# A Government and Binding Approach to Bella Coola

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### INTRODUCTION

In the time leading up to the work presented in this paper I was struck by the relative lack of Government & Binding (GB) treatments for American Indian languages. This paper will remedy the situation somewhat by investigating the adequacy of the GB framework for a language which has hitherto been neglected by current versions of the theory. Bella Coola is an isolated member of the Salish family, located on the Canadian west coast.<sup>1</sup> It seems to have branched off before any other languages of the family, the two main branches being Coast Salish and Interior Salish. Bella Coola shows characteristics of both branches, but should not be considered any closer to Proto-Salish than any other language. The Salish family shares many characteristics with the neighbouring Wakashan and Chemakuan families, most notably VSO word order, reduplication, and a lack of clear distinction between verbs and nouns. The similarities between these language families have been attributed to a real diffusion, as genetic relations remain inconclusive.

In section 1, I will describe the salient elements of Bella Coola syntax, discussing the current options we have to account for them. Section 2 will put the language into a recent VSO typological classification (Woolford, 1991), while section 3 will discuss the general adequacy of the GB framework for Bella Coola.

### **1. SALIENT ASPECTS OF BELLA COOLA SYNTAX**

#### 1.1 Noun/Verb dichotomy

The most important peculiarity of the language is the (seeming) lack of distinction between nouns and verbs. Much of the debate in the Amerindian literature concerning the Salish noun/verb dichotomy supports the distinction between the two categories; it not only makes Universal Grammar more plausible, but shows the diversity of human languages that can be described working within UG. Researchers usually examine the ways the distinction manifests itself at the levels of Morphology, Syntax and Semantics. Phonology has proven useless in offering proof for the dichotomy in Bella Coola, while Morpho-syntax has been only nominally more successful. The semantic level judges whether the word is taken more as a referring expression, or as some sort of action or state of being; this is by far the weakest of the three levels and can sometimes be identified only in retrospect. The morphological level is based on the distribution of affixes to stems and is a strong source of data that may lead to a solution for the problem. In Bella Coola, morphology shows a distinction between three types of roots based on the kinds of personal inflection they may take (Nater, 1984):

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<sup>&</sup>lt;sup>1</sup> For transcription of Bella Coola data, the following phonemes are used: [c] voiceless palatal affricate; [t] voiceless lateral fricative; [t] voiceless lateral affricate; ['] indicates that the preceding consonant will be pharyngealized.

i) particles and clitics can take no personal marking

ii) transitives can take bipersonal (subject/object) or passive pronoun paradigms

iii) intransitives can take the subject/possessive paradigm

The intransitives are the most troublesome of the roots since they seem to be made up of everything from intransitive verbs to adjectives, nouns, independent pronouns, numbers, and interrogatives. All of these elements can be inflected with the paradigm in (1) below.

When this paradigm is attached to an intransitive verb, the pronoun indicates the subject (or agent) of the verb. If the paradigm is attached to a nominal form, it normally indicates possession. This requires some clarification, however; if the nominal occurs *without* determiners, it acts as the main predicate of the sentence, which implies that there is a verb present. And conversely, if a verbal form occurs *with* determiners, it attains a substantive function, usually of the form: gerund - possessive. The example in (2) shows the translation of a verbal form when inflected with the above paradigm, while (3) shows a nominal form with the same paradigm. The (b) examples show the meaning when there are determiners present.

- (2) a. 7ałps-c (Newman, 1969a) eat(intr)-1sg 'I am eating'
  - b. ti-7ałps-c det-eat(intr)-1sg 'my eating'
- (3) a. staltmx-c chief-1sg 'I am chief'
  - b. ti-staltmx-c-tx det-chief-1sg-det 'my chief'

There is thus no distinction made between nominal and verbal intransitive roots in the morphology; the distribution of this pronominal paradigm suggests that the intransitive roots are all the same category. By claiming that they are the same, there is a certain generality present in this language that cannot easily be explained within GB (or indeed, any theory which crucially refers to Noun and Verb as distinct categories). Does the form in (3a) have the same status that the form in (3b) would have without determiners, or is it specially generated to have nominal status when occurring with determiners? Could it be that there are nominal and verbal versions of each

intransitive root in the lexicon, one that occurs with determiners and the other without, or could it simply be a process of zero-derivation? These are not pleasing propositions since they attempt to take away some simplicity of the system.

