Possessive Tone in Tswefap (Bamileke): Paradigmatic or Derivational?

Larry M. Hyman
University of California, Berkeley

Abstract

In this paper I consider two analyses of the possessive pronoun tonal paradigm in Tswefap, a Bamileke language spoken in Batoufam, Cameroon. As in the case of related languages that have been previously described, Tswefap has a rather complex tone system that involves multiple tone heights, tonal contours, and tone alternations. Although simplified, it also maintains several of the inherited noun class distinctions. In this study attention is on the tones of possessive pronouns and their effects on a preceding modified noun. I first present a paradigmatic account as one might find in a descriptive or pedagogical grammar indicating which possessive pronouns receive which tones. I then turn to a more traditional Bamileke and Grassfields Bantu analysis in terms of underlying representations and floating tones. It is argued that all possessive pronouns are preceded by a floating L tone which affects a preceding mid tone noun in one of two ways, depending on the syllable shape of the pronoun: (i) if the pronoun begins with a consonant, the mid of the noun becomes a mid to low contour tone; (ii) if the pronoun has consists solely of a vowel, the mid is raised to a high tone. Although I argue for the latter analysis, I conclude by demonstrating that alternate tonal variations indicate on-going change which may ultimately undermine the more abstract phonological analysis in favor of a considerably simplified paradigmatic tone assignment.

1. Introduction

In a number of studies in the 1970s, abstract tonal analyses were proposed of several Bamileke (Eastern Grassfields Bantu) languages, including Medumba [Bangangte] (Voorhoeve 1971), Fe’fe’ [Bafang] (Hyman 1972), Ghomala [Bandjoun] (Nissim 1981), and Yemba [Dschang] (Tadadjeu 1974, Hyman & Tadadjeu 1976). In each case floating tones were posited to capture morphotonemic alternations, which could be quite complex, particularly as followed up in the case of Yemba (cf. Pulleyblank 1986, Hyman 1985, Stewart 1992, Clark 1992, Snider 1999). As Hyman & Tadadjeu (1976) pointed out, these floating tones could be traced back to either lexical or grammatical historical syllables in Proto Eastern Grassfields Bantu (PEGB) whose vowels had dropped out, but could still be posited in abstract synchronic representations. Tadadjeu’s (1974:284) minimal quadruplet in Yemba illustrates.¹

¹ Standard abbreviations and tonal accent marks are adopted in this study as follows: H(igh) is marked by an acute (´) accent, L(ow) by a grave (‘) accent, M(id) by a macron (˘), downsteps by (ꜜ), and contours by combinations of the above accents, e.g. ML (˚). L˚ (˚˚) indicates a level L which contrasts with a falling L before pause.
In these examples the L tone prefix /lə-/ marks noun class 5 on nouns as well as verb infinitives. As indicated, bisyllabic *H.H and *L.L transparently yield monosyllabic H and L stems, while *L.H and *H.L result in new surface tonal contrasts: *L.H is realized as a level L pitch syllable, symbolized L˚, which contrasts with the falling pitch of L before pause. As shown, the historical *H remains as a floating tone that blocks the automatic “downgliding” of L before pause. The fate of *H.L is even more interesting: In this case the floating L causes the preceding H to become downstepped, thereby creating the unusual contrast between L-H and L-ꜜ H. To produce the downstep, Pulleyblank (1986:41) proposes a metathesis of the floating L, while Hyman (1985:72) and Snider (1999, ch.7) present different models which place the L on a second (register) tier. Other Bamileke languages produce still other tonal contrasts. Thus, from single /H, L/ contrast floating tones were assumed to be the correct mechanism to derive M tones, level L˚ vs. falling L, rising and falling tonal contours, and contrastively downstepped ꜜ H and ꜜ L (even double-downstepped ꜜ ꜜ H and ꜜ ꜜ L in Yemba). Although there are alternatives to abstract floating tones, including less desirable arbitrary diacritics (Hyman 2003), the great achievement was to derive the diverse Bamileke tone systems from a simple binary /H, L/ contrast which, in the generative tradition, was appreciated for its generality and its elegance. The question of course is whether the surface facts justify such abstract analyses, or whether the floating tones are simply a mirror of history.

