LOCATIVES IN BANGANGTE-BAMILEKE

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1. Introduction

Several scholars have stressed the Bantu character of Bamileke, e.g. Hyman and Voeltz [1971], which is claimed to be especially evident in the noun-class system [Voorhoeve 1971]. However, the typically Bantu locative prefixes pa-, ku- and mu- (classes 16, 17 and 18) seem totally absent. These prefixes often occur as pre-prefixes on nouns, which may govern concord in dependent morphemes. The following examples from Safwa (M 25) may replace a lengthy discussion (concordial prefixes underlined):

(1) mu-ʃi-tšabu fə-ʃi-ʃi
    'in this book' (the demonstrative shows concord with the nominal prefix)

    hw-f-jeenje u6-hw-o
    'towards that ravine' (the demonstrative shows concord with the locative pre-prefix)

Not even remnants of these locative prefixes are found, e.g. in locative adverbs like 'somewhere', 'below' or 'above'. If we are that sure about the inclusion of Bamileke in Bantu, we might envisage the possibility that the locative prefixes constitute a later Bantu innovation, after Bamileke and other neighboring languages have split off.

Instead of the Bantu system of locative prefixes or pre-prefixes governing concord in dependent morphemes, Bamileke uses different lexical means:

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1I follow Hyman's suggestion in distinguishing the Bamileke dialects as Pe?fe?-Bamileke, Bangangte-Bamileke, etc. This study has been made possible by a grant from the Netherlands Organisation for Tropical Research (WOTRO) under no. W 39-17. This grant made possible a 9-month stay of a Bamileke informant, Mr. Joseph Tchouane, in Holland. This paper was first presented at the 11th West African Language Conference at Yaoundé, April 1974.
a. three prepositions indicating relative elevation in relation to the speaker: mvə (higher than the speaker), md (lower than the speaker), and nə (on the same level as the speaker);
b. a great many locative specifications (often related to nouns): nüm 'on', nüm 'in', mbən 'next to', etc.
c. locative adverbs (only three have been found): bwə 'there', tə 'above', nəf 'below'.

These may be summarized in:

(2) a bə d mvə nüm bwə
    2 1 2 1 2 1
    'it is far away higher than the speaker (mvə) on (nüm) there (bwə), it is there'²

Next to these lexical locative phenomena, one observes two other locative phenomena:

²The surface tone is indicated in two ways which can be converted automatically. The number notation uses 1 as the highest level of pitch, and n as the absolute lowest. For practical use I developed a Christaller type of tone notation, indicating the change of level: no tone mark is used phrase-initially or for a tone that is on the same level as the preceding tone; an acute accent indicates a change to one level higher than the preceding tone; a vertical accent a change to one level lower; a grave accent a change to two levels lower, and a double grave accent a change to the lowest voice pitch. Double vowels accomodate glides, and do not indicate vowel length. This practical surface notation has been worked out with the help of my colleagues A. E. Meeussen and Th. C. Schadeberg and proved to be the only notation which could be handled by the informant. The surface notation does not contain clear clues as to the underlying tones. Acute accent always marks an underlying high, and double grave accent always marks an underlying low tone phrase-finally. Vertical and grave accent may mark both underlying high and low tone. If the level reached does not change to a higher one, it is underlying high; if it changes to a higher one, it is underlying low. In underlying representation (between slant lines) acute accent indicates underlying high and grave accent underlying low tone. A floating tone in underlying representation is symbolized by a tone-marked x.
d. a change of concordial class in a restricted number of nouns:

(3) bu am 'my hand' vs. bu åm 'in my hand'
    1 l      1 n

bam sâm 'my belly' vs. bam åm 'in my belly'
    2 l      2 l

e. a change in the tonal relation between the verb and the locative complement:

(4) a loã? la? 'and he takes the compound' vs.
    1 l2      1

a kuûm la? 'and he arrives at the compound'
    1 l3      3

Both sentences use a low verb in the same consecutive tense.

These phenomena can be summarized by the following pair of sentences:

(5) a. a bô d lâ? sâm 'it is my compound'
    2 1 2 1 1

b. a bô d la? åm 'it is in my compound'
    2 1 3 3 n

This paper will study the last two phenomena and try to relate them to the Bantu locative constructions.

