

NOTES

Mal Phonology Revisited

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It has been 25 years since "Phonemes of Mal" was first written (Filbeck 1966, 1976). It has been 20 years since the same description was incorporated in a Ph.D. dissertation (Filbeck 1971, 1978). Over the intervening years a few changes have had to be made, especially in certain areas of phonological interpretation that were once thought settled but which have now become uncertain. These changes have not involved the discovery of any new sounds or the description of any new phonemes. Rather, the changes have revolved around the (re)interpretation of certain consonant and vowel clusters in Mal. Moreover, the changes and uncertainties involve less than one percent of the Mal language so far described. But while they affect only a minute part of Mal they are nevertheless interesting phonologically.

The dialect described in this paper is what was designated as Mal B in Filbeck 1971, 1978. Altogether there are three Mal dialects which were designated Mal A, B, and C respectively. Mal B is the largest of the Mal dialects, numbering some 3,000 speakers in nearly a dozen villages in the Pua and Chiang Klang Districts of Nan Province in northern Thailand. It is also the dialect that has been described in greatest detail. All Mal dialects form a sister language to Prai and together belong to the Khmuic branch of the Mon-Khmer language family.

The purpose of this paper is to discuss the changes and reinterpretations that have become necessary in describing Mal phonology both synchronically and diachronically. There are two reasons behind this update. One is in the interest of accuracy of description. The other is in the interest of accuracy in field work, for the source of the need to update and revise Mal phonology stems from imperfect field work in the first place. Consequently this paper will also give an analysis of what went wrong nearly 30 years ago when I began eliciting data from Mal language helpers.

The following discussion is investigative and inductive in nature. The result of this methodological decision is that we shall be comparing competing analyses of various problems involved in order to arrive at an interpretation that will cover the most territory for us in describing Mal phonology as it currently stands. As we shall see, this territory includes both diachronic and synchronic aspects of Mal.

1. Mal Phonology Circa 1964-66

Mal phonology was early described in the following manner:

Consonant Phonemes

p	t	c	k	ʔ
b	d			
	l			
	s			h
m	n	ɲ	ŋ	
w		y		r ¹

Vowel Phonemes

i	ɨ	u
e	ə	o
ɛ	a	ɔ

Suprasegmental: Rising tone

Consonant Clusters

pl	py	ph	phl	phy		
th	thw	cw				
kl	kw	ky	kh	khl	khw	khy
mp	mpl	mpy	mph			
nt	nth	ns	nc			
ŋk	ŋkl	ŋky	ŋkh	ŋw		
mp	nh	ɲh				
*hw	*hy	-yh	-wh			

Vowel clusters

ia	ia
ie	ua

Since 1964-66 the following clusters have been added:

mphl	by	tw	nw
*ʔw	*ʔy		

The consonant clusters /mphl/ and /by/ have so far been found in only one word each out of over 2000 lexical items in Mal. While these clusters are additions to the original list, they do not in reality represent reanalyses or reinterpretations of the original description. In other words, their addition does not affect or change the internal phonological system of Mal as originally described. The addition of /mphl/ and /by/ is not unexpected when compared to the various patterns of consonant

¹The letter "r" stands for a high back unrounded vocoid that functions as a glide or semivowel like /w/ and /y/. /r/ occurs only in final position of a syllable. It may also be transcribed as [ɻ].

clusters observable in Mal. The addition of /tw/ and /nw/ does not pose any new structural changes in Mal, but the analyses lying behind them are interesting.

It is, however, the consonant clusters marked with* in the above lists that affect the description of Mal phonology. The first pair /hw hy/, while being a part of Mal phonology from the beginning, nevertheless require reanalysis in the light of more recent field work. The second pair /ɽw ɽy/ are new additions to the list of consonant clusters. Of these only /ɽw/ is a truly new cluster, not having been discovered in earlier field work, but /ɽy/ is added because of a reinterpretation of earlier data.

2. Metathesis

In Filbeck 1971, 1978 I posited a rule of metathesis for a set of similar phonological changes from Proto-Mal to Mal B. There Proto-Mal was reconstructed as having the following clusters of pre-aspirated nasals, liquids and semivowel:

hm	hn	hɲ	hŋ
hl	hr	hw	

Of these clusters all but /hr/ were retained as Mal B emerged from Proto-Mal. But a split was posited in how the remaining clusters were retained. The Proto-Mal clusters of /hm hn hɲ hl/ formed one group, which metathesized into /mh nh ph lh/ respectively in Mal B. Proto-Mal /hr hw/, on the other hand, did not metathesize, thus staying the same as in their Proto stage. The /r/ in Proto-Mal further underwent a separate change of /r/ --> /y/ thus producing the /hy/ consonant cluster in Mal B. Because of this split the rule for metathesis in Mal B became rather awkward to formulate. To begin with, a Vocabulary Redundancy Rule had to be posited for Proto-Mal, i.e. lexical items in Proto-Mal that began with the same (redundant) pre-aspirate /h/ had to be divided into three different classes: /hC1 hC2 hC3/. The reason for this is that all pre-aspirates in Proto-Mal divided three ways in Mal B. It was the class /hC1/ that metathesized, with the exception of /hw/ and /hy/. This behavior was then formulated in the following manner:

hC1 --> C1h

hC1 ≠ hw, hy

The pre-aspirate in /hC2/ disappeared and in /hC3/ became an unstressed syllable.²