In the current study I contrast two different tonal analyses of the possessive pronoun paradigm in Tswefap, a member of the Ndaʔndaʔ cluster of dialects spoken in Batoufam.² Like Fe’fe’, these dialects have developed a M tone which I will take as underlying, hence a three-height contrast between /H, M, L/.³ The question I will raise is whether the tones of possessive pronouns should be analyzed with floating tones or through a direct paradigmatic assignment of tones to pronouns according to noun class, person, and number. In §2 I first present the data and then the paradigmatic analysis. In §3 I show that an analysis recognizing a floating L neatly captures the same facts. In §4 I consider

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² Research on Tswefap is based on materials collected in a 2015-16 field methods class at the University of California, Berkeley, with Guy Tchatchouang as consultant. I would like to thank Guy and the members of the course for their contributions and insights in studying Tswefap: Geoff Bacon, Andrew Cheng, Emily Clem, Ginny Dawson, Erik Maier, and Alice Shen. Other consulted work on Tswefap includes Ngantchui (1989, 2002), Gueche Fotso (2013) and my own notes collected in the field (Hyman 1974).

³ As in Fe’fe’, M and L are lexical tones in Tswefap, while H tones either occur on grammatical morphemes or result from grammatical processes, e.g. M to H raising of a noun tone in certain possessives (see Tables 5 and 6 below).
current variation and direction for future changes in the system, concluding in §5 with consideration of a few additional facts that may affect the analysis.

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Table 1. Possessive Pronouns in Tswefap
2. The possessive paradigm in Tswefap

In this section I will present the realization of tone on possessive pronouns in Tswefap. As will be seen, these tones depend on noun class, as well as on the syllable structure of both the noun and the possessive pronoun. As in the case of neighboring Bamileke languages, the vast majority of nouns are monosyllabic of the shape CV or CVC and carry M or L tone, e.g. Ꙍwə̄ ‘child’, Ꙍf ‘chief’, Ꙍtɔ̄g ‘ear’, Ꙍpɔ̄b ‘egg’. They may also have a non-syllabic nasal preceding the initial consonant, e.g. Ꙍŋkɔ̀ ‘nest’, Ꙍnhwĩ ‘wife’, Ꙍnjɔ̄b ‘axe’, Ꙍmbvĩg ‘dog’.\(^4\) Possessive pronouns can have the shape V, CV, CVC or CVCV. The presence vs. absence of an initial C, as well as the identity of the initial C depend on noun class. Forms representing all of the relevant combinations of noun + possessive pronoun are given in Table 1 on the preceding page.

As seen, the nouns have first been grouped by noun class, identified by the initial consonant of the first person plural possessive Ꙍy/ y, Ꙍp, Ꙍm, or Ꙍts. These in turn have been grouped into singular/plural pairs (or genders), of which there are four: Ꙍy/p, Ꙍy/m, Ꙍts/m and Ꙍy/ts, the last being quite marginal. These are compared in Table 2 to other studies of Tswefap and with Proto-Eastern Grassfields Bantu and Proto-Bantu (PB) noun class numberings.

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<td>ts</td>
<td>ts</td>
<td>ts</td>
<td>5</td>
</tr>
<tr>
<td>pl</td>
<td>ts</td>
<td>ts</td>
<td>ts</td>
<td>ts</td>
<td>8, 10</td>
</tr>
</tbody>
</table>

Table 2. Tswefap Noun Classes

As indicated, there are some differences between the present and previous studies. Ngantchui (1989:137) mostly recognized a y class (as our speaker for this study also has) with a restricted w variant, while Gueche Fotso (2013:52) has w. Historically the situation was as indicated in the Hyman (1974) column: There was originally a distinction between class 1 w( ') vs. class 9 y( '), which merge as y( ') in the speech of our consultant, but

