CONTRASTIVE VOWEL LENGTH IN MIENIC: INHERITANCE OR DIFFUSION?

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1 Majority opinion

The Hmong-Mien (=Miao-Yao) family has two branches: a larger and more complex Hmongic branch, comprising the languages Hmong, Pu-Nu, A-Hmao, Hmu, Qo Xiong, Pa-Hng, and Ho Ne, among others, and a less-diversified Mienic branch, which includes the languages Mien, Mun, Biao Min and Zao Min (Niederer 1998). No language in the Hmongic branch has contrastive vowel length, nor do the Biao Min and Zao Min languages of the Mienic branch. On the basis of vowel length contrasts in dialects of the Mien and Mun languages alone, however, the majority view is that vowel length should be reconstructed for the ancestor language of the entire family, proto-Hmong-Mien (pHM). For example,

1. Purnell (1970) reconstructed both /a/ and /aː/ before /p, t, m, ŋ, i, and u/ at the proto-Mienic (pM) level, and carried the contrast up to the pHM level.

2. Downer (1982) also reconstructed the /a/–/aː/ contrast, and held out the hope that reconstructing more length contrasts could help clear up some of the difficulties in linking Mienic rimes with the severely reduced number of Hmongic rimes: "Since it is necessary to project the Yao length distinction back into [pHM] (but not [pH]) for the low vowels, a further assumption might be made: that [pHM] possessed similar length distinctions with other vowels. Such an assumption could then explain some other cases where a single Miao rime corresponds to two different Yao rimes ..." (p. 5). But careful study reveals no evidence that pHM vowel length played a role in the patterns of merger into pH: the quality of nuclear and peripheral vocalic elements alone seem to have determined the outcome of these mergers (Ratliff 2002). This does not constitute proof against pHM vowel length, but neither is there support for it here, as Downer had hoped there might be.

3. To account for their 210 rime correspondence sets (several with only one member), Wang and Mao (1995) rather artificially reconstructed vowel length in pHM whenever a word was recorded with a long vowel in any dialect. Length is reconstructed before stop and nasal codas, *i and *u (with many gaps) for all fifteen of the basic vowels in their proto-inventory (*i, *ɪ, *e, *ɛ, *æ, *a, *A, *ɐ, *ɒ, *ɑ, *ɔ, *o, *ʊ, *u, *ə). But as they point out in the introduction (p. 15), only dialects of Mun exhibit length contrasts in vowels other than /a/.

Reconstructing vowel length is a reasonable idea, especially since Mienic typically conserves rime contrasts which have merged in Hmongic. But for Purnell, the conven-

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ience of setting up pHM rimes as equivalent to pM rimes (including the length contrasts) " … is merely an attempt to organize the large number of [pHM] final correspondences in a way that would facilitate further investigation … [i]t is "not meant to imply that [pM] has preserved the [pHM] final system … intact" (1970:183). Nonetheless, most have proceeded under the assumption that it has.

2 Minority report

However, Theraphan L-Thongkum (1993:193) reconstructs the length contrast in [a] in Mienic as a vowel quality difference at the pM level: *ə > a, *a > aː. Taking the view that the contrast was one of quality, not length, at the pM level would clearly remove motivation for the reconstruction of length at the even earlier stage of pHM.

Although this is a different solution to the vowel length problem in HM, it is of importance that scholars working on neighboring languages in the diffusion area of Southeast Asia have come to similar conclusions about the origin of vowel length in other families. Graham Thurgood (1999) reconstructs *ə and *a as the source for /a/ and /aː/ in proto-Chamic (a mainland Austronesian group). Li Fang Kuei (1977) reconstructed quality contrasts as the source for length contrasts in proto-Tai, a branch of Tai-Kadai (his discussion of the fleeting nature of vowel length contrasts in Tai could be transplanted wholesale into an account of vowel length in Mien-Mun), and Weera Ostapirat (2000) reconstructs quality contrasts as a source for length contrasts in proto-Kra, another branch of Tai-Kadai (Gelao, Lachi, Laha, Paha, Buyang, Pubiao). Matisoff (2003) reconstructs vowel length contrasts in closed syllables for proto-Tibeto-Burman, while noting that "contrastive vowel length must have been an inherently unstable feature in TB" (p. 244).

For Chinese, on the other hand, Norman (1988:217) points out that length contrasts must have been present in proto-Yue (the subfamily to which Cantonese belongs), since length in closed syllables (giving rise to the *rù* tone) conditioned a tone split in the voiceless series. There is no clear consensus on whether or not vowel length should be reconstructed for either Middle Chinese or Old Chinese.

3 Building the case for length as a relatively recent development

3.1. *Phonemic length and lexical borrowings*

In the Southeast Asian linguistic area, vowel length is contrastive in closed syllables in (at a minimum) Mienic, Tai-Kadai, and languages of the Yue branch of Chinese. Today, Mien speakers in Thailand are in contact with vowel-length languages Standard and Northern Thai (Purnell 1965:3 and L-Thongkum 1993:193). In the provinces of Hunan, Yunnan, Guangdong, Guizhou, Jiangxi, and the Guangxi Zhuang Autonomous Region, Mien and Mun speakers live among Tai vowel-length language speakers (most notably Zhuang) and Chinese. On Hainan Island, Mun speakers are in a contact situation with (among others) speakers of two languages with contrastive vowel length, Hlai (Li) and Cantonese.

At all levels, as pointed out by Kosaka (2002), loanwords with long vowels seem to outnumber native words with long vowels in Mienic, whether or not they have long vowels in the source languages. This suggests that the development of vowel length in Mienic may have been facilitated by the borrowing of (1) words from languages with contrastive vowel length (where length was borrowed along with the word), (2) words from languages with "heavy syllables", interpreted by speakers of Mienic languages as containing long

vowels, and (3) words likely to serve as syntactic heads, thus susceptible to stress and lengthening (see below).

