

The s- and si- Prefixes in Bella CoolaPhilip W. Davis
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O. Introduction. Like the other Salishan languages, Bella Coola possesses an affix s- that precedes stems, and Bella Coola also possesses a second, closely related prefix, si-, that is not pan-Salishan. Our purpose in this paper is to characterize the semantics and grammar of these two forms.¹

Any language will be organized to enable the expression and communication of a NARRATED EVENT; something happens or something is, and that perception or recollection is conveyed by a speaker to a listener.² The implementation of this communication is commonly called a "speech act" (cf., e.g. Searle 1969), and like all historical occurrences it must exist within a matrix of other occurrences, some of which will also be speech acts. All languages are additionally organized to express this contextualization as well, in that they possess the formal means/patterns to communicate a variety of relationships between the speech act and the experience/knowledge shared by the speaker and listener. It is this aspect of meaning that makes the NARRATED EVENT relevant to the listener (sensible) by relating its terms and/or assertion (the whole) to what he already knows of the world (his prior knowledge of occurrences—speech acts and others). The application of language resources to this end has commonly been labelled "pragmatics" (cf. e.g. Lyons 1977.114-19). It is the expression of these two broad domains of meaning that imposes upon the grammar of a language its primary patterns.³

The identification of terms and relations within a NARRATED EVENT and their structuring results in a PROPOSITION, that may be thought of in the manner of Fillmore (1968, 1971 and 1977) and Chafe (1970) as consisting of an EVENT and a number of PARTICIPANTS.⁴ This semantic organization must then receive formal expression; for example, EVENT may be consistently placed at some fixed point in a sequence, while PARTICIPANTS occupy other points. Or EVENT may be accompanied by an additional, morphological device (e.g. to signal Fillmore's M[odality]), as the PARTICIPANTS may be accompanied by inflection (e.g. Case) to distinguish among the PARTICIPANTS as well as distinguishing the PARTICIPANTS as a group from the EVENT. In short, the formal apparatus of sequence and morphological

marking give an indication of the presence of the semantic distinctions. But, because the formal resources of a language are limited, it frequently happens that a single mark must serve multiple functions and signal, say, not only semantic information pertaining to the NARRATED EVENT, but also information as to the context in which that EVENT is communicated. A simple illustration of this in Bella Coola is the—at least—dual function of utterance initial position:

- (1) $\dot{\text{ɬ}}\text{ikm-}\emptyset$ ti-wač-tx
[run-it -dog-]
'The dog is running'

(ti- ... -tx are deictic markers that are discussed below.) Initial position, occupied here by $\dot{\text{ɬ}}\text{ikm-}\emptyset$ 'run', marks that semantic material as the EVENT, but that same position also marks the material occupying it as in some sense "new" in the context in which (1) is uttered. Thus (1) answers the question 'What's the dog doing?' but not 'Who (or 'What') is running?' An answer to the latter question might be

- (2) ti-wač ti- $\dot{\text{ɬ}}\text{ikm-tx}$
'It's a dog that's running'

The choice between (1) and (2) pertains not to different NARRATED EVENTS (The same thing has happened regardless of how it is organized for communication.), but to what knowledge is assumed to be shared by the speaker and listener, as reflected by the contextualization accomplished by one or the other question; and this is a matter of the matrix of occurrences that contain the utterance. Initial position encodes EVENT as well as information that lies outside the experience of the listener.

1.0 s-. It is the semantic and grammatical patterns of the PROPOSITION adumbrated above that are relevant to an understanding of the productive functioning of s- in Bella Coola; and it is upon that productive usage that we will focus in this paper. The productive semantic and grammatical pattern that s- evinces has also provided the source for innumerable lexicalizations. Where the source of lexical items is still productive we may expect to discover a continuum of degrees of lexicalization in the same manner that noun compounding in English yields forms with varying degrees of semantic opacity, formal bondedness, etc. (cf. Downing 1977). We acknowledge the existence of the lexicalized s- initial lexemes and a scale of lexicalization analogous to the English noun compounds, but we concentrate here upon the system that has produced this

result.

To understand the semantics of s- we must further detail the semantic and formal structure of the PROPOSITION. We have noted that utterance initial position signals the EVENT of a PROPOSITION. Independently of this, the morphological prefix ti- (also ta-, ci-, ʔa-, wa- and tu- depending upon gender, number and deixis. Cf. Davis and Saunders 1975b) signals the particularization of the semantic content of the following root (or stem). Thus, wač in

(3) wač-∅ ti-ʔikm-tx

means 'be-dog' and identifies the particularized PARTICIPANT of ti-ʔikm-tx 'the one (who is) running' as exhibiting those properties that enable one to cooperatively assert wač of the PARTICIPANT as a reasonable identification of it. In contrast to (3), ti-wač in (2) asserts—because of its utterance initial position—that 'the one (who is) running' is a particular dog. The deictic prefix marks a PARTICULAR, whereas its absence marks a DOMAIN. The PARTICIPANTS in a PROPOSITION will then be all, necessarily, deictically prefixed. The EVENT may or may not be.