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\(^4\) Transcriptions generally follow IPA except that y is used for [j], and zh is used for [ʒ], the realization of /y/ before a high vowel. Note that while there is an extensive set of onset consonants, the only coda consonants are /b, g, m, ŋ, ʔ/, where /b, g/ are realized voiceless and unreleased in final position.
apparently as w(‘) in Gueche Fotso (2013).\(^5\) The L (‘) tone indicates a different possessive tonal pattern from the other classes (see below).\(^6\)

Focusing on the data in Table 1, we first note that except for the y(‘) class, which has L tone throughout (in green), the plural person pronouns ‘our’, ‘your pl.’ and ‘their’ have M tone throughout (yellow). These latter are thus analyzed as /-ɔ̄/, /-ɪg̃/ and /-ūb/, respectively. All that needs to be added is that M nouns become ML, e.g. pfwɔ́ ‘children’, pʃɔ́ ‘our children’. This leaves predicting the tones of singular person pronouns. In the y(‘) class (plural p), the singular person pronouns all have the shape V with a L tone, /à/, /ò/, /è/, while the plural person pronouns begin with a consonant: /y-ɔ̄/, /y-ɪg̃/, /y-ūb/. In the y class (plural m), the singular person pronouns also have the shape V, this time with M tone (yellow). In addition, a preceding M tone noun becomes H: tɔ́g ‘ear’, tɔ́g ə ‘my ear’. The other singular person pronouns are all CV, also with predictable tone: First and second person pronouns have L˚ (level L) tone (in pink), while third person singular pronouns are M (yellow). As in the case of plural person pronouns, if the preceding noun is M, it becomes ML: tʃig ‘name’, tʃig tʃĕ ‘my name’, tʃig tʃù˚ ‘your (sg.) name’, tʃig tʃɔ́ ‘his/her name’. This completes the summary of the tonal data in the possessive pronoun paradigm.\(^7\)

The above constitutes a “paradigmatic” approach to accounting for the tones of possessive pronouns (and their effects on preceding M tone nouns), i.e. as one might find in a descriptive or pedagogical grammar. The ordered “rules” can be stated as follows:

(2) a. if the possessive pronoun is in the y(‘) class, assign a L
b. if the possessive pronoun is plural, assign a M
c. if the possessive pronoun is singular:
   i. assign M to the V in the y class
   ii. assign L˚ to second person singular CV pronouns
   iii. assign M to third person singular CV pronouns
c. concerning a preceding M noun
   i. raise it to H before a M tone V possessive pronoun (y class singulars)
   ii. change it to ML before a CV possessive pronoun

\(^5\) Interestingly, the initial w appears in the plural object pronouns wɔ́, wɪgɔ́, wub, whose tones vary in context between H and M.

\(^6\) Unfortunately Gueche Fotso (2013:44, 76) incorrectly indicates all possessive tones as L. Since all of his examples in the w class are animates, it is not clear if inanimate class 9 nouns also moved into the w class or whether they merged with the y class. Ngantchui (1989:139) marks both y(‘) and its plural p class with L, the y class with H, and the others with M (independent of person and number). Finally, in my 1974 notes, based on two hours of elicitation, I did not consistently distinguish H vs. M (except in a H-M sequence). However, I indicated plural pronouns as L in the w(‘) and y(‘) classes and wrote sù `wɔ́ ‘our friend’ (class 1), njɔ́p `yɔ́ ‘our axe’ (class 9). The two classes merge as y(‘) in the speech of our consultant, who however also has a variant with M tone, e.g. sù yɔ́ ~ sù yɔ́ ‘our friend’, njɔ́p yɔ́ ~ njɔ́p yɔ́ ‘our axe’. See also §4.

\(^7\) Since our goal is only to predict the tones, we will not be concerned with predicting the different syllable shapes, the y~zh alternation in the y classes, and the different vowels in V vs. CV singular possessive pronouns: a vs. C-e, o vs. C-u, e vs. C-ə.
As seen, in order to account for all of the patterns, the above descriptive rules have to refer to noun class, person and number, and syllable structure. The question is whether an analysis in terms of underlying representations can do better. This is taken up in the next section.

