

## Bella Coola Deictic Roots

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In Davis and Saunders 1974a and 1974b, we examined a portion of the deictic system of Bella Coola in some detail.<sup>1</sup> Our concern in those papers was deixis as expressed within an affixal system.<sup>2</sup> We now take up the expression of deixis by means of verbal roots; there are two of these in Bella Coola: ?aw and ?atu.<sup>3</sup> Together these roots constitute a formally unique set within the language; semantically, they express a spatial relationship between terms of the Narrated Event and the Speech Act via the Hearer or a third person as deictic pivot.<sup>4</sup> The deictic affixes (cf. fn. 2) convey a spatio-temporal relationship via a Speaker pivot.

1.0 Let us begin with the following forms:<sup>5</sup>

- |   |  |
|---|--|
| (1) (i) ti-?aw-x <sup>w</sup> -tx<br>'the one you(sg.) are<br>next to'  | (ii) ti-?aw-p-tx<br>'the one you(pl.)<br>are next to'  |
| (iii) ti-?aw-s-tx<br>'the one he/she/it is<br>next to'                  | (iv) ti-?aw-t-tx<br>'the one they are<br>next to'      |
| (2) (i) ti-?atu-x <sup>w</sup> -tx<br>'the one you(sg.) are<br>next to' | (ii) ti-?atu-p-tx<br>'the one you(pl.)<br>are next to' |
| (iii) ti-?atu-s-tx<br>'the one he/she is<br>next to'                    | (iv) ti-?atu-t-tx<br>'the one they are<br>next to'     |

(v) wa-ʔatu-tix<sup>W</sup>-c  
'the ones you(sg.) are  
next to'

(vi) wa-ʔatu-tip-c  
'the ones you(pl.)  
are next to'

(vii) wa-ʔatu-tis-c  
'the ones he/she is  
next to'

(viii) wa-ʔatu-tit-c  
'the ones they are  
next to'

The constructions of 1 and 2 show that ʔaw and ʔatu are 'transitive' in that they predicate a relation between two terms, an Agent and a Patient. The shape of the person-number affixes, that mark agreement with both the Agent and Patient, is anomalous where the Patient is singular, i.e. -x<sup>W</sup> in 1i and 2i, -p in 1ii and 2ii, -s in 1iii and 2iii, and -t in 1iv and 2iv. The usual shapes of these affixes are:

(3) (i) -ix<sup>W</sup>  
'you(sg.)-him/her/it'

(ii) -ip  
'you(pl.)-him/her/it'

(iii) -is  
'he/she/it-him/her/it'

(iv) -it  
'they-him/her/it'

The i of these affixes is dropped when they are added to the deictic roots. Where plural Patients are involved, the affixes appear in their expected shapes.

The examples of 1 and 2 are expressions of restrictive modification and are analogous to such constructions as ti-k'x-is-tx 'the one he/she sees.' Unlike other roots, ʔaw and ʔatu do not occur outside this construction; that is, there are no sentences

(4) (i) \*ʔaw-s ti-ɬalas-tx 'He is near the boat'

(ii) \*ʔatu-s ti-ɬalas-tx 'He is near the boat'

comparable to k'x-is ti-ɬalas-tx 'He sees the boat.' Within the framework of restrictive modification the deictic roots are regular occurring as well in expanded forms:

(5) (i) ti-lalas ti-ʔaw-s-tx 'the boat he is next to'

(ii) ti-lalas ti-ʔatu-s-tx 'the boat he is next to'

comparable to ti-lalas ti-k'x-is-tx 'the boat he sees.' With one exception they occur with the range of deictic affixes; ʔatu occurs as ʔaw does in 6:

| (6) | I                          | II                       | III          |
|-----|----------------------------|--------------------------|--------------|
|     | ti-ʔaw-s-tx                | ti-ʔaw-s-t'ayx           | ti-ʔaw-s-tix |
|     | ci-ʔaw-s-cx                | ci-ʔaw-s-c'ayx           | ci-ʔaw-s-cix |
|     | wa-ʔaw-s-c                 | wa-ʔaw-s-ac              | wa-ʔaw-s-ci  |
|     | IV                         | V                        | VI           |
|     | ta-ʔaw-s-t'ax              | ta-ʔaw-s-tx              | ta-ʔaw-s-tax |
|     | ʔil-ʔaw-s-ilʔayɿ           | ʔil-ʔaw-s-il             | ʔil-ʔaw-s-il |
|     | ta-ʔaw-s-t'ax <sup>W</sup> | ta-ʔaw-s-tx <sup>W</sup> | ta-ʔaw-s-tux |

They do not co-occur with the Middle affix -ɿ; for example, there is no form \*ta-ʔaw-ɿ-s as there is ta-k'x-ɿ-is 'the one he saw.'