In Bella Coola, as in other languages, PARTICIPANTS within a PROPOSITION will typically fulfill some ROLE. The specific character of ROLES will, of course, vary across languages; and within a language it is the EVENT that characteristically determines the ROLES of the co-occurring PARTICIPANT(S). Thus, in (1) above the ROLE of ti-wač-tx may be that of EXECUTOR, while in

(4) kʔ-∅ ti-wač-tx
[fall-he -dog-]
'The dog is falling'

the ROLE is less EXECUTOR-like and may be, rather, that of EXPERIENCER. EVENTS are not restricted to occurrence with one PARTICIPANT per PROPOSITION; more may appear, and they will also fulfill EVENT-identified ROLES:

(5) tx-is ti-ʔmsta-tx ti-ʔlsx^v-tx
[cut-he/it -person- -rope-]
'The person is cutting the rope'

(6) nap-is ti-ʔmsta-tx ti-staltmx-tx x-ti-ʔlsx^v-tx⁵
[give-he/him -person- -chief- Prep- -rope-]
'The person is giving the chief the rope'

We see in (5) that ʔmsta, as wač in (1), may be perceived as EXECUTOR, while ʔlsx^v 'rope' appears to be something like the ROLE fulfilled by wač in (4), i.e. EXPERIENCER. Where two ROLE-PARTICIPANTS are present, the EVENT may express the person and number of each, e.g. -is in (5). Linear sequence then

distinguishes the two ROLES, and it is this marking that prompts one to label Bella Coola as VSO. In (6) we find a third PARTICIPANT (staltmx 'chief') manifesting a ROLE that is characterized by the receipt of the rope. If we construct a scale of possible ROLES such that the most motile one is located at the left extreme and the least motile, most passive ROLE is at the right, then for sentence (5), the ROLE of ʔmsta 'person' falls to the left relative to the ROLE of ʔlsx^v 'rope':

motile-----passive
EXECUTOR EXPERIENCER

and the "passive" ROLE of tx 'cut' is EXPERIENCER regardless of whether it is inanimate (e.g. ʔlsx^v 'rope') or animate (e.g. wač 'dog'). The addition of a third ROLE forces a further segmentation of the right portion of the scale, so that we have for (6):

motile-----passive
EXECUTOR EXPERIENCER IMPLEMENT

The distinction of an IMPLEMENT ROLE is also possible for (5):

(7) tx-is ti-ʔmsta-tx ti-ʔlsx^v-tx x-ti-tʔʔa-tx
[cuthe/it -person- -rope- -knife-]
'The person cut the rope with the knife'

Sentence (7) is exactly parallel to (6). The EVENT of (4) — kʔ 'fall' — then differs from the EVENT of (1) — ʔikm 'run' — in that ʔikm "intersects" this scale further to the left than kʔ and selects a more motile ROLE. (Cf. Davis ms. b. for discussion of similar patterning in English, the continua involved and the ill-definedness of ROLES when divorced from the context of their use.)

The language permits overt expression of more than two ROLES, but when such is the case, Bella Coola betrays an inequality between the first two and the remainder. Note first that the language encodes information (person and number) only for the first two, and the third requires a marking in addition to its rightmost sequential positioning, viz. the Preposition x-. This parallel treatment of the first two ROLES in the above examples (in opposition to the remainder) extends to their expression under contextual conditions conducive to the use of pronouns. The EXECUTOR and EXPERIENCER are then given zero expression, while the third requires an overt form (Cf. Davis and Saunders 1975a

and 1976a); for (7) we may then find

- (8) tx-is x-tx
[cut-he/it Prep-it]
'He cut it with it'

The formal opposition of the first two ROLES to the remaining one(s) is more than a simple grammatical difference; there is a semantic content signalled by the grammatical unity of EXECUTOR and EXPERIENCER, and this becomes more apparent with the observation that Bella Coola has both a Passive and an Anti-passive construction. In the Passive expression, the EXECUTOR is formally treated in the same way as the IMPLEMENT in (6) and (7); for example,

- (9) nap-im ti-staltmx-tx x-ti-³msta-tx x-ti-^uqlsx-tx
[give-Pass he -chief- Prep- -person- Prep- -rope-]
'The chief was given the rope by the person'
- (10) tx-im ti-^uqlsx-tx x-ti-³msta-tx x-ti-tq³a-tx
[cut-Pass it -rope- Prep- -person- Prep- -knife-]
'The rope was cut by the person with the knife'

The peripherality of the EXECUTOR (and the IMPLEMENT as well) is in part evident in its possible omission without the pronoun effect that is produced by this same tactic in (8). The presence of the so-called Anti-passive construction continues the similar formal treatment of EXECUTOR and EXPERIENCER in that the Anti-passive extends the possibility of peripheral expression to the EXPERIENCER as in (11):

- (11) tx-a- \emptyset ti-³msta-tx x-ti-^uqlsx-tx x-ti-tq³a-tx
[cut-AP-he -person- Prep- -rope- Prep- -knife-]
'The person cuts the rope with the knife'

The shared semantic content hinted at by the common formal properties of the EXECUTOR and EXPERIENCER in (6) and (7), and now confirmed by the symmetrical presence of Passive and Anti-passive, is constituted by the placement of focal attention within the PROPOSITION, i.e. upon the EXECUTOR and EXPERIENCER in (6) and (7), while the other ROLES do not carry it there. (Cf. Davis ms. a. for further discussion of the cognitive bases of language and their patterning in languages of diverse types.)

