The syntax of precategorial roots

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In Halkomelem Salish, plural and diminutive marking combines with N, V and A. This paper argues that this apparent category-neutral behavior follows from the assumption that N, V and A are derived from roots by categorizing heads n, v, a (Marantz 1997). In particular, it is argued that diminutive and plural marking select for roots. In addition to covering a range of seemingly unrelated properties having to do with the distribution of roots and diminutive/plural marking, this analysis allows us to reconcile two seemingly contradictory claims found in the relevant literature. On the one hand it has been argued that Salish languages lack a N/V distinction whereas on the other hand there is robust distributional evidence to the effect that such a distinction exists. Under the proposed analysis, this dual behavior follows straightforwardly: certain syntactic rules target roots whereas others target the category derived by attaching the categorizing heads (n,v,a)

1 Several problems surrounding selectional properties of plural and diminutive marking

It is well known that in Halkomelem Salish (as well as in other Salish languages) plural and diminutive marking combine with Nouns, Verbs, and Adjectives, as illustrated below:

(1) Plural marking: unmarked Root marked plural
   i) N a. syáyeq’ syáq’yeq’
      log a lot of logs
      b. stiqiw steliqiw
      horse horses
   ii) V a. lhoqwet lholeqwet
       ‘wet sthg’ ‘wet many things’
       b. lháq’et lháleq’et
       lay sthg. down put down several objects

1 Halkomelem is a Coast Salish language, spoken around the Vancouver area in B.C. There are three dialects: Upriver, Downriver and Island Halkomelem. If not otherwise indicated, the data in the paper are from the Upriver dialect and appear in the official orthography of the language. Other data appear in whatever form they appear in their sources. I would like to thank the elders Elizabeth Herrling and the late Rosaleen George for teaching me about their language as well as the late M.D.Kinkade for doing so as well. Research on this paper was supported by a SSHRC grant (410-2002-1078).
A. smath’el  sma:leth’el
   be proud  lots of people proud
b. tsmeth’  tsmeth’meth’
   blue  lots of blue

(Galloway  1993 [henceforth G]: 325 & 397f.)

(2) Diminutive marking: unmarked root marked diminutive

i)   N a. q’á:mi  q’áq’emi
girl  small girl
b. stó:lô  stótelo
river  creek

ii)  V a. lhí:m  lhilhí:m
    picking  picking a little bit
b. xá:m  xexám
    crying  sobbing

iii) A a. p’eq’  p’íp’eq
    white  a little white, whitish
b. qel  qíqel
    be bad  be naughty

The data in (1)-(2) pose the following non-trivial question: Why does plural and diminutive marking combine with N, V, and A? Before I will proceed to answer this question, let me briefly clarify, why this question is not trivial.

A first attempt to account for the distribution of plural and diminutive marking would of course be to posit that we are dealing with accidental polysemy as in (3) below.

(3) Plural: Form   distribution   meaning
   i)   Pl1: {-l-, CeC, Ablaut, …}  pl- N_____  many/much N
   ii)  Pl2: {-l-, CeC, Ablaut, …}  pl- V_____  V many times
   iii) Pl3: {-l-, CeC, Ablaut, …}  pl- A_____  very A, more A

(4) Dim  Form   distribution   meaning
   i)   Dim1: {Ci-, Ce-}  dim- N_____  small N
   ii)  Dim2: {Ci-, Ce-}  dim- V_____  V a little bit
   iii) Dim3: {Ci-, Ce-}  dim- A_____  little A

Of course such an account faces the immediate problem that there are many accidents involved. First, it would be a mere coincidence that the form of all the plural morphemes is identical including their allomorphs. Second, it would be a mere coincidence that the form of all diminutive morphemes is identical (again including their allomorphs). Third, it would be a mere coincidence that the distribution of the plural morphemes differs in exactly the same way as the distribution of the diminutive morphemes differ. Fourth, it would be a mere coincidence that the meaning of all plural morphemes is systematically related. Fifth, it would be a mere coincidence that the meaning of all diminutive morphemes is systematically related. Obviously there are far too many accidents involved for this analysis to have any explanatory value.
Another potential analysis would be to postulate that for both plural and diminutive morphemes we are indeed dealing with the same forms which share a core (abstract) meaning (see section 5.4) and which are associated with a list of possible distributions:

(5) **Plural:**

<table>
<thead>
<tr>
<th>Form</th>
<th>distribution</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>{-l-, CeC, Ablaut,…}</td>
<td>pl-^[N,V,A]____</td>
<td>/much/ X</td>
</tr>
</tbody>
</table>

(6) **Dim**

<table>
<thead>
<tr>
<th>Form</th>
<th>distribution</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>{Ci-, Ce-}</td>
<td>dim-^[N,V,A]____</td>
<td>/little/ X</td>
</tr>
</tbody>
</table>

This analysis still leaves us with a suspicious accident: the list of possible distributions is identical for plural and diminutive morphemes.

