Lushootseed Copular and Wh- Deixis in a Government
and Binding Model of Grammar[1]

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0.0 Introduction

This squib represents a first attempt, to my knowledge, at the description of Lushootseed syntax in the government-binding (GB) framework. Lushootseed is a Coast Salish language of the Puget Sound region.

A forthcoming canon of Lushootseed literature compiled by Lushootseed Research also contains grammatical notes by Thom Hess, which include a discussion of the general form of the syntax, based in part on earlier work, and on current analysis. This description of the syntax uses notions of "predicate head", "direct complement", "oblique complement", and "locative augment", among others. These notions greatly simplify the analysis of a Lushootseed sentence, the only obligatory constituent being the head of the predication. The choice of names for these constituents facilitates easy description of the constituents' syntactic and semantic relationships.
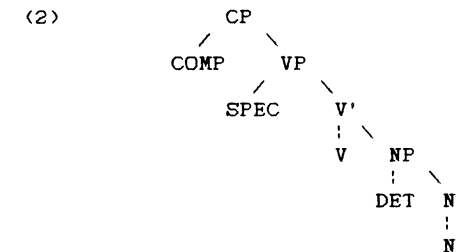
In many cases, these traditional Salishan terms translate with relative ease into GB and X'-syntactic notions, such as "verb (phrase)" (predication), "theme" (direct complement), "external argument" (agent), "adjunct" (locative), etc. In other cases, however, things are not so straight forward. Many different lexical categories, for instance nouns and pronouns--not just verbs--can head predications; "verbal" elements can, in turn, act as complements. Because of the complexity of the problem, a complete and adequate description of Lushootseed syntax in the Government and Binding framework is far beyond the scope of this paper. Of concern here, then, is the relationship of the copular deictic construction (X ti?ił/ti?e? "that/this is X") and its corresponding Wh-deictic question (stab/gʷat ti?ił/ti?e? "what/who is that/this") to the deictic NP (ti?ił/ti?e? X "that X").

1.0 Representing the Lushootseed sentence

As noted above, the only obligatory category in a grammatical Lushootseed sentence is the predicate (V). In such cases, the reference of the argument is generally default third person (as in 1c), and specified in discourse. Arguments of simple predicates can also be lexical, in the form an NP (1a) or clitic (1b).[2]

(1) a.   ?u?ukʷukʷ   ti dbad   My father is working.
         [ASP-work]ᵥ [DET my-father]ₙₚ

    b.   ?u?ukʷukʷ   čexʷ   You are working.
         [ASP-work]ᵥ =2s

    c.   ?u?ukʷukʷ   Ø   He is working.
         [ASP-work]ᵥ =3(s/p)

I will assume, without particular justification, that all one-place predicate S-structures, such as those in (1) share a similar Deep Structure of the form represented in (2).[3]
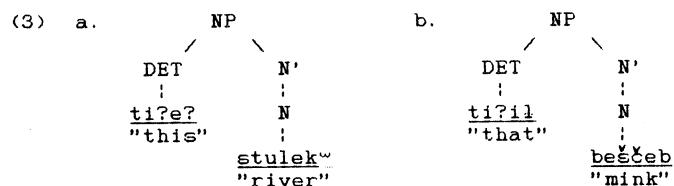
(2)

The subject clitic in (1b), then, is generated under NP and later Chomsky-adjoined to the verb complex. For (1c), either some pronominal element deletes from NP, or a third person subject clitic (with a null phonological representation) is called for. Since the subject clitic paradigm lacks both 3s and 3p subject clitics, I favor this solution.

