## Number in Bamileke Medumba

Rose-Marie Déchaine & Hermann Keupdjio Department of Linguistics, University of British Columbia dechaine@mail.ubc.ca; keupsmann2011@gmail.com

#### 1. NUMBER-MARKING ON COUNT NOUNS

• Number-marking partitions count Ns into five noun-classes (cf. Voorhoeve 1968).

CL	SG			CL	PL		
1	<b>m</b> -én	Ø-àm	'my child'	6	<b>b</b> -ún	<b>t∫</b> -ám	'my children'
	CL1-child	CL1-1POSS			CL6-child	CL6-1POSS	
	Ø-shùm	Ø-àm	'my son'		<b>shùm-</b> shùm	<b>t</b> f-ám	'my sons'
	CL1-son	CL1-1POSS			CL6 <sub>A</sub> -son	CL6-1POSS	
	Ø-B <del>ú</del>	Ø-àm	'my dog'		<mark>⊘</mark> -B <del>ú</del>	<b>t</b> f-ám	'my dogs'
	CL1-dog	CL1-1POSS			CL6-dog	CL6-1POSS	
3	<b>⊘</b> -b <sup>h</sup> ú	<b>∅-</b> ám	'my hand'	4	<b>m</b> -b⁴ú	<mark>m</mark> -ám	'my hands'
	CL3-hand	CL3-1POSS			CL4-hand	CL4-1POSS	
5	Ø-sò	<b>s</b> -ám	'my tooth'		<b>n</b> -sò	<mark>m</mark> -ám	'my teeth'
	CL5-tooth	CL5-1POSS			CL4-tooth	CL4-1POSS	

TABLE 1: NUMBER ON COUNT NOUNS

## 2. NUMBER-MARKING ON MASS NOUNS

• Non-count Ns are inherently singular (c3, c5), or inherently plural (c6,c4).

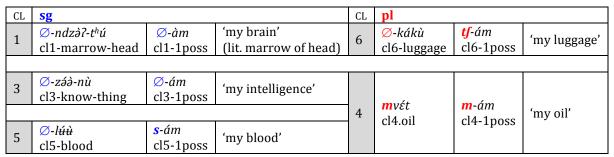


TABLE 2: NUMBER ON NON-COUNT (ABSTRACT & MASS) NOUNS

# 2.1 Pluralizing inherently plural mass nouns

• Inherently plural mass Ns are pluralized with associative plural *bà* (cf. Keupdjio 2015).

CL	SG			CL	A.PL+ PL			
1	_			6	<i>bà</i> ∅-kákù A.PL CL6-luggage	<i>tf-ám</i> CL6-1POSS	'my pieces of luggage'	
3	_		_	4	<b>bà m</b> vét	<mark>m</mark> -ám	'maralain da af ail'	
5	_	_	_	4	A.PL CL4.oil	CL4-1POSS	'my kinds of oil'	

TABLE 3: PLURALIZATION OF INHERENTLY PLURAL MASS NOUNS

## 2.2 Pluralizing inherently singular mass nouns

• Inherently singular mass Ns are pluralized with regular plural-marking (c6, c4).

CL	SG			CL	PL		
1	<i>Ø-ndz∂?-tʰú</i> CL1- <u>marrow</u> -head	Ø-àm CL1-1POSS	'my brain' (lit. marrow of head)	6	# <mark>∅-ndz∂∂?-tʰú</mark> CL6- <u>marrow</u> -head	<i>tf-ám</i> CL6-1POSS	[my brains]
3	<i>Ø-zá∂-nù</i> cl3-know- <u>thing</u>	<i>Ø-ám</i> CL3-1POSS	'my intelligence'		# <b>n-</b> zớờ-nù CL4-know- <u>thing</u>	<i>m-ám</i> CL4-1POSS	[my types of intell.]
				4			
5	<i>⊠-l<del>úù</del></i> CL5-blood	s-ám CL5-1POSS	'my blood'		% <mark>n</mark> -d <del>úù</del> CL4-blood	m-ám CL4-1POSS	'my types of blood'

