who Prox-man Prox-punch-Past-
he/him-Art)

(20) (i) *?a+k'juki+ swas tiqʷup'+it ti?imIktx

(ii) ?a+k'juki+ swas ti?imIk tiqʷup'+ittx 'We
know the man who they punched'
(know-we/him who Prox-man Prox-punch-Past-
they/him-Art)

(21) (i) *?a+k'juki+ swas tisnapixʷ tisnāx̣tx[10]

(ii) ?a+k'juki+ swas tisnāx̣ tisnapixʷtx 'We
know the slave who you are giving him'
(know-we/him who Prox-slave Prox-Prep-
give-you/him-Art)

As in sentences (9) and (12)-(15), paraphrases exist where the
Comment is an Adjective, and they are absent where the Comment
is a Nonadjective. The extant forms for the latter group of
sentences share with adjectival clauses the same orders of
modifier-modified or modified-modifier in parallel syntactic
structures. Compare (12) and (18) and (13)-(15) and (19)-(21).

Sentences (17)-(21) are paralled by a set where the
relative was 'who' is replaced by kas 'which':

(22)　(i)　　ʔaɬk'jukiɬ skas tija tiʔimlk　'We know
　　　　　　　which man is good'
　　　　　　　(know-we/him which Prox-good Prox-man)

　　　　(ii)　ʔaɬk'jukiɬ skas tiʔimlk tija

(23)　(i)　　ʔaɬk'jukiɬ skas tiʔapsuɬ tiʔimlk ʔaɬt'ax̣ʷ
　　　　　　　'We know which man lives there'
　　　　　　　(know-we/him which Prox-live Prox-man there)

　　　　(ii)　*ʔaɬk'jukiɬ skas tiʔimlk tiʔapsuɬ ʔaɬt'ax̣ʷ

(24)　(i)　　*ʔaɬk'jukiɬ skas tiqʷup't tiʔimlk [11]

　　　　(ii)　ʔaɬk'jukiɬ skas tiʔimlk tiqʷup't　'We
　　　　　　　know which man punches him'
　　　　　　　(know-we/him which Prox-man Prox-punch-
　　　　　　　he/him)

(25)　(i)　　*ʔaɬk'jukiɬ skas tiqʷup'iɬ tiʔimlk

　　　　(ii)　ʔaɬk'jukiɬ skas tiʔimlk tiqʷup'iɬ　'We
　　　　　　　know which man they punch'
　　　　　　　(know-we/him which Prox-man Prox-punch-
　　　　　　　they/him)

(26)　(i)　　*ʔaɬk'jukiɬ skas tisnapix̌ʷ tisnāx̣ [12]

　　　　(ii)　ʔaɬk'jukiɬ skas tisnāx̣ tisnapix̌ʷ　'We
　　　　　　　know which slave you are giving him'
　　　　　　　(know-we/him which Prox-slave Prox-Prep-
　　　　　　　give-you/him)

These sentences with kas work syntactically as those with
was do with two differences. The first is their behavior
with respect to the occurrence of Demonstrative/Article.
Neither may occur with kas. The relative element kas re-
fers to an indefinite object and as such is incompatible
with the definiteness of the grammatical categories of
Demonstrative/Article. (Cf. fn. 3 with respect to indefi-
niteness imparted by the absence of Demonstrative/Article.)
The relative element was identifies a specific object and
must occur with a member of this grammatical opposition.
The second difference between kas and was lies in the modi-
fied items with which they may occur. The relative kas
occurs with inanimate, animate, nonhuman, and human nouns,
but was is restricted to modifying human nouns.

1.3   The following complex sentences occur:

    (27)   ?aɬnapiɬ sƛ'aps ti?imlktx   'We know the
              man is going'
              (know-we/him go-he Prox-man-Art)

    (28)   ?aɬnapixʷ sjas ti?imlktx   'You know the man
              is good'
              (know-you/him good-he Prox-man-Art)

    (29)   ?aɬnapiɬ wasƛ'aps ti?imlktx   'We know the
              man is going'
              (know-we/him go-he Prox-man-Art)

    (30)   ?aɬnapixʷ wasjas ti?imlktx   'You know the man
              is good'
              (know-you/him good-he Prox-man-Art)

In (29) and (30) wa is sometimes translated by native in-
formants as "actually," "really," or "already." This con-

trasts with (27) and (28).

2.0 We now turn to a formal description of the sentences in 1.1, 1.2, and 1.3; and that description must be taken as tentative. The underlying structures are based on our feeling for the language---about "how things work"---and native informant reactions. The transformational rules are for the most part "motivated"; that is, they have application to two or more distinct structures. But it is always possible for a series of incorrect solutions to support each other mutually and appear correct overall. The following comments are then to be taken as one systematicization of certain syntactic phenomena in Bella Coola without claim of ultimate correctness.

2.1 Although sentences (9, 12-15) and (17-21) constitute close paraphrases, we forego drawing from this the conclusion that they are exact paraphrases and must derive from identical base structures. Our reasons are in part the formal syntactic differences between the two groups and in part the observations of Bolinger (1967 and 1968).

Sentences (9) and (12-15) are assumed to have an underlying structure analogous to the following one for (9):

(31)

```
                        S₁
          ┌──────────────┴──────────────┐
       Comment                         Topic
          │               ┌─────────────┴─────────────┐
          │             Agent                       Patient
          │               │                            │
          │               │                            S₂
          │               │               ┌────────────┴────────────┐
          │               │            Comment                    Topic
          │               │               │                         │
          │               │               S₃                      Agent
          │               │        ┌───────┴───────┐                │
          │               │     Comment         Topic               │
          │               │        │              │                 │
          │               │        │            Agent               │
          │               │        │              │                 │
          │               │        │              │                 │
         k'x            'I'         ja          ʔimɬk            ʔimɬk
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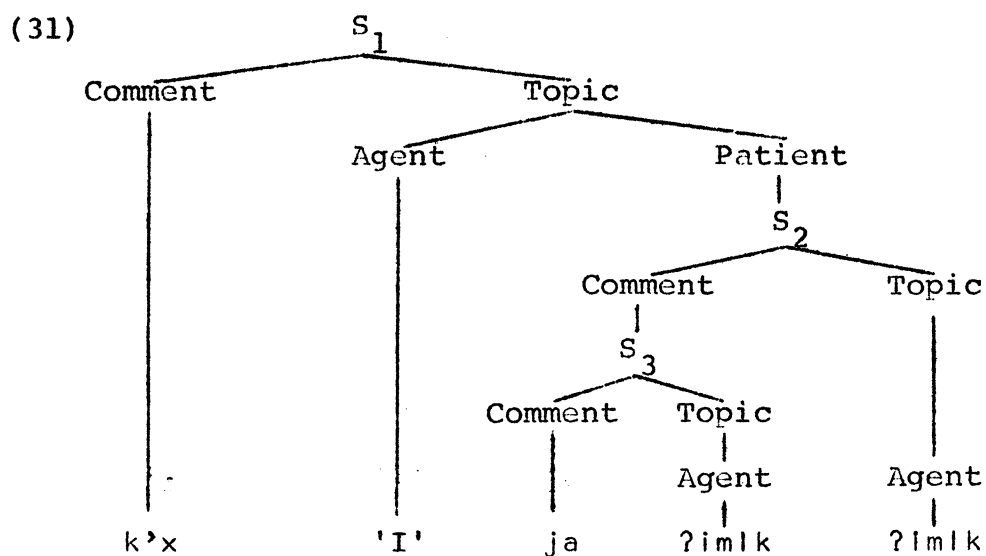
The structure of S_2 is based on earlier discussion of the predicative character of Bella Coola utterances. In the adjectival clause, the given Topic(Agent) of S_2 is ʔimɬk 'man', and it is predicated of this term that it is good. Similarly for the remaining sentences of this class.

To derive a surface structure from the above, underlying one, an Equi-Constituent Deletion rule applies as in English and elsewhere in Bella Coola(cf. Davis and Saunders 1972) deleting ʔimɬk in S_3. This yields(with tree-pruning. Cf. Ross 1969) a derived structure

(32)

