BAFANJI (CHUFIE') ORTHOGRAPHY GUIDE

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SIL B.P. 1299, Yaounde, Cameroon July 2007

(updated: August 2010)

(updated with tone orthography proposal: May 2016)

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Abbreviations

DM Discourse marker

F1 Today future

1Sg., 2Sg., 3Sg. 1^{st} , 2^{nd} or 3^{rd} Person singular

1Pl., 2Pl., 3Pl. 1st, 2nd or 3rd Person plural

P1 Today past tense
P2 General past tense
PROG Progressive aspect
SS Same subject prefix
NEG Negative marker

1. Introduction

This paper proposes an orthography for Bafanji, an Eastern Grassfields Bantu language from the Nun group. Bafanji is also classified as Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Wide Grassfields, Narrow Grassfields, Mbam-Nkam, Nun (Gordon 2005). Its ISO code 693-3 is [bfj]. Although the researchers editing the "Atlas Linguistique du Cameroun" (Dieu and Renaud 1983) assumed Bafanji to be part of Mengambo (reference number 908), subsequent research has suggested that Bafanji is a separate language (Seguin and Mbongue 1994). Approximately twenty thousand people speak the language, which is found in the village of Bafanji, Balikumbat Sub-division, Ngo-Ketunjia Division, North West province, Republic of Cameroon. There are additional speakers of the language living in the urban centres of Cameroon, but their number is not known. The language has no dialect differences.

The alphabet described in this document is the result of research which was begun in 2004 until present by the authors, who have also written the first phonology sketch of Bafanji (Hamm and Hamm, in progress). The only other publications on the language were made as a result of a linguistics class at the University of California resulting in a volume entitled "Aspects of Nchufie Grammar" (Koopman and Kural 1994), some papers of which have been published in various linguistic journals.

The alphabet proposed in this paper has been designed to be in accordance with the General Alphabet of Cameroonian Languages (Tadadjeu and Sadembouo 1979).

While there has been little linguistic work done on Bafanji, some studies have been done on other Nun languages (see Hombert 1980 for Bamun and Mungaka), as well as some in-depth analyses of Grassfields Bantu languages from other branches. In addition to this, several other recent phonologies and orthographies have been produced which have given considerable assistance in the preparation of this paper (See Achotia 2005 for Bamali, Njeck 2003a and Njeck 2003b for Bangolan, Njeck 2005 for Baba 1, Simpson 2006a and Simpson 2006b for Bamukumbit, and finally Sorsamo 2006a and Sorsamo 2006b for Bamunka).

2. Alphabet

The Bafanji segmental alphabet is made up of nineteen consonants and eight vowels for a total of twenty-seven letters. They are represented below in upper and lower cases:

2.1 Consonants

The consonant phonemes, their allophones and graphemes are presented in the table below. We also show their use in various positions in words. Bafanji does not have consonants in the word-final position.¹

Phoneme	Allophone	Grapheme	Initial	Medial
			position	position
/p/	[p]	P p	pi	mɨpeeŋ
			plant (v.)	bags
	[b] ²	Вb		mumbu
				dog

$$/p/-> [b]/m_$$
 $/l/-> [d]/n_$ $/y/-> [g]/\eta_$

¹ The apostrophe and final/ŋ/ appear orthographically, but phonologically they are modifications of the vowel, laryngealization and nasalization respectively, rather than consonants.

² Bafanji voiced plosives are the result of consonant hardening after nasals. Their allophones are written because of the influence of English in the area.

Phoneme	Allophone	Grapheme	Initial	Medial
	-	_	position	position
/t/	[t]	T t	tu'	nti
			carry	jigger
/k/	[k]	K k	ki	ŋki
			soap	water
/tʃ/	[tʃ]	Ch ch	chu	mɨchi
			say	blood
/f/	[f]	F f	f i	f u fa
			give	wind
/s/	$[s] \sim [\int]^3$	Ss	su	misugo
			fish	teeth
/z/	[z] ~ [ʒ]	Z z	zaa	zeza
			cry	grasshopper
/z/ ~	[z] ~ [j]	Z z	zoŋ	
/j/ ⁴			awake	
/γ/	[g]	G g		ŋga
				no
	[ɣ]2		g ui	g u goŋ
			wet	fool
/h/	[h]	H h	hou	
			there	
/m/	[m]	M m	meŋ	mumbi
			child	goat
/n/	[n]	N n	na'	munooŋ
			cow	sun
/ŋ/	[ŋ]	Ŋŋ	ŋeenzi	mɨŋa'
			fly (n.)	to open

⁻

³ Non-palatal sibilants tend to become palatal fricatives before high vowels. However, they can often be pronounced either way and non-palatal sibilants also occur before high vowels. It also varies from speaker to speaker.

 $^{^4}$ At least this one verb can be pronounced either with a root-initial /z/ or /j/. There is also alternation between the phonemes /z/ and /j/ in the noun class concord consonant paradigm.

Phoneme	Allophone	Grapheme	Initial	Medial
			position	position
/1/	[1]2	L1	lii	mɨlou'
			eye	palm wine
	[d]	D d		ndi
				older sibling
/w/	[w]	W w	waa	mɨwu
			trap	oil
	[v] ⁵		wigi	mɨwɨgɨ
			beat (v.)	species of trees
/j/	[j]	Y y	yi'	mɨyooŋ
			this	things
/ ų /	[ц]	W w	ẅε	mɨẅε
			harvest	to harvest

Table 1: Consonants

2.1.1 Prenasalized Consonants

One kind of consonant cluster found in Bafanji consists of clusters where the first consonant is a nasal consonant that is pronounced at the same place of articulation as the following consonant, as in the following table:

Consonant	Allophone	Grapheme	Word	Word Medial
Cluster			Initial	(Root initial)
			position	
/Np/	[mb]	Mb mb	mb i gi	mumbi
			palm nut	goat
/Nt/	[nt]	Nt nt	nt i ŋ	mɨntuŋ
			heart	curses
/Nk/	[ŋk]	Ŋk ŋk	ŋkwei	mɨŋkaiŋ
			wood	monkeys
/Nt∫/	[ntʃ]	Nch nch	nch iu	mintchu
			bottle	noises

-

⁵/w/ is pronounced [v] in CVgV words, of which there are only three in our corpus.