The particular expansion of VP given in (2), that is, [ᵥₚSPEC V'] is borne out by forms which have an adverbial in SPEC. For instance, cickʷ, "very", in cickʷ ?esxʷałʷił ti dbad, "My father is very tired." The expansion of NP is illustrated by the phrase ti dbad, with the determiner ti coming before d-bad, "my-father". NP, in this structure, is to be interpreted as "theme" of V. Other verbs (with appropriate suffix complexes) may take agent in this position. The expression of both theme and agent in the same sentence requires the presence of particular affixes which render the predicate (V in (2)) a two-place predicate. Two-place predicates have additional structure than (2), and thus are beyond the scope of this paper.
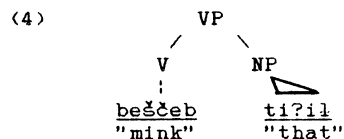
2.0 Copular deixis

The deictic NP follows the appropriate X' expansion suggested in (2), that is, [ₙₚDET N'], with the appropriate deictic DET (ti?e? "this", ti?ił "that"). Thus, the phrases "this river" and "that mink" have the structures in (3).

1

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(3) a.　　　　NP　　　　　　b.　　　　　NP
　　　　　　/　＼　　　　　　　　　　　/　＼
　　　　DET　　N'　　　　　　　　DET　　　N'
　　　　　:　　　:　　　　　　　　　:　　　:
　　　　ti?e?　　N　　　　　　　　ti?il　　N
　　　　"this"　　:　　　　　　　"that"　　:
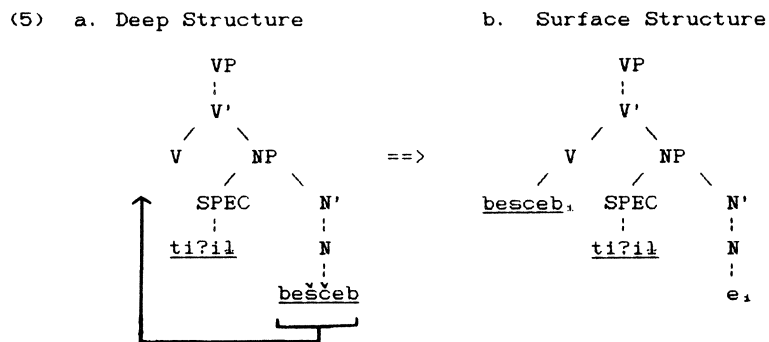　　　　　　　stulekʷ　　　　　　　　　　beščeb
　　　　　　　"river"　　　　　　　　　　"mink"

Since Lushootseed lacks a copula, the expressions corresponding to the English "that is (NP)" are rather interesting. They come out as stulekʷ ti?e? "this is a river" and beščeb ti?il "that is a mink".

The nouns "river" and "mink" in the above sentences may be analyzed as predicates, and "this" and "that" as arguments of those predicates. Thus, in our terms, beščeb ti?il would have a structure as in (4).

(4)　　　　　　VP
　　　　　　　/　＼
　　　　　　V　　　NP
　　　　　　:　　　▷
　　　　beščeb　　ti?il
　　　　"mink"　　"that"

The analysis in (4), however, ignores the obvious relationship between the copular deictic beščeb ti?il and its corresponding NP.

With respect to this criticism, I propose that copular deictic sentences (VP's) are in fact derived from sentences containing only their corresponding deictic NP's via a movement I will refer to has Raising to Predicate. Under this analysis, the derivation would proceed as in (5).

(5)　a. Deep Structure　　　　　b.　Surface Structure

　　　　　　VP　　　　　　　　　　　　VP
　　　　　　:　　　　　　　　　　　　　:
　　　　　　V'　　　　　　　　　　　　V'
　　　　　/　＼　　　　　　　　　　　/　＼
　　　V　　NP　　　==>　　　　V　　　NP
　　　　　/　＼　　　　　　　/　　　/　＼
　　↑　SPEC　　N'　　　besceb₁　SPEC　　N'
　　:　　:　　　:　　　　　　　　:　　　:
　　:　ti?il　　N　　　　　　　　ti?il　　N
　　:　　　　　:　　　　　　　　　　　　:
　　:　　　　beščeb　　　　　　　　　　e₁
　　└────┘

The noun, beščeb, raises to the V node (and acts as the predicate), leaving a trace. Under the Binding Theory (Principle A), as an NP trace, it is [+anaphor] and must be bound. Since beščeb has been

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raised to be the head of VP, it governs NP, satisfying the binding principle.[4]

Major lexical categories (N, V, A) are questionable or ambiguous in Lushootseed, as has long been noted in the literature on Salishan languages. Even were this not the case, there being, to my knowledge, no general principles prohibiting movements between categories, Raising to Predicate should be allowable.[5] The crucial lack of a copula to occupy V suggests that a look at similar constructions in non-copular languages may reveal similar structures.