```
                        S₁
          ┌──────────────┴──────────────┐
       Comment                         Topic
          │               ┌─────────────┴─────────────┐
          │             Agent                       Patient
          │               │                            │
          │               │                            S₂
          │               │               ┌────────────┴────────────┐
          │               │            Comment                    Topic
          │               │               │                         │
          │               │               │                       Agent
          │               │               │                         │
         k'x            'I'                ja                     ʔimɬk
```
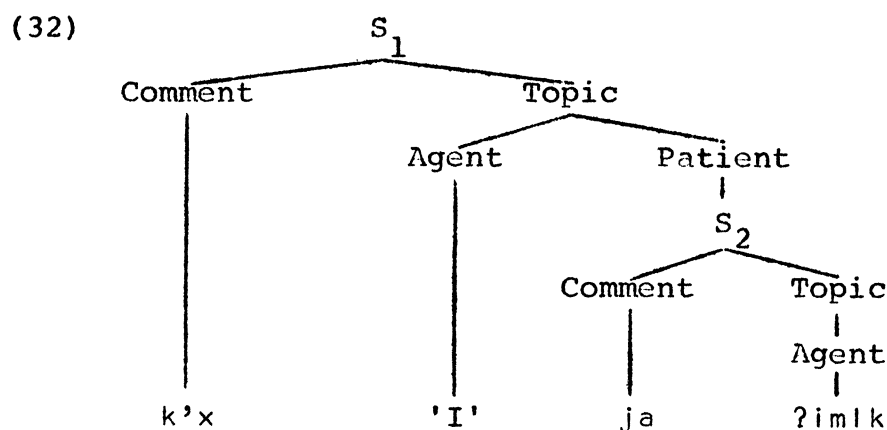
Agent-Patient Agreement now produces k'x-is. Any pronoun domi-
nated by Agent or Patient is deleted; this Pronoun Deletion
rule removes 'I' from the Agent of S_1.

Notice that the Agent Agreement rule does not apply to the
derived S_2 in (32), although we might expect it to and to affix
an -s according to our observation in fn. 5 that -s is the nor-
mal third person singular marker of an Agent in embedded sen-
tences. The Agent affixes are absent for the other persons and
numbers in this structure:

      (33)   k'xtic waja wa?imɩkuksc 'I see the good men'
            (see-I/them Prox-good Prox-man-Plural-Art)

One account of this is the following. We may have recourse to
the notion of global rules(Lakoff 1970) such that Agreement
holds between Comments and Topics only if the two are immediately
dominated by the same S in the base structure; if a syntactic
configuration of Comment and Topic dominated by an S is derived
by some transformational rule, then Agreement does not apply.
Since the Comment-Topic structure of S_2 in (32) is derived the
Agreement rules are inapplicable. Looking at (31), this means
that Equi-Constituent Deletion must apply before Agent Agreement
because the structural condition for the application of the latter
is met there, but it does not apply. Examination of sentences
(59)-(62) below provide support for this description.

A difficulty remains with the occurrence of the deictic
particles. We assume that Demonstrative/Article and Distal/Proxi-
mal are properties introduced within the base structure. In

terms of classical transformational generative grammar, these
properties may be introduced via a set of context-free rules
for Agent and so forth, so that a Complex Symbol is produced. A
morphophonemic rule then gives phonological shape to the features
of the Complex Symbol. Given this, the single, rightmost occur-
rence of -tx may be achieved by a rule spelling out Demonstra-
tive/Article to the right of the Agent of (32). In (32) ?imIk
of S_3 has been deleted before this rule applies. The result of
ordering Equi-Constituent Deletion before Demonstrative/Article
spelling is a single Demonstrative/Article element in S_2. The
multiple occurrence of ti- may be derived by a feature spreading
rule adding [+ Proximal -Female] (in this case) to all Comments
within the embedded S_3. Notice that disagreement of deixis with-
in an adjectival or relative clause is not possible:

     (34)   *k'xis taja ti?imIktx

     (35)   *k'xis swas taja ti?imIktx

Feature spreading accounts for this restriction. Distal/Proximal
is not spread to Comments of all embedded sentences. See, for
example, (27)-(30). Only those structures comparable to (31),
where some item is deleted, are so affected. This correctly
characterizes the sentences of 1.1 and 1.2, but not those of 1.3
The spreading of Distal/Proximal may then be included in the
operation of Equi-Constituent Deletion, and the subsequent opera-
tion of Deixis Spelling on both the Agent of S_2 and its Comment
adds the prefixes where appropriate.

Sentence (13) has the following underlying structure:

(36)

```
                        S₁
        Comment                    Topic
           |            Agent              Patient
           |              |                   |
           |              |                   S₂
           |              |        Comment           Topic
           |              |           |                |
           |              |           S₃               |
           |              |     Comment    Topic        |
           |              |        |     Agent Patient  Agent
           |              |        |       |      |       |
          k'x            'I'     qʷup'   X̓'msta  'he'   X̓'msta
```

As before we employ Equi-Constituent Deletion with respect to the two occurrences of X̓'msta, but notice that the affix of qʷup' is -t, not the normal 'he/him' -is. Where a third person singular or plural Agent(co-occurring with a third person singular Patient) of a transitive verb is to be deleted, the affix is -t. Where the Patient is singular, no other affix occurs; where it is plural, the additional increment -an appears:

(37) ʔaɬk'kjukiɬ tiX̓'msta tiqʷūxp̓ɬtantx[13] 'We know the person who punched them'
      (know-we/him Prox-person Prox-punch-Past-he/them-Art)

Where third person Agents occur with Patients of the first or second person in S₃ of (36), we again find the normal Agent-Patient affixes(cf. fn. 5):

(38) (i)   k'xit tiʔimlk tiqʷup'cstx 'They see the man who is punching me'
            (see-they/him Prox-man Prox-punch-he/me-Art)

   (ii)   kʾxit tiʔimɬk tiqʷupʾcttx 'They see the
man who is punching you'

   (iii) kʾxit tiʔimɬk tiqʷupʾtuɬstx 'They see the
man who is punching us'

   (iv) kʾxit tiʔimɬk tiqʷupʾtaptx 'They see the
man who is punching you all'

Sentence (14) has the structure:

(39)
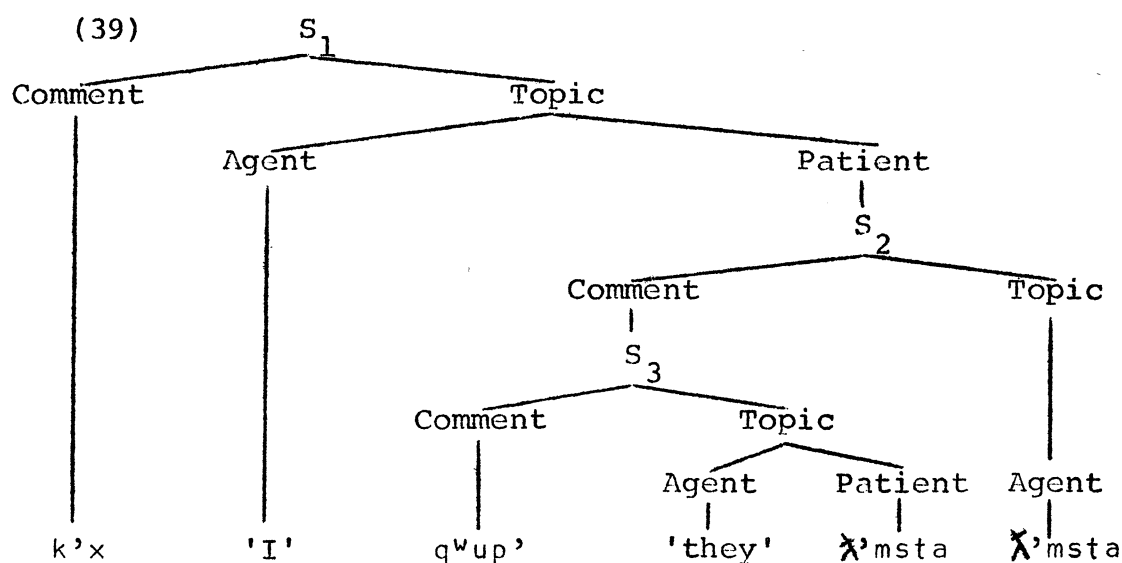
and the normal Agent-Patient affix for third person plural Agent
and third person singular Patient(-it) occurs.

The syntactic structure attributed to sentences (13) and (14)
seems to occur only where the modified term----the Topic of S_2
in (36) and (39)----is third person. That is, Bella Coola seems
to lack the equivalent of English "They see us who are good,"
"They see us who hit the man," "We see you who the man hit," etc.
Here Bella Coola has sentences on the model of (27)-(30). For
example,

(40) (i)   k'xtuɫt wasjaɫ   'They see that we are good'

      (ii)   k'xtuɫt ssp'iɫ tiʔimĺktx   'They see that we
             hit the man'

      (iii) k'xtuɫnu sspᵻ́ct xtiʔimĺktx   'We see that
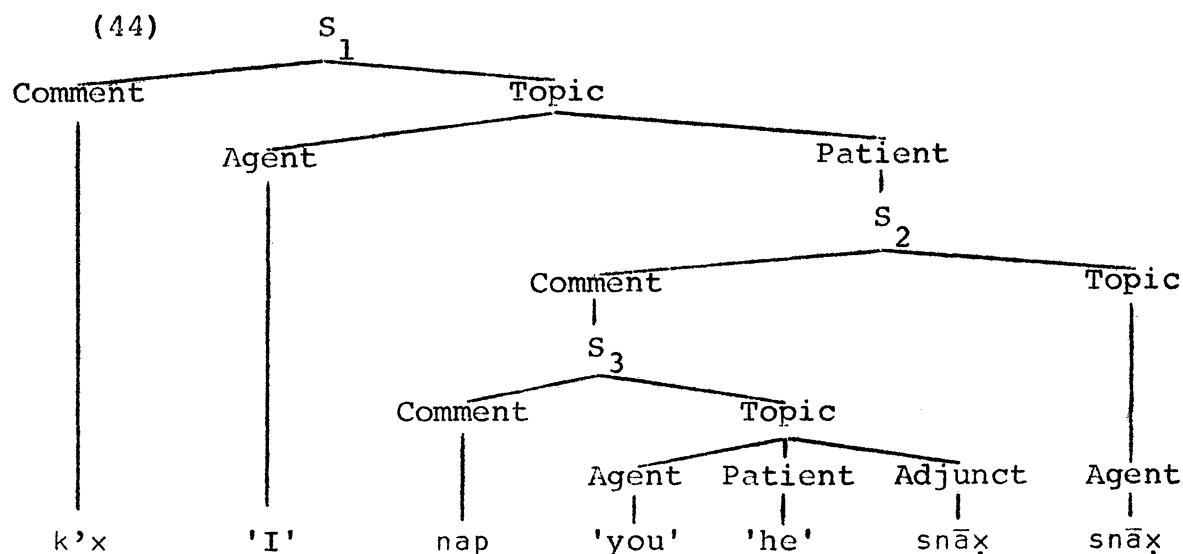   the man hit you'

and so forth.

To account for the affixes of (13) and (14), we must assume
Agent-Patient Agreement to apply before Equi-Constituent Dele-
tion.[14] The reverse order results in making Agent-Patient
Agreement inapplicable, since one of the constituents required
for its application(either Agent or Patient) would be deleted.
The -t and -tan of (13) and (37) are neutralizations of -is/-it
and -tis/-tit, respectively. Factors affecting Agreement in
embedded sentences with Transitive Comments are then:

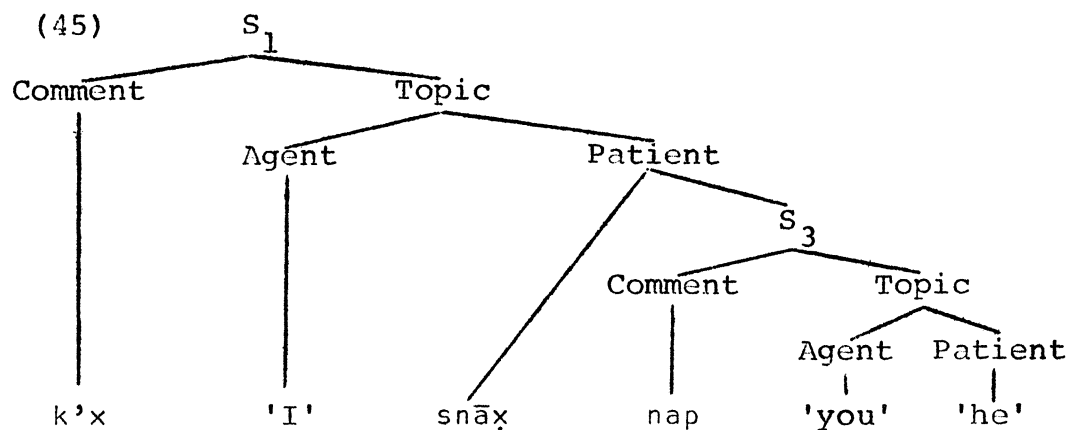(41)   Person of the Agent

        (i)   Third
        (ii) Nonthird

(42)   Person of the Patient

        (i)   Third
        (ii) Nonthird

(43)   Identity

        (i)   The Agent is to be deleted
        (ii) The Patient is to be deleted

(41i), (42i), and (43i) produce -t and -tan. (41i), (42i), and
(43ii) or (41i), (42ii), and (43i) produce the more usual af-
fixes(cf. fn. 5). (41ii) and 43i) or (42ii) and (43ii) produce
sentences on the model of (40).

Sentence (15) has the structure:

(44)

S_1