3. A representational analysis of the possessive paradigm

As mentioned in the introduction, the tradition in Bamileke (and Grassfields Bantu) studies has been to posit abstract underlying forms with /H/ and /L/, which may be linked or float. The question is whether such an approach can be helpful here. Can we reduce the number of “rules” in (2) and replace them with a more unified representation of possessive tone? Since the four tone patterns in Yemba in (1) have merged to a simple M vs. L contrast on monosyllabic nouns, we can assume that the historical *H-H, *H-L, *L-H and *L-L stem tones have been restructured, with two possible nominal tones, /M/ vs. /L/. As we have seen, M and L also contrast on possessive pronouns, although a L˚ tone is also observed. I shall now consider a derivational analysis a with floating L preceding all possessive pronouns.

My proposal is that possessive pronouns can have one of three underlying tones:

(3) a. y(´) class possessive pronouns are /L/
    b. CV first and second person singular possessive pronouns are /LM/
    c. remaining possessive pronouns are /M/, i.e.
       i. all plural person possessive pronouns
       ii. third person singular possessive pronouns

In this interpretation, /M/ is the default and all pronouns are preceded by a floating L. In the case of the y(´) class, all of the possessive pronouns are L, so nothing more need be said about these (other than the variation that will be pointed out in §4). I suggest that the L˚ of the CV first and second person singular possessive pronouns derives from the simplification of an underlying /LM/ contour, e.g. /nòb `p-è/ → nòb pè˚ ‘my animals’, /tsìg `ts-ê/ → tsìg tsè˚ ‘my name’.8 While the floating L has no effect in the first example, it is responsible for the ML falling tone of tsìg, which also occurs before M and L CV possessors: /tsìg `ts-ò/ → tsìg tsò˚ ‘his/her name’, /ŋwòò `y-ò/ → ŋwòò yò˚ ‘our child’. I suggest that the floating L is also responsible for the raising of M to H before a M tone V possessor, as when /tòg `à/ is realized tôg à˚ ‘my ear’. This is attributable to the fact that the expected output *tòg à is ill-formed: the language doesn’t permit a ML falling tone when the input is CVC+V. (It does however allow it when the input is CV+CV, e.g.

8 In an equivalent analysis the M of the possessive could be floating: /p-è˚/., /ts-è˚/. I assume that the second tone is M rather than H since, as mentioned, H tone is restricted to grammatical morphemes and derived environments, e.g. the M → H raising rule before M tone V possessors.

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(4) a. it converts M to ML before a CV possessive pronoun
b. it converts M to H before a M tone V possessive pronoun (y class)

When the preceding noun is L, the floating L has no effect: /pòb `y-ɔ ̄../pòb y ɔ ̄/ ‘our egg’. While one could argue that the derivational analysis in (3) does not have a great advantage over the paradigmatic analysis in (2), the fact that it is possible to derive the alternations by positing three different underlying pronominal tones, /L/, /M/, /LM/ and a floating L tone at least maintains a link with the historical source and relation to other dialects. However, in the next section we will see that on-going changes are undermining this link.

4. Reconstruction and change in progress

In the preceding section we saw that there are two reasonable analyses of the possessive tonal paradigm in Tswefap. The relation to PEG and class 1/2 forms from other Eastern Grassfields languages and dialects can be compared in Table 3 below from Hyman (in press).9 The PEGB forms at the bottom of the table show that the first and second singular pronominal roots reconstruct with *L tone, while the remaining pronouns reconstruct with *H(-H). In addition, the class 1 prefix reconstructs with *L, while class 2 reconstructs with *H. In principle this would produce four possibilities: *L+L, *L+H(-H), *H+L, *H+H(-H). This is most straightforwardly reflected in the first three languages, whose pronouns are L, LH, HL and H. However, we have only three possibilities in Tswefap: L, M, L˚, which correspond to the proto tones as in (5).