An alternative, which does not face the problem of involving suspicious accidents would be to follow the line of research which postulates the absence of a N/V/A distinction in Salish languages (see Kinkade 1983, Jelinek and Demers 1994 among many others). If so, one could argue that plural and diminutive marking combines with the morpho-phonological category root (cf. Hukari 1978, among others for such an approach):

(7) **Plural:**

<table>
<thead>
<tr>
<th>Form</th>
<th>distribution</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>{-l-, CeC, Ablaut,…}</td>
<td>pl-root____</td>
<td>/much/ X</td>
</tr>
</tbody>
</table>

(8) **Dim**

<table>
<thead>
<tr>
<th>Form</th>
<th>distribution</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>{Ci-, Ce-}</td>
<td>dim-root____</td>
<td>/little/ X</td>
</tr>
</tbody>
</table>

Even though, this analysis is attractive in that it immediately accounts for the category-neutral behavior of plural and diminutive marking, it faces the following problems.

First, if Salish languages lack a N/V/A distinction, then we expect no rule to be sensitive to such a distinction. However, as pointed out by a number of researchers (van Eijk and Hess 1986, Demirdache & Matthewson 1995, Davis and Matthewson 1999), there are syntactic and morphological properties which seem to distinguish between N, V, and A respectively.

A second problem with this approach has to do with the status of the morpho-phonological category root (which according to this account is selected for by plural and diminutive morphemes). Assume, following standard practice that roots are defined as morphemes with lexical meaning which have been stripped of all affixes (see for example Galloway 1993). If so, then prefixes, such as s-, x”, t” are not part of the root and it follows that reduplication should ignore them which is indeed the case (Galloway 1993, Hukari 1978):

(9) a. s-xíp
    s-xíxap
    line
    line.pl

b. s-ts’òmeqw
    s-ts’òts’emeqw
    great-grand-parent/child
    great-grand-parent/child.dim

Galloway 1993: 137
However, the problem that this account faces is that a reduplicated root can be
the input for plural marking as well as diminutive marking

(10) a. músmes mú-me-smes m-el-ú-me-smes
      cow/bovine cow.dim cow.dim.pl
b. xótsa xó-x-tsa x-el-ó-x-tsa
      lake lake.dim lake.dim.pl
c. sp’áq’em s-p’á-p’-q’em s-p’-el-á-p’-q’em
      flower flower.dim flower.dim.pl
d. kw’át’el kw’á-kw’-t’ál kw’-el-á-kw’-t’ál
      mouse mouse.dim mouse.dim.pl
      Galloway 1993: 137

In light of the data in (10), we are faced with several questions:
First, and most pressingly, why do reduplicated roots count as roots for the
purpose of plural/diminutive marking? Second, if these prefixes (s-, xʷ, t̓əxʷ)
are derivational (Galloway 1993, Hukari 1978) and if plural/diminutive marking
is inflectional (Galloway 1993) then why does inflectional marking appear
inside derivational marking? Third, if plural and diminutive marking is
inflectional (and so arguably syntactic), then why does it target a morpho-
phonological category, namely the root?

2 The proposal: In Halkomelem roots are syntactic categories

In order to develop the proposal I would like to briefly discuss certain
theoretical background assumptions regarding the locus of categorical
information.

It is often assumed that the lexical entry of a given lexical category is
intimately tied to its categorical information. For example, according to standard
assumptions within the (lexicalist) Government & Binding model, categorical
information is part of the lexical entry of words and once it enters the syntactic
component it projects according to X’-theory as illustrated in (11)

(11)   Lexicon: eat\_V  Syntax  
       cow\_N  VP  NP
       
According to this view, a lexical item cannot be accessed syntactically,
before it is associated with its category. Consequently, roots are inseparable
from their categories.