What we have seen from the morphological level is that there appears to be a distinction between transitive and intransitive roots based on what types of affixes may be attached, but once derivational stems have attached, they can all possibly act the same.

In trying to reconcile these morphological facts within a greater theory of syntax, I was reminded of a certain conception of 'transformation' from an earlier version of generative grammar. In Bach (1968), it was suggested that all Noun, Verb, and Adjective Phrases were introduced in the form of relative clauses. This means that each type of phrase would have a similar underlying structure, (much as the intransitive roots in Bella Coola seem to). According to Bach's argument, the following two sentences are equivalent versions of the same sentence at Deep Structure and Surface Structure, respectively:

"I spoke to the one who was an anthropologist"

and

"I spoke to the anthropologist"

The first sentence describes the underlying form of the sentence - not only for English, but supposedly for all languages. If we adopt such a proposal for Bella Coola, the generality of the intransitives is very well explained; it is possible to translate the intransitives as nouns which are derived from underlying relative clauses. The only difference, then, between English and Bella Coola is that English has many transformations which change the underlying structure (sometimes obligatorily) to the surface realizations, while Bella Coola lacks these transformations.

This type of analysis was acceptable in the late sixties, when transformations were still in their formative stage, but this argument does not fit into current Government and Binding theory. To even suggest that English noun phrases are actually relative clauses at D-Structure would be unacceptable within current frameworks. If this argument is taken into the semantic area, however, we may be able to express some cross-linguistic phenomena. For now, it may be easiest just to take the intransitive roots as verbal nouns, but this will also cause problems (which are to be discussed in section 1.5).

It should be noted that there are, in fact, some roots which can act as both transitives and intransitives. These make up a relatively small class of roots which cannot be derivationally formed. When they are used with the transitive paradigm there is a sense of causative or agent-related activity, while, when they occur with the subject/possessive paradigm, they express more of a 'medio-passive notion' (Newman, 1969a). By suggesting that at least some roots have both transitive and intransitive forms in the lexicon, we are introduced to the problem of how to account for the transitivizing and detransitivizing affixes that are very productive in the language. What effect do these affixes have on the argument structure of the verbs they are attached to? Are they base-generated with the verb, or are they actually contained within one of the verb's arguments and later incorporated into the verb? These argument-inhibiting and argument-adding affixes may even be stored, attached to their roots within the lexicon (as are the transitive/intransitive roots

discussed above); this would certainly save some trouble with changing the argument structure of the verbs, but would miss an important aspect of the language. This will be put on hold until some other things have been worked out.

#### **1.2 Subject/Object agreement on transitive verbs**

Transitive predicates in Bella Coola may occur with only their subject/object fused-form pronoun paradigm, or they may also have the lexical forms of the arguments, thus both (4a) and (b) below are completely normal in the language. The regular transitive subject/object paradigm is shown in (5) with the pronoun used in (4) in boldface.<sup>2</sup>

(4)

a.

k'x-ic (Newman, 1969b) see(trans)-1sgS/3sgO "I see it/him/her" k'x ic c'n wa subs

b. k'x-ic-c'n wa-sut-s ta-mnat-nu see-S/O-now det-house-3sg.poss det-son-2sg.poss "I see the house of your son"

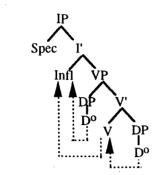
The gaps in the paradigm indicate where reflexive items would occur with the reflexive morpheme, (which will not be covered in this paper). Newman (1969b) analyzed the above fused-form morphemes in order to break them down into their constituent parts. He found the system surprisingly regular, with the object forms preceding the subject forms in all but those with a second person object (where the order was reversed).<sup>3</sup> The constituent pronouns in Newman's paradigm bear a close enough resemblance to their corresponding forms in other paradigms to say that they <u>are pronouns</u>.

Now that the transitive paradigm has been shown to be related to other pronouns in the language, the status of these endings must be accounted for; are they the actual arguments of the verb (theta-marked in deep structure), or simply agreement markers for null arguments? The implications of this dilemma are far-reaching, for both the language and current GB theory.