2. Change of Concordial Class

A restricted set of nouns are used as locative complements without any prepositional introduction. However, a change of concordial class in that case takes place, as shown in the following list:

(6) tu am 'my head' tu åm 'on my head'
    1 l      1 n

bu am 'my hand' bu åm 'in my hand'
    1 l      1 n

to am 'my throat' to åm 'in my throat'
    1 l      1 n

ben åm 'my garden' ben åm 'in my garden'
    1 l l      1 n

3 Notice both the difference in tone on the unidentified particle /d/ followin the verb /bô/ 'to be', as well as the different forms for 'my': /sâm/ and /åm/.
(6) (cont.)

<table>
<thead>
<tr>
<th></th>
<th>'my armpit'</th>
<th>'under my arm'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>1 n</td>
</tr>
<tr>
<td>2</td>
<td>1 n</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'my compound'</th>
<th>'in my compound'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 n</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'my belly'</th>
<th>'in my belly'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 n</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2 l</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'my back'</th>
<th>'on my back'</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2 n</td>
<td></td>
</tr>
</tbody>
</table>

Another group of nouns are used as locative complements without any change of concord and without a prepositional introduction:

(7)

<table>
<thead>
<tr>
<th></th>
<th>'my house, in my house'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 n</td>
</tr>
<tr>
<td>2</td>
<td>1 n</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'my pot, in my pot'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 n</td>
</tr>
<tr>
<td>2</td>
<td>1 n</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'my drinking horn, in my drinking horn'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 n</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'my mouth, in my mouth'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'my anus, in my anus'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Although the number of items is restricted, the change of concord in (6) seems to be governed by rules. My informant could predict that the following changes of concord would operate, if the following nouns could be used in a locative construction without a prepositional introduction:

(8)

<table>
<thead>
<tr>
<th></th>
<th>'my shoulder'</th>
<th>'on my shoulder'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 n</td>
<td>2 l</td>
</tr>
<tr>
<td>2</td>
<td>2 l</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'my bed'</th>
<th>'in my bed'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 n</td>
<td>1 l</td>
</tr>
<tr>
<td>2</td>
<td>1 l</td>
<td></td>
</tr>
</tbody>
</table>

but: 'my ear, in my ear'

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A very small difference may be observed in the pronunciation of these unnatural isolated examples. The non-syllabic nasal prefix is realized on a higher pitch in the locative complement. If there is no prefix, the initial voiceless consonant is realized as slightly more tensed in the locative complement. This may be due to the effect of a preceding floating high tone. In non-isolated examples these phenomena cannot be detected.
Bangangte-Bamileke has the following concord system: 5

\[
\begin{array}{cc}
\text{sg} & \text{pl} \\
(y)' & c' \\
(y)' & s' \\
\end{array}
\]

The possessive pronoun for the 1st person sg. is /âm/, /âm/ or /sâm/, and in the plural is /câm/ or /mâm/, depending on the concordial class of the noun. A locative noun uses in all cases the concord \((y)\), but the tone of the latter is opposite to the tone of the noun stem: H in the case of L tone nouns, and L in the case of H tone nouns. Some illustrations from recorded texts follow:

(9) \(kàd \; ghw \; o \; kə \; tə \; că? \; só \; tə \; ò \; a\)

12 2 2 2 1 2 1 2

'what makes you not put hat yours on-head yours?'

(what is it that makes you do not put your hat on your head?)

\(cwb \; că? \; só \; bù \; ò \; nì ámb \; njám \; âm\)

1 2 1 2 3 2

'take hat yours in-hand yours go behind me'

(take your hat in your hand and follow me)

If the locative concord is tonally different from the non-locative one (as in most examples in (6)), this changes the tonal concord of the genetive construction. The following examples may illustrate this:

(10) \(bùù \; nzwìl \; tswàmànko?\)

13 3h 3 3n 3n

'the hand of the wife of tortoise'

\(bùù \; nzwìl \; tswàmànko?\)

12 12 1 ln 3n

'in the hand of the wife of tortoise'

5The symbol \((y)\)' indicates a concordial element which is \(y\)- or \(\phi\)-(depending on the position of the pronoun in relation to the noun: preposition or postposition respectively), but always followed by a L pronominal stem. Only post-position pronouns are used in illustrations.
The reader may be referred to a previous article [Voorhoeve 1971] to appreciate these examples. The underlying representations of (10) (with tonal concord underlined) are:

(11) /Ĩ-bû-x ˘ n-zwf .../
    /Ĩ-bû-x ˘ n-zwf .../
    /Ĩ-vên-x ˘ n-zwf .../
    /Ĩ-vên-x ˘ n-zwf .../

One is tempted to introduce the concept of contrastive or polar tone in describing the locative concord. Informally the rule would be phrased as follows:

(12) The concord of a locative complement (for this restricted set of mostly inalienable nouns) is (y)- with a tone which is polarized with respect to the tone of the preceding noun stem.