The above observations and conclusion suggest that we distinguish semantically between the NUCLEUS of a PROPOSITION —containing the EVENT and one, at most two, PARTICIPANT-ROLE(S) that will bear focal attention—and a PERIPHERY containing the remainder of the PROPOSITION. (A similar proposal is made for English in Halliday 1970. Cf. also Davis ms. b.) The semantic peripherality —absence of focal attention—is explicitly indicated by certain utterances

containing -amk-, a derivational suffix that is added to the EVENT of a PROPOSITION. As in (9), (10) and (11), wherein NUCLEAR ROLES were removed from focal attention, so may PERIPHERAL ROLES be included; for example,

- (12) nap-amk-is ti-³msta-tx ti-^uqlsx-tx ^uat-ti-staltmx-tx
[give- -he/it -person- -rope- Prep- -chief-]
'The person gave the rope to the chief'
- (15) tx-amk-is ti-³msta-tx ti-tq³a-tx ^uat-ti-^uqlsx-tx
[cut- -he/it -person- -knife- Prep- -rope-]
'The person used a knife to cut the rope.'

A simple two-ROLE utterance such as (5) also has an alternative expression with -amk-, but with the EXPERIENCER continuing to occupy a spot in the NUCLEUS and without, thereby, ceding focal attention to the IMPLEMENT:

- (14) tx-amk-is ti-³msta-tx ti-^uqlsx-tx
[cut- -he/it -person- -rope-]
'The man cut the rope among other things'

It is sentences on the model of (14) that place the meaning of -amk- into relief. Sentence (14) is appropriate to a context in which the person who is the EXECUTOR cut items among which happened to be the rope; but cutting the rope was not central to his action. It was secondary —PERIPHERAL—to the primary —NUCLEAR—performance. The distinction between NUCLEAR and PERIPHERAL is also clearly present in these pairs:

- (15) (a) kaw-ic ti-sm³k-tx
[deliver-I/it -fish-]
'I'll deliver the fish'
- (b) kaw-amk-ic ti-sm³k-tx
[deliver- -I/it -fish-]
'I'll deliver the fish on my way'
- (16) (a) ^uulX-is ti-nap-tx
[steal-he/it -thing-]
'He stole the thing'
- (b) ^uulX-amk-is ti-nap-tx
[steal- -he/it -thing-]
'He walked off with the thing'
- (17) (a) lis-tis wa-³msta-c
[push-he/them -person-]
'He pushed the people'
- (b) lis-amk-tis wa-³msta-tx
[push- -he/them -person-]
'He pushed the people aside'

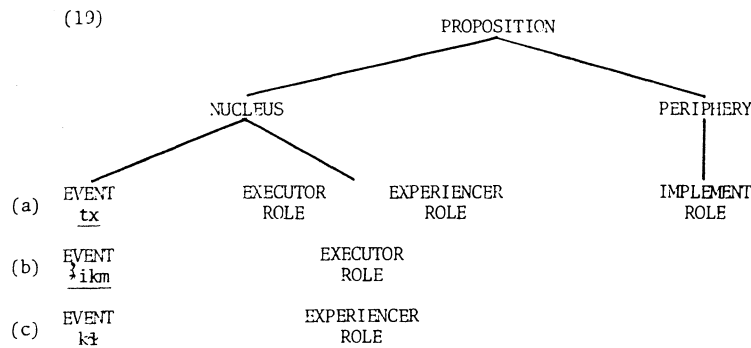
In (15b) the delivering is incidental to the primary purpose of the trip, whereas in (15a) it is the only reason; in (16b) the person who stole the object may

have taken it inadvertently while stealing something else, or even if while visiting he examines the object and leaves having forgotten to replace it, (16b) will be appropriate. In (17b) the peripherality is overtly present in the 'aside'; the EXECUTOR is not interested in pushing people as an end in itself, but in clearing a path. He is secondarily and incidentally pushing people. In (14)-(17) we see that -amk- indeed signals PERIPHERAL and combines that semantic property with the ROLE that grammatically, immediately follows the EXECUTOR. But comparison of (14)-(17) with (12) and (13) also shows that -amk- is not uniquely associated with some specific ROLE, combining as it does with EXPERIENCER—in (14)-(17)—and IMPLEMENT—in (12)-(13). We also see that -amk- is optionally present when the EXPERIENCER ROLE occupies the NUCLEUS, but that when the IMPLEMENT is accorded a position within the NUCLEUS, -amk- is obligatory. Compare (13) with (18):

(18) *tx-is ti-amsta-tx ti-tq¹a-tx

PERIPHERALITY is a property inherent in the IMPLEMENT ROLE, IMPLEMENT being always PERIPHERAL to the EVENT, the "happening" that involves the PARTICIPANTS as filling ROLES; but, in appropriate circumstances, IMPLEMENT may assume NUCLEAR status with respect to the PROPOSITION.

Each EVENT in the language will establish its ROLES and also which ones will be NUCLEAR for it and which ones, PERIPHERAL. Those ROLES are then known for each EVENT to be either NUCLEAR or PERIPHERAL, and knowing that imparts a semantic structure to the PROPOSITION as a whole, a schema for which might appear as follows (cf. Saunders and Davis 1978):



Other configurations are possible depending upon the EVENT; in contrast with tx 'cut', the EVENT nuyam¹ 'sing' acquires but one inherently NUCLEAR ROLE—the EXECUTOR—and two PERIPHERAL ones—the EXPERIENCER and IMPLEMENT:

(20) nuyam¹- \emptyset ti-[?]imlk-tx [?]u¹-ti-staltmx-tx x-ti-syut-nu-tx
 [sing-he -man- Prep- -chief- Prep- song-your-]
 'The man is singing the chief your song'