If it is assumed that these suffixes are, in fact, the real arguments of the verb, they must occur in D-Structure, either as independent pronouns which make up the fused form, or as null elements which form a portmanteau morpheme that is realized <u>only</u> as the fused form in INFL. The first suggestion is unlikely, as the forms are not completely regular; if this were a productive process, they would show more regularity. The latter is apparently our only other option, suggesting that these forms are stored as independent morphemes that attach to the verb through a process such as incorporation when there is movement through a specifier position. The diagram below suggests one possible way that this can happen (this diagram only accounts for the 'regular' order of Verb-Object-Subject):

 $<sup>^2</sup>$  There is also a causative transitive paradigm, which inflects a different class of roots. The causative roots are specified to take the causative transitive paradigm and have essentially the same meaning as regular transitive roots with the regular paradigm. The only time there is a causative meaning is when the causative paradigm inflects a **non-causative** root:

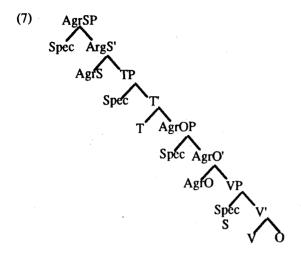
<sup>&</sup>lt;sup>3</sup> This may have something to do with the phenomenon of Agent Hierarchy as described by Jelinek and Demers (1983) for some Coast Salish languages, and also the thematic role hierarchy described by Randall (1988).



(6)

The only remaining problem with this proposal is the status of the lexical complements to the verb, as in (4b). If the null pronouns are the arguments of the verb, the lexical elements could not have thematic roles, and must then be classed as adjuncts. The problem with this is that adjuncts show freer word order than complements, and in this language the word order is preferably VSO when there are lexical subjects and objects. This suggests that the lexical items act more as complements than adjuncts, bringing into question the status of the pronominal suffixes as the arguments of the verb. There is also the consideration that the lexical elements intuitively come after the verb in the order: subject — object. These points indicate that it is unlikely that the pronouns are the (theta-marked) arguments of the verb, and rather that the lexical items are theta-marked (when present).

We will now investigate the hypothesis that transitive suffixes are only agreement markers. With this approach, the verb will get its marking for subject and object by being moved through the Agreement nodes on its way to INFL. The following diagram is a modification of Mahajan (1990) cited in Travis (1991) which indicates the structure of Agreement phrases within the (former) IP for a VSO language.



With this proposal, there are null arguments in the VP, but the agreement for these arguments is found within each AgrP. Some strong points in favour of this analysis include the fact that the lexical items are assigned theta roles, and their surface word order is identical to their underlying order.

In order to clarify the status of the transitive suffixes, the facts for and against accepting them as the verb's underlying arguments (as opposed to it's agreement markers) will now be summarized:

- the transitive suffixes have an implicit relationship with other pronouns of the language (which are presumably theta-marked) suggesting that they are also theta-marked.

- if we suggest that the pronouns are theta-marked, however, we lose the explanation for the typological characteristic for VSO word order with lexical items.

- AgrPs in the IP, and (permissably) null arguments for the verb, explain both where there are lexical subjects and/or objects, and where there are not. It thus seems that the AgrP analysis is the most precise, managing to account for both overt and covert arguments of the verb.

### 1.3 The Passive Paradigm

There is some question as to whether the passive in Salish languages is really the passive; there is no word order change, and there is no morpheme added to indicate passivization.<sup>4</sup> The only way that it is identified as passive is by the addition of the passive pronoun paradigm onto the

<sup>&</sup>lt;sup>4</sup> It is possible that this passive is a manifestation of the ergative nature of the language.

transitive verb. The paradigm is shown in (8), and an example in (9).<sup>3</sup>

- (8) -tinic -tinił (Newman, 1969b) 1st pl 1st sg 2nd -ct 2nd -tap 3rd -im 3rd -tim
- (9) knix-tim-c' (Newman, 1969a) eat(trans)-3pl(pass.)-now "they are now being eaten"

Jelinek and Demers (1983), in their study of Coast Salish languages, found that not everything can be expressed in both the active and passive voice. They mentioned that in Squamish it is impossible to say the equivalent of "the man helps you", when there is a second person patient; you must instead say "you are helped by the man" (i.e. using the passive paradigm). This has an interesting parallel in Bella Coola since the second person form of the passive paradigm is *identical* to the corresponding suffix of the transitive paradigm where there is a second person object and a third person subject. The example below can, in fact, have three different meanings.