TABLE 4: PLURALIZATION OF INHERENTLY SINGULAR NON-COUNT NOUNS

# 3. APPLYING THE TESTS

	TEST (i) COUNT N		(ii) MASS N: PL	(iii) MASS N: SG				
• I	NDEFINITE QUANTIFIER							
1	<i>tà?</i> <sub>INDEF</sub> N = 'a N'	✓tà? m-èn-tsìn IND C1-person-real 'a person'	Xtà? mvét IND C4.oil	Xtà? Ø-lú IND C5-blood				
• SPLIT QUANTIFIERS: 'each' and 'all'								
2	(a) FOC WH N <sub>SG</sub> QU = 'each N'	<b>√mbà j-ít</b> m-èn-tsìn <b>lō</b> even SG-WH C1-person-real QU 'each person'	Xmbà j-ít mvét ló even SG-WH C4.oil QU	✓mbà j-ít Ø-lú ló even SG-WH C5-blood QU 'each type of blood'				
	(b) every N <sub>PL</sub> all = 'all N'	<b>√ndʒɔ̃ɔŋ b-ù</b> n-tsìn <b>f</b> ɛ́ every C6-person-real all 'all (the) people'	✓ndʒɔʻɔŋ mvét fé every C4.oil all 'all (the) oil'					
			✓ndʒɔ̀ɔ́ŋ n-dɨ fɛ́ every C4-blood all 'all (the) blood'	✓ndʒɔ́ɔ́ŋ Ø-lɨ fɛ́ every C5-blood all 'all (the) blood'				
• I		IERS: 'few, litle, a lot of' (left-adjoined						
3	(a.i) <b>few ind'l</b> pl-N = 'few N'	<b>bú</b> ndòó <b>b</b> -ùn-tsìn few individual C6-person-real '(the) few people'	<b>Xbú ndòó m</b> vét few individual C4.0il	<b>Xbú ndòó Ø</b> -l <del>ú</del> few individual C5-blood				
	(a.ii) <b>DEG-little</b> N = 'little N'	Xtsìít-tsìt b-ùn-tsìn  DEG-little C6-person-real	✓mú-tsìít mvét  DEG-little C4.oil  '(the) little oil'	√mú-tsìít Ø-lú DEG-little C5-blood '(the) little blood'				
	(1) 1 ( 0							
	(b) a.lot.of N = 'a lot of N'	<b>√b</b> <sup>h</sup> w∂óŋ <b>b</b> -ùn a.lot.of C6-person 'a lot of people'	<b>√b</b> hw∂óŋ mvét a.lot.of C4.oil 'a lot of oil'	<b>∕b</b> <sup>h</sup> w∂óŋ Ø-lú a.lot.of C5-blood 'a lot of blood'				
• P	OST-NOMINAL QUANTIFIEF	RS: numerals and 'many' (LK = link; right						
4	(a) N LK NUM	✓ b-ùn-tsìn tʃùʔ báà C6-person-real LK two '(the) two people'	<b>✗</b> mvét tʃùʔ <b>báà</b> c4.oil LK two	X Ø-l <del>ú</del> tʃùʔ <b>báà</b> C5-blood LK two				
	(1)		4 (0.0017)	71(2,671)				
	(b) CLASS N LK NUM	√tsá b-ùn-tsìn tʃû² báà group C6-person-real LK two '(the) two groups of people'	√bén mvét tʃû? báà tin C4.oil LK two '(the) two tins of oil'	<b>√b<sup>h</sup>ú? Ø-</b> lú t∫û? <b>báà</b> pack C5-blood LK two '(the) two packs of blood'				
	(c) N LK many = 'many/much N'	b-ùn-tsìn tʃùʔ <b>má-yámð</b> C6-person-real LK DEG-many 'so many people'	✓ mvét tʃû? má-yámá C4.oil LK DEG-many = 'so much oil' = 'so many types of oil'	✓ Ø-lú tʃù? <b>má-yámá</b> C5-blood LK DEG-many = 'so much blood' = 'so many types of blood'				

#### 4. FINDINGS

Tests for count/mass contrasts (adapted from Kulkarni et al. 2013) indicate that:

- **1. Singular indefinite** *tà?* selects for count Ns.
- 2. Universal quantifiers select for number
  - (a) 'each' compatible with (count &mass) singular Ns
  - (b) 'all' compatible with (count & mass) plural Ns
- 3. Prenominal quantifiers
  - (a) count/mass contrast with 'few/little'
  - (i) 'few' combines with plural count Ns
  - (ii) 'little' combines with inherently plural and singular mass Ns
  - (b) no count/mass contrast with 'a lot of'
- 4. Post-nominal quantifiers
  - (a) bare numeral compatible only with count N
- (b) **numeral with classifier** compatible with count or mass Ns
- (c) 'many' insensitive to count/mass contrast

#### **Conclusion 1**

Tests 1, 3a & 4a-b confirm that there is a count/mass contrast in Medumba.

#### **Conclusion 2**

Medumba mass Ns partition into two classes according to whether they are inherently plural or inherently singular. Test 2 (with the universal quantifiers 'each' and 'all') confirms that this is an authentic number contrast: 'each' selects for morphological singular (count and mass) Ns; 'all' selects for morphologically plural (count and mass Ns). (Residue: some speakers also allow 'all' to combine with a singular mass N.)

### **Open questions:**

- 1. What is the significance of number-marking on mass Ns relative to **semantic** theories concerning the denotation of mass Ns?
- 2. What is the significance of number-marking on mass Ns relative to **syntactic** theories of number marking (cf. Borer 2005)?
- 3. Why is the associative plural  $\emph{ba}$  recruited to pluralize inherently plural mass Ns?
- 4. What is the syntax (and compositional semantics) of complex quantificational expressions in Medumba?

#### **5. SELECTED REFERENCES**

Borer, H.. 2005. In Name Only. Structuring Sense, Volume I. OUP.

**Keupdjio**, H.. 2015. Number stacking and the semantics of Associative plurals in Bamileke Medumba (ms). UBC.

**Kulkarni**, R., **Rothstein**, S. D., & **Treves**, A. (2013). A statistical investigation into the cross-linguistic distribution of mass and count nouns: morphosyntactic and semantic perspectives. *Biolinguistics*, *7*, 132-168.

Voorhoeve, J. 1968. Noun classes in Bamileke. Lingua 21, 584-593.