```
        Comment                      Topic
           |              Agent                Patient
           |                |                     |
           |                |                    S_2
           |                |          Comment            Topic
           |                |             |                 |
           |                |            S_3                |
           |                |     Comment       Topic       |
           |                |        |      Agent Patient Adjunct   Agent
           |                |        |        |     |       |        |
          k'x              'I'      nap     'you'  'he'    snāx̣    snāx̣
```

A rule is now required to raise the Agent Topic of S_2 in (44)---
and also in (31), (36), and (39) obligatorily or optionally under
the conditions noted above. For (44) this produces (with tree-
pruning) the derived structure:

(45)

S_1

```
     Comment                    Topic
        |            Agent               Patient
        |              |           /                  \
        |              |          /                   S_3
        |              |         /            Comment        Topic
        |              |        /               |        Agent    Patient
        |              |       /                |          |         |
       k'x            'I'    snāx̣             nap       'you'      'he'
```

Analogous derived structures are produced from (31), (36), and
(39). Topic-Raising must follow Equi-Constituent Deletion.

The other transformational rules apply as before, but two
additional comments are required. The first concerns the -s-

of tisnapixʷ in (15). This appears whenever a portion of an Adjunct co-occurring with the preposition x- has been deleted. It is assumed to be a permutation-copy(and allomorph) of x-. We return to its discussion below.

The second comment concerns the transitive structure of S_3 in (36), (39), and (44). The following sentences occur where an overt Agent, Patient, or Adjunct is present, e.g., "I know the man who punched the woman" in place of "I know the man who punched her/him":

(46) ?aɬk'jukiɬ ti?imlk tiqʷup'ɬt cixnascx   'We know the man who punched the woman'
(know-we/him Prox-man Prox-punch-Past-he/her Prox-woman-Art)

(47) ?aɬk'jukiɬ ti?imlk tiqʷup'ɬis cixnascx   'We know the man the woman punched'
(know-we/him Prox-man Prox-punch-Past-she/him Prox-woman-Art)

(48) ?aɬk'jukiɬ tisnā̲x tisnapixʷ cixnascx   'We know the slave you are giving the woman'
(know-we/him Prox-slave Prox-Prep-give-you/her Prox-woman-Art)

(49) ?aɬk'jukiɬ ti?imlk tinapixʷ xtisnā̲xtx   'We know the man you are giving the slave to'
(know-we/him Prox-man Prox-give-you/him Prep-Prox-slave-Art)

(50) ?aɬk'jukiɬ ti?imlk tinapt cixnascx xtisnā̲xtx
'We know the man who is giving the woman the slave'
(know-we/him Prox-man Prox-give-he/her Prox-woman-Art Prep-Prox-slave-Art)

Expressions of (46)-(50) such as

(51)　(i)　　*ʔaɬk'jukiɬ tiʔimlk<u>tx</u> tiqʷup't cixnascx

　　　(ii)　*ʔaɬk'jukiɬ tiʔimlk tiqʷup't cixnascx<u>tx</u>

　　　(iii) *ʔaɬk'jukiɬ tiʔimlk tiqʷup't cixnas<u>tx</u>

and so forth are incorrect.　The Demonstrative/Article elements may occur within only one Topic of an adjectival(or relative) clause, i.e., the S_2 structures of (36), (39), and (44).　This intersects with the obligatory-optional raising of the S_2(modified) Topics of these sentences.　In adjectival clauses where the structure of the S_3 Comment is transitive and such permutation is obligatory as in (46)-(50), the Demonstrative/Article elements are always those of the S_3 Topic.　The permuted Topic never has these deictic elements(cf. (51i)),[15] while the S_3 Topic does(cf. xnas in (46)-(48)).　In adjectival clauses where the structure of the S_2 Comment is intransitive, permutation does not occur, and it is always the S_2 Topic that has the Demonstrative/Article elements.　In (9), which has an Adjective Comment, it is the S_2 Topic again that has these elements.　But notice that where permutation occurs(optionally in (9ii) or obligatorily in (13ii), (14ii) and (15ii)) this element is left behind.

(52)　*ʔaɬk'jukiɬ tiʔimlk<u>tx</u> tija

(53)　*ʔaɬk'jukiɬ tiʔimlk<u>tx</u> tiqʷup't

and so forth are incorrect.　A pattern can be seen in this, viz., Deixis Spelling of Demonstrative/Article applies to lexical categories within a Topic if the Comment of that Topic

contains no S. (Note that where pronouns alone occur in S_3 or where a single lexical item occurs in S_3 and is lost by Equi-Constituent Deletion, the Topic of S_3 dominates no lexical items. It is dropped, and Ross's(1969) tree-pruning further drops the S_3 node producing a derived structure of S_2 comparable to that of (32). Deixis Spelling may then correctly apply to the S_2 Topic of such derived structures.) Where raising of the S_2 Topic is obligatory as in (46)-(50), the S_3 node has not been deleted, and Deixis Spelling is prevented from applying to the S_2 Topic. This accounts for the final -tx in (13ii)-(15ii) and the absence of two final Articles (or Demonstratives) in (46)-(50).

Let us now consider the following additional sentences:

(54) ʔaɬk'jukiɬ tijatx 'We know the good one'
(know-we/him Prox-good-Art)

(55) (i) ʔaɬk'jukiɬ tiqʷup'ɬttx 'We know the one who punched him/her/it'
(know-we/him Prox-punch-Past-he/him-Art)

(ii) ʔaɬk'jukiɬ tiqʷup'ɬt cixnascx 'We know the one who punched the woman'
(know-we/him Prox-punch-Past-he/her Prox-woman-Art)

(56) (i) ʔaɬk'jukiɬ tiqʷup'ɬistx 'We know the one he/ she punched'
(know-we/him Prox-punch-Past-he/him-Art)

(ii) ʔaɬk'jukiɬ tiqʷup'ɬis cixnascx 'We know the one the woman punched'