The above rule for metathesis with its two exclusions was awkward in large part because of its arbitrariness. That is, there was really no principled phonological reason for excluding /hw hy/ from its operation. The only reason for their exclusion was the fact that I had in my elicitation *heard* /hw hy/. Moreover, words beginning with these clusters were repeated many times over a period of time, and on each occasion there was either a pre-aspirate or perhaps a breathy quality imposed on the semivowel especially if the pronunciation became

²It was assumed that [h] in [hC3] was an "h" in Proto-Mal which became an unstressed syllable. It could have been something else, from an even deeper time level, that may have become /h- ~ pa-/ in Mal dialects.

exceptionally deliberate and slow. This latter pronunciation was interpreted as an acceptable variation of the pre-aspirate /hw hy/.

It appeared, therefore, that such were the phonetic facts of the situation and so the rule of phonological change from Proto-Mal to Mal B had to accurately display this situation even if it meant formulating a rather arbitrary rule.

This situation or interpretation lasted until just a few years ago. By that time my main language helper had learned to read his own language using the Thai script. He finally got the courage one day to inform me that the word /hyääm/ 'to carry on a pole by two people' should in reality be spelled /yhääm/. I asked him to repeat the word again and sure enough the initial cluster was /yh/. I immediately thought of several more words beginning with this cluster. Each time the language helper affirmed that /yh/ was the correct pronunciation.

This next led the language helper to suggest that the spelling for /hwäär/ 'to hope' be spelled /whäär/ as well. Again I tested several words beginning with this cluster, pronouncing each one with /wh/. And again the language helper affirmed that /wh/ was the correct pronunciation.

I quickly grasped the far reaching ramifications of these revisions, both for the synchronic and diachronic description of Mal. It meant, for one thing, that the arbitrary exclusion of /hw ny/ from the above metathesis rule was now no longer needed; Proto-Mal /hw hy/ had indeed metathesized along with the other pre-aspirate clusters of the same class thus making the rule general as it should have been. But at this point a more immediate question came to mind. What went wrong in the early 1960s causing me to mishear and thereby incorrectly transcribe these two clusters?

To find an answer to this question I asked my language helper to repeat several times each a number of words beginning with /wh/ and /yh/. It was in this repetition that I found my answer, for as the language helper started repeating several times a particular word he would become slower and deliberate in his pronunciation. And as he became more deliberate the pronunciation of, for example, /yhääm/ changed to become first a breathy /y^hääm/ and finally the breathy [h] became the pre-aspirate [hyääm]. That is, in segmental terms, the [h] in /wh yh/ moved from a post-segmental position to a pre-segmental position when pronounced at a slower and deliberate rate of speech. Furthermore this same pattern was repeated for each word whether it began with /wh/ or /yh/.

In other words, when I had first elicited such words nearly 30 years ago I mistakenly focused on the deliberate pronunciation of these words as the phonological norm for Mal instead of the pronunciation used when speaking at a more normal or faster rate. Moreover, what reinforced this mistaken focus was the fact that /mh nh ph lh/, as opposed to [hw hy], did not change in pronunciation as speech became slower and more deliberate thus establishing in my mind that [hw hy] were indeed different and should be transcribed differently. Unfortunately this mistaken focus persisted for over two decades until it was finally corrected.

3. Preglottalization

The consonant clusters /ʎw ʎy/ represent newly found clusters. /ʎw/ has been found in only one word so far, /ʎwarj/ 'to be sad'. /ʎy/, on the other hand, has been added because of the reinterpretation of two commonly used words, the noun 'wife' and the verb 'to defecate'.

At the beginning these latter two words were spelled respectively as /ʎiah/ and /ʎiak/ where the [i] in each word carried the crest of the syllable and the [a] was nonsyllabic. However, when my Mal language helper had become competent in reading his own language written in the Thai script, he objected to the above spellings. On listening closely to his pronunciation of these words I realized that the [a] in each word was just as prominent if not slightly more prominent than the preceding [i]. That is, [a] was also syllabic.

My first reaction was to consider these two words as consisting of two syllables, [ʎiah] and [ʎiak] respectively. But on further listening I realized that [a] was indeed slightly more prominent than [i] in each word. This meant that [i] should be interpreted as nonsyllabic [y], which further meant that the initial glottal stop would combine with the semivowel to make the cluster /ʎy/. Under this latter interpretation, then, these two words would be spelled /ʎyah/ 'wife' and /ʎyak/ 'to defecate'.