This is a curious kind of rule. Polar tones introduce a third value of a tone feature, which is given in the lexicon as +, - or blank. The blank is filled by a rule:

(13) [blank] → [-a tone]/[a tone]

Alternatively, one can assign the tone arbitrarily and change it by a rule to a polar tone. Or one may introduce a special feature [polar tone]. All three solutions seem unattractive. In most cases a solution involving polarization can be avoided, if the polar tone can be spelled out as HL or LH with the appropriate tone rules.

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6 The tonal concord in the genitive construction is identical with the tone of the (possessive) concord: L in class (y)' and H in all other classes.
There is reason to believe that the pronominal stem /-\~m/ has L tone. This L tone is replaced by a preceding floating H (after the concords (y), s', c and m'). If the special locative concord is a floating H, one should set up /\~x-\~m/ for all possessive pronouns in a locative complement:

(14) /bú \~x-\~m/ 'in my hand'
     /bá\~m \~x-\~m/ 'in my belly'

A special rule is then added which deletes the floating H after a H tone. If the floating H is not deleted, the general rule works and the floating H replaces the L tone of the pronominal stem. These two rules change /bú \~x-\~m/ into /bú \~m/ and /b\~m \~x-\~m/ into /b\~m \~m/.

This analysis offers very interesting historical insights. If, as in other Bantu languages, the locative complement consists of a locative pre-prefix (LP), a nominal prefix (NP) and a noun stem (NS), and dependent pronouns show concord with the locative pre-prefix and consist of a locative concord (\~x-) and a pronominal stem (-\~m), the change of concord in Bangangte-Bamileke reveals the relation of Bamileke with Bantu. However, this is only evident in a restricted set of mostly inalienable nouns. The Bamileke locative system seems to move in a different direction (using prepositions in other nominal complements), but reveals in a set of relics an older more Bantu-like system. The existence of a locative pre-prefix on nouns has not yet been demonstrated. This phenomenon will be studied next.

3. The Tonal Relation between Verb and Locative Complement

Example (3) shows two phenomena, the change in concord between la? sa\~m 'my compound' and la? \~m 'in my compound', but also a change in the tonal relation between the verb /b\~/ 'to be', the following element /\~/ (without a clear meaning) and the noun /\~x-\~m?-\~x/ 'village', 'compound'. The change consists of a general lowering of the tone level

---

7This solution was proposed by my colleague T. L. Cook. It creates a special problem. The special locative tone rule ignores the floating tone after the noun stem, which should be deleted before the rule applies.
of the element /â/ and the following complement. The same lowering of tone level is observed after verbs of four different tonal shapes (H = radical):

a. after prenasalized verbs /h-R-â/, 8
b. after the subjunctive /x-R-â/,
c. after the consecutive /x-R-â/, and
d. after the relative of the completive /x-R-âX/.

In the last two tenses a distinction between L and H radical is neutralized to L. In the first two cases the tonal phenomena are only present after an L radical. One may therefore conclude that this tonal phenomenon is conditioned by an H verbal prefix (h- or x-) and an L radical. Moreover, only H locative nouns are subjected to the lowering influence. I present here per number a series of 8 elicited examples with an L and an H radical (mostly -kûm- 'arrive' or -lò?- 'take' and -tûm- 'leave' or -yân- 'see'), and an L and an H locative or non-locative noun (mostly /h-zâ-â/ 'road' and /x-lò?-â/ 'compound').