/Nf/ ⁶	[mf] ~	Nf nf	nfei	
	[əf] ~ [f]		I leave	
/Ns/6	[s] ~ [əs]	Ns ns	nsoo	
			I wash	
/Nz/	[ndʒ]	Nz nz	nzua'	munzaa
			wedding	sheep
/Ny/	[ŋg]	Ŋg ŋg	ŋgwɨ	m i ŋgẅe
			salt	woman
/Nl/	[nd]	Nd nd	ndi	sɨndoŋ
			time	road

Table 2: Prenasalized Consonants

2.1.2 Palatalized Consonants

Another kind of consonant cluster is where the second consonant is a semi-vowel. Bafanji has has three different semivowels. The first is the palatal glide [j], which is always written in Bafanji as "y". All consonants except for two nasals (m, η) may be followed by this glide, as in the following table:

Consonant	Allophone	Grapheme	Word Initial	Word
Cluster			position	Medial
				(Root
				initial)
/pj/	[pj]	Ру ру	pye	wupyeŋ
			hand of	enemies
			bananas	
/tj/	[tj]	Ty ty	tye	mitye
			rust	saliva
/kj/	[kj]	Ky ky	kyε	mɨkyε
			herd	headpads
/t∫j/	[tʃj]	Chy chy	chyε	mɨchyeŋ
			talk	to sneeze

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⁶/f/ and /s/ are only prenasalized in verbal constructions. The underlying homorganic nasal of the first person singular pronoun or other verbal constructions, is often deleted, but can surface as a homorganic nasal (only with /f/) or as a schwa [ə].

/fj/	[fj]	Fy fy	fyε	mɨfyε
			send bamboo	to send
				bamboo
/sj/	[sj] ~ [∫j]	Sy sy	syeŋ	misye
			cut open	graves
/zj/	[zj]	Zy zy	zye	mɨzyε
			begin	to spread
/ y j/	[ɣj]	Gy gy	gyε	mɨgyε
			divide	to divide
/nj/	[ɲ]	Ny Ny	nyooŋ	mɨnyiε'
			thing	hot peppers
/lj/	[lj]	Ly ly	lyeŋ	fwolye
			clean	sleep (n.)

Table 3: Palatalization of Single Consonants

Palatalized consonants may also be prenasalized. These consonant clusters follow the rules for both palatalized and prenasalized consonants as seen above. The following table illustrates this.

Consonant	Allophone	Grapheme	Word Initial	Word Medial
Cluster			position	(Root initial)
/mpj/	[mbj]	Mby mby	mbyeŋ	
			enemy	
/ntj/	[ntj]	Nty nty	ntyε	mɨntyε
			market shed	market sheds
/nkj/	[ŋkj]	Ŋky ŋky	ŋkyε	mɨŋkyε
			raffia palm	raffia plams
/nt∫j/	[nt∫j]	Nchy nchy	Ma nchyε	
			I will speak	
/nzj/	[ndʒj]	Nzy nzy	nzye	Mɨnzye
			start	quarter of
				Bafanji
/nɣj/	[ŋgj]	ŋgy ŋgy	ηдуε	mɨŋgyε
			deer	deer (pl.)

/nlj/	[ndj]	Ndy ndy	ndye	mɨndye
			neck	necks

Table 4: Palatalization of Prenasalized Consonants

2.1.3 Labialized Consonants

A second semivowel may follow any of the consonants. This is the labiovelar glide [w], which is always written in Bafanji as "w".

Consonant	Allophone	Grapheme	Initial	Medial
Cluster		F =======	position	position
/pw/	[pw]	Pw pw	pwo	mipwoŋ
, p,	LP1	- · · · ·	hand	habits
/tw/	[tw]	Tw tw	twei	mitwo
,,	[]		bury	heads
/kw/	[kw]	Kw kw	kwi	mbou'kwo
/ 1007		100 100	four	Ekwo qtr
/t∫w/	[t(w]	Chw chw	chwo	chuchwo
/ 13 77	[[,],,]	GIW CIW	stay	sit
/fw/	[fw]	Fw fw	fwo	mufwa
/100/		I. AA IAA	medicine	billy goat
//	F	C		
/sw/	[sw]	Sw sw	swa	muswaaŋ
			stab	frog
/zw/	[zw]	Zw zw	zwa	mɨzwiŋ
			sing	to evaporate
/yw/	[ɣw]	Gw gw	gwoŋ	migwu
			sick	workmanshi
				p
/lw/	[lw]	Lw lw	lwa	mɨlwa
			mark out	to harvest
/mw/	[mw]	Mw mw	mwoŋ	mɨmwoŋ
			touch	to touch
/nw/	[nw]	Nw nw	nwiŋ	munwiŋ
			cutlass	knife
/ŋw/	[ŋw]	Ŋw ŋw	ŋweeŋ	mɨŋwε'
			shine	books
		1	1	

Table 5: Labialization of Single Consonants

Labialized consonants may also be prenasalized. These consonant clusters follow the rules for both labialized and prenasalized consonants as seen above. The following table illustrates this.

Consonant	Allophone	Grapheme	Initial	Medial
Cluster			position	position
/npw/	[mbw]	Mbw mbw	mbwo	tumbwo
			hands	finger
/ntw/	[ntw]	Ntw ntw	ntwo	m i ntwiŋ
			pap	calves (of leg)
/nkw/	[ŋkw]	Ŋkw ŋkw	ŋkwei	mɨŋkwo
			firewood	pestles
/nt∫w/	[ntʃw]	Nchw	nchwoŋ	minchwo
		nchw	wild cat	wars
/nyw/	[ngw]	Ŋgw ŋgw	ŋgwɨ	m i ŋgwei
			salt	boundaries
/nzw/	[ndʒw]	Nzw zw	nzwei'	
			I learn	
/nlw/	[ndw]	Ndw ndw	ndwo	_
			like, as	

Table 6: Labialization of Prenasalized Consonants

2.1.4 Labio-palatalized Consonants

A third and final semivowel is the labiopalatal glide $[\eta]$, which is written like the labial-velar glide with a dieresis (two dots) written above it " \ddot{w} ". When it is followed by a central vowel (schwa) is always pronouned as a velar glide, but is still written with the same symbol " \ddot{w} ". All non-labial consonants may be followed by the labiopalatal glide, as in the following table:

Consonant	Allophone	Grapheme	Initial	Medial
Cluster			position	position
/tų/	[tų]	Tẅ tẅ	tẅeeŋ	mɨtẅeeŋ
			descend	to descend

Consonant	Allophone	Grapheme	Initial	Medial
Cluster			position	position
	[tɰ]		tẅ i	patẅi
			sew	kind of Bafanji title
				(pl)
/kų/	[kų]	Kẅ kẅ	kẅe	mɨkẅiɛ'
			love	gravel
/t∫q/	[t∫ ų]	Chẅ chẅ	chẅee	mɨchẅe
			repair	cooking stones
/sų/	[sų]	Sẅ sẅ	sẅei	musẅeeŋ
			tell	mouse
/zų/	[zų]	Zẅ zẅ	zẅei'	mɨnzẅi
			learn	clothes
/үц/	[үц]	Gẅ gẅ	gẅe	mɨgẅiε'
			smile	shrimp (pl.)
/nų/	[nų]	Nẅ nẅ	nnẅe	mɨnnẅe
			god, fetish	gods
/lu/	[lų]	Lẅ lẅ	lẅee	mɨlẅi
			end (v)	nose
	[lɰ]		lẅi	_
			rotten	

Table 7: Labio-palatalization of Single Consonants

Labio-palatalized consonants may also be prenasalized. These consonant clusters follow the rules for both labio-palatalized and prenasalized consonants as seen above. The following table illustrates this.

Consonant	Allophone	Grapheme	Initial	Medial
Cluster			position	position
/Npų/	[mbw]	Mbẅ mbẅ	mbẅ i	_
			family	
/Ntų/	[ntɰ]	Ntẅ ntẅ	ntẅ i	
			I sew	
/Nkų/	[ŋkⴏ]	Ŋkẅ ŋkẅ	ŋkẅe	_
			impotent	

Consonant	Allophone	Grapheme	Initial	Medial
Cluster			position	position
	[ŋkɰ]		ŋkẅ i	_
			bush	
/Nt∫q/	[nt∫ų]	Nchẅ	nchẅeŋ	mɨnchẅi
		nchẅ	growl	hippopotamus (pl)
	[nt∫ɰ]			munchẅi
				clitoris
/Nzų/	[ndʒy]	Nzẅ nzẅ	nzẅei	mɨnzẅi
			whistle	clothing
/Nyu/	[ŋgⴏ]	Ŋgẅ ŋgẅ	ŋgẅe	mɨŋgẅe
			wife	woman
	[ŋgɰ]		ŋgẅ i	Muŋgẅ i
			ир	An area of
				Bafanji near the
				market
/Nlų/	[ndų]	Ndẅ ndẅ	ndẅee	mɨndẅee
			end (n)	ends (pl)

Table 8: Labio-palatalization of Prenasalized Consonants

2.1.6 Consonant Orthography Rules

Various rules on which consonants can occur in which positions or which can occur before or after other consonants are important to learn. Here is a partial list of consonant orthography rules:

- If you hear a nasal consonant before "k" or "g", always write "n".
- 2. If you hear a nasal consonant before "b", always write "m". Otherwise (before any other consonant), write "n".
- 3. "ŋ" and "' '" are the only consonants that can be written at the end of a word.⁷
- 4. The letters "ch" are used to represent a single sound. In the alphabet order they are placed between "b" and "d".
- 5. Never write a "q". If you hear a "q", write "kw".
- 6. Never write "kp". If you hear "kp", write "kw".
- 7. Never write "sh". If you hear "sh", write "s".
- 8. Never write "v". If you hear a "v", write "w".
- 9. Never write "nj". If you hear "nj", write "nz".
- 10. Never write "r". If you hear "r", write "l".

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⁷ Neither are true phonemic consonants. Both "ŋ" and " ' " represent modifications of the vowel(s) preceding, indicating nasalization and laryngealization respectively.

2.2 Vowels

The Bafanji language has eight short vowel phonemes presented with their allophones and proposed graphemes in the table below. The short vowel phonemes can be modified to be nasalized, laryngealized, or both nasalized and laryngealized. Examples of each of these modifications are presented the table below.

Phoneme	Allophone	Grapheme	Full	Oral	Nasal	Laryngeal	Nasal +
			Word				Laryngeal
/i/	[i]	Ιi		pi	piŋ	pi'	
				give birth	agree	fold	
/٤/	[8]	E e		kwe	kweŋ	_	kweŋ'
				throw	semen		add
				away			
/a/	[a]	3 3		fε		1ε '	
				meat		compound	
/w/	[w]	Ū ₩		t u	ո ս ŋ	f u '	
				tree	defecate	measure	
/ə/	$[i] \sim [a]$	Ηi		nt i	nt i ŋ	mɨ'	nɨŋ'
				jigger	heart	stutter	shelter
/a/	[a]	A a	a	twa	taŋ	ta'	
			3ps sub.	dirty	oil palm	drive	
			pronoun			away	
/u/	[u]	U u		su	ŋkuŋ	wu'	wuŋ'
				fish	noble	cow skin	respect
/ɔ/	[c]	Оо	О	lo	loŋ	go'8	loŋ'
			2ps sub.	vagina	year	file (n)	full
			pronoun				

Table 9: Short Vowels

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⁸ The laryngealized [9?] is much more rare than its diphthong counterpart [9u?], and it occurs only in nouns.