Where some overt lexical item is used as a third person deictic pivot as in 'the one the man is next to', the deictic suffixes do not occur, and we find such forms as

(7) (i) ti-ʔaw-s ti-ʔimlk-tx 'the one the man is next to'

(ii) ti-ʔaw-s ci-xnas-cx 'the one the woman is next to'

(iii) ti-lalas ti-ʔaw-s ti-ʔimlk-tx 'the boat the man is next to'

without -tx, -t'ayx, etc. Since we find the 'mixed' forms

(8) (i) ti-ʔaw-s c'ayx

(ii) ci-ʔaw-s t'ayx

(iii) wa-ʔaw-s t'ayx

we know that the demonstrative forms in columns II and IV of 6 are ambiguous. They may be deictic specifications of 'this one...'; but they may also be an overt, third person deictic pivot, 'the one this one is next to.' The second person Agent forms, of course, can present no ambiguity, and ti-ʔaw-x<sup>W</sup>-t'ayx is uniquely deictically specified as 'this [Demonstrative, Proximal] one you(sg.) are next to.' The demonstrative deictic forms in 8, e.g. c'ayx, function as pronominal Agents. (The pronominal function of deictic suffixes is discussed in Davis and Saunders 1974a and 1975.) The remaining forms of 6 do not allow an ambiguous interpretation, e.g. \*ti-ʔaw-s-cx; and there the deictic suffixes are unambiguous deictic specifications of 'the one....' The forms of 8 are normal for Bella Coola and are comparable to

- (9) (i) ti-k'x-is c'ayx      'the one this one[female] sees'  
 (ii) ci-k'x-is t'ayx      'the one[female] this one[male] sees'  
 (iii) wa-k'x-tis t'ayx      'the ones this one[male] sees'

Generally, in clauses of restrictive modification of the 'the one whom/that...' type, no deictic specification of the modified Patient is possible where the Agent is overtly present as a lexical item or pronoun. (Only the Demonstrative pronouns of the t'ayx and t'ax series may occur as overt Agents, and Patients---with the exception of pronominal roots. Cf. Davis and Saunders 1974a and In Preparation.) The restrictive modification with deictic roots is always of the type where the restricted term is the Patient, e.g. 'the one whom....' Restrictive modification with other two-term Comments is possible where the modified term is the Agent,

e.g. ti-k'x-t-tx 'the one who sees him/her/it.' Such forms are absent where the Comment of the modification is a deictic root; forms such as \*ti-ʔaw-t-tx 'he who is next to him/her/it' do not occur.<sup>7</sup> The deictically specified term is always expressed as the Patient of the deictic root, and the deictic pivot is always the Agent, but never the reverse.

1.1 To this point, we have identically glossed similar forms with ʔaw and ʔatu. The deictic roots do differ semantically and 'next to' is only one gloss of their basic meanings. Where the 'next to' gloss is appropriate, ʔatu is used if the Agent is working on the object, e.g. a car, or using it in some way, e.g. a tool. Where the deictically specified term is human, a conversation is sufficient for the use of ʔatu. A more intangible relationship between the deictic pivot and the specified object can also elicit ʔatu, e.g. a house one is renting. Where involvement of the pivot is absent, ʔaw is the correct expression of 'next to.' When the pivot is standing next to an object but is not working on or using it, or where the pivot is standing next to a person to whom he is not talking or next to a house with which he has no connection: all these are deictic relationships expressed by ʔaw. Another gloss of ʔatu and ʔaw is 'on' and again involvement (use, action upon, etc) requires ʔatu, and the absence of involvement requires ʔaw. Another acceptable gloss is 'towards.' Where the pivot is approaching an object (or walking from it as long as it is the closest object of its class to the pivot), ʔatu is used if the pivot has that object or person as his destination. If the pivot is incidentally approaching the object while having another goal, ʔaw is used. 'Around'

is still another possible gloss; wa-?aw-x<sup>W</sup>-c is used to indicate the area around the Hearer (-x<sup>W</sup>) in general; wa-?atu-x<sup>W</sup>-c indicates a specific spot near the Hearer. For example, if something is lost and the Hearer is sent to look for it and if he asks for instructions, the answer wa?awx<sup>W</sup>c means 'somewhere around you'; wa?atux<sup>W</sup>c means 'right where you are.' In the latter the Speaker knows the exact location of the lost object; in the former, he does not. Objects around the Hearer pivot are individually designated as ti-?aw-x<sup>W</sup>-tx; an object held in the Hearer's hand is ti-?atu-x<sup>W</sup>-tx.

There is a space associated with each Non-Speaker pivot. That area or some object within it is specified or deictically fixed relative to the Narration by ?aw if no other relationship holds between the determined object and the pivot; a specific portion of that area or some object that is additionally related to the pivot is deictically fixed by ?atu. The size of the space associated with the pivot may vary. If the Speaker and the pivot are in the same room, the area is small. In these deictic expressions the area must not include the Speaker (cf. below). If the pivot is removed from the Speaker, the area may expand to any size; for example, given a conversation in the Bella Coola valley about a deictic pivot in the Vancouver area, ta-?aw-s-tx<sup>W</sup> 'there where he is' may designate the entire Lower Mainland. Both roots require (1) the deictically specified object be closer to the pivot than to the Speaker and (2) the object be the closest of its kind to the pivot.<sup>8</sup> The roots differ in the degree of involvement or the degree of bond between the pivot and

the object. Where spatial contiguity is the only bond, ?aw is used; where some additional bond is present, ?atu is used.<sup>9</sup> This additional bond requires an animate pivot. Compare ti-?aw-s ti-lalas-tx 'the one the boat is near,' \*ti-?atu-s ti-lalas-tx, and ti-?atu-s ti-?imlk-tx 'the one the man is near[and involved with].'