(know-we/him Prox-punch-Past-she/him Prox-woman-Art)

(57) (i) ?a+k'juki+ tisnap̌ix^wtx 'We know the one
          you gave him/her'
          (know-we/him Prox-Prep-give-Past-you/him-Art)

     (ii) ?a+k'juki+ tisnap+ix^w cixnascx 'We know
          the one you gave the woman'
          (know-we/him Prox-Prep-give-Past-you/her
          Prox-woman-Art)

The structure of these sentences is that of those previously
considered. The difference lies in the choice of lexical item
as modified S_2 Topic. In place of choosing a noun---?imlk or
X'msta as before---as Topic, a third person pronoun 'he' occurs
in (54)-(57); in (54) for example

(58)
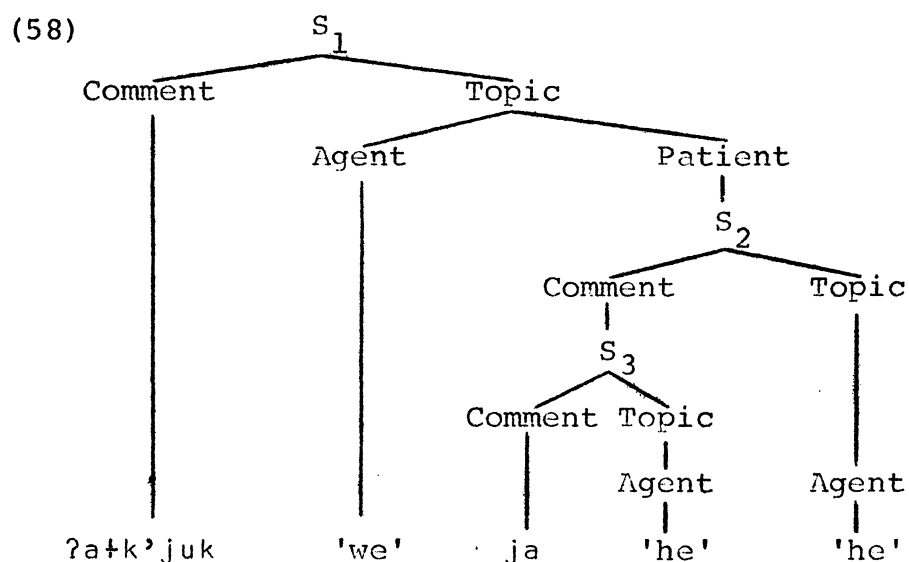
The Agent pronoun 'he' of S_3 is deleted by Equi-Constituent
Deletion, and the Agent pronoun of S_2 is deleted after Agent-
Patient Agreement as elsewhere yielding (54).

Let us now add these sentences:

(59) (i)   ja cixnascx ʔuɬtiʔimlktx   'The woman is
          good to the man'
          (good Prox-woman-Art Prep-Prox-man-Art)

    (ii)   *ʔaɬkʼjukiɬ tisijas cixnas tiʔimlktx

    (iii) ʔaɬkʼjukiɬ tiʔimlk tisijas cixnascx   'We
           know the man the woman is good to'
           (know-we/him Prox-man Prox-Prep-good-she
           Prox-woman-Art)

    (iv) ʔaɬkʼjukiɬ tisijas cixnascx   'We know the
           one the woman is good to'
           (know-we/him Prox-Prep-good-she Prox-woman-
           Art)

(60) (i)   ƛ'ap cixnascx ʔuɬtiʔimlktx   'The woman is
          going to the man'
          (go Prox-woman-Art Prep-Prox-man-Art)

    (ii)   *ʔaɬkʼjukiɬ tisiƛ'aps cixnas tiʔimlktx

    (iii) ʔaɬkʼjukiɬ tiʔimlk tisiƛ'aps cixnascx   'We
           know the man the woman is going to'
           (know-we/him Prox-man Prox-Prep-go-she
           Prox-woman-Art)

    (iv) ʔaɬkʼjukiɬ tisiƛ'aps cixnascx   'We know
           the one the woman is going to'
           (know-we/him Prox-Prep-go-she Prox-woman-
           Art)

(61) (i)   ja cixnascx ʔaɬtiʔimlktx   'The woman is
          good for the man'
          (good Prox-woman-Art Prep-Prox-man-Art)

    (ii)   *ʔaɬkʼjukiɬ tisijas cixnas tiʔimlk

    (iii) ʔaɬkʼjukiɬ tiʔimlk tisijas cixnascx   'We
           know the man the woman is good for'
           (know-we/him Prox-man Prox-Prep-good-she
           Prox-woman-Art)

    (iv) ʔaɬkʼjukiɬ tisijas cixnascx   'We know the
           one the woman is good for'
           (know-we/him Prox-Prep-good-she Prox-woman
           Art)

(62) (i) λ'ap cixnascx ?aɬti?imlktx 'The woman is
           going with the man'
           (go Prox-woman-Art Prep-Prox-man-Art)

     (ii) *?aɬk'jukiɬ tisiλ'aps cixnas ti?imlktx

     (iii) ?aɬk'jukiɬ ti?imlk tisiλ'aps cixnascx
           'We know the man the woman is going with'
           (know-we/him Prox-man Prox-Prep-go-she
           Prox-woman-Art)

     (iv) ?aɬk'jukiɬ tisiλ'aps cixnascx 'We know
           the one the woman is going with'
           (know-we/him Prox-Prep-go-she Prox-woman-
           Art)

(63)   ?ixq'm cixnascx wixɬɬti?imlktx 'The woman
           is walking from the man'
           (walk Prox-woman-Art Prep-Prox-man-Art)

The (i)-sentences of (59)-(63) require the modification of
the elemental underlying structure of Bella Coola to allow for
?uɬ-, wixɬɬ-, and ?aɬ-. The first----?uɬ-----means "directed
towards the object" as in (59) where some property is directed
away from some point(xnas) to another(?imlk), and in (60)
where the motion is from one point to another(?imlk). The
second----wixɬɬ---- means "directed from the object." The
deictic orientation is derived from the initial position with
respect to the object. Hence, for ?uɬ- the deixis is distal,
and for wixɬɬ- it is proximal. Both are nonstative involving
direction or motion. ?aɬ-:is to be compared with x-:

(64) sp'is tiwac'tx xtistntx 'He hits the dog with
         the stick'
     (hit-he/it Prox-dog-Art Prep-Prox-stick-Art)

(65) sp'is tiwac'tx ?aɬtistntx 'He hits the dog with
         the stick'
     (hit-he/it Prox-dog-Art Prep-Prox-stick-Art)

In (64) x- implies the ready presence of the stick; ?ał- in
(65) implies the ~~speaker~~ agent had to go and get the stick. The
prepositions ?ał- and x- are opposed, as ?uł- and wixłł- are,
by distal versus proximal, respectively; their point of orienta-
tion is defined with respect to the Agent of the sentence.
Both ?ał- and x- are stative. In (62) and (65) ?ał- denotes
a fixed orientation of the Agent and the object of the preposi-
tion as does x- in (64). In earlier examples x- marked a term
that was passed from one point to another. See (3). There
it may appear to indicate motion, but that results from equating
Bella Coola nap with English "give," where a better equation
would be English "gift." A closer translation of (3) would be
'The woman gifted the man with a fish'; the staticness of x-
is now more apparent as is the essential sameness of the Adjuncts
in (3) and (4).

The distal ?ał- and ?uł- are opposed by static versus non-
static as are the proximal x- and wixłł-. In (59) and (61)
the translation of ?uł- as 'to' implies some action upon the man
such as giving presents. The translation of ?ał- as 'for' im-
plies no action upon the man, but that the man benefits indirect-
ly by what the woman does or by her influence.

The four prepositions may then be described by the two
oppositions distal:proximal and stative:nonstative:

	Stative	Nonstative
Distal	?ał-	?uł-
Proximal	x-	wixłł-

To incorporate these additional data into our descrip-
tion of the syntax, the Adjunct of (8)---now repositioned as
a constituent of S along with Comment and Topic(cf. fn. 15)---
may be specified to have further structure:

(66)