(10) k'x-ct (Newman, 1969b) see(trans)-2sg(pass.) or 3S/2sgO
—"he sees you (sg)"
—"they see you (sg)"
—"you (sg) are seen"

We thus see that (at least with second person patients) the passive paradigm acts as the transitive paradigm with an unspecified agent. This may only be due to suppletion within the system, or perhaps it gives insight into the psychological organization of the passive for speakers of Bella Coola. The latter idea is unlikely, in that if it was true, we would probably see the entire passive paradigm supplanted by transitive correlates.

Assuming that the passive paradigm is distinct from the transitive paradigm, how do we represent them in relation to one another? In English, some reserchers believe the "be-en" morphology inhibits the assignment of accusative case to the object, causing it to move to a case position, but how can the passive paradigm in Bella Coola express the same process that we assume happens during English passivization? This bears directly on what we decided in section 1.2 - whether S/O marking on transitive verbs is agreement or a realization of arguments. With the assumption that this marking is simply agreement, we can suggest that the passive paradigm is also agreement, which only happens to indicate the patient of the verb. Perhaps the surface realization

<sup>&</sup>lt;sup>5</sup> This is the 'regular' passive paradigm; there is an equivalent 'causative' passive paradigm which serves the same function to the 'causative' transitive paradigm (see note 2).

of the agent in a passive construction will give a clue as to what exactly is going on. In the examples below we can see that the agent is marked with an oblique marker (glossed by Newman (1969b) as an 'indirective').<sup>6</sup>

- (11) 7awt-tinit x ta-7apsutt-tx follow(tr)-1pl(pass.) indirect. det-people-demonstr. "we are being followed by those people"
- (12) k'x-tim-k"-tuc x ti-man-t-t'ayx see(tr)-3pl(pass.)-quot-??? indirect. det-father-our-dem. "they were seen by our father here"

These examples suggest that the agent bears a thematic role in the deep structure, but is unable to be assigned case in the surface structure, and thus must be marked with an oblique; there is no attested example of a <u>patient</u> being lexically specified in a passive sentence, but it will not be known if this is possible (without the intuition of a native speaker). Leaving aside the question as to whether or not patients can be lexically specified, the underlying structure of the passive VP will be similar to its transitive counterpart except for a couple of key points: there is no AgrS in the VP (or maybe, just nothing in it) since there is no subject marking on the surface form of the verb; AgrO will still contain the object marking; and a lexical form may or may not appear as the external theta role. The passive will thus be characterized by the agent as the external theta-role which is unable to be assigned case, while the object agreement (referring to the patient) is the only inflection for person on the verb. This is similar to the English passive where the agent is also unable to be assigned case, and must be marked with an oblique; the agent may or may not be specified; and the number marking on the verb agrees with the patient. The only major problem left now is how to explain the word order of the passive; but then, this is also a problem for passivization in English.

## 1.4 Synthesis of current syntactic analysis

In section 1.1, the status of the intransitive roots was left as verbal nouns; it will now be necessary to see how they fit into the rest of the framework. If all lexical arguments of the main predicate are derived from either the transitive or intransitive roots, there is some sort of change taking place which allows them to be considered nominal in nature. Since a root without determiners will have a predicative sense, but with determiners has a substantive sense, it can be

This morpheme is not considered a preposition, and so will be simply called an 'oblique marker'.