The absence of expressions with the Speaker as pivot, e.g. \*ti-?aw-c-tx, and the absence of expressions in which the Speaker or Hearer is the deictically determined object, e.g. \*ti-?aw-cs-tx, can now be explained. While the form ti-k'x-ic-tx 'the one I see' is acceptable, \*ti-?aw-c-tx and \*ti-?atu-c-tx are not. The unacceptability of these and similar forms follows from the observation that deictic specification by affix is Speaker pivoted and deictic specification by deictic root is necessarily Non-Speaker pivoted. The latter type of incorrect form, \*ti-?aw-cs-tx (-cs denotes third person sg. Agent and first person sg. Patient), follows from the general observation that first and second persons are treated as proper lexical items and as such cannot occur restrictively modified; only third person lexical items so occur. One constraint on ?aw that remains arbitrary is the incorrectness of such forms as \*wa-?aw-tis-c (Note the absence of such forms in 1.). Where the deictically determined object is a group of two or more humans, only ?atu can be employed.

1.2 The deictic root ?aw, but not ?atu, may occur with a zero second person number suffix:

| (10) | I                          | III                         | V                            | VI                           |
|------|----------------------------|-----------------------------|------------------------------|------------------------------|
|      | ti-ʔaw-tx                  | ti-ʔaw-tix                  | (ta-ʔaw-x <sup>W</sup> -tx)  | ta-ʔaw-tax                   |
|      | ci-ʔaw-cx                  | ci-ʔaw-cix                  | (ʔiɪ-ʔaw-x <sup>W</sup> -iɪ) | (ʔiɪ-ʔaw-x <sup>W</sup> -iɪ) |
|      | (wa-ʔaw-x <sup>W</sup> -c) | (wa-ʔaw-x <sup>W</sup> -ci) | ta-ʔaw-tx <sup>W</sup>       | ta-ʔaw-tux                   |

The forms, e.g. \*wa-ʔaw-c, missing from the columns above and also forms with Proximal and Middle Demonstrative suffixes (columns II and IV of 6) are incorrect. There appears to be no principled explanation for this. Semantically, forms of 10 relate an object to the Narration via a second person pivot; ti-ʔaw-tx differs from ti-ʔaw-x<sup>W</sup>-tx in that the former denotes a pivot stative with respect to the determined object. In the latter such specification is absent, and the pivot may be either statively or nonstatively related to the object.

1.3 The deictic roots occur with an additional deictic suffix -t that differs from the ones of 6:

- |          |                           |      |             |
|----------|---------------------------|------|-------------|
| (11) (i) | ti-ʔaw-x <sup>W</sup> -t  | (ii) | ti-ʔaw-p-t  |
| (iii)    | wa-ʔaw-x <sup>W</sup> -t  | (iv) | wa-ʔaw-p-t  |
| (12) (i) | ti-ʔatu-x <sup>W</sup> -t | (ii) | ti-ʔatu-p-t |

The -t is Proximal and does not occur with the Non-Proximal prefix ta-. It is also constrained to use with masculine and plural objects with a second person pivot, i.e. \*ci-ʔaw-x<sup>W</sup>-t and \*ti-ʔaw-s-t. Semantically, the forms with plural deixis denote spaces; the masculine singular forms always refer to objects that may be occupied, e.g. cars, boats, canoes, etc. The -t indicates that the relationship of the pivot to the object (as indicated by the deictic root) is shared by the Speaker. Thus, ti-ʔaw-x<sup>W</sup>-t may be glossed as 'the one[e.g. a car] that you are closest



to or in, and I as well.' The comparable ?atu form ti-?atu-x<sup>W</sup>-t is appropriate to designate a car that one is riding in when speaking to another who is driving it. The -t deictic suffix occurs in only two other places in the language---?a<sub>1</sub>-ti-sunx<sup>W</sup>-t 'today' (cf. ?a<sub>1</sub>-ti-sunx<sup>W</sup>-tx 'in the sky') and ?a<sub>1</sub>-ti-sn<sub>1</sub>'-t 'tonight' (\*ti-sn<sub>1</sub>'-tx does not occur). The suffix -t occurs as well with the zero second person form of ?aw, ti-?aw-t, indicating a stative relationship of pivot to object.<sup>10</sup>

1.4 Bella Coola has two deictic suffixes reserved for lexical items denoting spaces. Such lexical items are always deictically plural; thus wa-sul<sub>1</sub>-c 'the house' but not \*ti-sul<sub>1</sub>-tx. The spatial deictic suffixes are -?awa and -?awx<sup>W</sup>a:<sup>11</sup>

(13) wa-sul<sub>1</sub>-?awa

(14) wa-sul<sub>1</sub>-?awx<sup>W</sup>a

The form of 13 indicates the house immediately in front of or behind, or immediately to one side; one gloss for 13 is 'the house next door.' The form of 14 indicates a house occupied by the Speaker as pivot; wa-sul<sub>1</sub>-?awx<sup>W</sup>a is 'the house I'm in' or 'the house here.' Both of these suffixes are Proximal, and Non-Proximal forms as \*ta-sul<sub>1</sub>-?awa are contradictory and incorrect. The two suffixes -?awa and -?awx<sup>W</sup>a have the force of Demonstratives, and therefore like other Demonstratives they may occur independently as terms of a sentence. For example, in ya ?awx<sup>W</sup>a 'It's good here[lit. This place where I am is good]' and in ya ?awa 'It's good there[next door, across the street, etc.]' they function as Agents analogous to ya t'ayx 'This one is good' and ya ti-?imlk-t'ayx 'This man is good.'