3.0 Deictic Wh-questions

I now turn to a discussion of Wh-constructions in Lushootseed; specifically, those related to the copular deictic construction. These are questions of the form "what (or who) is that" and are answered by the copular deictic.
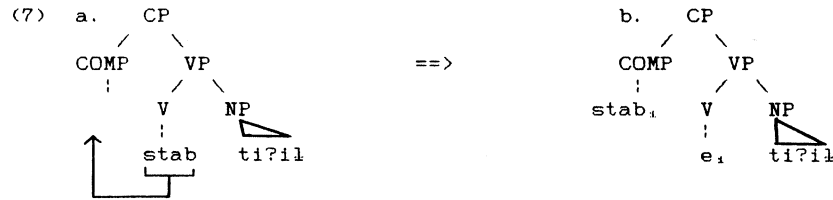
In general, Wh-Questions in Lushootseed are Wh-initial, even those which are clearly "adjunct" (6c,d):

(6)　a.　stab ti?il　　　　　b.　gʷat ti?il
　　　　　what that　　　　　　　who that
　　　　　"what is that"　　　　"who is that"

　　　c.　čad　ti sqigʷec　　d.　?esex̌id kʷ(i) adexʷestaqʷu?
　　　　　where DET deer　　　　　why/how DET　　your-thirst
　　　　　"where is the deer"　　"why are you thirsty"

For this reason, I posit a COMP node, as in (2).[6]

In non-GB treatments, these Wh-words may be described as predicates. Note that the complement adexʷestaqʷu? "your-thirst" is preceded by a determiner kʷi "conjectural/distant" and thus behaves like a noun, even though it is derived from the verb taqʷu? "be thirsty". Thus "your thirst" serves as the argument for a predicate "why (is there __)". In the GB model of grammar, Wh-words are considered to be logical operators under COMP, licensing empty variables under S (or rather, VP).
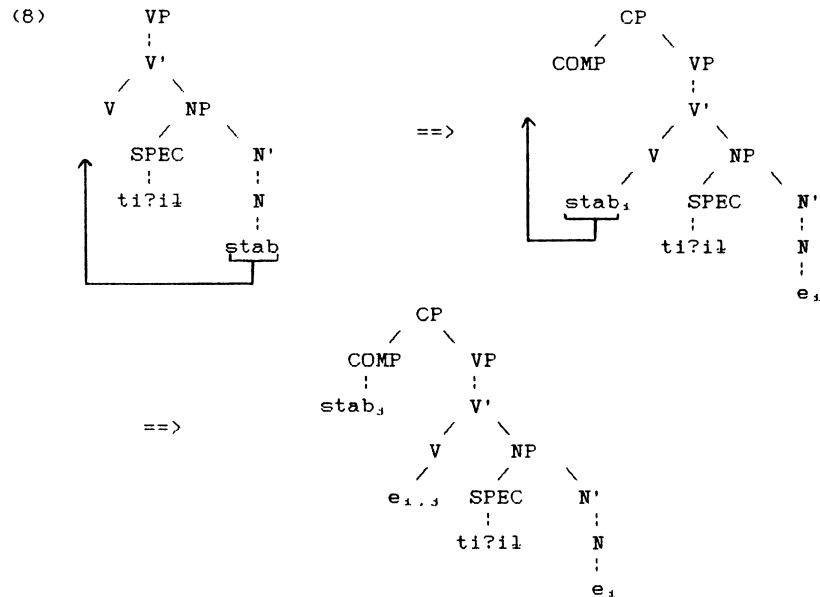
If the Wh-word has indeed been moved into COMP, as I assume under the GB model, the question becomes, where was it moved from? The obvious place is the predicate position, the head of VP. Thus, a deeper representation for Wh-deictic questions, ignoring for the moment intermediate X' levels, would be as in (7):