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9 I provide both my 1974 Batoufam w(`)p transcriptions, where I mistranscribed L˚ as M, and M as H, as well as the y(`)p agreements with correct tones on the next line.
### Table 3

<table>
<thead>
<tr>
<th>class 1 <em>gù-</em></th>
<th>class 2 <em>bò-</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg</td>
<td>2sg</td>
</tr>
<tr>
<td>Mankon</td>
<td>ɣà</td>
</tr>
<tr>
<td>Bamenyan</td>
<td>ɣò</td>
</tr>
<tr>
<td>Babadjou</td>
<td>ɣà</td>
</tr>
<tr>
<td>Mbuí</td>
<td>wà</td>
</tr>
<tr>
<td>Dschang</td>
<td>ɣà</td>
</tr>
<tr>
<td>Ngwe</td>
<td>ɣà</td>
</tr>
<tr>
<td>Babete</td>
<td>à</td>
</tr>
<tr>
<td>Batí</td>
<td>à</td>
</tr>
<tr>
<td>Bagam</td>
<td>à</td>
</tr>
<tr>
<td>Bangang</td>
<td>à</td>
</tr>
<tr>
<td>Baloum</td>
<td>à</td>
</tr>
<tr>
<td>Fompea</td>
<td>à</td>
</tr>
<tr>
<td>Bamendjou</td>
<td>à</td>
</tr>
<tr>
<td>Baleng</td>
<td>à</td>
</tr>
<tr>
<td>Bandjoun</td>
<td>à</td>
</tr>
<tr>
<td>Bâti</td>
<td>à</td>
</tr>
<tr>
<td>Bangou</td>
<td>à</td>
</tr>
<tr>
<td>Bangwa</td>
<td>ɛ̀-à</td>
</tr>
<tr>
<td>Fônti</td>
<td>à</td>
</tr>
<tr>
<td>Fe’fê’</td>
<td>à</td>
</tr>
<tr>
<td>Bâli</td>
<td>à</td>
</tr>
<tr>
<td>Bamun</td>
<td>à</td>
</tr>
<tr>
<td>Bâpi</td>
<td>à</td>
</tr>
<tr>
<td>Bangangtè</td>
<td>ðm</td>
</tr>
<tr>
<td>Limbu</td>
<td>yà</td>
</tr>
<tr>
<td>Adere</td>
<td>wàm</td>
</tr>
</tbody>
</table>

**PEGB:**
* *gù-àmò* *gù-o* *gù-i* *gù-ìtò* *gù-ìnò* *gù-àbò* *bò-àmò* *bò-o* *bò-i* *bò-ìtò* *bò-ìnò* *bò-àbò*

(5) **PEGB**

$$
\text{Tswefap} \quad \begin{array}{c|c|c|c|c}
\text{*L+L*} & \text{*L+H(-H)*} & \text{*H+L*} & \text{*H+H(-H)*} \\
\text{M ~ L} & \text{M ~ L} & \text{M} \\
\end{array}
$$

As indicated, both *L+L* and *L+H(-H)* correspond to L, while *H+H(-H)* corresponds to M. The merger of *L-L* and *L-H* as L is quite general in Tswefap, e.g. PEGB *m-fônò > fɔ́ ‘chief’, *lî- sônò > swòg ‘tooth’. This leaves *H+L*, which corresponds to M if V (e.g. tɔg à ‘my ear’), but L’ if CV (e.g. tsîg tsè’ ‘my name’). Both *H-L* and *H-H* normally merge, e.g. on nouns: *sîńò > tsîg ‘bird’, *ŋ-gwàŋò > ngwàg ‘salt’. However, PEGB *H+L* somehow yields L” on first and second person singular CV pronouns (which we
analyzed as /LM/). Historically, it is a *LHL combination that yields L˚ in Tswefap, where the initial L is the floating L that we have posited to precede all possessive pronouns. This L in turn likely had a vowel, a schwa that is sometimes heard in independent pronouns in certain Grassfields dialects.