These spatial suffixes occur with the deictic roots as well:

- |   |                                      |
|---|--------------------------------------|
| (15) (i) wa-ʔaw-x <sup>W</sup> -ʔawa                | (ii) wa-ʔaw-p-ʔawa                   |
| (iii) wa-ʔaw-s-ʔawa                                 | (iv) wa-ʔaw-t-ʔawa                   |
| (v) wa-ʔatu-x <sup>W</sup> -ʔawa                    | (vi) wa-ʔatu-p-ʔawa                  |
| (vii) wa-ʔatu-s-ʔawa                                | (viii) wa-ʔatu-t-ʔawa                |
| (16) (i) wa-ʔaw-x <sup>W</sup> -ʔawx <sup>W</sup> a | (ii) wa-ʔaw-p-ʔawx <sup>W</sup> a    |
| (iii) wa-ʔaw-s-ʔawx <sup>W</sup> a                  | (iv) wa-ʔaw-t-ʔawx <sup>W</sup> a    |
| (v) wa-ʔatu-x <sup>W</sup> -ʔawx <sup>W</sup> a     | (v) wa-ʔatu-p-ʔawx <sup>W</sup> a    |
| (vii) wa-ʔatu-s-ʔawx <sup>W</sup> a                 | (viii) wa-ʔatu-t-ʔawx <sup>W</sup> a |

The ʔatu forms of 15 and 16 are used in the following way. A person, A, wants to plant a garden but has no adequate ground around his house. His nextdoor neighbor Snac has space that could be used for a garden but has no interest in planting one. The person A asks his neighbor if he may use the space for a garden and is given permission. That space located next door and now used by A is indicated by the ʔatu forms with -ʔawa when the Narration takes place in A's house. If the Speaker is talking to some Hearer B about A, who is working in that space, then waʔatusʔawa 'there where he is working next door' is used. Speaking from that point across to A, waʔatux<sup>W</sup>ʔawa is used. The suffix -ʔawa is used if the Narration is located at or in A's house. If the Speaker moves to Snac's house, then the -ʔawx<sup>W</sup>a forms are used. Speaking to Snac about A, waʔatusʔawx<sup>W</sup>a means 'here where I am that he is working.' Speaking directly to A, waʔatux<sup>W</sup>ʔawx<sup>W</sup>a is used.

The ʔaw forms of 15 and 16 are used as follows. If someone is told of an event but not told of its location and if he then asks where

it occurred, the answer waʔawsʔawa indicates 'the general area around him/her/it next door.' Here, the pivot 'he/she/it' has no connection with the Narrated Event except an incidental position at the site of the Event as the Narration is performed. If someone is told of a place, say the Snootli (snut'li) valley, but not where it is, and further if he inquires about its location and the Speaker and Hearer happen to be in it, then waʔawsʔawx<sup>W</sup>a 'this place where we are' is used. If someone enters a house knowing he is to stay there but not in which room, and if he asks where he is to sleep, the answer is waʔawx<sup>W</sup>ʔawx<sup>W</sup>a 'here where you and I are' when the question happens to be asked in the guest's room.

Both ʔaw and ʔatu preserve their meanings as described in 1.1 when they are used with the two spatial deictic suffixes; -ʔawa and -ʔawx<sup>W</sup>a are additional ways of specifying the referent object by deictically relating it to the Narration via the Speaker as pivot.

2.0 In addition to the forms of 6, ʔaw and ʔatu occur with a second set of deictic prefixes; we illustrate these with the form ʔaw-s:

|      |                           |                         |              |
|------|---------------------------|-------------------------|--------------|
| (17) | I                         | II                      | III          |
|      | t'-aw-s-tx                | t'-aw-s-t'ayx           | t'-aw-s-tix  |
|      | c'-aw-s-cx                | c'-aw-s-c'ayx           | c'-aw-s-cix  |
|      | ʔaw-s-c                   | ʔaw-s-ac                | ʔaw-s-ci     |
|      | IV                        | V                       | VI           |
|      | t'-aw-s-t'ax              | t'-aw-s-tx              | t'-aw-s-tax  |
|      | ʔil-ʔaw-s-ilʔayl          | ʔil-ʔaw-s-il            | ʔil-ʔaw-s-il |
|      | t'-aw-s-t'ax <sup>W</sup> | t'-aw-s-tx <sup>W</sup> | t'-aw-s-tux  |

The combinations of persons and numbers of the Agent pivot and Patient object that occur with the other deictic prefixes in 6 occur here as well. The occurrence of the deictic roots in 17 further distinguishes them from all other roots; the latter do not occur in comparable forms.

The constructions of 17 are superficially similar to those of the third person pronominal roots. While deictic suffixes express pronominal reference within the Agent, Patient or prepositional Object of a sentence (cf. for example 8 and 9), pronominal reference within the Comment is expressed by a set of pronominal roots:

|          |      |               |       |                |
|----------|------|---------------|-------|----------------|
| (18) (i) | ?ne  | 'is I'        | ɬmilɬ | 'are we'       |
| (ii)     | ?imu | 'is you(sg.)' | ɬup   | 'are you(pl.)' |
| (iii)    | tix  | 'is he/it'    | wix   | 'are they'     |
| (iv)     | cix  | 'is she'      | wix   | 'are they'     |

