

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

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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 [Bangante] (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 (*), and contours by combinations of the above accents, e.g. ML (˘). L° (˘°) indicates a level L which contrasts with a falling L before pause.

(1)		<i>Surface</i>		<i>Underlying</i>		<i>PEGB</i>
	‘feather’	lè-tóŋ	L-H	/lè-tóŋ/	*-tóŋé	*H.H
	‘to call’	lè-tóŋ	L- ⁺ H	/lè-tóŋ-`/	*-tóŋ-à	*H.L
	‘tooth’	lè-tòŋ°	L-L°	/lè-tòŋ´/	*-tòŋé	*L.H
	‘to reimburse’	lè-tòŋ	L-L	/lè-tòŋ-`/	*-tòŋ-à	*L.L

In these examples the L tone prefix /lè-/ 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-⁺ 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 ⁺ H and ⁺ L (even double-downstepped ⁺ ⁺ H and ⁺ ⁺ 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 Nda?nda? 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

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 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.

cl	gloss	noun	1sg	2sg	3sg	1pl	2pl	3pl
y p	'chief'	fɔ̃	fɔ̃ à	fɔ̃ ò	fɔ̃ è	fɔ̃ yò	fɔ̃ zhìgà	fɔ̃ zhùb
	pl.	fɔ̃	fɔ̃ pɛ̃°	fɔ̃ pù°	fɔ̃ pā	fɔ̃ pō	fɔ̃ pìgā	fɔ̃ pūb
	'child'	ŋwā	ŋwā à	ŋwō ò	ŋwē è	ŋwā yò	ŋwā zhìgà	ŋwā zhùb
	pl.	pfwā	pfwā pɛ̃°	pfwā pù°	pfwā pā	pfwā pō	pfwā pìgā	pfwā pūb
	'animal'	nòb	nòb à	nòb ò	nòb è	nòb yò	nòb zhìgà	nòb zhùb
	pl.	nòb	nòb pɛ̃°	nòb pù°	nòb pā	nòb pō	nòb pìgā	nòb pūb
	'dog'	mbvīg	mbvīg à	mbvīg ò	mbvīg è	mbvīg yò	mbvīg zhìgà	mbvīg zhùb
pl.	mbvīg	mbvīg pɛ̃°	mbvīg pù°	mbvīg pā	mbvīg pō	mbvīg pìgā	mbvīg pūb	
y m	'egg'	pòb	pòb ā	pòb ò	pòb ē	pòb yō	pòb zhīgā	pòb zhūb
	pl.	mbòb	mbòb mɛ̃°	mbòb mù°	mbòb mā	mbòb mō	mbòb mìgā	mbòb mūb
	'foot'	khwà	khwà ā	khwò ò	khwē ē	khwà yō	khwà zhīgā	khwà zhūb
	pl.		nkhwà mɛ̃°	nkhwà mù°	nkhwà mā	nkhwà mō	nkhwà m ìgā	nkhwà mūb
	'ear'	tōg	tōg ā	tōg ò	tōg ē	tōg yō	tōg zhīgā	tōg zhūb
	pl.	ntōg	ntōg mɛ̃°	ntōg mù°	ntōg mā	ntōg mō	ntōg mìgā	ntōg mūb
	'tree'	tsā	tsā ā	tsó ò	tsé ē	tsā yō	tsā zhīgā	tsā zhūb
	pl.	ntsā	ntsā mɛ̃°	ntsā mù°	ntsā mā	ntsā mō	ntsā mìgā	ntsā mūb
'hand'	pfū	pfū ā	pfú ò	pfū ē	pfū yō	pfū zhīgā	pfū zhūb	
pl.	mbvū	mbvū mɛ̃°	mbvū mù°	mbvū mā	mbvū mō	mbvū mìgā	mbvū mūb	
ts m	'tooth'	swòg	swòg tsɛ̃°	swòg tsù°	swòg tsā	swòg tsō	swòg tsīgā	swòg tsūb
	pl.	nswòg	nswòg mɛ̃°	nswòg mù°	nswòg mā	nswòg mō	nswòg mìgā	nswòg mūb
	'name'	tsīg	tsīg tsɛ̃°	tsīg tsù°	tsīg tsā	tsīg tsō	tsīg tsīgā	tsīg tsūb
	pl.	ndzīg	ndzīg mɛ̃°	ndzīg mù°	ndzīg mā	ndzīg mō	ndzīg mìgā	ndzīg mūb
	'leaf'	hwà	hwà tsɛ̃°	hwà tsù°	hwà tsā	hwà tsō	hwà tsīgā	hwà tsūb
	pl.	hwà	hwà mɛ̃°	hwà mù°	hwà mā	hwà mō	hwà mìgā	hwà mūb
y ts	'eye'	tsō	tsō tsɛ̃°	tsō tsù°	tsō tsā	tsō tsō	tsō tsīgā	tsō tsūb
	pl.	nō	nō mɛ̃°	nō mù°	nō mā	nō mō	nō mìgā	nō mūb
y ts	'thing'	zhwā	zhwā ā	zhwó ò	zhwé ē	zhwā yō	zhwā zhīgā	zhwā zhūb
	pl.	tswā	tswā tsɛ̃°	tswā tsù°	tswā tsā	tswā tsō	tswā tsīgā	tswā tsūb