2.2.1 Short and Long Vowels

Bafanji vowels can also be long. These are written as a sequence of two vowels. Long vowels contrast with short vowels. Minimal pairs of these are given below:

Phoneme	Long	Graphemes	Short	Long
	Phoneme			
/i/	/i:/	i ~ ii	li	lii
			fly (v)	name
/٤/	/ε:/	e ~ ei	kwe	kwei
			throw away	help
	/e:/	e ~ ee	chẅe	chẅee
			soak	make
/a/	_	ε	fε	
			meat	
/w/	/w:/	u ~ uu	nt u	nt uu
			walking stick	advice
/ə/	/ə:/	i ~ ii	pi	p ii
			to be able	pour
/u/	/u:/	u ~ uu	fu	fuu
			white	co-wife
/ɔ/	/ɔ:/	0 ~ 00	ko	koo
			color	leg
	/o:/	ou ~ oo	mbou	mboo
			poor man	type of tree
/a/	/a:/	a ~ aa	fa	faa
			flute	cold weather

Table 10: Contrast between Short and Long Vowels

Only the low front vowel /a/ (written 'ɛ') cannot be long. In addition, there are two levels of contrast in the mid front and back vowels. The higher mid front vowel is represented with /ee/ and the lower mid front vowel is represented as a vowel sequence /ei/ because it is often pronounced that way. The corresponding mid back vowels are both written with a double-o /oo/ because, at this point, there are very few examples of the higher case.

Long vowels can be oral or nasal. They are not laryngealized. See the table below for examples.

Phoneme	Allophone	Grapheme	Oral	Nasal
/i:/	[i:]	Ii ii	lii	_
			name	
/e:/	[e:]	Ee ee	fee	keeŋ
			python	squeeze
/ε:/	[e:] ~	Ei ei	fei	
	[εɨ] ⁹		rest	
/w:/	[w:]	Uu uu	ŋk uu	
			rope	
/ə:/	[ə:]	Ii ii	ŋ ii	iiŋ
			root	yes
/u:/	[u:]	Uu uu	fuu	nzuuŋ
			yam beetle	buffalo
/o:/	[oː]	Oo oo	too	Ŋkooŋkooŋ
			ear	termite mound
/ɔː/	[5ː]		koo	gooŋ
	_		leg	mortar
/a:/	[a:]	Aa aa	waa	muswaaŋ
			trap	water frog

Table 11: Long Vowels

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 $^{^9}$ The long / ϵ / is usually pronouned as a diphthong [ϵi], but can also sometimes be pronounced [$\epsilon\epsilon$].

2.2.2 Vowel Diphthongs

Vowels sounds can be put together to form diphthongs and vowel sequences. Rising diphthongs are the result of mid and low vowels raising to high vowels. These are pronounced quickly, like a short vowel. They can be oral, nasal, or laryngeal, but there are no forms that are both nasal and laryngeal.

Phoneme	Allophone	Grapheme	Oral	Nasal	Laryngeal
/εi/	[e ^j]	Ei ei	fei		fei'
			wasp		judge (v)
/ai/	[a ^j]	Ai ai	_	laiŋ	
				pass	
/əw/	[ə ^ш]	Iu iu	l iu		l iu '
			chair		sweet yam
/ɔu/	[o ^w]	Ou ou	lou		lou'10
			harp		rejoice

Table 12: Rising Diphthong Vowels

Bafanji also has falling diphthongs. This time a high vowel precedes the mid or low vowel and is said more slowly, similar to a long vowel. Falling diphthongs can be oral, nasal, laryngeal, and in one case, both nasal and laryngeal. See the table below.

Phoneme	Allophone	Grapheme	Oral	Nasal	Laryngeal	Nasal/
						Laryngeal
/iε/	[iε]	Ie ie	_	kieŋ	kie'	kieŋ'
				steer (v)	loosen (v)	annoy (v)
/ia/	[ia]	Ιε ίε	kiε ¹¹	_	sie'	_
			coil (v)		announce	

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 $^{^{10}}$ This laryngealized diphthong usually occurs in verbs, but it contrasts with the laryngealized [5?] in the nouns /to'/ 'container' and /tou'/ 'a traditional cooking kettle'.

¹¹ There is some variation in the pronunciation [ki ϵ] ~[kia]. But since there is no contrast between the phonemes $/\epsilon$ / and /a/ after /i/, and there seems to be more tendency for it to be pronounced as the latter, we have recommended the use of epsilon for the orthography.

Phoneme	Allophone	Grapheme	Oral	Nasal	Laryngeal	Nasal/
						Laryngeal
/wə/	[cm]	Di ui	k ui		p ui '	
			metal		buttock	
			dish			
/we/	[we]	⊡ e u e		_	z u e'	_
					wait	
/wa/	[wa]	ા દ ઘ દ		_	ch u ε'	_
					lift up	
/uɔ/	[uɔ]	Uo uo	munzuo	zuoŋ	zuo'	_
			ground	insult (v)	pain	
			nut			
/ua/	[ua]	Ua ua	pua		pua'	_
			fear		mushroom	
/oa/	[oa]	Oa oa		noaŋ	noa'	noaŋ'
				bite	build	custom
					(house)	

Table 13: Falling Diphthong Vowels

Falling diphthongs contrast with semivowels in consonant clusters. The semivowels y, \ddot{w} , and w sound similar to their vowel counterparts /i/, /u/, and /u/, but are pronounced more quickly. The table below illustrates this contrast.

Vowel	Falling	Vowel	Semivowel
Phoneme	Diphthong		
/i/	/iε/	ріε	рує
		two	wing
/w/	/wə/	ŋk ui	ŋkẅɨ
		I fry	bush country
/u/	/ua/	pua	pwa
		fear	lazy

Table 14: Falling Diphthongs vs. Semivowels

2.2.3 Vowel Orthography Rules

Various rules on which vowels can occur in which positions are important to learn. Some of the vital orthography rules are that:

- 1. Laryngealization is symbolized with an apostrophe and should always be written at the end of the word.
- 2. Nasalization is symbolized with an "ŋ" immediately after the vowel or vowels, and before the glottal stop when the vowel is also laryngealized. Example: kieŋ' *annoy*.
- 3. If you hear "ey", write "ei".
- 4. If you hear "ow", write "ou".

3. Tone

This is an important area of study that has not yet been concluded. It has not been studied in detail during this analysis, but is an area which will have to be considered during any future revisions of the orthography.

As an interim measure, we encourage the Bafanji community to begin writing without marking tone, making note of problems that arise which can be resolved in the course of further tone study.

Update 2016: A tone orthography proposal has been made and is detailed in Appendix A.

4. Word Division

4.1 The Verb

The subject pronoun is morphologically separate from the verb and is written separately, except for first person singular (homorganic nasal) which is written attached to the first verb of the verb phrase:

A chwo ŋgɨu mɨtaiŋ. 2Sg PROG SS.go market

He is going to the market.