While the link to PEGB possessive tones is clear, there are some ongoing changes that will ultimately obscure the tonal connections. These involve the y(˚) class, which we have already seen to be a merger of earlier classes 1 w(˚) and 9 y(˚). The direction of change is away from L tone possessive pronouns towards M. Interestingly, the change is proceeding differently with singular vs. plural pronouns. When the pronouns are plural, M tone is becoming an alternative independent of the tone of the noun, e.g. after L tone nòb ‘animal’ and M tone mbvîg ‘dog’:

(6) ‘our’  ‘your pl.’  ‘their’

nòb yò nòb zhîgò nòb zhûb ~ nòb yŵ nòb zhîgî nòb zhûb
mbvîg yò mbvîg zhîgò mbvîg zhûb ~ mbvîg yò mbvîg zhîgî mbvîg zhûb

When the pronouns are singular, M is an alternative to L only if the noun is L, hence after nòb, but not after mbvîg:

(7) ‘my’  ‘your sg.’  ‘his/her’

nòb à nòb õ nòb ê ~ nòb â nòb ô nòb î
mbvîg à mbvîg õ mbvîg ê vs. *mbvîg à *mbvîg ô *mbvîg î

If continuing to play out in this way, classes y(˚) and y would of course merge, a process that has been taking place over some time throughout in the area. However, while most of the diachronic studies of noun class merger and loss in the Grassfields area has focused on segmental marking (e.g. Hyman 1972, Good 2012), this last change in progress is strictly tonal. It is not surprising that the direction should be towards the majority pattern, pronouns with M tone. The ultimate endpoint is of course loss of noun classes altogether, thereby greatly simplifying the paradigm.

5. Conclusion

In the preceding sections I have presented both the segmental and tonal properties of the Tswefap possessive pronoun paradigm. I’ve suggested that a representational analysis is still possible even though the historical origins have been considerably obscured. While the floating L + M configuration works quite well for noun classes other than y(˚), the

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10 The alternative is to merge towards the marking of a “prominent” class. This has happened in the Ewo dialect of Teke (Republic of the Congo) where segmentally identical classes 1 and 3 have merged with the L tone agreement pattern of class 1, since this class includes animate beings and also tends to be where borrowings are found (Hyman, Lionnet & Ngolele, in press).
one perhaps unexpected effect is the raising of M to H before when a noun precedes a M tone possessive pronoun of the shape V. This was attributed to the floating L analysis, something which is confirmed in the following independent possessive pronoun forms (where the y(’) class shows evidence of earlier w concord):

\[
\begin{align*}
\text{y(’) class:} & \quad \ddot{\text{dw}}\vdot \ ‘\text{mine}’ & \dot{\text{dy}}\vdot \ ‘\text{ours}’ \\
& \quad \ddot{\text{dow}} \ ‘\text{yours (sg.)}’ & \dot{\text{dzh}}\vdot \ ‘\text{yours (pl.)}’ \\
& \quad \dot{\text{dzhi}} \ ‘\text{his/hers}’ & \dot{\text{dzhub}} \ ‘\text{theirs}’ \\
\text{p class} & \quad \dot{\text{dp}}\vdot \ ‘\text{mine}’ & \ddot{\text{dp}} \ ‘\text{ours}’ \\
& \quad \ddot{\text{dp}}\vdot \ ‘\text{yours (sg.)}’ & \dot{\text{dpig}} \ ‘\text{yours (pl.)}’ \\
& \quad \dot{\text{dp}} \ ‘\text{his/hers}’ & \dot{\text{dpub}} \ ‘\text{theirs}’
\end{align*}
\]

Table 4. Independent Possessive Pronouns

If we assume that the initial marker is /\vdot/, we can predict the H tone that appears before M in the p class third person forms.