<sup>&</sup>lt;sup>6</sup> It turns out that the indirective is also used to mark the 'object' of <u>intransitive</u> verbs:

<sup>(</sup>i) ?alps-awx ti-wac' eat(intrans)-3pl indirect. det-dog "they ate the dog"

assumed that the <u>determiners</u> indicate the function of a particular full word. It is then possible to specify the main verb as simply having Determiner Phrase<sup>7</sup> (DP) arguments.<sup>4</sup> The question then arises as to what constitutes a DP; could it be considered as a D and a VP, or a D and an IP? In any case, it does not seem to be an NP (unless identical realizations can be considered as either noun or verb, depending on whether determiners are present — this does not seem likely, or aesthetically pleasing). Since a VP may act as a full clause, I will propose that for Bella Coola the D subcategorizes for an IP. This may not show the same pattern as other languages do within GB, but it is the most descriptively accurate and may even suggest some sort of special symmetry within the language; there have been no examples of overt complementizers in the language (CP -> C IP), and it seems that they take the same complements as determiners, so why not conflate the two categories? Other possible evidence for the non-existence of a CP in the language includes the lack of movement, both NP and WH. This is, of course, only a preliminary suggestion and will have to be thoroughly investigated before anything concrete can be proposed.

### 2. IMPLICATIONS OF WORD ORDER CLASSIFICATION FOR BELLA COOLA

#### 2.1 Background

The study of language based on word order typology has allowed us to compare genetically unrelated languages with the same fundamental word order in order to see what other aspects of their syntactic organization follow from this basic typology. The study of VSO languages has, for example, come up with the point that many languages have the same underlying word order (SVO). Greenberg (1963) has suggested that VSO languages should (implicationally) show the following characteristics (because they are head-initial): prepositions rather than postpositions; adjectives should follow their noun; SVO as the only alternate word order; interrogative words or phrases must occur first in an interrogative word question; the inflected auxiliary (if there is one) must occur before the main verb. These points, and others brought up by Woolford (1991) will be addressed for Bella Coola.

#### **2.2 Implications of VSO typology**

To begin with, Greenberg's universals will be investigated for Bella Coola; his first point, that there should be prepositions in the language rather than postpositions, is realized in the language fairly obviously. There are two main prepositions in the language, one indicating "to, towards", while the other one indicates "at, on". These prepositions take DPs as their complements, and the PPs themselves can be considered complements to the verb.

(13) kt-c ?ut-ti-t'xt-tx fall-1sg on-det-rock-demonstr. "I fell on this rock"

<sup>&</sup>lt;sup>7</sup> I accept the proposal that Fukui and Speas (1986) make concerning the use of DP instead of the traditional NP. I feel that it amplifies the distinction between functional and lexical categories and demonstrates symmetry in the system.

<sup>&</sup>lt;sup>8</sup> Assuming, from section 1.2, that it is in fact the lexical items (or null elements) within the VP which bear the theta-roles (and not the 'pronouns', which are only agreement).

In Bella Coola we don't see adjectives following their heads, since adjectives form their own constituents (similar to DPs). This doesn't necessarily mean that the language is not head-initial, but just that adjectives perform a different function in this language (perhaps more along the line of appositives, where the subject or object is being modified by an equational-type phrase). As for SVO word order as the only alternate ordering, there is insufficient data to substantiate the claim. There are no attested examples of SVO word order, but it is not known whether they are not permitted or simply were not elicited. The interrogatives do come at the beginning of the interrogative clause, but only because they act as the predicate of the sentence, as can be seen in (14). When they are uninflected, as in (15), they have a modifying role.

- (14) ?ustam-nu-ks (Newman, 1969a) go where?-2sg-interrogative "where are you going"
- (15) wat-l'ks ratq<sup>\*</sup>ut rac who?-interr. book these "whose books are these"

As for Greenberg's last point, the location of the auxiliary, this is not possible to confirm since there is no auxiliary in Bella Coola. In other Salish languages, however, there is an auxiliary, and it does occur before the main verb.

Comments will now be made concerning Woolford's (1991) classification of VSO languages. Her primary purpose in writing the paper was to prove that all types of VSO languages can be accounted for by proposing that the arguments of the verb are located within the VP at DS (see Fukui and Speas, 1986; Koopman and Sportiche, 1990). She then went on to show that this analysis gives such a general (and simple) account of the phenomena involved, that it accounts even for (apparently) nonconfigurational languages. She divided the VSO languages into those which seem to have flat structure within the VP, and those that have hierarchical structure. The original purpose of this paper was simply to use her tests in an attempt to determine the structure of Bella Coola VPs. This analysis follows.