Note however, that this is not a necessary assumption. Within the early
rule-based system of transformational grammar, categorical information is
introduced by (lexical) phrase structure rules as in (12):

(12) a. lexical rules N → cow  b. syntactic rules: S → NP VP
     V → eats  VP → V NP
According to this view, roots are separable from their categorical information, however, syntactic rules are still not able to access the roots without their categories.

The situation is very different in recent approaches to the locus of categories. In particular, Marantz 1997 argues that categorical information is introduced syntactically by means of the syntactic heads (n, v, a) as in

(13) \[
\text{Lexicon: } \sqrt{\text{eat}} \quad \text{Syntax} \quad \nu \quad \sqrt{\text{cow}} \\
\text{v} \quad \text{eat} \quad \text{n} \quad \text{cow}
\]

According to this view, roots are separable from their categorical information and consequently, syntactic rules are expected to access roots.

I will adopt this last view and propose to take it one step further by arguing that in Halkomelem roots are regular syntactic categories. As such we expect that roots can do what every other category can do as well: roots can be modified, can take complements, can be selected for and can be pronominalized as illustrated in (14)

(14) \[
\text{n} \quad \text{Root} \quad \text{v} \quad \text{Root} \\
\text{modifier} \quad \text{Root} \quad \text{modifier} \quad \text{Root} \\
\text{Root} \quad \text{Compl} \quad \text{Root} \quad \text{Compl}
\]

To solve the problems surrounding plural and diminutive markers, I propose that they are to be analyzed as root modifiers. In what follows I will show how this proposal solves the problems identified in section 1.

3 Why plural and diminutive marking combines with N, V, and A.

Recall from section 1 that plural and diminutive marking combine with N, V and A, which poses a non-trivial analytical problem. Given the proposal introduced in section 2, we now have a straightforward solution to this problem. In particular, according to this proposal plural and diminutive marking only appear to combine with N, V, and A, but they actually combine with roots (Hukari 1978), which are not yet nominalized, verbalized, or adjectivized.

(15) \[
\text{Pl: } \text{Form} \quad \text{distribution} \quad \text{meaning} \\
\text{Pl: } \{-l-, \text{CeC, Ablaut, } \ldots\} \quad \text{pl}^{\text{Root}} \quad \text{much}
\]

(16) \[
\text{Dim: } \text{Form} \quad \text{distribution} \quad \text{meaning} \\
\text{Dim: } \{\text{Ci-}, \text{Ce-}\} \quad \text{dim}^{\text{Root}} \quad \text{little X}
\]

Under this proposal, the appearance of category-neutrality follows from the fact that plural and diminutive marking attaches before roots become N’s, V’s and A’s as illustrated in
Crucially, this analysis overcomes the problem associated with the related proposal discussed in section 1, according to which there is no N/V distinction Kinkade 1983, Jelinek and Demers 1994 among many others). In particular, if Salish languages lack a N/V/A distinction, then we expect no rule to be sensitive to it. However, as mentioned there certain phenomena seem to distinguish between N, V, and A, respectively (van Eijk and Hess 1986, Demirdache & Matthewson 1995, Davis and Matthewson 1999). This apparent contradiction can be straightforwardly captured by the present analysis.

(18) \[ n/v/a \rightarrow \text{domain for category sensitive rules} \]

\[ \text{Root} \rightarrow \text{domain for category neutral rules} \]

Furthermore, the present proposal provides an immediate answer to another question posed in section 1, namely the question as to why plural and diminutive marking (which have argued to be inflectional and thus syntactic categories) target a morpho-phonological category, namely the root. The answer of course is that it does not target a morpho-phonological category since I am arguing that roots are indeed syntactic categories and plural and diminutive markers are analyzed as root modifiers.

4 Why reduplicated roots count as roots.

In this section we will provide an answer to the second main question posed in section 1. Recall that even though reduplication seems to target roots (i.e. prefixes are ignored) reduplicated roots can in fact be the input for further reduplication. Relevant examples are repeated below for convenience.