In these loanwords, length appears sporadically across Mienic dialects. The variation is likely to be due both to different immediate loan sources, and to different prosodic systems in the borrowing dialects. For example, if a loan from Chinese has an [aː] in Mien, it does not consistently have a long vowel in Mun, even though length carries a higher functional load in Mun than in Mien. See the two tables below for contrasting patterns of length correspondence (Mien data from Downer 1973 and Mun data from Shintani and Yang 1990):

Mien long: Mun long

Chinese	gloss	Mien	Hainan Mun
yāng	seedling	ʔjaːŋ 1	zjaːŋ 1
bēng	thief, burglar	tsaːʔ 8	taː 6
mǎi	buy	maːi 4	maːi 4
bài	be defeated	paːi 6	ʔbaːi 4
kě	thirsty	gaːt 7	gaːt 7
gē	cut, mow	kaːt 7	kaːt 7 (Liangzi)
gān	sweet	kaːm 1	kaːm 1
sān	three	faːm 1	taːm 1, 5
yā	duck	ʔaːp 7	ʔaːp 7

Mien long: Mun short

Chinese	gloss	Mien	Hainan Mun
làng (fèi)	waste time	laːŋ 6	laŋ 3
zhēng	evaporate	tsaːŋ 1	saŋ 1 (Liangzi)
běi	north	paːʔ 7	ʔbak 7
tài	too much	thaːi 5	thai 1
huài	go bad, spoil	waːi 6	huai 2
fá	punish	paːt 8	hɔat 8
fā	send out	faːt 7	hɔat 7
fǎ	law, method	faːt 7	phat [44]
fàn	violate	paːm 2	phan 5
nán	south	naːm 2	naːm 2, nam 1
là	wax, candle	laːp 8	lap 8

3.2. *Syllable weight and prosody*

On a higher level of linguistic organization, two independent descriptions of Mien (and a note on Mun) show these two vowel length languages are characterized by a prosody that alternates short and long (or light and heavy) syllables.

For Mien, Downer (1961) writes, “The word in Highland Yao [= Mien] consists of a full syllable, which may be preceded by one or two reduced syllables. Full syllables are characterized by a system of tones, and, when preceded by reduced syllables, by relative prominence and duration. Reduced syllables have no tones, and have markedly different realizations depending on speed of utterance” (p. 532). “Reduced syllables do not occur

finally, but always precede a full syllable or another reduced syllable. They are of two kinds—regular reduced syllables, and reduced syllables in -a. The two kinds agree in having weaker stress and shorter duration than the following full syllables so that a strong iambic rhythm is imparted to disyllabic words …"(p. 539). Purnell (1965) also classifies Mien syllable types into a major type (pre-pausal, stressed) and a minor type (those syllables which precede the major syllable). Together, strings of minor syllables and one major syllable make up the "phonemic phrase" (pp. 7 ff.) In this synchronic study, in a manner reminiscent of L-Thongkum's later historical study, Purnell analyzes short [a] as phonologically /ə/, and long [aː] as phonologically /a/ (pp. 78 ff.).

For Mun, Shintani and Yang (1990) observe that "… in plurisyllabic words or contexts, a tonal and vowel neutralization is often observed" (p. viii). My analysis of 135 sentences in this dictionary illustrating basic syntactic types showed a strong correlation between vowel length and phrase-final position (location of the syntactic head of the phrase).

But with regard to the question of this paper—is contrastive length due to inheritance or diffusion?—the fact that Mien and Mun today are characterized by an iambic rhythm cannot constitute proof that length is a secondary development. This is a "chicken and egg" problem: the role of stress and the alternation between full and reduced syllables could as easily be seen as a consequence of the inherited feature of length as a factor in its development and a supportive environment for it.

However, some long vowels clearly seem to have developed secondarily. Given the iambic rhythm of these languages, not only must non-phrase-final syllables be light, but phrase-final syllables (syntactic heads) must maintain a certain gravity. Comparative data in Wang and Mao (1995) make it appear that compensatory lengthening—either upon loss of a medial, or upon reanalysis of a medial as syllable onset—may have developed sporadically to preserve necessary "weightiness". Compare forms in each column below to see that vowel length and the presence of a medial glide are in complementary distribution across the Mienic languages in their sample. The absence of both length and a medial glide is another possible outcome, but crucially none of the forms below contains both a long vowel and a medial glide:

	ash	*narrow*	*armspan*	*twist*
Jiangdi (Mien)	saːi 3	hep 8	tsaːm 2	sjet 7
Xiangnan (Mien)	swa 3	ei 8	tsaŋ 2	sje 7
Luoxiang (Mien)	ɕwai 3	hep 8	wjam 2	ɕat 7
Changping (Mien)	θwai 3	hjep 8	joːm 2	θjet 7
Liangzi (Mun)	sai 3	hep 8b	jom 2	saːt 7
Lanjin (Mun)	saːi 3	heːp 8	jɔm 2	saːt 7
Dongshan (Biao Min)	swai 3	hjɛn 8	jaŋ 2	--
Sunjiang (Biao Min)	ɕi 3	he 8	jɔn 2	--
Daping (Zao Min)	sɔi 3	hɛp 8	dzjam 2	sjɛt 7

3.3. *Inherent length variability in [a] favors a diffusion hypothesis*

Recall that while in Mun a vowel length contrast holds between several vowel pairs, in Mien the contrast only exists between /a/ and /aː/. Mien is not alone in showing a length contrast only in [a]. This is also true of Shan, Tai Lɯ, Wuming Zhuang (Tai-Kadai), Cantonese (Sinitic), Chamic (Austronesian), and undoubtedly other languages of the area.