These occur with one term Topics, i.e. those where only an Agent is present, and they are marked for person and number as any other one-term Comment is. For example ɬmilɬ-anaw wa-k'x-t-c 'We are the ones who saw it [lit. The ones who saw it are we]' is parallel to ʔap-aw wa-k'x-t-c 'The ones who saw it are going.' The singular third person marker -s appears on embedded pronominal roots as it does on other one-term roots when embedded:

|          |                                 |  |
|----------|---------------------------------|--|
| (19) (i) | ?imu ti-k'x-is-tx               | 'You are the one he sees'                |
| (ii)     | ?aɬnap-iɬ s-?imu-s ti-k'x-is-tx | 'We know (that) you are the one he sees' |
| (20) (i) | ya ti-k'x-is-tx                 | 'The one he sees is good'                |
| (ii)     | ?aɬnap-iɬ s-ya-s ti-k'x-is-tx   | 'We know (that) the one he sees is good' |

The suffix -s of third person singular Agent agreement is absent in both 19i and 20i; embedding these sentences as Patients conditions the overt marker -s in 19ii and 20ii. This formal parallelism is taken as showing the forms of 18 function as Comments. The third person forms, tix, cix, and wix, may occur as the Comment of restrictive modification, e.g. ti-tix-tx 'the one who is he' analogous to ti-ya-tx 'the one who is good,' and also in such expressions as

| (21) | I                    | II                  | III     |
|------|----------------------|---------------------|---------|
|      | tix tx               | tix t'ayx           | tix tix |
|      | cix cx               | cix c'ayx           | cix cix |
|      | wix c                | wix ?ac             | wix ci  |
|      | IV                   | V                   | VI      |
|      | tix t'ax             | tix tx <sup>W</sup> | tix tax |
|      | cix ?iɪ?ayɪ          | cix iɪ              | cix iɪ  |
|      | wix tax <sup>W</sup> | wix tx <sup>W</sup> | wix tux |

It is these forms that superficially resemble the deictic root constructions of 17. In both, there appears a root, ?aw/?atu or ix, with some preceding element to mark gender: t'/t for masculine singular, c'/c for feminine singular, and Ø/w for plural. In both 17 and 21 occurrence of a Speaker pivoted deictic element is required following the root; thus both \*t'-aw-s and \*tix are incorrect in isolation. Occurrence of an overt Agent is possible in lieu of this deictic element: t'-aw-s ti-?imlk-tx 'that one the man is next to' and tix ti-?imlk-tx 'the man is he/the one.' This similarity, however, hides a formal difference. The construction

tix ti-ʔimlk-tx may occur as Patient of a two-term Comment while t'-aw-s ti-ʔimlk-tx may not:<sup>12</sup>

- (22) (i) ʔaɫnapil s-tix-s ti-ʔimlk-tx 'We know the man is he/the one'  
 (ii) ʔaɫnapil s-k'x-is ti-ʔimlk-tx 'We know the man saw him/her/it'  
 (iii) \*ʔaɫnapil s-t'-aw-s ti-ʔimlk-tx

The form t'-aw-s ti-ʔimlk-tx occurs parallel to ti-k'x-is ti-ʔimlk-tx 'the one the man saw':

- (23) (i) ʔaɫnapil ti-k'x-is ti-ʔimlk-tx 'We know the one the man saw'  
 (ii) ʔaɫnapil t'-aw-s ti-ʔimlk-tx 'We know that one the man is next to'

The constructions of 17, like those of 6, are examples of restrictive modification.

2.1 Such pairs as ti-ʔaw-s-tx and t'-aw-s-tx differ in emphasis that may be Non-Demonstrative versus Demonstrative, respectively. If someone is sent for an object but fails to find it, the Speaker may point it out with t'-aw-x<sup>W</sup>-tx 'that one there you are next to,' t'-aw-s-tx 'that one there he/she/it is next to,' etc. The degree of involvement between the pivot and the deictically determined object expressed by ʔaw and ʔatu remains operative; t'-atu-x<sup>W</sup>-tx if said to a Hearer sent to look for something can imply, for example, that the Hearer is holding the item in his hand (the greater bond) but does not know it is the correct one. If, doing this, he asks where the object is, the answer t'-atu-x<sup>W</sup>-tx means not only 'that one right there you have in your hand' but also implies a certain denseness on the part of the Hearer. This implication is predictable from the concatenation of Demonstrative emphasis (t'-) and greater than simple spatial

connection (?atu); the implication is absent from the ?aw forms. Repetitions of indications of an object require t'-atu- combinations. If the Hearer is sent for an object, doesn't see or recognize the correct one, the Hearer's first request for aid is answered t'-aw-x<sup>W</sup>-tx; any subsequent request (e.g. the same 'Which one?' question) is responded to by t'-atu-x<sup>W</sup>-tx. That is, the first answer constructs or is taken by the Speaker to construct the greater than spatial bond between the pivot (the Hearer here) and the deictically determined object; and only t'-atu- is now appropriate.

The Demonstrative force of the prefixes of 17 hold for the deictic relation between the pivot and the object. Independently of this that same object will be deictically specified relative to the Speaker via the affixes, and here the relation to the Speaker pivot may be demonstratively emphasized as well: t'-aw-x<sup>W</sup>-t'ayx 'this one you are right next to.'