(19) a. músmes  mú-me-smes  m-el-ú-me-smes
    cow/bovine  cow.dim  cow.dim.pl

b. xótsa  xó-x-tsa  x-el-ó-x-tsa
    lake  lake.dim  lake.dim.pl

c. sp’áq’em  s-p’a-p’-q’em  s-p’-el-á-p’-q’em
    flower  flower.dim  flower.dim.pl

d. kw’át’el  kw’á-kw’-t’el
    mouse  mouse.dim

Galloway 1993: 137

The present proposal provides a straightforward answer. According to the present proposal, Halkomelem precategorial roots are regular syntactic categories (before they are categorized as N’s, V’s or A’s) and plural and diminutive markers are analyzed as root modifiers. As modifiers plural and diminutive markers are adjoined to the category they modify. As is well known,
if \( Y, (Y = \text{modifier}) \) adjoins to \( X \), then the complex structure is an \( X \) as in (20)i. Consequently, if the plural or diminutive marker adjoins to the syntactic category root, then the complex structure remains a root as in (20)ii:

(20)

\[
\begin{array}{c}
\text{i)} & \text{X} & & \text{ii)} & \text{Root} \\
& \begin{array}{c}
Y \quad \text{X} \\
\text{modifier}
\end{array} & & \begin{array}{c}
\quad \text{pl/dim} \\
\text{Root}
\end{array}
\end{array}
\]

It therefore follows that reduplicated roots still count as roots. Just like any other modifiers, plural and diminutive marking can be stacked:

(21)

\[
\begin{array}{c}
\text{Root} & & \text{Root} \\
\quad \text{dim} & \begin{array}{c}
\text{Root} \\
\text{plural}
\end{array} & & \begin{array}{c}
\quad \text{dim} \\
\text{Root}
\end{array}
\end{array}
\]

The input for plural marking in the examples in (19) is another root, one which has been modified by diminutive reduplication as shown in (22):

(22)

\[
\begin{array}{c}
\text{x-\text{el-\text{o-x-tsa}}} \\
\quad \text{plural} & \begin{array}{c}
\text{xó-x-tsa} \\
\text{dim}
\end{array}
\end{array}
\]

5 Independent Evidence (and solving the rest of the problems)

We now turn to independent evidence for the present proposal according to which Halkomelem roots are syntactic categories. If correct then we predict that besides being able to be modified, roots should be able to take complements, be pronominalized, and be selected for by other syntactic heads. In this section I will show that these predictions are indeed borne out.

5.1 Roots can take complements: lexical suffixes

The first prediction is that roots as syntactic categories should be able to take complements as in (23)

(23)

\[
\begin{array}{c}
\text{Root} \\
\text{Root} & \text{complement}
\end{array}
\]
I argue that the so-called lexical suffixes of Halkomelem can be successfully analyzed as root complements. As root complements we expect them to be apparently category neutral and form a morpho-phonological unit with the root. Lexical suffixes do indeed display these properties: they seem to combine with N’s, V’s, and A’s and as such pattern in a category-neutral way. In addition, lexical suffixes are suffixes with lexical meaning (and as such often described as bound roots). Of course this amounts to saying that they form morpho-phonological unit with root as expected from the present analysis. Some data exemplifying these properties are given below:

(24)

<table>
<thead>
<tr>
<th>Root</th>
<th>root + complement</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) N</td>
<td>qo qo-áles</td>
</tr>
<tr>
<td>water</td>
<td>water-eye</td>
</tr>
<tr>
<td>‘tear’</td>
<td></td>
</tr>
<tr>
<td>xelh</td>
<td>xelh-áleqel</td>
</tr>
<tr>
<td>ache</td>
<td>ache-head</td>
</tr>
<tr>
<td>‘headache’</td>
<td></td>
</tr>
<tr>
<td>tále</td>
<td>tale-áwtxw</td>
</tr>
<tr>
<td>dollar</td>
<td>dollar-house</td>
</tr>
<tr>
<td>‘bank’</td>
<td></td>
</tr>
<tr>
<td>ii) V</td>
<td>kw’qw kw’qw-áles</td>
</tr>
<tr>
<td>hit</td>
<td>hit-eye</td>
</tr>
<tr>
<td>‘hit on the eye’</td>
<td></td>
</tr>
<tr>
<td>tex</td>
<td>tex-áleqel</td>
</tr>
<tr>
<td>bump</td>
<td>bump-head</td>
</tr>
<tr>
<td>‘bump one’s head’</td>
<td></td>
</tr>
<tr>
<td>iii) A</td>
<td>lhq’átses lhq’átses-áwtxw</td>
</tr>
<tr>
<td>five</td>
<td>five-house</td>
</tr>
<tr>
<td>five houses</td>
<td></td>
</tr>
<tr>
<td>G 1993: 204</td>
<td></td>
</tr>
<tr>
<td>G 1993: 216</td>
<td></td>
</tr>
</tbody>
</table>