```
                              S
                              |
         _____
        /                     |                      \
   Comment                  Topic                  Adjunct
                          /       \              /         \
                      Agent     Patient    Preposition    Object
```
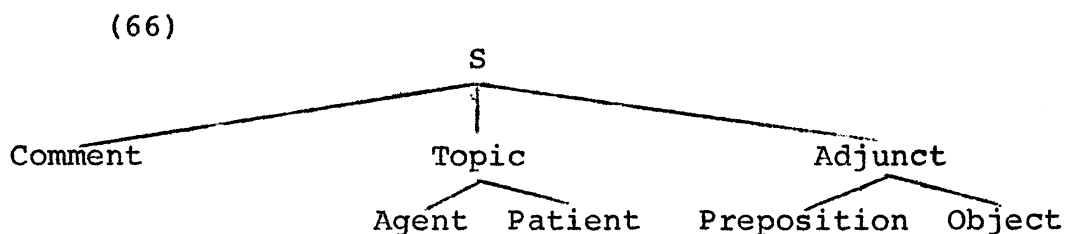
Where Equi-Constituent Deletion has removed the Object of an
Adjunct, Preposition Copying replicates the preposition imme-
diately before the Comment. The copying form of x- is -s-;
that of the Distal ?aɬ- and ?uɬ- is -si-. But wixɬɬ- has no
copying form. Given (67)

(67)   ?ixq'm cixnascx wixɬɬti?imlktx   'The woman
                 is walking from the man'

we would expect to find it embedded as a Comment in an adjec-
tival clause analogous to (60iii) and (62iii):

(68)   ?aɬk'jukiɬ ti?imlk ti__?ixq'ms cixnascx

where the __ would be filled by some copy of wixɬɬ-. Since
-si- copies Distal prepositions, we might expect -s- to copy
both Proximal ones. But this is not the case. Sentences such
as (68) are absent from the language, and the semantic slot is
filled by constructions employing a verb; for example,

(69)   ?aɬk'jukiɬ ti?imlk tiwalis cixnascx   'We
                 know the man the woman is leaving'
                 (know-we/him Prox-man Prox-leave-she/him
                 Prox-woman-Art)

Notice that in (59)-(62) the Comment of the embedded S_3
has an -s marking the third person singular Agent. The other
Agent-Patient affixes occur where appropriate. This is because
there is no deletion of Agent or Patient of the embedded S_3
as there was in previous examples of adjectival clauses; it
is the Object of the Adjunct that is deleted, and the agreement
rules apply unaffected. Compare

(70)   ?a+k'xi+ tistn tisisp'+is tiwac'tx 'We are
         looking at the stick he hit the dog with'
         (look-we/it Prox-stick Prox-Prep-hit-Past-
         he/it Prox-dog-Art)

that has the underlying structure

(71)
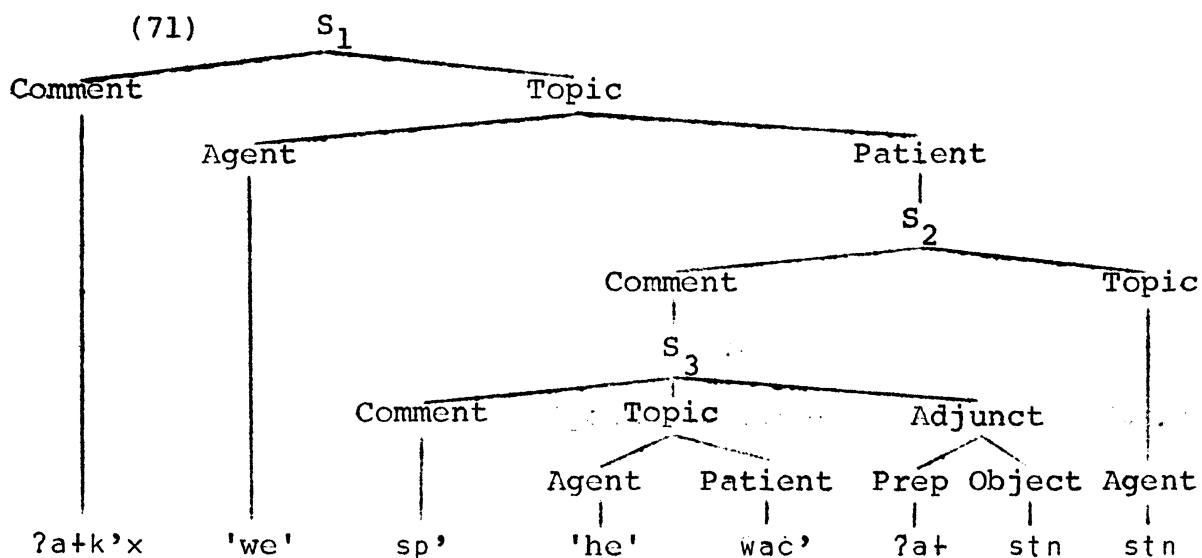
and the derived structure (72) after Equi-Constituent Deletion
and Agent-Patient Agreement have applied to S_3:

(72)

```
                        S₁
          Comment              Topic
             |         Agent          Patient
             |           |               |
             |           |              S₂
             |           |      Comment        Topic
             |           |         |              |
             |           |        S₃              |
             |           |   Comment  Topic   Adjunct |
             |           |     |    Agent Patient Prep  Agent
             |           |     |     |      |     |      |
          ?aɬkʼx       'we'  spʼis  'he'   wacʼ  ?aɬ    stn
```
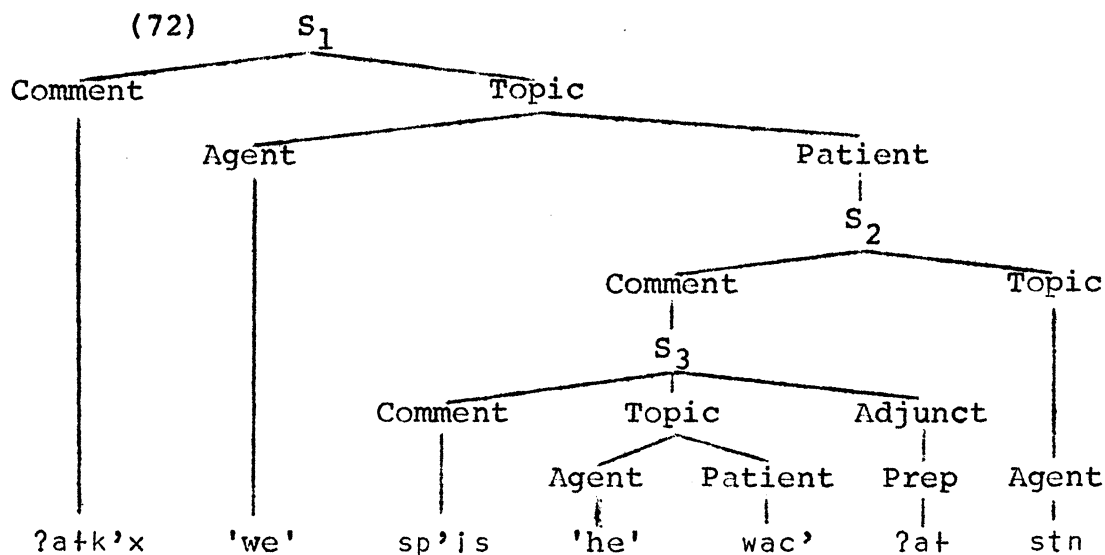
It is to this structure of S_3 in (72) and comparable ones that Preposition Copying applies.

2.2   The structure of the relative clauses in sentences (17)-(21) and (22)-(26) is similar to that assumed for the adjectival ones of (9) and (12)-(15). The difference lies in the presence of was and kas and their syntactic structure. They function as a Comment, the Topic of which is the structure S_2 in (31). Sentence (17), for example, has the structure:

(73)

```
                              S₁
            Comment                    Topic
               |              Agent            Patient
               |                |                 |
               |                |                S₂
               |                |       Comment        Topic
               |                |          |            |
               |                |          |          Agent
               |                |          |            |
               |                |          |           S₃
               |                |          |     Comment      Topic
               |                |          |        |          |
               |                |          |       S₄        Agent
               |                |          |   Comment  Topic   |
               |                |          |      |       |     |
               |                |          |      |     Agent   |
               |                |          |      |       |     |
            ʔaɬk'juk          'we'         wa     ja    ʔimɬk  ʔimɬk
```
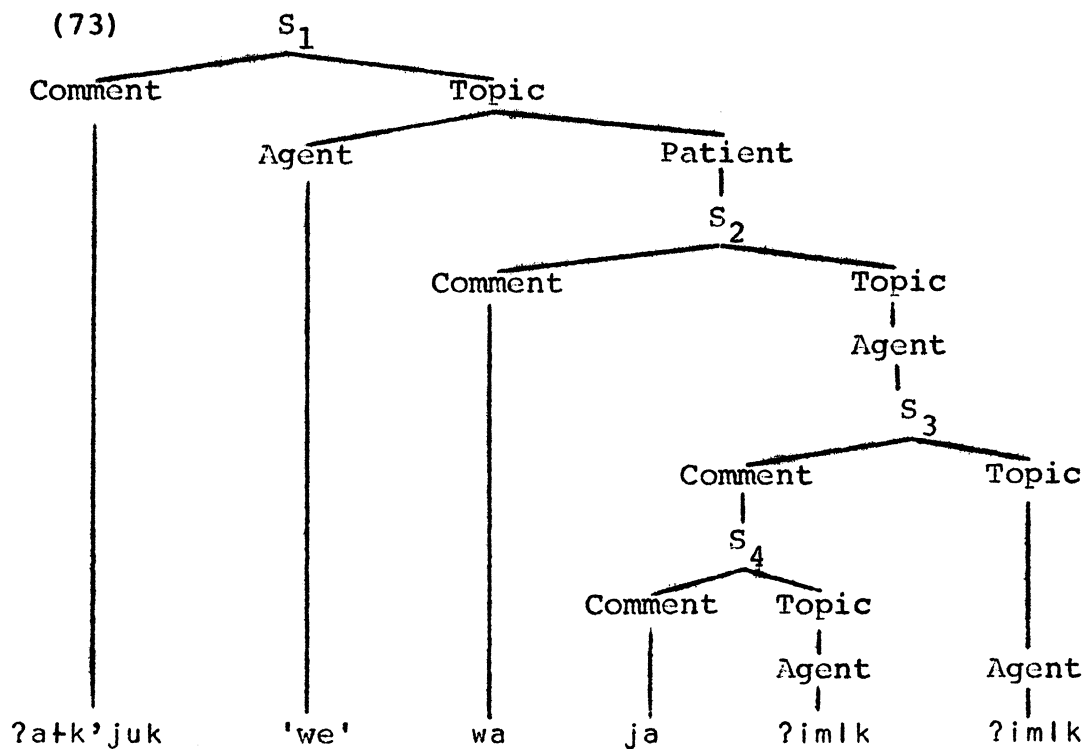
The following sentences show more clearly that wa functions
as a Comment:

    (74) (i)   ʔaɬk'jukcant swac 'They know who I am'
            (know-they/me who-I)

       (ii) ʔaɬk'jukct swanu   'They know who you are'

     (iii) ʔaɬk'jukit swas   'They know who he is'

      (iv) ʔaɬk'juktuɬs swaɬ 'They know who we are'

       (v) ʔaɬk'juktap swanap 'They know who you all are'

      (vi) ʔaɬk'juktit swanaw 'They know who they are'

In (74) wa is a Comment to a pronoun Topic; the structure of
(74i) is

(75)