2.2 The Demonstrative forms of the deictic roots occur with the same variety of constructions that the Non-Demonstrative forms do (the ?aw-Ø second person singular, the -t deictic suffix, and the -?awa/-?awx<sup>W</sup>a suffixes):

| (24) | I                       | III                      | V                            | VI                           |
|------|-------------------------|--------------------------|------------------------------|------------------------------|
|      | t'-aw-tx                | t'-aw-tix                | (t'-aw-x <sup>W</sup> -tx)   | t'-aw-tax                    |
|      | c'-aw-cx                | c'-aw-cix                | (?iɩ-?aw-x <sup>W</sup> -iɩ) | (?iɩ-?aw-x <sup>W</sup> -iɩ) |
|      | (?aw-x <sup>W</sup> -c) | (?aw-x <sup>W</sup> -ci) | t'-aw-tx <sup>W</sup>        | t'-aw-tux                    |

|          |  |                            |
|----------|--|----------------------------|
| (25) (i) | t'-aw-x <sup>W</sup> -t                  | t'-aw-p-t                  |
|          | t'-aw-s-t                                | t'-aw-t-t                  |
| (ii)     | t'-atu-x <sup>W</sup> -t                 | t'-atu-p-t                 |
|          | t'-atu-s-t                               | t'-atu-t-t                 |
| (26) (i) | ?aw-x <sup>W</sup> -?awa                 | ?aw-p-?awa                 |
|          | ?aw-s-?awa                               | ?aw-t-?awa                 |
| (ii)     | ?atu-x <sup>W</sup> -?awa                | ?atu-p-?awa                |
|          | ?atu-s-?awa                              | ?atu-t-?awa                |
| (27) (i) | ?aw-x <sup>W</sup> -?awx <sup>W</sup> a  | ?aw-p-?awx <sup>W</sup> a  |
|          | ?aw-s-?awx <sup>W</sup> a                | ?aw-t-?awx <sup>W</sup> a  |
| (ii)     | ?atu-x <sup>W</sup> -?awx <sup>W</sup> a | ?atu-p-?awx <sup>W</sup> a |
|          | ?atu-s-?awx <sup>W</sup> a               | ?atu-t-?awx <sup>W</sup> a |

The Demonstrative form t'-aw-Ø of 24 occurs with the suffix -t (t'-aw-t) but not the -?awa/-?awx<sup>W</sup>a suffixes; this parallels the Non-Demonstrative usage of ti-?aw-Ø-. In 25 the forms with third person pivots absent from 11 and 12 occur; the plural forms \*?aw-x<sup>W</sup>-t and so forth do not.

2.3 We have shown that the deictic roots occur in constructions of restrictive modification and that they occur with Non-Demonstrative and Demonstrative forms. The Demonstrative forms---while superficially similar to sentences with pronominal roots---function as clauses of restrictive modification. The Demonstrative forms have one other formal property in common with pronominal roots. We have pointed out that the latter can be used in restrictive modification e.g. ti-tix-tx 'the one who is he,' ci-cix-cx 'the one who is she,' etc. Similarly, forms like t'-aw-s-tx,



c'-aw-s-cx, etc. function as clauses of restrictive modification (cf. 23).

Thus, ti-tix-tx should parallel t'-aws-tx; that is, the t- of tix may be considered to be part of the stem t-ix, and the t'- of t'-aws-tx should be compared with the ti- of ti-tix-tx, i.e.

$$(28) \quad \begin{array}{c} \text{ti-tix-tx} \\ | \quad | \quad | \\ \text{t'-aws-tx} \end{array}$$

We find, however, that the set of Demonstrative forms with ?aw and ?atu may further occur in these constructions:

| (29) | I   | II                                   | III                                  |
|------|---|--------------------------------------|--------------------------------------|
|      | ti-t'-aw-s-tx   | ti-t'-aw-s-t'ayx                     | ti-t'-aw-s-tix                       |
|      | ci-c'-aw-s-cx   | ci-c'-aw-s-c'ayx                     | ci-c'-aw-s-cix                       |
|      | wa- <sup>?</sup> aw-s-c                               | wa- <sup>?</sup> aw-s-ac             | wa- <sup>?</sup> aw-s-ci             |
|      | IV  | V                                    | VI                                   |
|      | ta-t'-aw-s-t'ax                                       | ta-t'-aw-s-tx                        | ta-t'-aw-s-tax                       |
|      | ?i <sub>1</sub> -aw-s-i <sub>1</sub> ?ay <sub>1</sub> | ?i <sub>1</sub> -aw-s-i <sub>1</sub> | ?i <sub>1</sub> -aw-s-i <sub>1</sub> |
|      | ta-t'-aw-s-t'ax <sup>W</sup>                          | ta-t'-aw-s-tx <sup>W</sup>           | ta-t'-aw-s-tux                       |

The Non-Proximal Demonstrative feminine forms that we might suppose to be \*?i<sub>1</sub>-i<sub>1</sub>-aw-s-i<sub>1</sub>?ay<sub>1</sub> and \*?i<sub>1</sub>-i<sub>1</sub>-aw-s-i<sub>1</sub> do not occur. The repetition ?i<sub>1</sub>-i<sub>1</sub>, that we would expect on the basis of 17 and 6, seems to be avoided, and we find instead ?i<sub>1</sub>-aw-s-i<sub>1</sub>?ay<sub>1</sub> and ?i<sub>1</sub>-aw-s-i<sub>1</sub>. These expanded forms of 29 occur as well with the various expressions of 24-27, e.g. ti-t'-aw-~~ø~~-tx and so forth.