5.2 Roots can be pronominalized

Next, we expect that roots can be pronominalized, like other syntactic categories. As pronominalized roots, we expect them to be apparently category neutral (i.e. not be restricted to either V’s, N’s, or A’s). A promising category for such a root pronoun is Halkomelem tl’ó, which can be used in typical argument environments (following a determiner) as well as well as in typical predicative environments

(25) a. lám tú-tló
    go det-tló
    ‘He goes.’ G 1993: 173

b. tl’ó-cha te Bill kw’e may-t-óme
   tló-FUT det Bill Comp help-trans-2s.obj
   ‘It will be Bill that helps you.’ (G 1993: 173)

This pronominal form might be analyzed as root-pronoun (but cf. Wiltschko 2002 for a different analysis).

5.3 Roots can be selected for by a syntactic head

Finally, we predict that roots can be selected for by syntactic heads. In other words we expect to find overt evidence for the categorizing heads n, v and a, respectively.

5.3.1 Evidence for the categorizing head n

First, Halkomelem (like other Salish languages) has a nominalizing prefix s-. This prefix combines with a root and yields a noun. Note that some of these roots are in fact bound (i.e. they are not independently attested). However, the fact that s- is not reduplicated suggests that it is indeed a prefix (Suttles 2004). The boundedness of the root here recalls Marantz’ argument that cat as a noun is an “idiom”. In other words, the bound nature of these roots corresponds to the fact that cat in English can only be a noun.

(26)  
   a. s-xôñó s-xôñîñó   Downriver dialect  
      nom-foot nom-foot.pl  
      ‘foot’ ‘feet’  
   b. s-qʷâmêy s-qʷomqʷâmêy  
      nom-dog nom-dog.pl  
      ‘dog’ ‘dogs’  
   c. s-mênt  s-mòmnênt  
      nom-rock nom-rock.pl  
      ‘rock, mountain’ ‘rocks, mountains’  
      Suttles 2004: 264

Note moreover that s- is not restricted to roots. Rather it can also derive verbs from nouns. This suggests that the nominalizer s- cannot only select for roots but also for v:

(27)  
   a. t’ílem s-t’ílem   Upriver dialect  
      verb nominalized verb  
      ‘sing’ ‘song’  
   b. p’ótl’em s-p’ótl’em  
      verb nominalized verb  
      smoke ‘smoke’  
   c. íth’em s-íth’em  
      get dressed clothes  
      Galloway 1993: 372

We are now in the position to solve an apparent ordering problem we encountered in section 1. Recall that the nominalizer is to be classified as a derivational prefix (given that it changes the category of whatever it attaches to (Galloway 1993, Hukari 1978). Furthermore plural and diminutive marking are often classified as inflectional (Galloway 1993). Then the question arises as to why inflectional morphology appears inside derivational morphology as in (28) repeated below for convenience:
According to the present analysis, the observed ordering is not at all surprising: plural and diminutive marking are root modifiers and as such introduced before the categorizing head n. Consequently the prefix s- is not part of the input for plural or diminutive marking and therefore does not count for reduplication.

A crucial consequence of this analysis is that terms like “inflection” and “derivation” are not to be considered primitives of natural language (even though they are at least sometimes descriptively useful, see Rice 199***). According to the present proposal, plural and diminutive marking are root modifiers and not inflectional categories whereas the nominalizer is a categorizing head which can select roots.