Looking for evidence of a VP-internal subject, Woolford begins by looking at areas which have been investigated fairly regularly by others in the field (namely McCloskey, 1983; Sproat 1985 and Choe, 1986),

It does not appear that Bella Coola can be confirmed as either of Woolford's two classes of VSO languages (flat vs. hierarchical VP) on the basis of binding evidence; where there is ambiguity in an English sentence such as "Peter's father saw him", there is no ambiguity in the corresponding Bella Coola one. This is due to the deictic markers that make up one aspect of the determiners. The deictic system marks the possessor with the proximate (visible) form, while the possessed is marked in the distal (invisible) form.<sup>9</sup> The following example demonstrates the structure.

<sup>&</sup>lt;sup>9</sup> While this may not make total logical sense (ie. it is the father who you are seeing, and thus must be visible but is, in fact, marked with distal), it is common in other Salish languages, and even occurs in Algonqian.

| (16) | k'x-ic-c'n                    | wa-sut-s              |
|------|-------------------------------|-----------------------|
|      | see-S/O-now                   | distal-house-3sg.poss |
|      | "I see the house of your son" |                       |

ta-mnał-nu (Newman, 1969b) prox-son-2sg.poss

There may be other structures where binding phenomena are visible, but at this stage, without the help of a native speaker, it is most difficult to find examples.

Woolford's next criterion which gives an idea about the internal structure of the VP is word order. In VSO languages, the following are word orders that would be generated in the base: Infl V S; Comp Neg V S. Since Bella Coola does not have an overt auxiliary or complementizer, the only remaining category which can give us a clue as to the structure of the VP is Neg. If, according to Sproat (1985) for example, the subject is generated in the Spec of IP, there will then have to be movement of the verb out of the VP, and even higher than Spec of IP in order to get the proper word ordering. The example below shows the realization of a Bella Coola sentence with negation (Newman, 1969b).

(17) qax<sup>\*</sup> ?inu-s ta-mna-c not be you.sg(intrans)-3sg det-son(intr)-1sg ("he is not being you, he who is my son") "you are not my son"

This example suggests that if the subject is generated in the Spec of IP, the negative particle is going to have to move out of the IP... but to where? Since Bella Coola does not seem to have (overt) complementizers, there is no concrete proof as to whether it has a CP, although some people claim that <u>all</u> languages have COMP even if it is not (always) realized. If we assume, however, that the subject is generated within the VP, we will only have to explain the movement of the verb to a position preceding the subject. This analysis may then support the analysis in section 1.2 with the diagram in (7) showing the agreement phrases within the IP. The verb is moved through each functional head (including AgrO and AgrS), and morphemes are attached to indicate what is happening at each level. We would only have to suggest an additional node for the negative phrase.

There is no proof for [Spec,IP] in Bella Coola due to the lack of movements that take place. It seems that there is neither passive-NP movement nor WH-movement. Woolford brings up [Spec,IP] in order to prove that it is empty at the D-Structure, and thus that any word order evidence indicating that it is filled signals that a movement has taken place. Since we do not see any word order evidence to suggest that [Spec,IP] is ever filled, we are left with the conclusion that the subject remains within the VP at surface structure.

Comparable to the subjects, the verbs also show a lack of movement once they have been incorporated with INFL (with agreement markers); this becomes apparent when we try to move verb-object constituents out of the VP. This does not give us any proof for a hierarchical structure within the VP, and is the first suggestion that Bella Coola may have a flat VP.

The lack of any other movements (by which we can test parasitic gap constructions, for example) indicates that there may not be an asymmetry between subjects and objects in the

language, or perhaps there is but we are just unable to see it. We are therefore unable to commit the language as either having a flat or hierarchical VP. This may seem to defeat the purpose of this analysis, but I believe it simply opens the door for more extensive study (with a native speaker). At the very least, Bella Coola does not contradict Woolford's proposal, just as the supposedly nonconfigurational languages did not.

