Bangime semivowel y: an audio tour

Bangime has an unusual glide (semivowel) q. This is the IPA symbol for a high front rounded semivowel, similar to that in French words like *huit* [qit]. It does not occur in Dogon, Songhay, or (to our knowledge) in Mande languages of the zone. However, it does occur in the neighboring cliffs dialect of Bozo-Jenaama as spoken in Kargué and Namagué villages.

The known Bangime words that include this semivowel are listed below. There are several nouns (1), a few verbs (2), but no adjectives, numerals, affixes, or grammatical particles. Transcriptions are for prepausal (e.g. isolation) pronunciations, manifested in this sample in the form of prepausal tone-dropping on the final syllable of underlying M-toned $/C\bar{v}C\bar{v}/$ (1a,c,d,o-q,s; 2a,i,j). Tones are irrelevant to the articulation of η and can be disregarded here.

(1) Nouns

nitial (including <i>Cy</i> clusters), n=7					
	sųīì	'grain-based meal' (could also be analysed as /sqījī/)			
b.	ųìjє̀	'moon'			
c.	<i>uījè</i> (1 of 2)	'water'			
d.	<i>ųījè</i> (2 of 2)	'day-night transition' in $q\bar{i}j\bar{\epsilon}$ [\emptyset $k\bar{u}w^n$ δ] 'night fell'			
e.	<i>yèbè</i>	in: $\psi = [\emptyset \ k\bar{u}w^n]$ it was just before nightfall'			
f.	<i>ų</i> èèrí	'drinking glass' (< French verre)			
g.	<i>ųàà</i>	'price'			
h.	$y \partial w^n$ (rounding of	'rain (n)' $ q $ is clearest in definite $ \bar{a} q \bar{b} w^n $ 'the rain')			
intervocalic, n=11 (or 10, excluding 'shell; tree bark')					
i.	ἀ χύηέ	'earth, country, mud'			
j.	& ùy& (1)	'dream (n)'			
k.	œùy è (2)	'néré tree (Parkia)'			
1.	súųé	'breast'			

	m.	sùyè	'chicken'	
	n.	tùyè	'ashes'	
	0.	<i>kūψὲ</i> (1)	'calabash'	
	p.	<i>kūų</i> è (2)	'shell; tree ba	ark'
	q.	пйцѐ	'balsam-spur	ge shrub (<i>Euphorbia</i>)'
	r.	ŋúη ⁿ έὲ	'song'	
	S.	sūųì	'stuttering (n)'
(2)	Ve	rbs (shown in	3Sg perfectiv	e form with $k\acute{o}\acute{o}\acute{g}$).
initial,		3 (or 1, excludi kóó [ń ųījè]	ing 'buy' and	'(rain) fall') 'he/she ascended'
	b.	kóó [ń yàà-rà]	'he/she bought', cf. noun 'price' (1g)
	c.	kóó [ń yōm-b (rounding of	-	'it rained', cf. noun 'rain' (1h) n perfective-2 $\eta \partial - w^n$ 'it rained')
intervo		ic, n=6 (5 excl		
	d.	kóó [ŋ́ gùyèr	È]	'he/she wove (rope)'
	e.	kóó [ý nùyèn	tà]	'he/she went in and came out the other end'
	f.	κόό [ή ηὰη ⁿ ὲ-	-rɛ̃]	'he/she sang', cf. noun 'song' (1r)
	g.	kóó [ý tùyè-r	<i>È]</i> (1)	'he/she carried on head'
	h.	kóó [ý tùyè-r	$\hat{\varepsilon}J(2)$	'he/she transplanted, grafted'
	i.	[à yòw ⁿ] kóó	[ý ų̄ɔm-bɔ̀]	'it rained, the rain fell', cf. noun 'rain' (1h)
	j.	kóó [ń sūyè]		'he/she descended'

(2d) and (2e) have also been heard with j instead of η , the distinction being phonetically subtle. In the case of '(rain) fall' (2c), the rounding of η has been heard most clearly in perfective-2 $\eta \partial - w^n$, as opposed to perfective-1 $k \delta \delta [\eta \eta \bar{b} m - b \delta]$, where the flanking

rounded vowels mask the rounding of η . This verb also has inflected forms beginning #qu, including imperfective $\eta \hat{u} - w^n \hat{\sigma}$. This transcription is "correct" as underlying form, but it is heard as [$j\hat{u}w^n\hat{\sigma}$].

The breakdown by position (initial versus intervocalic) and by quality of adjacent vowels, combining nouns and verbs (including verbs with variable $\psi \sim j$), is in Table 1 below. Pairs involving phonologically related nouns and verbs ('rain' and 'rain fall', 'buy' and 'price') are counted as singletons. 'Calabash' and 'shell; tree bark' may be the same lexical item and are counted here as a singleton. However, homonyms ('carry on head' and 'transplant, graft', 'water' and 'day/night transition', and 'dream' and 'néré tree (*Parkia*)') are counted as distinct items. Nasalized ψ^n in 'sing'/'song' is not distinguished in the numbers from ψ .

Table 1

initial	8	$\#_i(\text{or }\#C_i)$	5
		#_ <i>e</i>	1
		#_ E	1
		#_a	1
intervocalic	15	# <i>Cu</i> _ε	13
		# <i>Cu_e</i>	1
		#Cu_i	1

The opposition i versus u is effectively neutralized after initial q and before intervocalic q. There are no cases of initial #qu... (other than underlying forms of 'rain fall' where q is realized as j), and no cases of intervocalic #Ciq... However, in $s\bar{u}q$ i (1h) the word-final i is clearly unrounded.

In initial position, there is a preference for a following i (5/7) or less often another other front vowel (2/7). The exceptions are a pair of examples each with a and o, but each pair consists of a verb and a cognate noun ('rain' and 'rain fall', 'price' and 'buy'), so each pair reduces to a single root. $u \partial w^n$ 'rain' can sound like $[j \partial w^n]$ with unrounded semivowel j in isolation, but in the definite form the rounding in u is audible (and the lip-rounding visible) after the low vowel of definite proclitic u.

(3)	$\bar{a} \ q \bar{b} \hat{w}^n$ 'the rain'	
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In the relatively numerous # η i... examples, the rounding extends phonetically in part to the *i*, so $\eta ij\hat{e}$ 'moon' is heard as something close to $[\eta\hat{y}]\hat{e}$. The phonetics, and the analysis, are complicated by that fact that all of the initial # η i... examples are either followed by unrounded palatal semivowel j or else (in 'grain-based meal') have long ii which (in Bangime) is not distinguishable from underlying /iji/.

The intervocalic examples all involve preceding u and following ε , less often another front vowel i or e. The preceding u has a fronted articulation, e.g. superimage is approximately [syue]. One could therefore consider the possibility of reanalysing the "u" as /i/ before intervocalic u.

The stems in (4) show that w and j can also occur in $\#Cu_{\epsilon}$, and that initial #wi and #ju contrast with #yi.

(4)	a. <i>ɲùwɛ̂</i> 'fat (n)'	,
	b. <i>pújé</i> 'wife'	
	c. wàà&íbí 'obligation'	
	d. kóó [ń wìndɛ] 'he/she wrote	,
	e. <i>kóó ý jūm-bà</i> 'he/she danced	1'

When initial q is followed by a nonhigh vowel (qe, qe, and especially qa, qo), q can be heard with a labialized release, as in (1g-h) above. That is, the lip rounding extends beyond the retraction of the palatal approximation of the blade of the tongue. A low-level phonetic transcription [j^w] or [q^w] roughly captures this.