In the forms of 29, the equation of the t'- of t'-aw-s- with the t- of tix seems now to be valid, i.e.<sup>13</sup>

(30)

|    |   |       |   |        |
|----|---|-------|---|--------|
| ti | # | t-ix  | # | tx     |
|    |   |       |   |        |
| ti | # | t'-aw | # | s # tx |

3.0 The deictic roots of Bella Coola have been shown to constitute a unique set within the language, and we may assume their irregular properties are archaic. The examples and comparisons of 28, 29, and 30 may be interpreted as showing that these forms are in a transitional state. The constructions of 17 are relic forms, whereas those of 29 are newer ones in which the t'-/c'-/ø- are being reinterpreted as part of the stem on the model of tix/cix/wix. We have seen that patent repetition of deictic prefixes, e.g. \*?iɬ-iɬ, is unacceptable. Generally, syntactic constructions, e.g. t'aw, seem to be undergoing reinterpretation as morphological, derivational, e.g. t'-aw. This is reflected in the general synthetic nature of Bella Coola.

It is interesting to consider the regular Speaker pivoted deictic suffixes in this light. We list them again in 31:

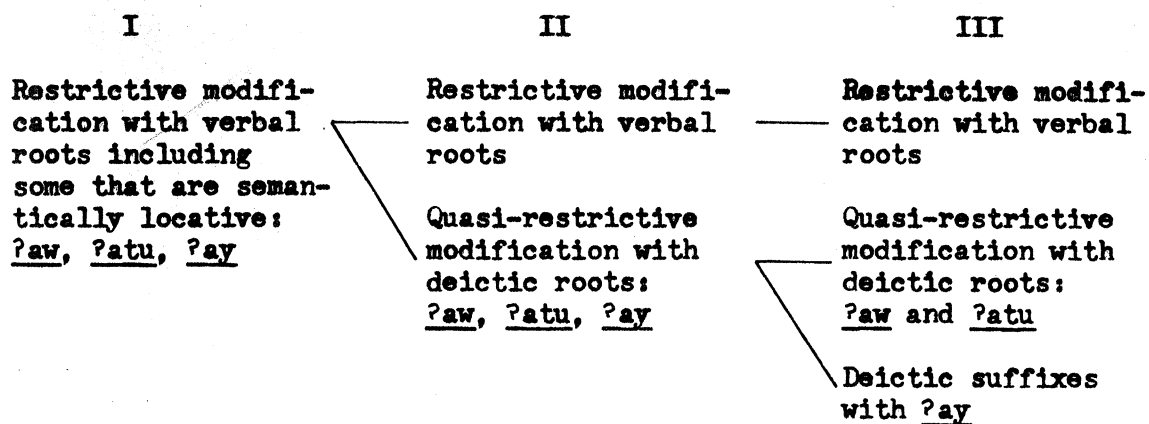
(31)

| I                                   | II                    | III                   |
|-------------------------------------|-----------------------|-----------------------|
| -t-x                                | -t'-ayx               | -t-ix                 |
| -c-x                                | -c'-ayx               | -c-ix                 |
| -ø-c                                | -ø- <sup>?</sup> ac   | -ø-ci                 |
| IV                                  | V                     | VI                    |
| -t'-ax̣                             | -t-x̣                 | -t-ax̣                |
| - <sup>?</sup> iɬ- <sup>?</sup> ayɬ | (- <sup>?</sup> iɬ- ) | (- <sup>?</sup> iɬ- ) |
| -t'-ax̣ <sup>w</sup>                | -t-x̣ <sup>w</sup>    | -t-ux̣                |

They have been further segmented in 31 to emphasize the similarity between

them and the deictic root constructions of 17. We find in both the same correlation of t-masculine proximal, c-feminine proximal, Ø-plural proximal, and t-masculine non-proximal, and t-plural non-proximal. Further, glottalization in each set is associated with demonstrative emphasis. On the basis of this we may speculate that the suffixes themselves were, at an earlier time, syntactic constructions such that ti-ʔimlk t'-ayx 'this man,' like ti-ʔimlk t'-awstx 'the man he/she/it is next to,' was a construction of restrictive modification. Extension of the process that appears to be still occurring (t'aw#s > t'-aw#s) has obscured that origin.

The roots ʔaw and ʔatu have been given the label 'deictic roots' because they function solely to restrict and place terms of the Narrated Event relative to the Narration in the same way the deictic affixes do; they have no occurrence outside such constructions (cf. the incorrect 4). Given their cognate function and a single (speculated) source construction for the deictic suffixes and deictic roots (The possible root ʔay noted in fn. 3 may be assumed to recur in such forms as t'ayx.), we may then suspect a state of Bella Coola in which deictic suffixes were absent, and the roots ʔaw, ʔatu, and ʔay were productive, perhaps, as locative roots. This development can be represented in the following schema:



It remains a problem for internal and comparative reconstruction to determine the correctness and details of this hypothesis.

# Notes

<sup>1</sup>Bella Coola is a Salishan language spoken on the north central coast of British Columbia, Canada. We wish especially to express our appreciation to Margaret Siwallace, Charles Snow, and Felicity Walkus, among many, who have helped us to an understanding of Bella Coola. We also wish to thank the National Science Foundation (Grant SOC73 05713 A01) and the Canada Council (Grants S73-1973 and S75-0225) for their financial support of this work.