# 3. ADEQUACY OF THE GB ACCOUNT OF BELLA COOLA

The most glaring problem in the proposed GB analysis for Bella Coola is the issue of what makes up the DP. Inherent in this problem lies the more fundamental difficulty of the transitivizing and detransitivizing affixes that occur between the most common paradigms of the language. If we assume that both a transitive form and an intransitive form are stored in the lexicon for each root that can have both forms (along with its transitivizing or detransitivizing affix), we are positing a much larger lexicon than is necessary, even though it will explain roots that can have both transitive forms without additional markers. On the other hand, how are we to change the argument structure of a verb during the derivation if we have only the <u>roots</u> in the lexicon? If we see the detransitivizing affix, for example, as occupying the complement to the verb in the deep structure, the phenomenon can possibly be explained by this affix being assigned the theta role by the transitive verb, and simply absorbing it so that no other DP can be assigned that theta role.

The transitivizing affix is a little more difficult to explain; where can it occur in the VP to introduce another theta position? This seems patently impossible since the verb must have its theta grid when it is generated in deep structure. The only way that it would seem possible to do something like this in the syntax would be if there was an oblique marker on the object of the derived transitive verb. This does not happen. Once the verb has been transitivized, it takes the same pronominal agreement paradigm and lexical complements as any "root transitive" verb; there is absolutely no difference between the two. The same is true of the detransitivizing affix, in that the pronominal markers on the verb treat both derived intransitives the same as "root intransitives". There only seem to be semantic factors which limit the transitivizing or detransitivizing process.

Current proposals suggest, however, that the transitivity-changing affixes may have their own theta-grid, with specifications for inheritance of theta-roles from the verb.<sup>10</sup> The specifications on these affixes may indicate whether certain theta-roles are blocked or absorbed. It also seems possible that new theta-roles may also be introduced with the affixes, but there isn't anything concrete concerning this. The following is an example of a typical detransitivizing affix that will demonstrate two different ways of analyzing these types of affixes.

(18) mnck-ic (Nater, 1984) count(trans)-1sgS/3sgO "I will count them (objects)"

<sup>&</sup>lt;sup>10</sup> See Randall (1988), for instance.

### (19) mnck-m-c count-detrans-1sg.poss "I am busy counting"

We can either see the detransitivizing affix as actually occupying the object position in the deep structure, or as a derivational affix on the verb which changes the theta-grid of the verb, blocking the THEME role. If we go with the first suggestion, it will be assumed that the affix is some sort of unspecified (or unspecifiable) object (although it could plausibly be considered some sort of aspect marker — durative). This particular example shows the close relationship between the transitive pronominal markers and the intransitive ones; most notably the /-c/ which indicates 1st person singular with the detransitivized verb also indicates 1st person singular in the fused-form /-ic/. When the elements making the fused-form of the 'intransitive' come together, they have the same ordering (ie. object, subject) as the transitive version, supporting this proposal. Not all the pronouns in the transitive paradigm are this transparent, however, making this analysis somewhat doubtful.

If we are going to accept the second proposal (that the affix is affecting the theta-grid of the verb), we may have to decide where the affixation is taking place: in the lexicon or in the syntax. From what Randall (1988) has suggested though, it doesn't seem to matter; if the blocking of the THEME role is occuring in the syntax, it won't interfere with any syntactic rules, although it may be difficult to suggest a location for the affix (unless it is simply adjoined to the verb in the base). This analysis seems very well suited for the problems in Bella Coola, but there is one possible catch: Randall states that if a theta-role is blocked, all the roles below it on the thematic hierarchy will also be blocked. Since THEME is the highest theta-role (in this study, at least), all theta-roles will be blocked, which suggests that there will be no AGENT role, while there actually is. Randall may account for this, however, by the optional Absorption of lower theta-roles, by the affix. The choice of *which* roles may be absorbed is where her proposal needs some more work.

There does not seem to be an altogether obvious way to test for the two main modules of GB within Bella Coola (namely Government and Binding), but there is no reason to believe that all languages will exploit all modules of the theory. The account of Bella Coola may even be simpler without having to resort to them (although a theory usually likes to get all the support it can). In conclusion, it will take extensive study of the language with a native speaker to determine the structure of the D-Structure VP. It is difficult working with material recorded by people active in other frameworks and eras; everyone does not always think to elicit certain (possible) alternate forms from the speakers, and the analyses are invariably coloured by different objectives. There are enough points raised here to question certain aspects of current GB theory, but overall it does account fairly well for Bella Coola without offering any glaring contradictions.

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