```
                        S₁
          ┌─────────────┴─────────────┐
       Comment                      Topic
          │              ┌────────────┴────────────┐
          │            Agent                     Patient
          │              │                          │
          │              │                         S₂
          │              │                   ┌──────┴──────┐
          │              │                Comment        Topic
          │              │                   │             │
          │              │                   │           Agent
          │              │                   │             │
        ?aɬnap         'they'               wa            'I'
```
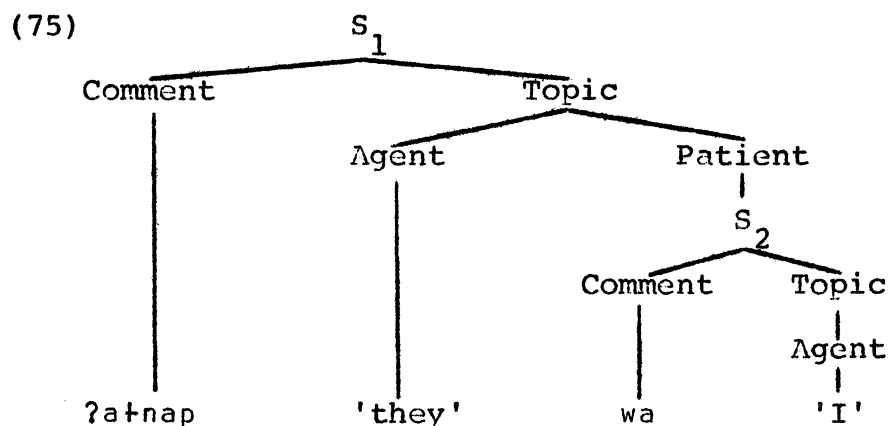
In (17)-(21) an obligatory -s occurs suffixed to wa----
and similarly for ka in (22)-(26). This is the marker of a
third person singular Agent within the Topic that must be pre-
sent in embedded sentences but absent in nonembedded ones.
Compare (74iii) and (74vi) and the following relative construc-
tion:

(76)   ?aɬk'juktiɬ swanaw wa?imɩkuksc wajac
          'We know the men who are good'
          (know-we/them who-they Prox-man-Plural
              Prox-good-Art)

The affix -naw marks the third person plural Agent. This
coincidence of Agent suffixes is taken as support for the
description of wa and ka as Comments.

The Comments wa and ka occur in two forms. Compare the
following:

(77)   (i)   ?aɬk'jukiɬ swas tiƛ'aptx   'We know who is
                going'
             (know-we/him who Prox-go-Art)

       (ii) ?aɬk'jukiɬ swās tiƛ'aptx   'We know who is
                going'

(78) (i) ʔaɬk'juktuɬnu swanu 'We know who your are'
(know-we/you who-you)

(ii) ʔaɬk'juktuɬnu swānu 'We know who you are'

(79) (i) ʔaɬk'jukiɬ swas tipuƛ'tx 'We know who is coming'
(know-we/him who-he Prox-come-Art)

(ii) ʔaɬk'jukiɬ swās tipuƛ'tx 'We know who is coming'

(80) (i) ʔaɬk'jukiɬ skas 'We know which he is'
(know-we/him which-he)

(ii) ʔaɬk'jukiɬ skās 'We know which he is'

The (i)-forms of (77)-(80) imply closeness to the speaker; the (ii)-forms imply distance. One shouts when he says "ʔaɬk'juktuɬnu swānu." In the following:[16]

(81) (i) was tikaʔimɪk tikaƛ'aptx 'I wonder who will be the man who will go'
(who Prox-Unrealized-man Prox-Unrealized-go-Art)

(ii) wās tikaʔimɪk tikaƛ'aptx 'I wonder who will be the man who will go'

(82) (i) was tiʔimɪk tiƛ'apɬtx 'I wonder who the man is who went'
(who Prox-man Prox-go-Past-Art)

(ii) wās tiʔimɪk tiƛ'apɬtx 'I wonder who the man is who went'

(83) (i) kas tikaʔimɪk tikaƛ'ap 'I wonder which will be the man to go'
(which Prox-Unrealized-man Prox-Unrealized-go)

(ii) kās tikaʔimɪk tikaƛ'ap 'I wonder which will be the man to go'

the first sentences of (81) and (83) imply a closely approaching departure, and the second imply a more distant one. In parallel

fashion, the first sentence of (82) implies a recent departure and the second, one more distant in the past. The deixis is again distal-proximal but in terms of both time and space.

Returning to (73), the structure is affected by the same transformational rules that operate on the adjectival structures of 2.1. One additional rule is required to account for the s- before wa- and ka-. Notice that this s- also occurs in sentences (27)-(30). The conditioning of its occurrence seems to be the following: wherever an embedded sentence occurs such that Equi-Constituent Deletion does not apply spreading the deictic Distal/Proximal, an s- is prefixed to that sentence. In (73) deictic elements are attached to ja of S_3 by Equi-Constituent Deletion; but within S_2 Equi-Constituent Deletion does not apply, and an s- is prefixed.[17]

There is one apparent difference between adjectival and relatival clauses, viz., where an overt Agent is present within an embedded S. The relative clause comparable to (47) is

(84) (i) *?aɫk'jukiɫ swas ti?imlk tiqʷup'ɫis cixnascx

(ii) ?aɫk'jukiɫ swas ti?imlk tiqʷup'ɫim xcixnascx
      'We know the man who was punched by the woman'
      (know-we/him who-he Prox-man Prox-punch-Past-Passive/he Prep-Prox-woman-Art)

(84i) is incorrect; it is necessarily further affected by the passive transformation. The Agent in such constructions is shifted to Adjunct position and normally marked by x-(although

?at- can also occur), and the Patient moves to Agent position.

A set of Passive Agent suffixes are then added to the Comment

marking the person and number of the derived Agent:

(85)   -tinic 'I'   -tinit 'we'

          -ct   'you'   -tap   'you'

          -im   'he/she/it'   -tim   'they'

The unacceptability of (84i) seems to be solely a function

of an overt Agent, e.g., cixnascx. The passive construction

occurs elsewhere independently of the syntactic circumstances

of (84):

(86)   k'xtinic xti?imlktx   'I am seen by the man'
          (see-Passive/I Prep-Prox-man-Art)

The remaining relative clause structures parallel those of

(73) and the adjectival clauses.[18]

2.3 The complex sentences of (27)-(30) have an underlying

structure analogous to that of (75) for (74):

(87)

$$
\begin{array}{c}
S_1 \\
\swarrow \qquad \searrow \\
\text{Comment} \qquad \text{Topic} \\
\qquad \swarrow \quad \searrow \\
\qquad \text{Agent} \qquad \text{Patient} \\
\qquad\qquad\qquad | \\
\qquad\qquad\qquad S_2 \\
\qquad\qquad \swarrow \quad \searrow \\
\qquad\qquad \text{Comment} \quad \text{Topic} \\
\qquad\qquad\qquad\qquad | \\
\qquad\qquad\qquad\qquad \text{Agent} \\
?at\text{nap} \qquad \text{'we'} \qquad X'ap \qquad ?imlk
$$
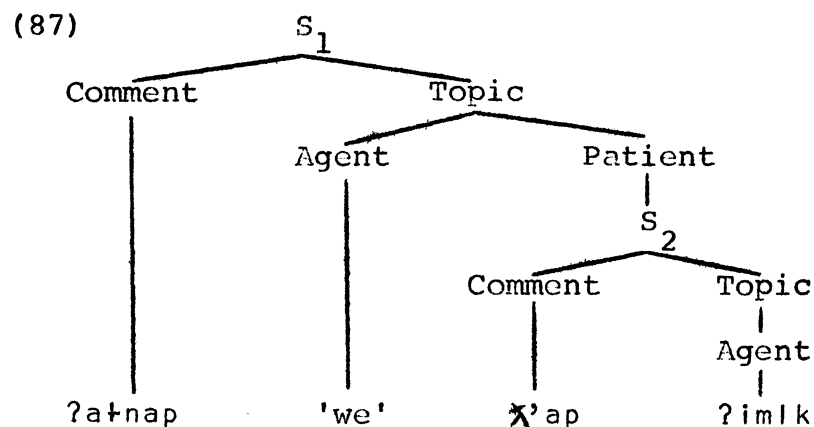
Because Equi-Constituent Deletion does not apply to S_2, Agent

Agreement affixes the expected -s to X'ap, and because no deictic

element is spread to the Comment of S_2 by Equi-Constituent

Deletion, an s- is prefixed to S_2. The complex sentences do not undergo Topic Raising as the adjectival and relative clauses do:

(88)   *ʔałnapił stiʔimlk ƛ̓aps[19]

The presence of wa- in (29) and (30) may be treated as part of s- prefixation. We leave its precise description unsettled.[20]

NOTES

[1] We wish to express here our gratitude to the National Museum of Canada, Simon Fraser University, Rice University, and the Canada Council for financial support of our fieldwork on Bella Coola since 1966.

[2] The number chosen also depends on what is meant by the term "Bella Coola." Those of early middle age, say, 35-50/55, speak a language that older speakers call "broken." It is the language of the older speakers that is represented in this paper. The figure of 200+ includes both these groups, but we will use "Bella Coola" to designate only the language of the latter group.

Within the older speakers we find additional variation in data across individuals, but because of the small number of speakers it is not possible to determine whether this is idiolectal or a reflex of dialectal differences. It is typical of one of our informants to label as "Kimsquit" or "Tallio" some sentence construction with which she does not agree. The amalgamation of the villages into Bella Coola was virtually complete by 1920. The number moving from the settlements of Kimsquit and Tallio was small relative to those in Bella Coola. There are few who were reared in either of these villages still alive. It seems more likely this variation is idiolectal and perhaps further increased by the degree of influence English has had on each speaker. Cf. now also Dorian 1973.

[3]The forms ti---tx and ci---cx bracketing ?imlk and xnas, respectively, represent a set of deictic elements. The grammatical categories involved are here Distal-Proximal, Demonstrative-Article, and Invisible-Visible. The distinction of Invisible-Visible is made only in combination with Distal. Deixis intersects the grammatical categories of Singular-Plural and, within the singular number, Female-Nonfemale(The distinction is one of sex, not gender. Morphemes occurring with deixis are divided into those that refer to female animals and an unmarked group including male animals.) This intersection produces the following forms:

(i)