Once the pattern that relates ROLES to each EVENT as inherently NUCLEAR or PERIPHERAL—(19a), (19b), (19c), etc.—becomes one of the PROPOSITION as well, it can be (and is) exploited by placing PERIPHERAL ROLES into the NUCLEUS of the PROPOSITION, e.g. (12) and (13), or NUCLEAR ones into the PERIPHERY, e.g. (9)-(11). It is the inherent EVENT-determined NUCLEARITY-PERIPHERALITY of ROLES and the PROPOSITIONAL NUCLEARITY-PERIPHERALITY that the former engenders which produce the semantic interplay that identifies both as distinct aspects of the PROPOSITION. We consider the above examples to amply illustrate the presence of the NUCLEAR-PERIPHERAL distinction in Bella Coola. (The semantic organization of the PROPOSITION and the structuring of the sentence that it implies is further discussed in Saunders and Davis In prep. English shows a distinction similar to the EVENT-determined NUCLEARITY or PERIPHERALITY of ROLES in allowing each EVENT/Verb in the language to select proto-typically a ROLE or ROLES and to occur optionally with an additional one, the distinction between the proto-typical ROLE(S) and the others being formally recognized in various ways. Cf. Davis ms. b. for discussion.)

1.1 It is within the frame of semantic distinctions encompassed by the opposition of NUCLEUS to PERIPHERY that s- functions, and we begin by considering its occurrence in the expression of PARTICIPANTS, particularly in the Bella Coola equivalent of relative clauses. The formation of a PARTICIPANT requires that it be made PARTICULAR, and this semantic content is signalled by the deictic prefix (cf. above). The prefix does not, however, further identify the PARTICULAR by fixing it in space-time; this is the semantic province of the deictic suffixes, that identify the PARTICULAR in terms of the speaker's witnessing of it relative to the space and time of the conversation. (Cf. Davis and Saunders 1975b for details.) If such specification is omitted, it is thereby claimed that the PARTICULAR is unwitnessed by the speaker; thus,

(21) ti-[?]imlk-tx

(22) ti-[?]imlk- \emptyset

In (21), the PARTICULAR (ti-) man (?imlk) is said to be visually witnessed by the speaker at the time of the conversation and within a certain distance of it (-tx); while in (22), the PARTICULAR (ti-) man is claimed to be unseen at any time by the speaker (-Ø). The identification of a PARTICULAR by relating it via the speaker's experience to the spatio-temporal locus of the conversation is but one way of achieving the precise specification of the PARTICULAR. A PARTICULAR is also sufficiently identified if its ROLE in some PROPOSITION is provided. For example,

- (23) ti-?imlk ti-?ap-tx
 [-man -go-]
 'the man who is going'

Thus, -tx, -Ø and ti-?ap-tx all function in paradigmatic fashion in the identification of the PARTICULAR that the deictic prefix asserts to exist. In (23), the PARTICULAR is identified as the one fulfilling the EXECUTOR ROLE of the EVENT ap in the PROPOSITION that follows the PARTICULAR ti-?imlk. When other identifying PROPOSITIONS with differing ROLES are employed, any of the ROLES may serve to specify the PARTICULAR. The PROPOSITION expressed in (6), for example, contains EXECUTOR, EXPERIENCER and IMPLEMENT; and a PARTICULAR may be identified by its filling any of the three:

- (24) ti-?msta ti-nap-t ti-stal-tmx-tx x-ti-?l-sx^v-tx⁷
 [-person -give-he/him -chief- Prep- -rope-]
 'the person who gave the chief the rope'
- (25) ti-stal-tmx ti-nap-is ti-?msta-tx x-ti-?l-sx^v-tx
 [-chief -give-he/him -person- Prep- -rope-]
 'the chief whom the person gave the rope'
- (26) ti-?l-sx^v ti-s-nap-is ti-?msta-tx ti-stal-tmx-tx
 [-rope -give-he/him -person- -chief-]
 'the rope that the person gave the chief'

It is in (26) that we begin to see the function of s-; here it is associated with an inherently PERIPHERAL ROLE, the IMPLEMENT. Sentence (7) provides a parallel to (26):

- (27) ti-tqta ti-s-tx-is ti-?msta-tx ti-?l-sx^v-tx
 [-knife -cut-he/it -person- -rope-]
 'the knife the person cut the rope with'

Occasionally, EVENTS that occur with a single NUCLEAR ROLE (i.e. that are grammatically Intransitive) will appear with a PERIPHERAL ROLE as in (28):

- (28) nuyamk-Ø ti-?msta-tx x-ti-syut-nu-tx
 [sing-he -person- Prep- -song-your-]
 'The person is singing your song'

The involvement of syut 'song' in the EVENT of nuyamk 'sing' is sufficient to identify it by its participation in that PROPOSITION:

- (29) ti-syut ti-s-nuyamk-s ti-?msta-tx⁸
 [-song -sing-he -person-]
 'the song the person is singing'

When the PARTICIPANTS that occupy identifying PERIPHERAL ROLES have those ROLES recast into the PROPOSITIONAL NUCLEUS, as in (12) and (13), those ROLES may still serve to identify some PARTICULAR PARTICIPANT, but the inclination is not to employ s-; thus,

- (30) ti-?l-sx^v ti-nap-amk-is ti-?msta-tx
 [-rope -give -he/him -person-]
 'the rope that the person gave'

but

- (31) ?ti-?l-sx^v ti-s-nap-amk-is ti-?msta-tx

The last is said to "sound a little funny." When the reverse happens (viz., a NUCLEAR ROLE is perceived as PROPOSITIONALLY PERIPHERAL), as when the EVENT-NUCLEAR EXPERIENCER of (5) appears in the PROPOSITIONAL PERIPHERY of (11), that now PERIPHERAL ROLE may still serve to specify some PARTICULAR:

- (32) ti-?l-sx^v ti-s-tx-a-s ti-?msta-tx
 [-rope -cut-AP-he -person-]
 'the rope the person cut'

The presence of the identifying ROLE in the PERIPHERY of the PROPOSITION again elicits the s- prefix on the EVENT.

