

A Note on the Phonemic Status of [ə] in Biao Min Yao

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In Solnit 1985 I presented the rhyme system of Biao Min as:

a	ai	au	an	ən
ə	əi	əu	ən	
ɛ			(y)ɛn	~ ɛŋ
i			in	
ɔ				ɔŋ
u	ui		un	uŋ

There is also a sequence [-iu] which is analyzed as medial plus simple vowel: /-yu/.

It is evident that the phonetic rhymes [ai əi] could be phonemic /ei ɔu/. Mao, Meng & Zheng (MMZ) make this choice for [ai]=/ei/, as shown by the cited forms (p.67-9) ʔei<sup>1</sup> 'vine', hɔwei<sup>7</sup> 'child', bei<sup>5</sup> 'hot', and mei<sup>2</sup> 'you'. The only instance in MMZ of the corresponding rhyme with back vowel element is lɔəu<sup>4</sup> 'successful, complete action' (Mandarin le). Finally MMZ have a sequence -wei in ko<sup>4</sup> dwei<sup>3</sup> 'tail', but this may be a misprint: I have kɔ<sup>4</sup> dwai<sup>3</sup> for this word (the choice of o vs. ɔ is unimportant).

Of the remaining rhymes with ə, -ən can be assimilated to the vowel ɔ: /ɔn/= [ən]. The unrounding before -n has a parallel with u after labials; /un/→[un] / [+labial] \_

Thus all except the simple -ə can be assimilated to rhymes with ɛ and ɔ (while we are at it, we could also write these /e o/, there being no contrast ɛ/e or ɔ/o). Examining the distribution of -ə brings out several interesting points.

1. the rhyme -ə occurs after

w, initial and medial  
 l, medial only  
 p  
 m

and not after simple (non-cluster) dentals, prepalatals, or velars.

2. the rhyme -ɔ occurs with all simple initials *except* p, b and m. So we seem to have complementary distribution, with ɔ following aspirates, ə following 'plain' stop and nasal, and neither occurring with voiced stop:

	p	ph	b	m	hm
ə	pə	-	-	mə	-
ɔ	-	phɔ	-	-	hmɔ

3. However, both -ə and -ɔ occur with medial -l-, e.g.

klə<sup>1</sup> rainbow                      blə<sup>2</sup> chest  
 klɔ<sup>1</sup> horn                              blɔ<sup>3</sup> thin (not thick)

4. /ou/ (formerly -au) does not occur with medial -l-. This makes it possible to eliminate a as a phoneme altogether:

[pə] = /po/  
 /pho/ = [phɔ]  
 [mə] = /mo/  
 /hmo/ = [mɔ]  
 /plo/ = [plɔ]

/plou/ = [plə]

In other words, phonetic [-ə] after labials is really /-o/, and after medial /l/ it is really /-ou/.

This reanalysis has some historical backing. BM [-a] generally corresponds to Yu Mien (YM) back rounded vowels followed by ŋ:

	BM	YM	
fly (n.)	ma <sup>4</sup>	mun <sup>4</sup>	
rain	bla <sup>4</sup>	byun <sup>6</sup>	
rainbow	klə <sup>1</sup>	cun <sup>1</sup>	
pig	twa <sup>4</sup>	tun <sup>4</sup>	
deaf	dwa <sup>1</sup>	dun <sup>1</sup>	
room	pə <sup>2</sup>	pun <sup>2</sup>	(房)
towards	hwa <sup>5</sup>	hun <sup>5</sup>	(向)
thick (liquids)	nwa <sup>2</sup>	non <sup>2</sup>	(濃)
forehead	plə-	pyŋ <sup>2</sup>	

('forehead' is the first syllable of a compound, plə-tau<sup>2</sup>, and so occurs only in the sandhi tone, phonetically equal to tone 7)

Comparative data also shows that the factor conditioning the allophone [ɔ] was originally not aspiration, but final stops, a less unusual feature:

	BM	YM	
tree	hmɔ <sup>4</sup>	-	Ch. 木 muk
hail	phɔ <sup>4</sup>	po <sup>8</sup>	
six	klɔ <sup>7</sup>	cu <sup>7</sup>	
finger	dɔ <sup>7</sup>	du <sup>7</sup>	
few	tshɔ <sup>4</sup>	tsu <sup>8</sup>	

Thus the general development after labial initials and medial is \*uŋ > ə, \*uk > ɔ. The final stop also causes aspiration of \*voiced initials, then disappears, leaving the aspiration as the apparent factor conditioning the complementary variant [ɔ]. Actually the aspiration and the vowel distribution are both effects of a vanished cause.

References

- Mao Zongwu, Meng Chaoji, & Zheng Zongze. 1982. *Yaozu yuyan jianzhi* [Brief account of the languages of the Yao people]. Beijing: Minzu Chubanshe.
- Solnit, David B. 1985. Introduction to the Biao Min Yao language. *Cahiers de Linguistique Asie Orientale* XIV #2, 175-191.