```
                          Deixis
              Proximal                    Distal
         Article   Demonstrative    Article    Demonstrative
           I            II         IIIa  IIIb        IV
```

		I	II	IIIa	IIIb	IV
Sg.	Female	ci-cx	ci-c'ajx	ɫa-iɫ	ɫa-ɫ	ɫa-?iɫaiɫ
	Nonfemale	ti-tx	ti-t'ajx	ta-tx̣	ta-ɫ	ta-t'ax̣
Plural		wa-c	wa-?ac	ta-tx̣ʷ	ta-ɫ	ta-t'ax̣ʷ

The referents of morphemes in construction with the deictic affixes of I are said to be near or in a know location, or seen frequently, but not necessarily visible. In construction with III the referents are either extant in the past, but not the present(IIIa) or they are not visible(IIIb). The "past" reference of IIIa implies invisibility, and the forms of III are opposed to those of IV as Invisible-Visible.

It can be seen from the display of (i) that the prefix
marks the Distal-Proximal distinction, while suffixation dis-
tinguishes between Demonstrative-Article and further in III
between Temporal and Spatial Distance. The Demonstrative suf-
fixes are practically identified as only those that may accom-
pany a gesture of pointing. Neither those of I nor III may
do so. A further distinction is made within Proximal between
a Near Proximal and a Middle Proximal. This is marked by -ɬai-
occurring immediately before the deictic suffix of I and II.
It is identical for all forms of Proximal deixis except the
Plural Demonstrative where it is -ʔaɬai-.

The Nonfemale Proximal prefix is also used to form
gerunds:

     (ii) tiX̌'ap 'going'

Gerunds may not occur with the Demonstrative/Article suffixes.
Nouns, however, occur without those suffixes; without them
they have indefinite reference. This makes (ii) ambiguous
meaning either 'going' or 'a one[male] who is going'. The
Plural Proximal prefix wa- also occurs without an accompany-
ing suffix to mark an inanimate collective:

     (iii) waʔanajkmixʷ 'what [thing(s)] you want'

It is syntactically singular. Compare (iv) and (v):

     (iv) ʔaɬnapic waʔanajkmixʷ 'I know what you want'

     (v) ʔaɬnaptic waʔanajkmixʷc 'I know who[all] you
           want'

Compare also

(vi) ʔałnapił waʔamatnu 'We know where you live'

The Nonfemale Singular suffix of IIIa---tx̣---occurs with other prefixes than ta-. Where this happens, it is translated as past tense consistent with its deictic reference:

(vii) k'x̣is tiʔimⱡktx̣ swās tiʔanajkmix̣ʷtx̣ 'The man sees who you wanted'
(see-he/him Prox-man-Art who Prox-want-you/him-Art)

The Plural Distàl prefix and suffix of IIIa together may mark past time:

(viii) ʔałnapił taX̣'apnutx̣ʷ 'We know what time you went'

[4]Bella Coola makes no thoroughgoing distinction between nouns, verbs, and adjectives(But see the discussion of sentences (9) and (12)-(15) below.). We will use "verb" and so forth loosely without giving them precise meaning within Bella Coola.

[5]The affixes are partially fused, making clear distinction of a subject and object difficult. The set of noncausative, nonpassive affixes are(cf. also Newman ca. 1935 and 1969):

(i)

Object Subject		Singular			Plural		
		1	2	3	1	2	3
Singular	1	---	cinu	ic	---	tułap	tic
	2	cx̣ʷ	---	ix̣ʷ	tułx̣ʷ	---	tix̣ʷ
	3	cs	ct	is	tułs	tap	tis
Plural	1	---	tułnu	ił	---	tułap	tił
	2	cap	---	ip	tułp	---	tip
	3	cant	ct	it	tułt	tap	tit

(Verbs without additional tense, modal, or aspectual modifi-
cation are undetermined within time; in our examples we gloss
such verbs as simple or progressive present depending solely
upon what is appropriate to the English.) Certain combinations
of subject and object require further comment. Where a third
person subject(singular or plural) and a second person object
(singular or plural) occur with an overt subject, i.e., not
a pronoun, that subject is marked by the preposition x-(cf.
(3) and (4)):

> (ii) (a) *k'xct ti?iml̄ktx
>
> (b) k'xct xti?iml̄ktx 'The man sees you'
>
> (iii) (a) *k'xtap ti?iml̄ktx
>
> (b) k'xtap xti?iml̄ktx 'The man sees you all'
>
> (iv) (a) *k'xtap wa?iml̄kuksc
>
> (b) k'xtap xa?iml̄kuksc 'The men see you all'

(In (ivb) the segment sequence /xw/ yields /x/ before /a/.)
This phenomenon occurs only within this combination of persons.
The (b)-constructions are incorrect with other person-number
combinations.

The dashes marking some subject-object intersections in
(i) occur where the referent of both subject and object is
identical. In this circumstance a reflexive morpheme -cut-
is affixed to the stem and the subject affixes added. They are

(v)	-c	'I'	-(i)ł	'we'
	-nu	'you'	-(n)ap	'you'
	-(s)	'he/she/it'	-(n)aw	'they'

They occur elsewhere with nouns(vi), intransitive verbs(vii), and adjectives(viii):

(vi)	staltmxc	'I am chief'
(vii)	X'apc	'I am going'
(viii)	sxc	'I am bad'

They also mark possession; (vi), for example, can mean 'my chief'. The variant forms within the plural of (v) are determined by the final segment of the stem. The vowel inital variants occur after consonants, and the consonant initial ones after vowels(The formulation is actually more complex than given here.) The -s of the third person singular is more troublesome. In embedded sentences it always occurs with third person singular subjects. In nonembedded ones the -s at one time appeared to be stylistically determined(Newman ca. 1935:28):

> One of my informants said that the -s suffix characterizes "the way stories are told," that the zero suffix is more commonly used in conversation. Although it is true that the zero suffix is relatively rare in texts as compared with my field notes, it is not consistently avoided in telling stories....Apparently a stylistic difference is felt between the -s and the zero suffix, the latter perhaps expressing a more informal abbreviated version of the pronominal reference.

Our informants most frequently do not use -s in nonembedded
sentences. Where it does occur in that position it is affixed
only to verbs, not adjectives nor nouns----a first indication
of a distinction between verb and nonverb in the language.
Nonembedded sentences containing it elicit the comment that
they are "a little bit different " from the ones without it.
When pressed to explain that difference informants respond
to sentences with -s with "I'm just talking about it." This
fits with Newman's observation that the -s characterizes stories.
Given that it is explained as "just talking" and that it can
be used outside its appropriate stylistic matrix, it may be
that a stylistic difference is in progress of being reinterpret-
ed as a grammatical one.

Both sets of affixes in (i) and (v) will be absent from
underlying structures and assumed to be added by transformation-
al rules that we(looking forward to the introduction of the
terms Agent and Patient below) call Agent-Patient Agreement
for (i) and Agent Agreement for (v).

[6](12ii) is usually considered incorrect, although there
is some vacillation on the part of informants.

[7](13i) is correct if glossed as 'I see him who punched
the person' in place of 'I see the person who punched him'.
The latter is intended here.

[8](15i) is correct if glossed as 'I see what/him you are
giving the slave' in place of 'I see the slave you are giving

him/her'. The latter is intended here.

[9](19i) is correct with the gloss 'We know who punched the man' but not with the gloss 'We know the man who punched him'. The latter is meant here.

[10](21i) is correct with the gloss 'We know who you are giving to the slave' but not with the gloss 'We know the slave you are giving him/her'. The latter is intended here.

[11](24i) is correct with the gloss 'we know which one punches the man' but not with the gloss 'We know which man punches him/her'. The latter is meant here.

[12](26i) is correct with the gloss 'We know which one you are giving the slave' but not with the gloss 'We know which slave you are giving him/her'. The latter is intended here.

[13]The form qʷūxpʼ is a reduplication from the root qʷupʼ. For a statement of reduplication and verbal categories in Bella Coola, see Saunders and Davis 1972.

[14]Transitivity then forces the following extrinsic ordering:

 (i) Agent-Patient Agreement

 (ii) Equi-Constituent Deletion

 (iii) Agent Agreement

[15]An apparent exception to this is

 (i) ʔaɬkʼjukiɬ tiʔimlk tinapixʷtx xtismɬktx 'We
     know the man you are giving the fish'
    (know-we/him Prox-man Prox-give-you/him-Art
     Prep-Prox-fish-Art)

(i) is a paraphrase of (49). There are no paraphrases of (46)-(48) or (50) on the model of (i). For example, (46) does not have the paraphrase

(ii) *ʔatk'juki↕ ti?imlk t⌐q^wup↕tx cixnascx

What this indicates is (1) the statements concerning the oc-currence of Demonstrative/Article with respect to Topic are correct but that (2) the Adjunct is not a constituent of Topic; it is a constituent of S:

(iii)