The above phrases suggest that s- is not associated with a single ROLE, but that it is appropriate to ROLES that happen to appear without focal attention, i.e. in the PERIPHERY of a PROPOSITION. The presence of expressions wherein the identified PARTICULAR is omitted as in

- (33) ti-s-tx-a-s ti-?msta-tx
 'the thing/one the person is cutting'
- (34) (a) ti-s-tx-a-c-tx
 'the thing/one I'm cutting'
- (b) ti-s-tx-a-nu-tx
 'the thing/one you're cutting'
- (c) ti-s-tx-a-s-tx
 'the thing/one he's cutting'
- (35) ti-s-nuyamk-s-tx
 'the thing he's singing'

may give the impression that there should exist in the language forms such as

- (36) stxa
 (37) snuyam̄t

The impression is strengthened when (34) and (35) are compared with (38):

- (38) (a) ti-ḡlsx^v-c-tx
 'my rope'
 (b) ti-ḡlsx^v-nu-tx
 'your rope'
 (c) ti-ḡlsx^v-s-tx
 'his rope'

This conclusion is apparently shared by speakers of the language who recognize (36) as a nonce expression for 'anything they could cut' and (37) as 'a thing sung'. Once lexicalized, the forms can then appear as a semantic unit—a lexeme—and not as an expression of a PROPOSITION; and in the same way that ti-ḡmsta-tx 'the man' is expressed, we can find

- (39) ti-stxa-tx
 'the thing that's cut'
 (40) ti-snuyam̄t-tx
 'the thing that's sung'

It is the removal of inflection that signals the shift from identification by PROPOSITIONAL ROLE to identification by NAME, i.e. from (34) to (39) and from (35) to (40). The ROLES in the nonce circumstances of (34) and (35) are reified to create a new independent category or DOMAIN. It is as in English when the modifying structure of Adjective and Noun in the good guy becomes by compounding a new category, the good guy; a sub-type constructed for an occasion is removed from the immediate circumstances of its creation to become an independent DOMAIN of perception (cf. Davis ms. b. for further discussion).

Another tactic that Bella Coola may employ in the construction of new DOMAINS is the addition of the derivational suffix -ta to the forms of the third person singular of (34) and (35). Because the PERIPHERAL ROLE is frequently the IMPLEMENT, -ta may give the impression that it forms 'instruments', but that is secondary to (and derives from) its marking of PERIPHERAL ROLE PARTICIPANTS. Thus, from ḡp-is 'He shears it' we may find ḡp-ta 'shears'; but we also find from ḡilusayx-ḡ 'He passes/gets by', the form s²ilusayxsta 'place where people meet' or 'passage'. From ḡkm-ḡ 'He speaks', we find sḡkmsta 'voice'; and from ḡmt-ḡ 'He sits up/down', s²mtsta 'resting place', etc.

It is important to emphasize that the creation of new lexemes is but one aspect—and a minor one for the grammar of Bella Coola—of s- prefixation.

It is also important to note that s- does not denote ROLE, but only PERIPHERAL; and this is one difference between s- and -amk-. The latter specifically designates ROLES as PERIPHERAL. The presence of ROLE in the above examples of relative clauses with s- is effected by the deictic ti-—itself prefixed to the expression of a PROPOSITION—that denotes a PARTICULAR PARTICIPANT; s- simply adds the semantic content of PERIPHERAL to that, and the total then implies a PERIPHERAL ROLE. The suffix -amk- further differs from s- in that the former denotes a PERIPHERAL ROLE that is also a carrier of focal attention within the PROPOSITION, while s-, as we have seen above in (31), must denote that the material to which it is relevant remains in the PERIPHERY of the PROPOSITION.

That s- marks PERIPHERAL semantic content should make it appropriate to the expression of the "circumstantial" PROPOSITIONAL material of time and space; and indeed this is so. Time and space are morphologically plural in Bella Coola (cf. Davis and Saunders 1975a), so that we find these expressions (Space is considered below with si-):

- (41) ta-s-ḡaḡi-nu-tx^v
 [- -be located-you-]
 'the time you were here'
 (42) ta-s-ḡaḡi-nu
 'while you were here'

The absence of deictic suffix in (42) indicates a failure to identify the time (the boundaries) and the result is a span of time.

1.2 It is frames such as

- (43) (ti-ḡmsta) ti-_____

that express the PARTICIPANT and the ROLE in our examples to this point, but the language does not constrain the expression of PERIPHERAL to this context.

In utterances such as

- (44) ḡaḡnap-iḡ ti-ḡmsta-tx s-ḡap-s
 [know-we/him -person- -go-he]
 (45) ḡaḡnap-iḡ s-ḡap-aw wa-ḡmsta-c
 [know-we/it -go-they -person-]

we find s- in a different formal context, but with the same function. Sentence (44) is close to working as a nonrestrictive relative clause. The content of s-ḡap-s does not identify the man in (44) as it would if it occurred in (43); here, it provides the information that, in addition to knowing the man, we also

know that he is going: 'We know the man and that he is going' (cf. Davis and Saunders 1978). But that increment of knowledge, the expression of which in (44) is prefixed by s-, is not the focal point of the utterance; it is an add-on, PERIPHERAL remark. Sentence (45) is usually glossed as 'We know (that) they are going' and thus conveys the impression—a false one. Cf. Davis and Saunders In prep. —that so-called "embedding" may be present here. This utterance is, rather, the exact parallel of (44); only here the 'thing known' is expressed by its absence, thus 'it'; and a more literal gloss of (45) would be 'We know it, they're going'.