<sup>2</sup>The deictic affixes of Bella Coola are

|           | Proximal<br>Non-Demonstrative | Proximal<br>Demonstrative   | Middle<br>Non-Demonstrative |
|-----------|-------------------------------|-----------------------------|-----------------------------|
| Masculine | ti--tx                        | ti--t'ayx                   | ta--i                       |
| Feminine  | ci--cx                        | ci--c'ayx                   | ?iɬ--i                      |
| Plural    | wa--c                         | wa--?ac                     | ta--i                       |
|           | Middle<br>Demonstrative       | Distal<br>Non-Demonstrative | Distal<br>Demonstrative     |
| Masculine | ta--t'ax                      | ta--tx                      | ta--tax                     |
| Feminine  | ?iɬ--?iɬ?ayɬ                  | ?iɬ--iɬ                     | ?iɬ--iɬ                     |
| Plural    | ta--t'ax <sup>w</sup>         | ta--tx <sup>w</sup>         | ta--tux                     |

In addition to these, there is a set consisting of ti--tix, ci--cix, and wa--ci that occur only in questions (as the Distal Demonstrative ones do); their deictic range includes the Proximal and Middle as defined in Davis and Saunders 1974b. The plural affixes are used with lexical items and constructions to express space and time as well as simple plurality. The

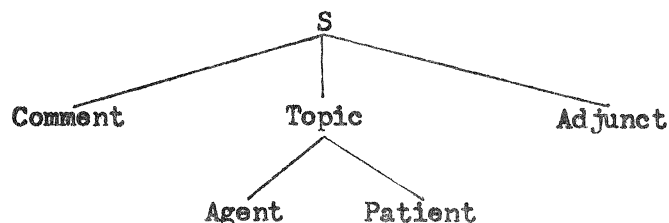
semantics of these forms is discussed in Davis and Saunders 1974b; additional usage is described in Davis and Saunders 1974a.

<sup>3</sup>There may be other deictic roots in the language. The form ?ala?aysc 'now,' for example, consists of a preposition ?al- (variant of ?al-), a deictic prefix a- (variant of wa-), a form ?ay, a suffix -s (third person?), and a particle c' (that elsewhere is glossed as 'now'). The remainder ?ay may be a deictic root. Cf. also §3.0 below. Some forms with ?aw and ?atu are mentioned in Newman 1935 but not discussed.

<sup>4</sup>We will employ the term Speech Act to designate the Speaker, the Hearer, and the Narration. This will include as well the location of the Narration, what the Speaker and Hearer know or assume at the time of the Narration, e.g. what has gone before, where it occurs, etc. The Narration is the report; the Narrated Event is used to designate that which is reported/expressed as the Narration. The terms of the Narrated Event are deictically related to the space-time of the Narration via their spatio-temporal relationship to either the Speaker or some Non-Speaker, i.e. the Hearer or a third person. This relator of the terms of the Narrated Event to the Narration will be called the pivot. Cf. Saunders and Davis 1975b for additional use of some of these distinctions.

<sup>5</sup>The roots ?aw and ?atu occur in 1 and 2 with the deictic affixes of the Non-Demonstrative Proximal Masculine Singular. The roots also occur with the remaining affixes of fn. 2 (with the exception of the Middle Non-Demonstrative) as well as ti--tix, ci-cix, and wa--ci. Cf. 6.

<sup>6</sup>We assume here that the structure of simple sentences is



This expresses the VSO nature of Bella Coola. The Patient and Adjunct constituents are optional. The Adjunct can be further expanded as Preposition plus Object or as S. For each combination of person (first, second, or third) and number (singular or plural) of the Agent and Patient, there occurs a suffix to mark agreement within the Comment. Only plural animate Agents and Patients are treated as plural in the agreement. Others, including the plural of space-time (cf. fn. 2), are treated as singular. See Davis and Saunders 1973a for further discussion; see that and Davis and Saunders 1974c for discussion of the structure of restrictive modification.

<sup>7</sup>The -t marks third person (singular and plural) Agents that are deleted within the derivation of restrictive modification; it may be considered to be a neutralization of -is 'he/she/it-him/her/it' and -it 'they-him/her/it.' The form ti-?aw-t-tx is correct with another meaning (cf. 1).

<sup>8</sup>The first of these necessary semantic components can be illustrated with ti-?aw-x<sup>W</sup>-t'ayx; -aw-x<sup>W</sup> indicates the object is near the Hearer pivot. The affixes ti--t'ayx indicate the object is near the Speaker as well, but the form ti-?aw-x<sup>W</sup>-t'ayx is appropriate only when the object is on the side of the Hearer away from the Speaker.

<sup>9</sup>The root ʔawɿ 'to follow' can now be analyzed as a frozen form of the deictic root ʔaw plus the lexical suffix -ɿ, a variant of the shape -aɿ 'foot/leg' (cf. Davis and Saunders 1973b and Saunders and Davis 1974 and 1975a). The deletion of the a from -aɿ parallels the loss of i in the agreement affixes.

<sup>10</sup>The form \*wa-ʔaw-t is incorrect.

<sup>11</sup>The suffix -ʔawx<sup>W</sup>a is occasionally realized as -ʔāx<sup>W</sup>a. This long vowel lacks the distinctive pitch contour of 'true' long vowels. The suffixes -ʔawa and -ʔawx<sup>W</sup>a are Speaker pivoted as those suffixes of fn. 2 are.

<sup>12</sup>The s- in 22 marks embedded sentences. Cf. Davis and Saunders 1974c.

<sup>13</sup>The # and - are ad hoc markings of a syntactic versus nonsyntactic distinction, i.e. not part of stem versus part of stem.



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