```
                    S
       _____/_|_____
   Comment      Topic         Adjunct
              /      \
          Agent    Patient
```
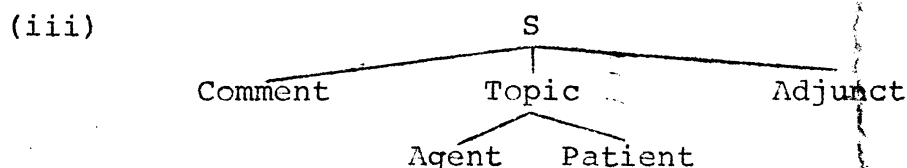
In the remainder of the paper we shall substitute the nuclear base structure of (iii) for that given in (8).

[16] Sentences (81)-(83) are "mild" questions glossed as 'I wonder'. They contrast with "true" questions formed on the same roots but with the affix -ks: waks 'who?' and kaks 'which?' These also occur in lengthened distal forms; for example,

(i) waks tiˣ'ap↕ 'Who went'

(ii) wāks tiˣ'ap↕ 'Who went'

This lengthening as deictic-marker can also be seen in the past tense itself:
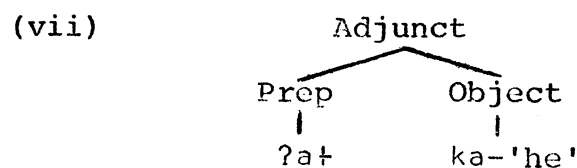
(iii) ˣ'ap↕ 'He went'

(iv) ˣ'ap↕↕ 'He went'

(iii) implies a recent departure, and (iv) a more remote one.

ka- is an aspectual prefix that marks the Comment as in-
complete or unrealized. It is usually translated as an English
future tense. It also occurs with nouns as in tika?imɬk
in (81) implying an unknown, hence unrealized, person. It
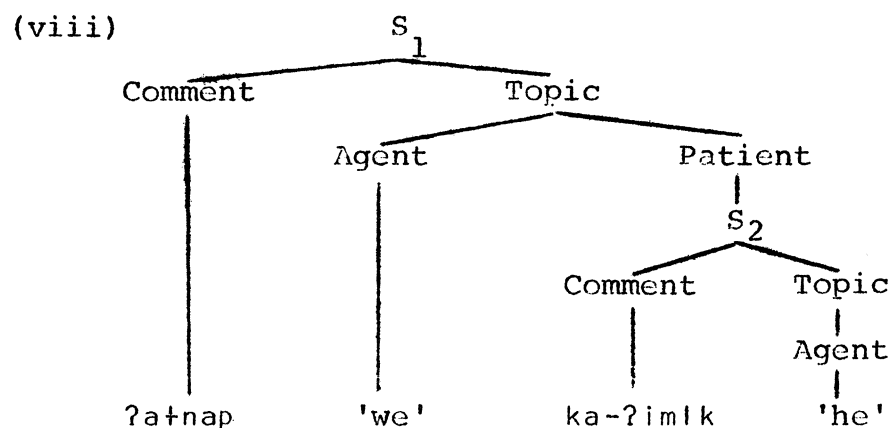also occurs in such sentences as

(v) ?aɬnapiɬ tikasikaχ'apnu 'We know who it will
                              be with whom you will go'

(vi) ?aɬnapiɬ ska?imɬks 'We know it will be a boy
                         [said of a pregnant woman]'

where the ka- before si- in (v) is copied from the Adjunct along
with the preposition when the pronoun is deleted:

(vii)
```
            Adjunct
           /       \
        Prep       Object
         |           |
         ?aɬ      ka-'he'
```

In (vi) the structure is

(viii)
```
                        S₁
                   /          \
            Comment            Topic
               |            /         \
               |        Agent          Patient
               |          |               |
               |          |              S₂
               |          |          /        \
               |          |     Comment        Topic
               |          |        |             |
               |          |        |           Agent
               |          |        |             |
            ?aɬnap      'we'    ka-?imɬk        'he'
```

ka- "Unrealized" contrasts semantically with the wa- of
(29)-(30); their syntactic behavior is, however, not parallel.
ka- "Unrealized" and wa- "Realized" differ from the relative
(and interrogative) ka and wa. The latter exhibit deictic

behavior while the former do not.

[17]This s- <u>may</u> be identified with the s- of deverbal noun derivation that occurs in Bella Coola and other Salish languages. Compare

     (i)   (a)   na-x̣c-ax̣   'lie down'

             (b)   s-x̣ic-ta   'bed'

     (ii)   (a)   c'x̣n-m-ax̣ᵂ 'think'

             (b)   s-c'ūx̣in   'brain'

If such identification is made, then embedded S's may be interpreted as being required to convert to nouns either by incorporation within a noun(i.e., via the deictic spreading of Distal/Proximal) or where that does not apply, by s-derivation.
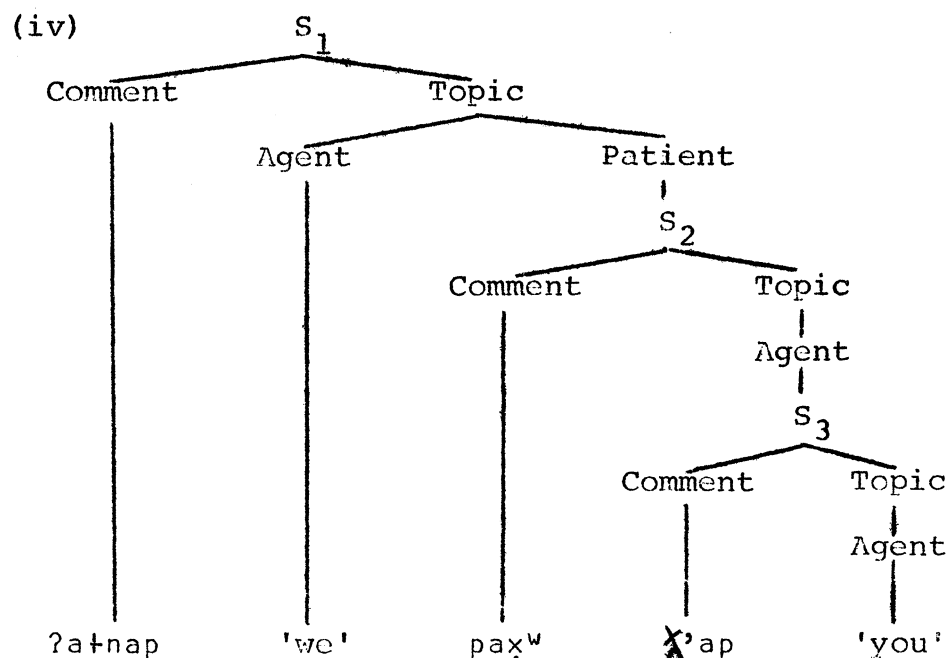
[18]Other morphemes that occur as Comments similar to the relatives are xsūc 'all' and q'ᵂala 'all gone, no more':

     (i)   ʔałk'juk̓ił sxsūcⱥw waX̣'msta waX̣'ap 'We know all the people who are going'

     (ii)   ʔałk'juk̓ił sq'ᵂalanaw waX̣'msta waja 'We know there are no more people who are good'

Sentences (i) and (ii) have underlying structures analogous to (73). Sentence

     (iii)   ʔałnapił spax̣ᵂ sX̣'apnu 'We know when you are going'

has the following structure:

(iv)

S_1

Comment — Topic

Agent — Patient

S_2

Comment — Topic

Agent

S_3

Comment — Topic

Agent

?aɬnap   'we'   paxʷ   ƛ'ap   'you'

The s's before and after paxʷ are predictable by the same rule that introduces s- in (73) and (87).

[19]Sentences similar to this---which we have not considered in this paper---do occur:

    (i)   ?aɬnaptixʷ wa?imlkuksc wasƛ'apaw

(i) means something like 'You know the men [plus the fact that] they are going'. (i) cannot be said of strangers, but (ii) can:

    (ii)   ?aɬnaptixʷ wasƛ'apaw wa?imlkuksc

In (ii) what is known is that the men are going, not specifi-cally who they are.

(i) appears to manifest nonrestrictive modification in con-trast with the restrictive modification of 1.1 and 1.2 It may possibly be described by a paratactic structure opposed to the hypotactic structure of 2.1 and 2.2:

(iii)   Patient
                        ╱‾‾‾╲
                     ʔimɬk   S

Phonologically, this is supported by a pause that usually occurs between tiʔimɬktx and wasƛ'aps.

[20]wa- "Realized" cannot easily be treated as a Comment, for it, unlike wa- 'who' and so forth, cannot again occur following the s- sentence prefix:

(i)   *ʔaɬnapcinu swasƛ'apnu

Nor can it be identified with the wa- "Collective" use of the deictic particle; they seem too semantically disparate.

It may also occur before relative clauses:

(ii)   ʔaɬk'juktiɬ waswanaw wak'xt cixnascx   'We
                  know the ones who see the woman'

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