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. *ɲwā* ‘child’, *fā* ‘chief’, *tāg* ‘ear’, *pòb* ‘egg’. They may also have a non-syllabic nasal preceding the initial consonant, e.g. *ɲkà* ‘nest’, *nzhwī* ‘wife’, *ɲjòb* ‘axe’, *mbv̄g* ‘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 *yà/yā*, *pā*, *mā*, or *tsā*. These in turn have been grouped into singular/plural pairs (or genders), of which there are four: *y/p*, *y/m*, *ts/m* and *y/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.

	<i>This study</i>	<i>Ngantchui (1989)</i>	<i>Gueche Fotso (2013)</i>	<i>Hyman (1974)</i>	<i>PEGB/PB</i>
sg	y(´)	y ~ w	w	w(´)	1
				y(´)	9
pl	p	p	p	p	2
sg	y	y	y	y	3, 7
pl	m	m	m	m	4, 6
sg	ts	ts	ts	ts	5
pl	ts	ts	ts	ts	8, 10

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

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, ɲ, ʔ/, where /b, g/ are realized voiceless and unreleased in final position.

apparently as $w(\text{ })$ in Gueche Fotso (2013).⁵ The $L(\text{ })$ 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 $y(\text{ })$ 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 $/-\bar{5}/$, $/-\bar{1}g\bar{5}/$ and $/-\bar{u}\bar{b}/$, respectively. All that needs to be added is that M nouns become ML, e.g. $pf\bar{w}\bar{5}$ ‘children’, $pf\bar{5} p\bar{5}$ ‘our children’. This leaves predicting the tones of singular person pronouns. In the $y(\text{ })$ class (plural p), the singular person pronouns all have the shape V with a L tone, $/\grave{a}/$, $/\grave{o}/$, $/\grave{e}/$, while the plural person pronouns begin with a consonant: $/y-\grave{o}/$, $/y-\grave{1}g\grave{o}/$, $/y-\grave{u}\bar{b}/$. 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: $t\bar{5}g$ ‘ear’, $t\acute{5}g \bar{a}$ ‘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: $ts\bar{1}g$ ‘name’, $ts\bar{1}g ts\grave{e}$ ‘my name’, $ts\bar{1}g ts\grave{u}$ ‘your (sg.) name’, $ts\bar{1}g ts\bar{5}$ ‘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 $y(\text{ })$ 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 $w\bar{o}$, $w\bar{1}g\bar{a}$, $w\bar{u}\bar{b}$, 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 $y(\text{ })$ 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 $w(\text{ })$ and $y(\text{ })$ classes and wrote $s\bar{u}$ ‘ $w\bar{o}$ ‘our friend’ (class 1), $nj\bar{o}p$ ‘ $y\bar{a}$ ‘our axe’ (class 9). The two classes merge as $y(\text{ })$ in the speech of our consultant, who however also has a variant with M tone, e.g. $s\bar{u} y\bar{o} \sim s\bar{u} y\bar{5}$ ‘our friend’, $nj\bar{o}p y\bar{o} \sim nj\bar{o}p y\bar{5}$ ‘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 $y\sim zh$ alternation in the y classes, and the different vowels in V vs. CV singular possessive pronouns: a vs. $C-\varepsilon$, o vs. $C-u$, e vs. $C-\bar{a}$.