Locative complements are found in the left column, non-locative ones in the right column:

(15) after a prenasalized verb:

a. a nke ntuûm nžâ  a nke njan nžâ (from -yân-)
   1 1 1 n 1 1 1 n
   'he used to leave the road'  'he used to see the road'

b. a nke ntuûm Id?  a nke njan Id?
   1 1 1 2 1 1 1 2
   'he used to leave the compound'  'he used to see the compound'

c. a nke nkuûm nzâ  a nke ndoo? nzâ (from -lò?-)
   1 1 ln n 1 1 ln n
   'he used to arrive at the road'  'he used to take the road'

d. a nke nkuûm la?  a nke ndoo? Id?
   1 1 13 3 1 1 13 2
   'he used to arrive at the compound'  'he used to take the compound'

---

8I cannot present all the evidence for the underlying forms posited in this paper. Some arguments may be found in section 4.2.
(16) after the subjunctive:

<table>
<thead>
<tr>
<th>a.</th>
<th>kúūm nzē</th>
<th>2 1 3 4 4 3 4 3 4 3 4 3</th>
<th>'that he may leave the road'</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>kúūm lā?</td>
<td>2 1 2</td>
<td>'that he may leave the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>compound'</td>
</tr>
<tr>
<td>c.</td>
<td>kúūm nzē</td>
<td>2 1 n</td>
<td>'that he may arrive at the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>road'</td>
</tr>
<tr>
<td>d.</td>
<td>kúūm lā?</td>
<td>2 1 3</td>
<td>'that he may arrive at</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the compound'</td>
</tr>
</tbody>
</table>

(17) after the consecutive:

<table>
<thead>
<tr>
<th>a.</th>
<th>kúūm nzē</th>
<th>1 1 n</th>
<th>'and he leaves the road'</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>kúūm lā?</td>
<td>1 13 3</td>
<td>'and he leaves the compound'</td>
</tr>
<tr>
<td>c.</td>
<td>kúūm nzē</td>
<td>1 1 n</td>
<td>'and he arrives at the road'</td>
</tr>
<tr>
<td>d.</td>
<td>kúūm lā?</td>
<td>1 13 3</td>
<td>'and he arrives at the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>compound'</td>
</tr>
</tbody>
</table>
e. mandalum tuum nda nta? mesang
   1 21 13 3 3 4 3 3
   'man leaves house chases small-bird' (and the man goes out of the
   house and chases the little bird)

(18) after the relative of the completive:

a. z'a tulum nza 1d  z'a yaen nza 1d
   2 13 3 2
   'who left the road'     'who saw the road'

b. z'a tulum la? 1d  # z'a yaen 1d? 1d
   2 13 3 4
   'who left the compound' 'who saw the compound'

c. z'a kulum nza 1d  z'a la? nza 1d
   2 13 3 2
   'who arrived at the road' 'who took the road'

d. z'a kulum la? 1d  # z'a la? 1d? 1d
   2 13 3 4
   'who arrived at the compound' 'who took the compound'

In a simple surface description one could state that an H locative com-
plement is realized one level lower (or in case of the consecutive two
levels lower) after a low radical preceded by a high prefix.

4. Analysis of the Locative Tone

4.1. The locative high tone. One would like to attribute the lowering
influence in a locative complement to some defined locative tone. In
Bangangte-Bamileke a lowering influence must often be attributed to a
floating high tone. This may be demonstrated in the genetive construction:

(19) a. ndu ben
    12 1
    'the husband of the child'

b. ndu ben
    13 3
    'the husbands of the child'

The lowering should be attributed to a high tonal concord in (19b) as
opposed to a low tonal concord in (19a). The basic tone rule which is
responsible has been described as a lowering of an H tone after HL
[Voorhoeve 1971]. Discussion with my colleague A. E. Meeussen convinced
me that this anti-universal rule should be abandoned in favor of the
equally plausible and more universal lowering of an \( L \) in the environment \( H--H \). The underlying forms of (19) are as follows (tonal concord underlined):

\[
\begin{align*}
(20) & \quad a. \ /h-d_6-x \underline{x} \ x-m\underline{\text{έ}}n-x/ \\
& \quad b. \ /h-d_6-x \underline{x} \ x-m\underline{\text{έ}}n-x/
\end{align*}
\]

Two successive strings of \( \text{HLH} \) in (20b) create two successive lowerings (downsteps) which realizes \( \text{m} \underline{\text{έ}}n \) (itself carrying \( H \) tone) on level 3 (in 19b) instead of on level 1 (in 19a).

In the same way one might set up the underlying forms of (5):

\[
\begin{align*}
(21) & \quad a. \ /\underline{d}_6 b \underline{\cdot} d \ x-l\underline{\text{ά}}? \ .../ \\
& \quad b. \ /\underline{d}_6 b \underline{\cdot} d \ x-l\underline{\text{ά}}? \ .../
\end{align*}
\]

The underlying \( /\underline{x}/ \) in (21b) has the same effect on the noun \( /l\underline{\text{ά}}?/ \) (which is realized on level 3 instead of level 1), and explains at the same time the downstep in \( /\underline{d}/ \).