But:

Ndei ŋkua' Le' Mɨŋkie nzɨu soŋ wɨ. 1Sg.want SS.go.up Ndop SS.see friend my I want to go up to Ndop to see my friend.

There is a phonological constraint against prenasalization on voiceless fricatives (f, s) in Chufie'. Verbs that begin with these consonants usually do not allow prenasalization, although all other word-initial consonants can be prenasalized. Normally this prenasalization is marked with either "m", "n", or "ŋ" (since it is always homorganic), but they are not written in the case of words that begin with a voiceless fricative, except in the case of the first person singular pronoun, which is always pronounced and always written, regardless of the generalization just made. See the following examples.

Nsoo le' ø-fee munzuo.

1Sg.move across compound SS.shell groundnut *I moved across home to shell groundnut.*

Ndei φ-soo lε' mbigi ŋgiu wu.

1Sg.want SS.move across compound before SS.go death *I want to move across home before going to the funeral.*

The symbol "ø-" is not written in the orthography. It is included here simply to show the absence of the expected homorganic nasal which marks that the subject of the verb is the same subject as was first mentioned in the phrase (same subject marker). Both of the examples given above show that the same subject marker is not written before the letters "s" or "f" because they are not pronounced in normal speech in Chufie'. However, the first example also shows that the first person singular subject pronoun (also a homorganic nasal) is written because it is pronounced in normal speech.

4.2 Compound Words

There are many words in Bafanji that are formed when two words come together to make a new one. Just like the meaning of 'blackboard' in English is not transparent, so the meanings of Bafanji compound words are not necessarily transparently related to the individual words of which they are made. An area where this is common is in the names of some snakes and plants. Compound words should be written together as one word.

geifye (literally 'fresh grass') green mamba snake

titwimbigi (literally 'red ant') a species of grass

ndimeŋ (literally 'senior child') babysitter

mbiŋfu (literally 'white money') cowrie shell

nchoondigɛ (literally 'mouth house') door, doorway

4.3 Reduplicated Words

Reduplicated words are another kind of compound word. In reduplication, one word is said twice which gives a different meaning from the word when it is said only once. Reduplication is found in nouns and verbs and should be written as one word. See the examples below.

nti'nti' dragonfly
nziŋziŋ darkness
ndindi smoke
chuchu ringworm
sisi thread

tutu take revenge

ndugundugu (be) straight, equal, perfect

ndanda (be) slow wuwu threaten

5. Coalescence

There are some pronouns whose vowel changes when attached to some words. The vowel of the word to which they attach may also change. Nouns, verbs, adverbs and relative pronouns can all be followed by pronouns. When a pronoun attaches to the end of one of these words, it follows consistant rules of coalescence. This means that when the root vowel and pronoun vowel come together with no consonant in between them, there is a predictable change in the pronunciation of the vowels, either of the possessive pronoun or of the root vowel or both.

In Bafanji, these words are written in their citation form with a hyphen between the main word and the pronoun. This is illustrated in 5.1 to 5.3 below.

5.1 In Noun Phrases: Possessive Pronouns (2sg, 3sg)

When there is no coalescence, the possessive pronoun is written as a seperate word. The table below shows an example of how each of the possessive pronouns should be written.

Person	Possessive	Orthography	Gloss
	Pronoun		
		kuna	pig
1sg	wi	kuna w i	my pig
2sg	-0	kuna-o	your pig
3sg	-е	kuna-e	his pig
1pl (dual.)	wu'	kuna wu'	your and my pig
1pl (exclusive)	w u gu	kuna w u g u	our pig
1pl (inclusive)	wieŋ'	kuna wieŋ'	our pig (all of us)
2pl	waiŋ	kuna waiŋ	your pig
3pl	gou	kuna gou	their pig

Table 15: Possessive Pronouns

Coalescence and elision are seen when the second person singular possessive pronoun /-o/ and the third person singular possessive pronoun /-e/ are suffixed to a noun. In the first case, the suffix /-o/ can be seen to change the root vowel. The table below shows the phonetic change in vowels where the root vowel is either i or a, though the orthography remains the same.

Root	Root	Orthography	Pronunciation	Gloss
Vowel	Vowel	Noun+'your'	Noun + 'your'	
Phoneme	Grapheme	-о	-ე	
/i/	i	mumbi-o	[mumbiɔ]	your goat
/8/	e	pe-o	[c3q]	your
				excrement
/a/	3	τε-ο	[taɔ]	your shoe
/w/	ŧŧ	k u -o	[kwɔ]	your
				eyebrow
/ə/	i	nd i -o	[rdɔɔ]	your truth
/a/	a	za-o	[ccz]	your odour
/u/	u	su-o	[ʃuɔ]	your fish
/ɔ/	0	ŋgo-o	[ŋgɔɔ]	your skin

Table 16: Coalescence in Second Person Possessive Pronouns

The third person singular suffix /-e/ can also undergo coalescence. In this case, the suffix vowel is affected, and the root vowel usually remains unchanged. The table below shows these phonetic changes.

Root	Root	Orthography	Pronunciation	Gloss
Vowel	Vowel	Noun + 'his'	Noun + 'his'	
Phoneme	Grapheme	-е	- 8	
/i/	i	mumbi-e	[mumbii]	his goat
/3/	e	pe-e	[pɛɛ]	his excrement
/a/	3	tε-e	[taa]	his shoe
/w/	ŧ	k u -e	[kwi]	his eyebrow
/ə/	i	nd i -e	[ndəɛ]	his truth
/a/	a	za-e	[zaa]	his odour
/u/	u	su-e	[ʃui]	his fish
/ɔ/	0	ŋgo-e	[ŋgɔa]	his skin

Table 17: Coalescence in Third Person Possessive Pronouns

There needs to be further investigation into compound pronous (i.e., pɨgɨ-a 'we and he') to obtain a complete set of the combinations and their corresponding pronunciations. Again, any combinations where the second or third person pronoun is suffixed, will likely result in coalescence and will follow the pattern of pronunciation based on root vowel given above.

5.2 In Verb Phrases: Direct Objects

Similarly, the second and third person direct object pronouns, /-o/ and /-e/ respectively, also undergo coalescence. The vowel changes are exactly the same as those demonstrated above with nouns and possessive pronouns. The tables below demonstrate the orthography and pronunciation of direct object suffixes with verb.