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 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-ě/ → nòb pè° ‘my animals’, /tsĩg `ts-ě/ → tsĩg tsè° ‘my name’.⁸ While the floating L has no effect in the first example, it is responsible for the ML falling tone of tsĩg, which also occurs before M and L CV possessors: /tsĩg `ts-ā/ → tsĩg tsā ‘his/her name’, /ɲwā `y-ò/ → ɲwā 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 /tōg `ā/ is realized tóg ā ‘my ear’. This is attributable to the fact that the expected output *tōg ā 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-ě /, /`ts-ě /. 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.

/p̄fw̄ ð̄ p̄-ā/ → p̄fw̄ ð̄ p̄ā ‘his/her children’.) Instead, the L causes a M to raise. What this means is that the floating L has two different realizations on a preceding M noun:

- (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: /p̄òb̄ ð̄ y-ā/ → p̄òb̄ yā ‘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).

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.

	class 1 *gù-						class 2 *bá-					
	1sg	2sg	3sg	1pl	2pl	3pl	1sg	2sg	3sg	1pl	2pl	3pl
Mankon	ɣà	ɣò	ɣié	wàɣá	wàŋá	wáá	bâ	bò	byé	báɣá	báŋá	báá
Bamenyan	wiɛ	ɣò	ɣé	wú	wǒ	wǒ	pié	pò	pé	pú	pó	pó
Babadjou	ɣà	ɣò	ɣè°	wò°	wèi°	ɣàp°	pâ	pô	pé	pó	peí	páp
Mbui	wà	ɣò	wi°	wii°	wə°	wá°	bá	búó	bí	bíí	bá	bá
Dschang	ɣà	wù	ɣi°	wák°	wè°	wòp°	pá	pú	pí	pák	pé	póp
Ngwe	ɣà	ɣò	ɣyé°	wák°	wá°	wálp°	bá	bó	bé	bák	bá	bálp
Babete	à	ò	è°	wák°	wú°	wòp°	pá	pú	pé	pák	pú	póp
Bati	à	ù	ì	pò	ɣi	ɣàp	pá	pú	pí	pò	ɣí	ɣáp
Bagam	à	ò	è°	wiŋi	wuŋ°	wòp°	pá	pó	pé	piŋi	puŋ	póp
Bangang	à	ò	i°	wák°	ɥi°	wòp°	pá	pú	pé	pák	pí	póp
Baloum	à	ò	i°	wáú°	wè°	wòp°	pá	pú	pí	páú	pé	póp
Fomopea	à	ò	i°	wák°	wè°	wòp°	pá	pú	pí	pák	pé	póp
Bamendjou	à	ò	i°	wák°	wú°	wòp°	pá	pó	pí	pák	pú	póp
Baleng	à	ò	è°	wák°	wè°	wùp°	pá	pú	pyé	pók	pé	púp
Bandjoun	à	ò	è°	ɣók°	ɣó°	ɣàp°	pá	pú	pyá	pók	pó	páp
Batie	à	ò	è	ɣók°	ɣéé°	ɣàp°	pé	pó	pé	pók	peé	páp
Bangou	à	ù	ì	ɣòh	ɣù	ɣòp	pē	pō	pá	póh	pú	póp
Bangwa	ɛ~à	ù~ò	ì~è	ɣò	ɣyá	ɣùp	pé	pú	pí	pó	pyá	púp
Batoufam1	à	ù	ì	wò	wúɣá	wùp	pē	pū	pá	pó	púɣá	púp
Batoufam2	à	ò	è	ɣò	ɣiɣá	ɣùb	pè°	pù°	pā	pō	pɣā	pūb
Fotouni	à	ò	ì	ɣó°	ɣé°	ɣàp°	bá	bó	bí	bó	bé	báp
Fondanti	à	ò	ì	ɣò	ɣi	ɣàp	bá	bó	bí	ɣó	ɣí	ɣáp
Fe'fe'	à	ò	ì°	ɣòh°	ɣii°	ɣáá°	bá	bó	bí	bóh	bí	báá
Bali	à	ù	ì	ɣù?	ɣin	ɣàp	bá	bú	bí	bú?	bín	báp
Bamun	à	ù	ì	ú	ùn	áp	pá	pú	pí	pú	pún	páp
Bapi	á	ú	í	ɣú?	ɣúm	ɣóp	pá	pú	pí	pú?	pún	póp
Bangangte	ám	ò	è°	ɣág°	zín°	ɣòb°	cám	có	tsó	cághá°	tsíná°	cóbá°
Limbum	ɣà	ɣò	ɣi	ɣèr	ɣéè	ɣàb	wá	wó	ví	wér	wéé	wáb
Adere	wám	wò	wi°	-wùt°	-wùn°	-wô	bám	bó	bí	-wùt°	-wùn°	-wô