If my analysis is correct, the lowering effect on the locative complement should be attributed to a floating high tone, preceding this complement. This floating tone will be called the locative tone (or in a more historical perspective the locative pre-prefix). The effect of this tone will be studied in the verb forms in (15) – (19).

4.2. **Generalities about verb forms.** Very little is known about the Bamileke verb system. A short article by Dunstan [1963] leaves aside the tonal analysis. Hyman [1972] devoted a few pages to the verb, but the system seems much more complicated than he assumes. Let me outline some of the main problems here.

One observes a host of auxiliaries making very subtle distinctions in meaning. E.g., the auxiliary \( /c_6\underline{g}/ \) indicates that the action started in the early hours, the auxiliary \( /z_f/ \) that the action was premeditated the day before, the auxiliary \( /g\underline{h}_6/ \) that a preceding action must have been completed before this one started, the auxiliary \( /b\underline{c}_n/ \) that the action is a repetition of some former action, etc. Some auxiliaries may be combined. They make different demands on the form of the main verb.
The radical of the main verb can only show one tonal distinction (L or H), e.g., the radicals /tɔg/ 'to spit' and /tɔg/ 'to pass' in

(22) a kwɔỳ ntiɛd ndɛd mbɛd ntɔg ntsɛ nτɔg ...
   1 12 1 23 2 24 3 3
'she ent-on encountered house of-excrement spat saliva passed'
(she went on and encountered a house of-excrement, spat saliva and passed...)

One will never find more than two segmentally identical verb roots, distinguished only by tone. This is one of the main reasons why I try to analyze Bamileke on a deeper level with L and H tones only.

The radical may behave different tonally in different constructions. A prenasalized low verb has a different tone from its non-prenasalized counterpart. Let me give an example with the radicals /tɔm/ 'to leave' and /kum/ 'to arrive':

(23) a. with H radical tɔmɛ nτumɛ
   1 1 1 1
b. with L radical kumɛ nkmumɛ
   2 1 1 2

The same kind of tonal effect of the nasal prefix is found in Fe?fe?-Bamileke. The H radical is realized on a mid tone in both cases (prenasalized or not), but the L radical is realized as a raised low to mid if non-prenasalized, and as high (higher than mid) if prenasalized. This makes it clear that there exists a nasal prefix in Bamileke which exerts a tonal influence. It is normal practice to attribute this effect to the inherent tone of the nasal prefix; I have posited a high nasal prefix /h-./

Example (23) shows that there is a vocalic release, realized as a predictable vowel sentence-finally or before pause. This vocalic release bears an independent tone. One is therefore entitled to expect a verbal suffix with its inherent tone. In any case the verb form is more complex than was thought before. Without distinguishing different

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9This vowel is identical with the preceding vowel after vowels or glottal stops, and /a/ in all other cases.
morphemes in the main verb, one cannot analyze the verb tones. In the following example I present some shapes of the radical /lò?/ 'take':

\[(24) \quad \begin{align*}
a. \text{ a } lò? \ jù & \quad \text{ 'and he takes the thing'} \\
& \quad \text{1 12 1} \\
b. \text{ a } lò? \ jù & \quad \text{ 'he has taken the thing'} \\
& \quad \text{1 32 3} \\
c. \text{ a } nkè ndò? \ jù & \quad \text{ 'he used to take the thing'} \\
& \quad \text{1 1 13 3} \\
d. \text{ a } lò? \ jù & \quad \text{ 'that he make take the thing'} \\
& \quad \text{2 13 2} \\
e. \text{ a } o? \ lò? \ jù & \quad \text{ 'he will take the thing'} \\
& \quad \text{2 2 21 2}
\end{align*}\]

I cannot present here all the details of the verb system. I only want to make clear that the main verb is complex and should in any case have a prefix and a suffix.