Although I have suggested that M raising occurs because of the following floating L, there is a potential problem in generalizing this account. As seen in the following examples, a similar M to H raising process occurs in the ‘noun1 of noun2’ possessive construction when noun1 belongs to any but the y(’) noun class:

<table>
<thead>
<tr>
<th>class</th>
<th>noun 1</th>
<th>noun 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>pfw\vdot ‘children’</td>
<td>pfw\dot m\dot b\vdot ‘children of dog’</td>
</tr>
<tr>
<td>y</td>
<td>t\vdot g ‘ear’</td>
<td>t\dot g m\dot b\vdot ‘ear of dog’</td>
</tr>
<tr>
<td>m</td>
<td>nt\vdot g ‘ears’</td>
<td>nt\dot g m\dot b\vdot ‘ears of dog’</td>
</tr>
<tr>
<td>ts</td>
<td>ts\dot g ‘name’</td>
<td>ts\vdot m\dot b\vdot ‘name of dog’</td>
</tr>
<tr>
<td>But:</td>
<td>y(’)</td>
<td>\eta\vdot w\vdot ‘child’</td>
</tr>
</tbody>
</table>

Table 5. M Tone Raising of Noun1 before a M tone Noun2

As seen in the last row, if noun1 belongs to the y(’) class, its M does not raise to H, rather it becomes a ML falling tone (as in possessive pronoun paradigm). Since the fall in \eta\vdot w\dot m\dot b\vdot ‘child of dog’ is clearly attributable a floating L, something else is needed to produce the M to H raising in pfw\vdot m\dot b\dot g ‘children of dog’. The most straightforward analysis would be a floating H tone, which also affects M tone nouns when the possessor noun2 is L tone, as in Table 6 below. Again, there is no M raising when noun1 belong to the y(’) class.11 Because of this, whenever a y(’) noun does not have a distinct plural, the only difference between a singular and plural noun1 input will be tonal: m\dot b\vdot g \eta\vdot w\dot m\dot b\vdot ‘dog of child’ vs. m\dot b\vdot g \eta\vdot w\vdot m\dot b\vdot ‘dogs of child’, m\dot b\vdot g f\vdot ‘dog of chief’ vs. m\dot b\vdot g f\dot m\dot ‘dogs of chief’. It would appear that a floating H is required or perhaps a sequence of floating tones.12 Since

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11 The floating L does not appear on \eta\vdot w\vdot, rather is “absorbed” before L tone f\dot.
12 Similar problems arise in Fe’fe’, which also has M to H raising (Hyman 1976).
M to H raising occurs elsewhere in the language, including in the verbal paradigm, more research will be needed to determine a full and comprehensive analysis.13

<table>
<thead>
<tr>
<th>class</th>
<th>noun1</th>
<th>noun2</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>pfwɔ̄ ‘children’</td>
<td>pfwɔ́ fɔ́ ‘children of chief’</td>
</tr>
<tr>
<td>y</td>
<td>tɔ́g ‘ear’</td>
<td>tɔ̄g fɔ́ ‘ear of chief’</td>
</tr>
<tr>
<td>m</td>
<td>ntɔ̄g ‘ears’</td>
<td>ntɔ́g fɔ́ ‘ears of chief’</td>
</tr>
<tr>
<td>ts</td>
<td>tsɔ́g ‘name’</td>
<td>tsɔ̄g fɔ́ ‘name of chief’</td>
</tr>
<tr>
<td>But:</td>
<td>y(‘) ŋwɔ̄ ‘child’</td>
<td>ŋwɔ́ fɔ́ ‘child of chief’</td>
</tr>
</tbody>
</table>

Table 6. M Tone Raising of Noun1 before a L tone Noun2

References

Good, Jeff. 2012. How to become a “Kwa” noun. Morphology 22.293-335.

13 One such construction worthy of further study is the presentative, marked by ɔ̄ before a L tone, HM before a M: ɔ̄nòp ‘it’s an animal’, ɔ̄ŋwɔ̄ ‘it’s a child’. The HM appears to occur only before nouns. Thus compare: ɔ̄pɔ̀ ‘it’s us’, ɔ́wūb ‘it’s them’. Presentative ɔ̄ is undoubtedly related to the initial marker of the independent possessive pronouns in Table 4.
http://gsil.sc-ling.org/pubs/SCOPILS_1_3_4/studies_in_bantu_tonology.pdf