PEGB: *gù-àmà *gù-ò *gù-ì *gù-itá *gù-iná *gù-ábá *bá-àmà *bá-ò *bá-í *bá-itá *bá-iná *bá-ábá

Table 3

(5) PEGB	*L+L	*L+H(-H)	*H+L	*H+H(-H)
Tswefap	L	L(-L)	M ~ L°	M

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-fòná > fò 'chief', *li- sòŋá > swòg 'tooth'. This leaves *H+L, which corresponds to M if V (e.g. tóg á 'my ear'), but L° if CV (e.g. tsīg tsè° 'my name'). Both *H-L and *H-H normally merge, e.g. on nouns: *síná > tsòg 'bird', *ŋ-gwáná > ŋgwāg '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 on-going changes that will ultimately obscure the tonal connections. These involve the $y(\cdot)$ class, which we have already seen to be a merger of earlier classes 1 $w(\cdot)$ and 9 $y(\cdot)$. 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 *mbvīg* ‘dog’:

- (6) ‘our’ ‘your pl.’ ‘their’
 nòb yò *nòb zhìgè* *nòb zhùb* ~ *nòb yō* *nòb zhīgē* *nòb zhūb*
 mbvīg yò *mbvīg zhìgè* *mbvīg zhùb* ~ *mbvīg yò* *mbvīg zhīgē* *mbvīg zhūb*

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

- (7) ‘my’ ‘your sg.’ ‘his/her’
 nòb à *nòb ò* *nòb è* ~ *nòb ā* *nòb ō* *nòb ē*
 mbvīg à *mbvīg ò* *mbvīg è* vs. **mbvīg ā* **mbvīg ō* **mbvīg ē*

If continuing to play out in this way, classes $y(\cdot)$ 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.¹⁰ 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 $y(\cdot)$, the

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 $y(\cdot)$ class shows evidence of earlier w concord):