Sequences such as s-³ap-s, because they are marked as signalling PERIPHERAL information, imply some NUCLEUS with respect to which they hold that status; but this does not mean that such phrases cannot be uttered without the preceding NUCLEUS, and we do find that such phrases as

(46) s-³ap-s

are possible as complete utterances. Sentence (46) is appropriate to a context in which some assertion, ³ap-∅ ti-staltmx-tx 'The chief is going' or the like, has occurred; (46) indicates an understanding of that utterance (or other context) and elicits a confirmation. Thus, 'Is he really going?' or 'He's going, eh?' are suitable glosses. Sentences like (46) require an informational setting that both speaker and listener are aware of, and if it is not present a direct yes-no question, e.g. ³ap-∅-a 'Is he going?', is necessary. Or again if someone sees a large fish and relates his experience with

(47) ik^w-∅-tu ta-sm³k ta-kx-ic ?ala?awa
[big-it-indeed -fish -see-I/it across the street]
'The fish that I saw across the street was indeed big'

his listener may respond with

(48) s-ik^w-s
'Was it as big as you say?'
'So it's big, huh?'

It is the explicitly PERIPHERAL information marked by s- that elicits an answer. Mention of a PARTICIPANT, e.g. ti-sm³k-tx 'the fish'; or an EVENT, e.g. ³ap-∅ 'He's going'; or a PROPOSITION not marked as PERIPHERAL will not produce this effect. For example, a response to (47) might be

(49) ik^w-s
[big-it]

This alternative to (48) does not require confirmation; it simply denotes

acceptance of the prior assertion: 'That big:' If the utterance of a PROPOSITION marked as PERIPHERAL (s-) implies a NUCLEUS, then absence of the latter is perceived as a request to produce it (In Grice's [1975] terms, this is a blatant flouting of the maxim of quantity.); and in this context, the answering NUCLEUS is the same PROPOSITION, unmarked for PERIPHERALITY (without s-). This usage has a corollary, namely, that the material prefixed by s- in (46) and (48) is not strongly asserted, but rather mentioned and assumed to be in the experience of the listener. In general, the greater the semantic dependency of a PROPOSITION, the greater its lack of assertiveness and the greater its function of mentioning. The occurrence of s--prefixed PROPOSITIONS appear to have in this regard something in common with the so-called "anti-topics" (except that here it is a PROPOSITION rather than the usual PARTICIPANT. Cf. Givón 1975:197, Chafe 1976:53 and Davis ms. a.) in being additions, increments present to prevent misunderstanding or as aids to better seeing the relevance of the NUCLEAR PROPOSITION; and as such, and with focal attention placed elsewhere upon the NUCLEAR portion, their assertiveness is correspondingly diminished.

1.3 A last usage of s- combines properties from its occurrences described in sections 1.1 and 1.2. Consider these sentences:

(50) ya-∅ ta-?imlk-tx ti-s-?a³uk^wala-∅
[good-he -man- -Indian doctor-he]
'The man was good as an Indian doctor'

(51) ya-∅ ti-?imlk-tx ti-s-ks-tus ti-^qx^wmtimut
[good-he -man- -fix/make-Caus he/it -car]
'The man is good as fixing cars'

These differ from the identifying-by-ROLE forms of (26), (27), (29), etc. in several ways. First, the paradigmatic relationship of -∅, deictic suffix, and identifying relative clause is absent. In (50), for example, the suffix -tx identifies ?imlk 'man' as one observed by the speaker in DISTAL space-time (cf. Davis and Saunders 1975b); and the following ti-s- phrase does not and cannot have the semantic function of constraining the PARTICULAR ?imlk to some unique one. Secondly, the agreement of deictic prefixes observed in constructions wherein a subsequent phrase does identify a preceding PARTICIPANT by ROLE, e.g. ti-...ti- in (23), is not required here. Thirdly, PARTICIPANTS in such phrases as (24) may themselves be deictically identified: thus ti-staltmx-tx

and ti-ǫlsx^v-tx. But here that identification is not possible, and the following variations of (50) and (51) are not acceptable:

- (52) *ya-∅ ti-?imlk-tx ti-s-?aʔuk^vala-∅-tx
 (53) *ya-∅ ti-?imlk-tx ti-s-ks-tus ti-ǫ^vX^vmtimut-tx

While phrases like ti-s-?aʔuk^vala-∅ 'as an Indian doctor', ti-s-iXanm-∅ 'as a hunter', etc. clearly differ from the relative clause forms of section 1.1, they have in common the presence of a deictic prefix and the concomitant specification of a ROLE. The parallelism of utterances such as (50) with the forms of section 1.2 is also instructive:

- (54) (a) ya-∅ ti-?imlk-tx ti-s-?aʔuk^vala-∅
 (b) ya-∅ ti-?imlk-tx s-?aʔuk^vala-s

Forms like s-?aʔuk^vala-s in (54 b) and elsewhere add PERIPHERAL PROPOSITIONAL information, while those exemplified in (54 a) add PERIPHERAL ROLE information and differ from forms like ti-s-nuyamǫ-s-tx in that the latter provide ROLE information that is PERIPHERAL to the PROPOSITION contained in the phrase itself, i.e. to nuyamǫ-s. The PERIPHERALITY of (54 a) is like that of (54 b); both signal information PERIPHERAL to what precedes, i.e. ya-∅ ti-?imlk-tx. Sentence (54 a) might be glossed in English as 'The man is good when he's an Indian doctor [performs his duties as one]'. It identifies an aspect of ti-?imlk-tx 'the man', but not his essence; it does not therefore identify him as squarely as the relative clause will.