Root	Root	Orthography	Pronunciation	Gloss
Vowel	Vowel	Verb + 'you'	Verb + 'you'	
Phoneme	Grapheme	-о	-ე	
/i/	i	pi-o	[ciq]	birth you
/8/	e	ge-o	[ς3γ]	have you
/a/	3	ηε-ο	[naɔ]	show you
/w/	ŧ	3 u -o	[ʒɯɔ]	sweep you
/ə/	i	zi-o	[ccz]	slap you
/a/	a	na-o	[naɔ] ~ [nɔɔ]	allow you
/u/	u	tu-o	[tuɔ]	pay you
/ɔ/	0	ko-o	[kɔɔ]	tie you

Table 18: Coalescence in Second Person Direct Objects

Root	Root	Orthography	Pronunciation	Gloss
Vowel	Vowel	Verb +	Verb + 'him'	
Phoneme	Grapheme	'him'	- 8	
		-е		
i	i	pi-e	[pii]	birth him
3	e	ge-e	[γεε]	have him
a	3	пε-е	[naa]	show him
ш	u	зu -е	[ʒwi]	sweep him
ə	i	zi-e	[zəɛ]	slap him
a	a	na-e	[naa]	allow him
u	u	tu-e	[tui]	pay him
Э	0	ko-e	[kɔa]	tie him

Table 19: Coalescence in Third Person Direct Objects

5.3 With Grammatical Words

Finally, grammatical words at the beginning of clauses can combine with the second and third person subject pronouns, /-o/ and /-a/ respectively, to create other patterns of coalescence. A few examples are given below.

Orthography	Pronunciation	Gloss
Verb + 3sg	Verb + 3sg	
-a	-a	
f i -a	[faa]	the place he
nd i -a	[ndaa]	the time he
t i -a	[te]	since he
ke-a	[kea]	or he
no-a	[naa]	thing he

The coalescence of the second person pronoun with grammatical words is less common, but also possible. See the example below.

Ŋka zi yʉ' fi-o giu pi.

I.NEG know place where.you go NEG

I don't know where you are going.

An important set of exceptions to this rule are the frequently used indirect object marker "mbwo" as seen below:

```
mbwo - to you (sg.)
mbwe - to him
mbwo ma - to me
mbwo pou - to them
etc...
```

Further study needs to be done on the vocative suffix /-e/ which can be attached to many words.

In the case of laryngealized words which end with an apostrophe, no hyphen is written, but the pronoun is added after the apostrophe.

fa'e his work

lε'e his compound

tou'e her thigh

6. Punctuation and Capitalisation

The punctuation marks and rules for punctuation and capitalisation suggested for Bafanji are similar to those of English. The following punctuation marks are suggested to be used:

```
Full stop (.)

Question mark (?)

Exclamation mark (!)

Comma (,)
```

Quotation marks ("...")

The use of each of these will be discussed below. Other punctuation marks, such as the colon (;), semicolon (;) or ellipsis (...) may be adopted to the Bafanji orthography later if deemed necessary.

6.1 Capitalisation

Capital letters are used in two ways.

1) In the beginning of a sentence:

Mbii ndain ntou' nki. 1Sg.P1 SS.pass SS.fetch water

I passed to fetch water.

2) In proper nouns:

Le' Fie' - Bafanji

Mbaangan - name of quarter

Kwei' Hon - Ngumba

Le' Mɨŋkie - Ndop/Bamunka

6.2 Full stop

Full stop is written at the end of a sentence. (Usually before there is a change of the subject of the verb.):

A giu ndige ntuu.

2Sg. go house advice

He went to school.

Pou chwo fi ndige no pigi.

3Pl. PROG thatch house with thatching grass *They are thatching the house with grass.*

Ŋoon chwo nkua' tan no liu milou'.

person PROG SS.go up palm tree to tap wine

The man is climbing a palm tree to tap wine.

6.3 Question mark

Question mark is written at the end of an interrogative sentence. Because there is a potential for the question mark to obscure a glottal stop, a space is inserted before the question mark:

O fi ki yi mitain?

2Sg. give what me market

What are you giving me from the market?

Mma men la fi? mother child DM where *Where is the child's mother?*

O giu fi?

2Sg. go where

Where are you going?

Ma nzu ki?

1Sg.F1 F1.eat what

What will I eat?

6.4 Exclamation mark

Exclamation mark is written at the end of a command or an exclamatory word or phrase. It expresses interjections, surprises, excitement and forceful comments as well as simple commands:

Fei mbi! Nchwo soo zyendigε.
exit outside 1Sg.PROG wash floor
Go out! I am washing the floor.

Ŋga! – *No!*

Nziu ndaa ηgyε ndeŋ' pwo le!

1Sg.see really antelope large hand there

I saw a very large antelope over there!

6.5 Comma

Commas are used to separate clauses within a sentence or words in a list:

Ndii pε', nyoon ŋooŋ zu ze a now like this man who eat thing him mila' tiu'e la. mbon' tiu'e. \mathbf{a} ze alone DM he F1.strike fight alone him Now, he who has eaten alone will fight alone.

Mo', pie, tii, kwi, ntain. - One, two, three, four, five.

6.6 Quotation marks

Quotation marks are written at the beginning and end of direct speech:

Mumbi ngie', "O ziu nyoon le?" goat P2.say you see thing there?"

The goat said, "Do you see that thing there?"

A gie', "A ŋgwe."

3sg says 3sg leopard

He says, "It's a leopard."

Note that another punctuation mark is always written before the opening quotation mark to separate it from the preceding text. If the end of the quotation is also the end of the sentence, the full stop is written before the closing quotation mark.

7. Need for further testing of the orthography

Any orthography needs people to use it for a time before potential problems reveal themselves. It is our hope that this proposal will be a significant step in process of developing the Bafanji language. However, it must be known that this orthographic statement is incomplete and that revisions will take place.