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(7)  a.        CP                      b.        CP
            /     \                             /     \
        COMP      VP         ==>            COMP      VP
         :       /  \                        :       /  \
                V    NP                    stab₁    V    NP
                :                                   :
              stab   ti?il                         e₁   ti?il
```

The presence of <u>stab</u> in COMP licenses the Wh-trace under V, satisfying Binding Principle C. We now are in a position to take this analysis one step further, in light of the discussion in Section 2.0 of copular deixis.

Note that Wh-words like <u>stab</u> "what" and <u>gʷat</u> "who" are no more (and no less) "verb-like" than their nominal counterparts in (6). Note as well that the "demonstrative" <u>ti?il</u> is in the same relative configuration to V in (7a), the putative Deep-structure representation of the question <u>stab ti?il</u>, as it was in (5b), the output of Raising to Predicate. Thus, I propose that the representation in (7a) is itself an intermediate representation, and that the Wh-deictic expression is directly related to the copular deictic construction, and ultimately to the deictic NP.

The correct deep structure and subsequent derivation of "what is that" and "who is that" questions is given in (8):

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(8)       VP                              CP
          :                             /    \
          V'                        COMP      VP
        /   \                        :        :
       V     NP         ==>                   V'
           /    \                           /   \
        SPEC    N'                         V     NP
         :      :                              /    \
       ti?il    N                          stab₁   SPEC    N'
                :                                   :       :
              stab                                ti?il     N
                                                            :
                                                            N
                                                            :
                                                            e₁
```