4.3. The locative tone after verb forms. Four verbal forms show a lowering of a following high locative complement:

\[(25) \quad \begin{align*}
a. \text{ } & \quad \text{L-R-x} \quad \text{(prenasalized verb)} \\
b. \text{ } & \quad \text{x-R-x} \quad \text{(subjunctive)} \\
c. \text{ } & \quad \text{x-R-x} \quad \text{(consecutive)} \\
d. \text{ } & \quad \text{x-R-x} \quad \text{(relative of completive)}.
\end{align*}\]

The last two tenses (consecutive and relative of completive) also show neutralization of an H radical to L. This neutralization can be produced as an assimilation of the radical to an L post-radical tone:

\[(26) \quad H \rightarrow L / H [-]_R L[]^{10}\]

The final segment in the environment is necessary to exclude from this rule a simple consecutive in sentence-final position. In this case the H radical keeps distinct:

\[(27) \quad \begin{align*}
a. \text{ a } tūm & \quad \text{ 'and he leaves'} \quad (-tūm-) \\
& \quad \text{1 1} \\
b. \text{ a } kūm & \quad \text{ 'and he arrives'} \quad (-kūm-) \\
& \quad \text{1 ln}
\end{align*}\]

\[^{10}_H \text{ or } L \text{ indicate a floating } H \text{ or } L \text{ tone.}\]
The locative rule can now be phrased as the lowering of an H locative complement after a low radical preceded by an H verbal prefix. The fourth lines of examples 15-18 summarize all instances of this lowering:

(28)  
<table>
<thead>
<tr>
<th></th>
<th>a nkə nkuəm 1a?</th>
<th>≠</th>
<th>a nkə ndod? 1id?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 1 13 3</td>
<td></td>
<td>1 1 13 2</td>
</tr>
<tr>
<td>b.</td>
<td>a kəUm 1a?</td>
<td>≠</td>
<td>a 16d? 1id?</td>
</tr>
<tr>
<td></td>
<td>2 13 3</td>
<td></td>
<td>2 13 2</td>
</tr>
<tr>
<td>c.</td>
<td>a kuəm 1a?</td>
<td>≠</td>
<td>a 1od? 1id?</td>
</tr>
<tr>
<td></td>
<td>1 13 3</td>
<td></td>
<td>1 12 1</td>
</tr>
<tr>
<td>d.</td>
<td>z'a kəUm 1a? 1d</td>
<td>≠</td>
<td>z'a 16d? 1id? 1d</td>
</tr>
<tr>
<td></td>
<td>2 13 3 4</td>
<td></td>
<td>2 13 2 3</td>
</tr>
</tbody>
</table>

If the lowering influence is attributed to a floating high locative tone (as suggested in 4.1), the underlying forms of (28) should be:

(29)  
|   | /...h-kum-x x-1d?.../ | ≠ | /...h-1d?-x x-1d?.../ |
| a. | /../x-kum-x x-1d?.../  |   | /../x-1d?-x x-1d?.../ |
| b. | /../x-kum-x x-1d?.../  | ≠ | /../x-1d?-x x-1d?.../ |
| c. | /../x-kum-x x-1d?.../  | ≠ | /../x-1d?-x x-1d?.../ |
| d. | /../x-kum-x x-1d?.../  | ≠ | /../x-1d?-x x-1d?.../ |

Without any special rule, the non-locative complement should be as low as the locative one. The main tone rule downdrifts one L segment between H segments, while there is no downdrift if more L segments are interposed. This rule already gives the wrong results in (25c) and (25d) (left column), because the low radical is followed by a low segment. Downdrift should not occur here, but it does. One should therefore have a rule which deletes a floating low after a low radical:

(30) \[ L \rightarrow \emptyset / L \] _R_

This rule should follow rule (26). It also deletes the floating L in the right columns of (29c) and (29d). After this rule the underlying forms of (29c) and (29d) are:

(31)  
|   | /../x-kum-x x-1d?.../ | ≠ | /../x-1d?-x x-1d?.../ |
| c. | /../x-kum-x x-1d?.../  |   | /../x-1d?-x x-1d?.../ |
| d. | /../x-kum-x x-1d?.../  | ≠ | /../x-1d?-x x-1d?.../ |

Now only (31c) right column does not produce downdrift, as required. All other forms produce it. The only remaining problem is that (29a, b, d)
right column should produce downdrift on the verb radical, but not on the subsequent complement. This effect can only be produced if the low nominal prefix of the non-locative complement is deleted or changed to high. This could be executed by a rule like:

\[ (32) \ L_0 \rightarrow \ H_0 / H_0 \ \text{VP} \ NP^{[\text{----H}]} \]

This rule might in fact have to be more complicated, because the rule might be related to another one which changes a floating L to floating H before a complement, as shown in the following examples:

\[ (33) \ a \ q? \ ns\dot{\text{ên}} \quad \text{'he will go'} \]
\[ 2 \quad 2 \quad 2 \quad 2 \]

\[ a \ q? \ l\dot{\text{oō? l\dot{d}}} \quad \text{'he will take the compound'} \]
\[ 2 \quad 2 \quad 2 \quad 2 \quad 2 \]

But this will for the moment be left out of consideration. Rule (32) does not apply to the forms in the left column, because there the NP starts with a high locative tone.