5.3.2 Evidence for the categorizing head ν

In addition to having nominalizing prefixes, Halkomelem has a number of verbalizing suffixes. In particular, I argue that the so called transitive and intransitive suffixes of Halkomelem are best analyzed as ν which combine with roots:

<table>
<thead>
<tr>
<th>Roots</th>
<th>Transitized roots</th>
</tr>
</thead>
<tbody>
<tr>
<td>q’óy ‘die’</td>
<td>‘óy-t ‘kill sthg/so.’</td>
</tr>
<tr>
<td>ikw’ ‘lost’</td>
<td>ikw’-et ‘throw sthg away, discard sthg’</td>
</tr>
<tr>
<td>tás ‘get hit, mashed’</td>
<td>tás-et ‘mash sthg (berries)’</td>
</tr>
<tr>
<td>qw’es ‘fall into water’</td>
<td>qw’es-t ‘push sthg./so. into water’</td>
</tr>
<tr>
<td>tl’ëxw ‘covered’</td>
<td>tl’ëxw-t ‘cover so/sthg’</td>
</tr>
<tr>
<td>xélh ‘hurt’</td>
<td>xélh-t ‘beat so. up’ (lit. ‘hurt so.’)</td>
</tr>
<tr>
<td>xwét ‘tear’</td>
<td>xwét-t ‘tear sthg’</td>
</tr>
</tbody>
</table>

Galloway 1993: 245-247

In (30) below I show some examples where some bound roots occur with either n or ν – a situation which is of course expected under the present analysis.

<table>
<thead>
<tr>
<th>Nominalized root</th>
<th>Verbalized root</th>
</tr>
</thead>
<tbody>
<tr>
<td>(29)</td>
<td></td>
</tr>
<tr>
<td>s-piwich</td>
<td>piwich</td>
</tr>
<tr>
<td>nom-ice</td>
<td>ice-trans</td>
</tr>
<tr>
<td>‘ice’</td>
<td>‘freeze it’</td>
</tr>
<tr>
<td>s-k’ix</td>
<td>k’ix-ot</td>
</tr>
<tr>
<td>nom-name</td>
<td>name-trans</td>
</tr>
<tr>
<td>‘name’</td>
<td>‘name it’</td>
</tr>
<tr>
<td>s-yóóóóos</td>
<td>yóóóóos-t</td>
</tr>
<tr>
<td>nom-story</td>
<td>story-trans</td>
</tr>
<tr>
<td>‘story’</td>
<td>‘tell him’</td>
</tr>
</tbody>
</table>

Suttles 2004: 264
In the remainder of this paper I will explore some of the consequences of the claim that in Halkomelem roots are syntactic categories and that plural and diminutive markers are to be analyzed as root modifiers. In particular, I will explore what this proposal might imply for the meaning as well as the form of roots and root modifiers, respectively.

To establish what roots might or might not denote it will be useful to think about the meaning of nouns and verbs. The classical definition of what nouns and verbs denote (which people get taught in school) has it that a noun denotes a “person, place, or thing” and that a verb denotes an “action”. Of course we know that this semantic definition of nouns and verbs as a syntactic category is not quite right. However, it is true that nouns have the potential to become referential (for example by adding a determiner). In other words, nouns can potentially denote individuals of all sorts (call this individuality). I will assume that this potential for referentiality stems from the external arguments of nouns, the so called R(eferential)-argument (in the sense of Williams 1981). In particular, I assume that this R-argument is introduced by the nominalizing head n.

Similarly, in the realm of verbs we know that they don’t just denote “actions. However, it is the case that have the potential to denote (dynamic or static) events, they denote eventualities. I will thus assume that the categorizing head v is responsible for introducing an event argument (e). The trees below summarizes these assumptions:

\[
(31) \qquad n = \text{“individuality”} \quad \quad v = \text{“eventuality”}
\]

According to (31) whether or not a given word denotes an individuality or an eventuality is not inherent to the meaning of the root. Rather it is compositionally determined by the categorizing head. In other words, Accordingly, roots do not inherently denote individualities or eventualities. Consequently, roots must denote something rather abstract, call it a concept. With this in mind, it is interesting to turn to the denotation of roots. It has been independently argued that concepts can only be modified by intensifiers Muramatso 1998. Given the present proposal according to which plural and diminutive markers are root modifiers, and if roots do indeed denote concepts then it must be the case that so called plural and diminutive marking are to be analyzed as intensifier and diminishers (diminutive). Initial evidence that this analysis might indeed be on the right track stems from the fact that the so called “plural” marker is often interpreted as intensifying. For example, it can be added to the negative marker ewe:

\[
(32) \quad \text{éwe} \quad \text{ewéwa} \\
\text{neg} \quad \text{neg.pl} \\
\text{‘not’; ‘no’} \quad \text{‘really no’}
\]
Interestingly, according to the consultant’s translation the plural form of negation is “really no” which of course sounds like an intensified no consistent with the present analysis. Of course, it remains to be seen whether this analysis can indeed derive the apparent variety of meanings associated with it (especially in the verbal domain). I will leave this for future research.