$y(\cdot)$ class:	$\tilde{a}w\grave{e}$	‘mine’	$\tilde{a}y\bar{o}$	‘ours’
	$\tilde{a}w\bar{o}$	‘yours (sg.)’	$\tilde{a}zh\bar{i}g\bar{o}$	‘yours (pl.)’
	$\tilde{a}zh\grave{h}$	‘his/hers’	$\tilde{a}zh\bar{u}b$	‘theirs’
p class	$\tilde{a}p\grave{e}^\circ$	‘mine’	$\acute{a}p\bar{u}$	‘ours’
	$\tilde{a}p\bar{u}^\circ$	‘yours (sg.)’	$\acute{a}p\bar{i}g\bar{o}$	‘yours (pl.)’
	$\acute{a}p\bar{u}$	‘his/hers’	$\acute{a}p\bar{u}b$	‘theirs’

Table 4. Independent Possessive Pronouns

If we assume that the initial marker is $/\tilde{a} \text{ } \grave{\cdot}/$, 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 $y(\cdot)$ noun class:

	<i>class</i>	<i>noun</i>		<i>noun1</i>	<i>noun2</i>	
	p	$pfw\bar{o}$	‘children’	$pfw\acute{o}$	$mb\bar{i}g$	‘children of dog’
	y	$t\bar{o}g$	‘ear’	$t\acute{o}g$	$mb\bar{i}g$	‘ear of dog’
	m	$nt\bar{o}g$	‘ears’	$nt\acute{o}g$	$mb\bar{i}g$	‘ears of dog’
	ts	$ts\bar{i}g$	‘name’	$ts\acute{i}g$	$mb\bar{i}g$	‘name of dog’
<i>But:</i>	$y(\cdot)$	$\eta w\bar{a}$	‘child’	$\eta w\bar{a}$	$mb\bar{i}g$	‘child of dog’

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

As seen in the last row, if noun1 belongs to the $y(\cdot)$ class, its M does not raise to H, rather it becomes a ML falling tone (as in possessive pronoun paradigm). Since the fall in $\eta w\bar{a}$ $mb\bar{i}g$ ‘child of dog’ is clearly attributable a floating L, something else is needed to produce the M to H raising in $pfw\acute{o}$ $mb\bar{i}g$ ‘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 $y(\cdot)$ class.¹¹ Because of this, whenever a $y(\cdot)$ noun does not have a distinct plural, the only difference between a singular and plural noun1 input will be tonal: $mb\bar{i}g \eta w\bar{a}$ ‘dog of child’ vs. $mb\acute{i}g \eta w\bar{a}$ ‘dogs of child’, $mb\bar{i}g f\bar{o}$ ‘dog of chief’ vs. $mb\acute{i}g f\bar{o}$ ‘dogs of chief’. It would appear that a floating H is required or perhaps a sequence of floating tones.¹² Since

¹¹ The floating L does not appear on $\eta w\bar{a}$, rather is “absorbed” before L tone $f\bar{o}$.

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

	<i>class</i>	<i>noun</i>		<i>noun1</i>	<i>noun2</i>	
	p	pfw̄	‘children’	pfw̄	f̄	‘children of chief’
	y	t̄g	‘ear’	t̄g	f̄	‘ear of chief’
	m	nt̄g	‘ears’	nt̄g	f̄	‘ears of chief’
	ts	ts̄g	‘name’	ts̄g	f̄	‘name of chief’
<i>But:</i>	y()	ɲw̄	‘child’	ɲw̄	f̄	‘child of chief’

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

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¹³ One such construction worthy of further study is the presentative, marked by $\bar{\alpha}$ before a L tone, HM before a M: $\bar{\alpha}$ *nòp* ‘it’s an animal’, $\bar{\alpha}$ *ɲw̄* ‘it’s a child’. The HM appears to occur only before nouns. Thus compare: $\bar{\alpha}$ *p̄* ‘it’s us’, $\acute{\alpha}$ *wūb* ‘it’s them’. Presentative $\bar{\alpha}$ is undoubtedly related to the initial marker of the independent possessive pronouns in Table 4.

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