Bibliography

- Achotia, Bridget. 2005. *Bamali Orthography Statement*. Yaoundé: NACALCO, MS.
- Dieu, Michel and Patrick Renaud. 1983. Situation linguistique en Afrique centrale. Inventaire préliminaire: Le Cameroun. Paris-Yaoundé: ACCT-CERDOTOLA-DGRST.
- Gordon, G. Raymond. 2005. *Ethnologue: Languages of the World*. Dallas, Texas: SIL International.
- Hamm, Cameron and Valerie Hamm. In Progress. *A Phonological Sketch of Bafanji (Chufie')*. Yaoundé: SIL, MS.
- Hombert, Jean-Marie. 1980. Le groupe noun. In Larry M. Hyman and Jan Voorhoeve, eds. (1980) *Les classes nominales dans le bantou des Grassfields*. L'expansion bantoue 1, Numéro spécial 9:143-163. Paris: SELAF.
- Koopman, Hilda and Murat Kural, eds. 1994. *Aspects of Nchufie Grammar*. UCLA Occasional Papers in Linguistics, v.14.
- Njeck, Mathaus. 2003a. *Bangolan Orthography Guide*. Yaoundé: NACALCO.
- Njeck, Mathaus. 2003b. *A Phonological Sketch of Bangolan*. Yaoundé: NACALCO.
- Njeck, Mathaus. 2005. Baba 1 Orthography Guide. Yaoundé: SIL.
- Seguin, Lawrence and Joseph Mbongue. 1994. *Première évaluation globale de la situation sociolinguistique à Bafanji*. Yaoundé: SIL.
- Simpson, Hazel. J. 2006a. A phonological sketch of Bamukumbit (Mangkong) Language. Yaoundé: SIL.
- Simpson, Hazel. J. 2006b. *Bamukumbit (Mangkong) Orthography Guide (Provisional)*. Yaoundé: SIL.
- Sorsamo, Hannu. 2006a. An Introduction to the phonology of Bamunka. Yaoundé: SIL.
- Sorsamo, Hannu. 2006b. *Bamunka Orthography Guide (Provisional)*. Yaoundé: SIL.
- Tadadjeu, Maurice and Etienne Sadembouo (eds.). 1979. *General Alphabet of Cameroon languages*. PROPELCA 1. Yaounde: University of Yaounde.

Appendix A

Tone Orthography Proposal (December 2015)

Summary: Lexical tone is proposed only in verbs and in the contrast between the first person singular pronoun and the pronoun for same subject. All other lexical tone is unmarked. Five grammatical categories are marked, not their actual tone melodies.

Lexical tone

In preparing the analysis for tone contrasts, only basic words were used, that is, words that were made of more than one root (compound words) or borrowed from other languages were excluded from the analysis. There are four main tone patterns (or melodies) for nouns in Chufie': H, L, HL, LH. Although there are eight words with LHL and eleven words with HLH tone pattern, these seem to be exceptions¹², and are rare in comparison to the other patterns (H: 164 L: 183 HL: 128 LH: 125).

Nouns¹³: when comparing tonal minimal pairs between the four main tonal melodies, no one contrast is particularly infrequent, so either all melodies should be marked, or none marked. Compared to these, there are very few minimal tone contrasts involving the HLH or LHL melodies (see charts below). After examining the potential for ambiguity if none of these melodies are marked, it was found to be unlikely to have much ambiguity, thus, lexical tone in nouns is proposed to be completely unmarked. This avoids graphic overload, letting proposed tone marks (see grammatical tone below) be more significant when they appear.

Tonal melody contrasts:

	Н					
Н	X	L				
L	19	X	HL			
HL	8	13	X	LH		
LH	14	11	11	X	HLH	
HLH	0	0	1	0	X	LHL
LHL	2	1	0	0	0	X

¹² The exceptions appear to be mainly from two sources: nouns derived from verbs which can allow three tones on one syllable, and reduplicated nouns whose tone is also reduplicated or otherwise perturbed in the process.

¹³ There are more than nouns in this group. Here and in the rest of this tone proposal, 'noun' includes all classes of words except verbs.

Number of contrasts per melody:

Number of	for this melody	
43	Н	many
44	L	many
33	HL	many
36	LH	many
1	HLH	very few
3	LHL	very few

If there is no lexical tone marking in nouns: the semantic ideas of words that would be homonyms are sufficiently distinct that it would be rare to have true ambiguity in the context of a sentence.¹⁴ Word order also disambiguates many potentially ambiguous areas. This will need further observation and if necessary, may need to be adjusted, once it has been used within the community.

Proposal for lexical tone in nouns: The first person singular (1SG) subject pronoun in narrative tense and the consecutive/same subject marker (SS) are a tonal minimal pair with high functional load. It is proposed to mark the 1SG subject pronoun as (m: n: ŋ:) with colon to distinguish it from the SS.¹⁵ This is the only lexical tone mark proposed in word classes other than verbs.

Verbs: Lexical tone in verbs has a very high functional load, because verbs have two tone classes, H and L and there are many minimal pairs (50+ pairs when looking at 580 basic verbs).

Proposal for lexical tone in verbs: Since no nouns are being marked for tone, all verbs will be marked for lexical tone, according to its tone class.

Pedagogical information: Since there are a number of factors which influence the final pronunciation of pitch in a verb phrase, it is not always easy to know what the lexical tone of a verb is. A suggestion is given here for teachers and writers to work out which tone class a verb belongs to, and therefore, which tone mark to use when writing. One can use the frame: a ka [VERB] 'he has already [VERBed]'. Some students will also find it helpful to memorize the tone and diacritic on two key words: mì (swallow) kúa' (go up). The motivation for these key words is that when you swallow, the substance goes down, so the mark also points down. Similarly, moving along a path where you are going up hill, the mark points up. ¹⁶

¹⁵ Should this difference be judged to require more explicit marking in the future, the same subject marker could be marked with a circumflex (\hat{n} , over the nasal consonant (\hat{n} , \hat{n} , \hat{n}).

¹⁴ Since language is for communication, a sentence is sufficient context to disambiguate – anything less than that would be in the context of teaching, accompanied by reading of the text by a teacher, which would disambiguate any orthographic ambiguity.

¹⁶ Ideally, the key words would avoid words with glottal or two vowels to keep the key words as simple as possible with respect to syllable shapes, however these have proved effective in teaching a few key writers how to write verbal lexical tone.