This analysis again presents interesting historical insights. The locative floating high tone seems to qualify as a prefix, preceding the nominal prefix. However, unlike the locative pre-prefix in Bantu, this prefix is high.

5. The Synchronic Relevance of Floating Tones

Hyman [1972] raised the question about the synchronic relevance of the host of floating tones which I had to posit in the analysis of the Bamileke data. In the genetive framework [Voorhoeve 1971] these tones proved clearly relevant from a historical point of view, but does this necessarily mean that they are also synchronically relevant? In fact, when one comes across a relatively simple 2-syllable construction like ndu\dot{\text{du}} m\dot{\text{en}} 'the husbands of the child'(19b) and one has to accept an underlying representation like in (20b) /n\dot{\dot{d}}-\dot{\dot{d}}-\text{x} \times \text{x}-m\dot{\text{ên}}-\text{x}/ (with three intervening floating tones), which is transformed by relatively simple tone rules into the required simple output, one may wonder why new generations of Bamileke did not invent shortcuts based on simplified underlying representations at the expense of more complicated or less universal
tone rules. This would in fact be possible, in the nominal constructions. A rule which accepts automatic downstep between high tones would reduce the underlying representation of (20b) to /ndú=x mén/, which seems already much more acceptable from a synchronic point of view.

In the case of the locative construction in Bangangte-Bamileke we are confronted with new floating tones (verbal prefixes and suffixes, and a locative tone) which are less well motivated by comparisons with other Bantu languages. Dialectal evidence may replace the general Bantu arguments. I mentioned in section 4.2. that prenasalized L verb radicals show the same type of tonal characteristics in Bangangte and Fe?fe?. Fe?fe?-Bamileke shows a high /6/ before the pronoun of a subjunctive verb form [Hyman 1972:151]. Bangangte-Bamileke has a floating high tone in the same position, which accounts for the rising tone of a preceding L morpheme or a falling tone of the following L pronoun. The floating tone in one of the dialects matches a vocalic segment in one of the other dialects.

But even in the same dialect one finds floating and segmental alternations. The examples in (23) show a vocalic release of verb forms in sentence-final position. This vocalic release with H tone is only present sentence finally:

(34) L radical
    a ns\| nènè 'he will go'
    1 2 3 2

    a bɔ nènè 'while he went...'
    1 1 3 2

    nènè 'go'
    2 1

H radical
    a ns\| tûmè 'he will leave'
    1 2 3 3

    a bɔ tûmè 'while he left...'
    1 1 3 3

    tûmè 'leave'
    1 1

The tone of the vocalic release is combined with the radical tone, if the verb is in non-final position:

(35) L radical
    a ns\| làw? jù 'he will take
    1 2 3 2 3 'it'

    a bɔ làw? jù 'while he took
    1 1 3 2 3 'it...'

H radical
    a ns\| yàn jù 'he will see it'
    1 2 3 4

    a bɔ yàn jù 'while he saw it...'
    1 1 3 4
This indicates that Bamileke speakers must in some way relate the added tone of the radical to the vocalic release.

In one of the recorded texts I found the following sentence:

(36) fingalé mə nə? mvəd wet weə yə?  
2 2 12 2 1 12 21 n  
'ring I had given you where'  
(Where is the ring I had given you?)

A relative phrase in Bangangte-Bamileke is preceded by a relative concord, in this case /zə/, and followed by a demonstrative element /lə/. The preceding sentence would be elicited as:

(37) fingalé zə mə nə? mvəd wə lə yə?  
2 2 1 2 2 1 12 2 1 n

Sentence (36) is regarded by the informant as just a shortened version of (37) with deletion of the segmental content of /zə/ and /lə/, but with the tones preserved. Bamileke speakers seem able to handle such floating tones with semantic content.

REFERENCES