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                    CP
                  /    \
              COMP      VP
               :        :
             stab₃      V'
    ==>               /   \
                     V     NP
                   /     /    \
                e₁,₃  SPEC    N'
                       :       :
                     ti?il     N
                               :
                               N
                               :
                               e₁
```

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Note that now the Wh-trace of <u>stab</u> under V is free from its governor, but that the NP-trace under N is still bound, now by the Wh-trace.[7]

4.0 Conclusion

Three things are gained by this analysis of Wh-Deixis in Lushootseed. It captures a relationship among Wh- and Copular Deixis and the Deictic NP. It captures as well the dual nature of the Wh-form, as both logical operator and predicate. And finally, it makes use of general principles (the Binding Theory) to account for these serial relationships.

This analysis further suggests that it may be possible to prohibit deictic determiners (demonstratives) from heading NP's. It provides as well some insight into the definitions, in Government-Binding, of NP- and Wh-traces. This analysis crucially makes use of a derivational definition of the traces; they are the results of particular kinds of movement. They are not defined intrinsically by the nature of their antecedents, thus avoiding a circularity which exists in the GB literature.

By limiting discussion only to (one-place) deictic expressions, I have only scratched the surface of the problems that Lushootseed syntax presents for the theory of Government and Binding. Lushootseed sentences are generally far more complex than those discussed here, and the structure of these constructions (specifically with regard to the two-place predication and its concomitant morphology) may be troublesome for the state of GB theory.[8] In short, Lushootseed, while possessing a fairly straightforward syntax, may provide a number of interesting questions for the GB theorist. This discussion is only the merest beginning.

References

Hagiwara, Robert (in preparation). "Lushootseed Lacks INFL"

Hess, Thom and Vi (taqʷšəblu) Hilbert (1976). <u>Lushootseed 1</u> and <u>Lushootseed 2</u>. Seattle, Washington: Daybreak Star Press.

Hess, Thom and Jan van Eijk (1985). "Noun and Verb in Salishan". In <u>Papers from the 20th International Conference on Salishan and Neighboring Languages</u>, Vancouver, BC.

Kinkade, M. Dale (1983). "Salish Evidence Against the Universality of 'Noun' and 'Verb'". In <u>Lingua</u> 60, pp. 25-40.

Riemsdijk, Henk van and Edwin Williams (1986). <u>Introduction to the Theory of Grammar</u>. Cambridge, Massachusetts: MIT Press.

Untitled canon of Lushootseed literature, with accompanying grammatical notes, glossary, and notes to text, forthcoming from Lushootseed Research.

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Notes

¹I wish to express my gratitude to Sharon Hargus and Dawn Bates (both of the University of Washington) for reading earlier versions of this paper, Vi (taqšəblu) Hilbert (University of Washington) for introducing me to the Lushootseed language and culture, Thom Hess (University of Victoria) for his immeasurable contribution to my understanding of Lushootseed grammar, and those unfortunates who have tried to teach me generative syntax: Anne Lobeck (now at the University of Alabama, Birmingham), Fritz Newmeyer, and especially Heles Contreras (both of the University of Washington). I alone must be held accountable for any errors or oversights in this paper.

²In this paper, I will be using a modified version of the standard orthography adopted for use in the forthcoming canon of literature from Lushootseed Research. Modifications, made for typographical ease, were the replacement of schwa with "e" and glottal stop with "?". ASP refers to aspectual prefixes; in (1a-c), the prefix is ?u "completive aspect".

³For motivation for this structure within the GB framework, see Hagiwara (in preparation), where it will be argued that Lushootseed lacks an INFL node, and thus cannot express tense or agreement per se. CP (COMP Phrase), in languages with INFL nodes, expands to COMP and IP (INFL Phrase). In the absence of IP, CP takes as its complement some other maximal projection, namely VP.

⁴The notion "governing category" of the Binding Theory is defined by van Riemsdijk and Williams (1986) with respect to a particular NP or S. In more recent analyses, S has been reanalyzed as IP.
In Hagiwara (in preparation), the phrasal notion S, with respect to the Binding Theory, will be redefined structurally, in terms of "that maximal projection which CP takes as its complement. In most languages, this will be IP. In Lushootseed, it will be VP. The alternative is to posit an intervening S or IP node between CP and VP. This would be extremely ad hoc, the otherwise umotivated S node serving only to satisfy the definition of "governing category" for the Binding Theory.

⁵For arguments that N and V do not exist in Salishan languages, see Kinkade (1983). For arguments that they do, see Hess & van Eijk (1985). Further elaboration of this long-standing controversy may be found in the cites of both these works.

⁶This COMP can be better motivated in Lushootseed than it is here. It can be filled with a preposition or a subordinating subject marker, and it can introduce a subordinate predicate (clause) as below:

stab kʷi tučalatubuɬed [?al kʷi tusučebebiluɬlep]
what DET ASP-chase-2pO [꜀ₚPREP DET ASP-berrypicking-your(pl)]
"What chased you(pl) when you(pl) were berrypicking?"

?utučadi? ti?iɬ ?a ?al ti čit, [čela ?uxec]
ASP-fire-a-shot DET there PREP DET near [꜀ₚand-we become-frightened]
"Somebody fired a shot nearby, and we got scared."

The complexity of these constructions is increased by the s̱ in the subordinate clause of the first example, which in Hess and Hilbert (1976) is described as a "nominalizer".

⁷I have purposely avoided discussion of forms such as gʷat ti?iɬ stubs "who is that man", as it requires an adjunct NP, daughter of VP and sister to V'. The exact relationship of the Wh-form of these constructions to the copular deictic is unclear to me at this time, though it seems likely that these are instances of two-place predications, the two D-structure arguments being gʷat "who" and ti?iɬ stubs "that man".

⁸For instance, the standard order for a two-place predication involes the use of a preposition, as below:

tukʷaxʷateb ?e ti dstalel tse dsk̓ʷuy
ASP-help-pas/erg PREP DET my-nephew DET my-mother
"my nephew helped my mother"

In this passive/ergative construction, the standard order is V – ?e – NP – NP. While it is possible to invert the PP and the NP, the unmarked order is with the PP apparently dominated by VP, and the second NP, again apparently, sister to VP (not sister to PP). This is the opposite of what would be expected by case theory.