However, we are now in the position to understand the reason why the rules identified by Demirdache and Matthewson 1995 as well as Davis and Matthewson 1999 target nouns (and not roots). In particular, the particular syntactic context they discuss all involve individual modification. The first context involves complex predicates, i.e. predicates which consist of a modified noun. Crucially, the head of such a predicate must be a noun. As Davis & Matthewson 1999 point out, these modifiers are individual-level modifiers and of course individual modification is impossible at the root level since roots denote concepts:

\[(33) \text{Head of complex predicate: } \begin{array}{c} \text{X} \\ \text{N} \end{array}_\text{pred} \begin{array}{c} \text{kw}=s=\text{Maggie} \\ \text{det}=\text{nom}=\text{Maggie} \end{array} \]

\[a. [áma \text{ lexlex} \text{ smúhlats} [\text{kw}=s=\text{Maggie} \text{ det}=\text{nom}=\text{Maggie} \]‘Maggie is a good intelligent woman.’

\[b. *[áma \text{ smúhlats} [\text{léxlex} [\text{kw}=s=\text{Maggie} \text{ det}=\text{nom}=\text{Maggie} \]‘Maggie is a good intelligent woman.’

\[(Davis \text{ and Matthewson } 1999: 41f. (26/28)\]

Similarly, the head of a (head-final) relative clause must be a noun. Again, we can understand this pattern since the relative clauses involved modify individuals (and not concepts). Since individual modification requires nounhood it follows that only nouns can occur in this position.

\[(34) \text{Head of relative clause: } \begin{array}{c} \text{N} \end{array}_\text{relative clause} \begin{array}{c} \text{kw}=s=\text{Maggie} \\ \text{det}=\text{nom}=\text{Maggie} \end{array} \]

\[a. [âts'x-en-Ø-lhkan] \begin{array}{c} \text{ti} \end{array}_\text{subj} [\text{kwatsáts-Ø-a} [\text{sqayew} [\text{kw}=s=\text{Maggie} \text{ det}=\text{nom}=\text{Maggie} \]‘I saw the man who left.’

\[b. *[âts'x-en-Ø-lhkan] \begin{array}{c} \text{ti} \end{array}_\text{subj} [\text{sqayew-Ø-a} [\text{kwatsáts} [\text{kw}=s=\text{Maggie} \text{ det}=\text{nom}=\text{Maggie} \]‘I saw the leaving one who is a man.’

\[(Davis \text{ and Matthewson } 1995: 87)\]

In sum, I believe the present analysis according to which roots are syntactic categories denoting concepts allows us to understand which rules target roots (and as such appear to be category-neutral) in a systematic way.

Finally, we turn to the issue of the form. It is well-known that roots in Halkomelem have are mostly associated with a canonical shape (i.e. CVC). If such roots are indeed a syntactic categories, and if plural and diminutive marking is indeed a syntactic phenomenon (i.e. root modification), then it would follow that then non-concatenative morphology associated with it is syntactic in nature. In other words, I suggest that reduplication (as well as infixation) is to be analyzed as an regular instance of the syntactic mechanism known as agree (a.k.a. as move, or copy) (see Ajiboye and Déchaine in preparation, Inkelas and
Zoll 2004, Travis 2002 for a similar proposal. Again, a detailed analysis of such an approach is beyond the scope of the present paper and will have to await future research.

7 Conclusion

To conclude, in this paper I have argued that in Halkomelem roots are syntactic categories as shown in (35):

(35)

\[
\text{n/ν/a} \quad \text{Root} \\
\text{modifier} \quad \text{Root} \\
\text{Root} \quad \text{compl}
\]

As syntactic categories, roots can be modified, selected for, take complements and be pronominalized. We have also seen that the syntactic status of roots gives raise to the appearance of category-neutrality.

As a consequence of the present analysis we also concluded that notions like inflection and derivation are derived and not primitives of natural language. Finally, the proposal raises a number of important issues for future research For example, it remains to be determined whether the syntactic category “root” matches the traditional morpho-phonological category “root”. Furthermore, it remains to be seen whether or not roots accessible in all languages? and finally whether non-concatenative morphology can always be treated as a syntactic phenomenon.

References

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