The specification by s- of a PARTICIPANT's guise has served as a second source of lexicalizations. Thus, we have these pairs among many:

- (55) (a) ǫǫ-is
 [slice-he/it]
 'He's slicing it'
 (b) sǫǫ
 'spring salmon sliced into fillets'
- (56) (a) xnas-∅
 [female-it]
 'It's female'
 (b) sxns
 'effeminate person'
- (57) (a) Xs-∅
 [fat-he]
 'He's fat'
 (b) sXs
 'fat, grease'

Only the constructions of 1.1 and 1.3 are sources of lexicalizations; and since it is only those two that specify PARTICIPANTS' ROLES, this seems reasonable. It is this lexicalized s- that is occasionally in works on Salishan (Kuipers 1967.282 and 1974.182) labelled a "nominalizer"; but there is in Bella Coola no good basis for asserting a grammatical dichotomy of Noun vs. Verb, and the semantic PARTICIPANT-EVENT opposition is not contained in the lexical items themselves, but signalled by the grammar. Thus, to call s- a "nominalizer" is only to recognize the historical source of certain s- initial lexemes as those constructions that serve to express ROLES.

2.0 si-. While the s- prefix of the previous section is pan-Salishan, there exists in Bella Coola a second prefix si-, that appears to have no direct correlate in the other Salishan languages. Ablauted forms are not unusual in Bella Coola (Cf. xnas ~ xns above.); and a fairly frequent alternation is i ~ ∅. We thus find for the Medio-passive morpheme both -m- and -mi-; for the Perfective particle both ǫ and ǫi; for the Inferential Dubitative particle both ck and cki, etc. The temptation is therefore strong to see s- and si- as a continuation of this pattern. The temptation is increased by the similar semantic content of the two and the similarity of their grammatical contexts. The s- and si- prefixes differ from the other ablaut pairs above in that s- and si- have become contrasting forms, whereas the others remain allomorphic variants, albeit grammatically conditioned ones. Assuming s- to be the historical origin of si- (We note also that the zero forms of m, ǫ and ck are the more frequent and less constrained.), the relative youth of si- is reflected not only by its appearance in one Salishan language, but also by the comparatively fewer lexicalizations that have a si- construction as their source.

2.1 The si- prefix functions as does s- in expressing the Bella Coola equivalent of relative clauses and in those where the identifying ROLE is in the PERIPHERY. Whereas s- corresponds to those PERIPHERAL ROLES that are otherwise expressed by the Preposition x-, si- corresponds to those expressed by ?aǫ- and ?uǫ-. (Cf. footnote 5.) Thus, for

- (58) nuyamǫ-∅ ci-xnas-cx ?uǫ-ti-?imlk-tx
 [sing-she -woman- Prep- -man-]
 'The woman is singing to the man'

we have

- (59) ti-?imlk ti-si-nuyamǫ-s ci-xnas-cx
 'the man the woman is singing to'

and

- (60) ti-si-nuyam̄i-s-tx
'the one she's singing to'

The Preposition ?aɪ- occurs in analogous fashion:

- (61) ʔap-∅ ci-xnas-cx ?aɪ-ti-?imlk-tx
[go-she -woman- Prep- -man-]
'The woman is going with the man'
- (62) ti-?imlk ti-si-ʔap-s ci-xnas-cx
[-man - -go-she -woman-]
'the man the woman is going with'
- (63) ti-si-ʔap-s-tx
'the one she's going with'

Because (64) is possible

- (64) ʔap-∅ ci-xnas-cx ?uɪ-ti-?imlk-tx
'The woman is going to the man'

both (62) and (63) are ambiguous and have second glosses of 'the man the woman is going to' and 'the one she's going to', respectively. And because ?aɪ- is, among other things, an expression of semantic CAUSE (cf. Davis and Saunders 1976b), (62) is a third way ambiguous: 'the man because of/for whom she is going'. In the same manner that

- (65) ti-s-nix-a-nu-tx
[- -saw-AP-you-]

glosses as 'the thing you're sawing' or 'the thing you're sawing with',

- (66) ti-si-nix-a-nu-tx

glosses as 'the one you're sawing for'. The Preposition ?aɪ- is further commonly used in the designation of spaces:

- (67) ?apsuɪ-iɪ ?aɪ-nuɫalk
[live-we Prep-Bella Coola]
'We live in Bella Coola'

And as s- was commonly involved in the expression of the temporal circumstance of a NUCLEAR PROPOSITION, so is si- the common expression of spatial circumstance:

- (68) ta-suɪ ta-si-?apsuɪ-iɪ-tx^w
[-house - -live-we-]
'the house we lived in'
- (69) ta-cimilt ta-si-ɪxam̄-c-tx^w
[-valley - -hunt-I-]
'the valley that I hunted in'

(Again space—like time—is deictically plural.)