Some conventions for use of the verbal lexical tone marks:

- the lexical mark is written on the first vowel of the verb root
- in partially reduplicated verbs such as *titíŋ* -stand, *chichwó* -sit, *ninùŋ* –lay down, *tityè* -stumble (partial reduplication means that the verb root is preceded by a prefix consisting of the first root consonant plus the vowel i): The mark should be written on the first vowel of the verb *root* (not the first vowel of the word) because this will enhance similarities between the partially reduplicated forms and the regular forms of these verbs. The regular forms of these verbs have a meaning of the state of standing, sitting, etc, while the partially reduplicated forms imply body movement from one position to another.
- when verbs are fully reduplicated, the mark will be written twice (once on both verb roots): kwɛ̃'kwɛ̃' (look.FOC)
- when a verb is functioning as an attribute or is nominalized, it is not marked for lexical tone

```
gan kwei tansi
owners take tax
'tax collectors'
kwa'two
think.head
'thought'
gan nton pe
owners send his
'his disciples'
```

Grammatical tone

There are five grammatical categories which consist solely of a tonal morpheme (no segmental information exists with any of these morphemes in any context). These grammatical morphemes need to be accounted for in the orthography. The marks used are shown below with sentences which show the mark in the context of a sentence. In both the example sentence and the English translation, the mark in question is shaded in grey.

1. < Far past (P3), placed directly *before* the first element of the noun phrase which functions as the subject of a clause.

```
< Yeso nfèi ndige luon Mbou'mbi ngìu ndige Saimu.

P3. Jesus left the synagogue and went to the house of Simon. (Luke 4:38)
```

Kie' <a nchwo nchán nchoo nka' ngwo chiu la, nzíu kie' pou táin kwu noon ngìu twéitwéi.

As P3.he was reaching at the gate of the village, he saw that they carried a dead man going to bury. (Luke 7:12)

2. > General future (F0), same as above, placed directly *before* the first element of the noun phrase which functions as the subject of a clause.

Nchinchye tu-a a ka zúŋ miteeŋ soŋ' la, > pou ŋkíu', mè' ŋgua' muoŋ. Any tree that does not bear good fruits, F0. they will cut down and throw in fire. (Luke 3:9)

Kee mbúa, kɨ ŋge píŋ nzua', > meŋ-o ndùu.

Don't be afraid, only have faith, your F0.child will be well. (Luke 8:50)

3. Conditional clause marker, placed *on top* of the <u>first letter of the first word</u> in the conditional clause.

Ō mbí Meŋ Mbou'mbi, o sì ŋgua' yi' a chú' mble. COND.If you are the Son of God, change this stone to become bread.

4. = Hortative mood marker, placed directly *before* the first element of the noun phrase which functions as the subject of a clause.

Ma ŋgaŋ fa' Mbaandeŋ'. = A pɨ kie' o chú la. I am God's worker. HORT.Let it be as you said. (Luke 1:38)

 $\bar{\eta}$ oon η kw \hat{u} ná η g \hat{w} e-e k \hat{u} gé me η , = nzi η -e l \hat{u} a η kuu-e mbí pai η no mbwo-e. *COND.If someone dies and leaves a wife without a child, HORT.the brother should take his widow and deliver children with her for him. (Luke 20:28)*

5. » Imperfective aspect marker, placed directly *after* the verb which is in the imperfective form.

< A ŋka chwo nfèi ndigɛ Mbou'mbi pi, a ŋki nchwó» hou nzì ŋki, ndúoŋ» Mbou'mbi nooŋ pou tu'.

She was not leaving (PROG) the house of God, she was only staying. IPV there (in a state of) fasting and she was praying. IPV to God day and night. (Luke 2:37)

Yi' kɨntye no-a ya n:zóu'» ntye-o? What kind of thing am I hearing. IPV about you? (Luke 16:2)

The reason that the first four are not marked directly on the verb is that the tonal effects of these tense, aspect, and mood (TAM) markers often extend leftward to affect the subject of the clause (the imperfective marker only affects the tone on the verb itself, as it is a H tone suffix to the verb). Since the subject of the clause is where a hearer picks up the first auditory clues of the above tonal TAM markers when such an utterance is spoken, this is where we have chosen to place the grammatical marking. In this way, the reader gets the grammatical clue early enough in the sentence to read it correctly the first time. This strategy has been proposed in at least two other language communities in the North West Region of

Cameroon (Bambalang and Pinyin), and has great potential in Bafanji to reduce the effects of rereading sentences due to grammatical ambiguity.

Complicated examples:

It is possible that more than one lexical or grammatical tone could appear with a word, or one could find a number of the proposed marks in close proximity. The following examples illustrate different kinds of combinations or strings of the proposed tone orthography in actual sentences. In cases where it is helpful, a morpheme-by-morpheme interlinear translation of relevant words is given.

Two grammatical marks at the head of a noun phrase:

Ndwo mè' fee two-o! $> \bar{N}$ ziŋ-o nchwèe no puu, = o síɛ'e. $> \bar{A}$ nsì ŋgu no-e, = o lìeŋ pipuu-e.

FUT.COND.brother-your FUT.COND.he

Be careful! If your brother will do a bad thing, you should rebuke him. If he will accept his fault, you should forget his sin. (Luke 17:3)

Four marks in close succession (three grammatical marks and one lexical):

Nchinchye ngwo-a pou ka kón' wain la, > pain ngiu nfèi» hou, = pain kùn
pupugu-a no mikoo main la, mè' hou no nè ngie' Mbou'mbi ka pi son' pou-a pou
pi.

Any country that does not house you, when FO.you are leaving(Low). IPV from there, HORT. you should shake the dust that is on your feet and throw it there to show that God is not fine with them. (Luke 9:5)

Three other marks in close succession (two grammatical and one lexical):

Chwee yoonzu ndiinkoo mbwo ma, me' minzwi son', nfi yoonzu pou = n:zú, nnó, o pigi nzú zo nnó?

HORT-1SG-eat(Low)

Prepare the evening meal for me, wear good clothes, give me the food so I should eat and drink before you eat and drink your own. (Luke 17:8)

There are no examples of hortative (=) and far past (<) or hortative and general future (>) co-occurring on the same subject noun phrase.