The lexicalizations from this range of usages reflect place,

- (70) (a) si?apsuɪ
'where one settles'
- (b) ta-si?apsuɪ-tx^w
'the place of settlement'
- (71) (a) si?aɪps
'where one eats'
- (b) ta-si?aɪps-tx^w
'the place one eats'

or they reflect CAUSE ('purpose'),

- (72) (a) siɪxani
'the thing one is stingy because of/about'
- (b) ti-siɪxani-tx
'the reason one is stingy'
- (73) (a) siɪikm
'thing one always has to run for'
- (b) ti-siɪikm-tx
'the thing one has to run for'
- (74) (a) siya⁹
'reason for being good'
- (b) ti-siya-tx
'the thing one has to be good for'

In (73) and (74), semantic CAUSE is recognized in the 'has to' or 'got to' component of the English gloss. Counter to this primary usage, names for most of the months show the si- prefix, the implication being that the prefix may mark time as well as place:¹⁰

- (75) (a) sik^wlx
'March [when it gets warm]'
- (b) si?is?am̄ɪɪ
'June [when we eat spring salmon]'
- (c) si?istliɪ
'August [when we eat dog salmon]'
- (d) si?iswaysɪ
'September [when we eat cohoe]'
- (e) siq^wlx^wayx
'November [when they gather]'
- (f) si?mt
'December [when it sits down]'
- etc.

But since the Preposition ?aɪ-, closely associated with si-, may denote 'at'

a place or 'at' a time, appearance of such forms is not to be completely unsuspected. The younger si- continues its encroachment into the semantic domain of s-.

2.2 As the prefix s- appears outside contexts that simultaneously signal a ROLE, so may si- occur. Consider

- (76) ?ati-naw wa-^hmsta-c si-pu^h-s
 [be located-they -person- -come-he]
 'The people are here is why he came'
- (77) ?a^hnap-ic si-^hap-nu
 [know-I/it -go-you]
 'I know why you're going'

In both, the si-prefixed material is clearly analogous to the forms of (44) and (45), and the observations made there are valid here as well. We also note that in the same way that the s-prefixed PROPOSITION may stand as an utterance, as in (46) and (48), so here si-initial PROPOSITIONS are possible, under the same circumstances of discourse and with the same elicitation of confirmation:

- (78) si-^hap-s
 'Is that the reason he's going?'
- (79) si-^has-s
 [-be ill-he]
 'Is that why he's sick?'
- (80) si-^hipayx-s
 [-get caught-he]
 'So this is the place he got caught, huh?'

There appear to exist no forms on the model of the s- phrases of section 1.3, and any lexicalizations with si- initial must then result from the constructions of 2.1

3. Conclusion. The si- prefix—as the s- one—denotes (i) PERIPHERALITY to the EVENT to which it is affixed (if the whole is then in turn deictically prefixed to identify a PERIPHERAL ROLE) or (ii) PERIPHERALITY to the material that precedes it, i.e. the preceding NUCLEAR portion of the PROPOSITION; and the prefix functions in the latter case to signal that the entire PROPOSITION that follows it (to which it is affixed) is PERIPHERAL to the preceding NUCLEUS. In both cases it appears that the NUCLEAR-PERIPHERAL distinction that is relevant to s- and si- is the PROPOSITIONAL one, and not the ROLE-inherent, EVENT-determined one. The PERIPHERY of the PROPOSITION, that s- and si- express,

seems to be complementarily divided between them. If there is any pattern to the division, it is that s-, associated with the more PROXIMAL Preposition x-, is less PERIPHERAL and more tightly bound to the NUCLEUS than si- with its association with the more DISTAL Prepositions ?a^h- and ?u^h-.

There is good reason then—both formal and semantic—to conclude that s- and si- in contemporary Bella Coola derive historically from the same source, and it is only by understanding their grammatical and semantic patterning that one can understand the multitude of lexemes those patterns have spawned.

Notes

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²Upper case notation is employed throughout this paper to identify semantic oppositions; a term written with only the first letter in upper case is a grammatical one.

³These, obviously, do not exhaust the communicative capacity of language, and it is, at least partially, the process of analysis and understanding of language that requires that human experience be segmented and attributed to this or that portion of it.

⁴Our focus here is on the structuring of EVENTS and PARTICIPANTS, and we set aside other components, e.g. Fillmore's (1968:24 et passim) M[odality].

⁵Bella Coola possesses four Prepositions, that have been described in the following manner:

	STATIVE	ACTIVE
PROXIMAL	x	wixt̥
DISTAL	?at̥	?ut̥

Common glosses for x- are 'by' and 'with'; for wixt̥-, 'from'; for ?at̥-, 'at' and 'with'; and for ?ut̥-, 'to' and 'until'. Cf. Davis and Saunders 1975a and 1978.

⁶Once this acknowledged PERIPHERAL element is made NUCLEAR, it may then also occur as the only NUCLEAR ROLE, i.e. in a Passive construction:

tx-ank-im ti-tq̥ta-tx
'The knife was used to cut with'

⁷In phrases that identify some ROLE and contain a form expressing an EVENT that selects two NUCLEAR ROLES (i.e. a Transitive Predicate), the inflection on that form has the shapes -t 'he/him' and -tan 'he/them' when the EXECUTOR is third person singular and the EXPERIENCER is third person singular and third

plural, respectively, and it is the EXECUTOR ROLE that the phrase signals as the identifying ROLE, i.e. the one who did it as opposed to the one it was done to or done with. Cf. Davis and Saunders 1978 for further remarks.

⁸The third singular inflection -s on forms expressing an EVENT that selects one NUCLEAR ROLE (i.e. Intransitives) appears in place of -Ø under circumstances that are commonly called "embedded". Cf. Davis and Saunders In prep.

⁹McIlwraith (1948:612. Vol. 2) cites this form with the gloss 'Supernatural good luck'.

¹⁰McIlwraith (1948:610-11. Vol. 2) cites names for ten of the months constructed in this fashion.

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