While the above interpretation is straightforward enough, the psycholinguistic factors are not. On testing out the spelling /ʎy/ for these words, several readers, including my main language helper, did not accept it. They preferred rather the two-syllable spelling, [ʎiah] and [ʎiak]. No clear reason on the part of the readers was put forward for the preference. Doubtless this preference has to do with the way these words are spelled using the Thai alphabet. The equivalent of the preglottal cluster /ʎy/ would be อัย /ʎyah/ 'wife' and อัยค /ʎyak/ 'to defecate'. In Thai the glottal stop in such a cluster is common enough but its function is to help signal the *tone* of the syllable (e.g. ไม้ with a "mai ek" tone mark signals low tone in the Thai alphabet) and not the pronunciation of a glottal stop. In other words, the normal usage of /ʎy/ in Thai would interfere with introducing a different usage for the same combination in Mal. Consequently the two-syllable spelling is preferable because it is more readily and unambiguously recognizable on sight when reading.

4. Labialization

Mal has the following types of syllable structure as illustrated in the words /khuan/ 'younger sibling' and /khwān/ 'child of parent'. In the first word the /u/ is the syllabic peak of the word with /a/ being nonsyllabic. In the second word, however, the /a/ is the syllabic peak while /w/ is nonsyllabic thus making the /w/, on the phonetic level of description, a labialization of the preceding consonant.

There are other cases, however, similar to the situation described in the previous section, that may be interpreted as either labialization or as two syllables. That is, instead of an initial labialization /Cw-/, the [w] is [u] and is syllabic along with the subsequent vowel [a]. And between the [u] and [a] there is an all but imperceptible glide, [-uwa-].

These characteristics first came to notice when the spelling of the following two words was contested by my main language helper: [nuan] 'bridge' and [nuay] 'loins'. He recommended that these words be spelled [nuwan] and [nuway] respectively. Upon listening closely, especially when the rate of speech slowed somewhat, two syllables were indeed heard. At the same time a new word with the same characteristics came to attention, [tuway] 'to oversee'. As with the previous two words, the spelling [tuay] was rejected in favor of the two-syllable spelling.

While these characteristics are consistent with psycholinguistic principles, my first reaction was to reject the two-syllable spelling as an incorrect interpretation and description of Mal phonology. That is, the examples above should be described as beginning with consonant plus labialization: /nw/ and /tw/ respectively. The main reason for this is that since there is a great number of unambiguous labialized consonants in Mal phonology already, it makes sense to extend this pattern to include /nw tw/ as well. For example, from the beginning the clusters /ŋw/ and /thw/ were well attested for Mal in such words as /ŋwaay/ 'to return' and /thwaar/ 'bird trap'. However, these words are unambiguously one syllable each, and the one-syllable spelling has long been accepted, while the words in the previous paragraph are preferred to be spelled with two syllables each.

This difference in pronunciation and preference, though, can be explained *phonologically* in terms of two phonetic environments which, with the data we currently have, operate in tandem. The first is the short vowel in [-wa-], and the second is the initial consonant. That is, if the initial consonant is an aspirated stop, then either /-wa-/ or /-ua-/ may occur in contrast. But with other initial consonants, if the vowel in [-wa-] is short, then it is interpreted as labialization, even if there is a pronunciation [-uwa-], because there is nothing else that stands in contrast with this combination of sounds. In other words, this pronunciation finds its explanation as a *morphophonemic* variation within the phonological structure of Mal. Moreover, the *preference* for the two-syllable spelling may be explained psycholinguistically as due to influence from Thai that has no /nw tw/ consonant clusters.

This analysis finds some support in a few words where there is variation between the one-syllable and two-syllable pronunciation. One word is /kuar/ 'river' which may also be pronounced [kuwar]. Similarly /tua/ 'before' may be pronounced [tuwa] or even [twa], where the [a] in the latter examples is syllabic as well. In other words, this variation is possible because in this environment there is no contrast as in the above aspirate environment; therefore, free variation is allowed. If indeed this is the case, then it is better to maintain the vowel cluster /-ua-/ as the basic structure and spelling of these latter words.

5. Psycholinguistics or historical linguistics

This brings us back to [ʔyak ~ ʔiyak] and [ʔyah ~ ʔiyah] of section 3. There I gave a psycholinguistic explanation of why the two-syllable spelling of each word was preferred. But how valid is a psycholinguistic explanation for a description of a language? Certainly psycholinguistics is synchronic and not diachronic in its setting. However, in this instance we cannot rule out outside influence from Thai if we rely on psycholinguistic factors as the determining criteria in describing Mal

phonology. This is especially true since we are using the Thai alphabet to write Mal. In other words, in describing the phonology of Mal we are in effect allowing Thai phonological habits or patterns an important role in determining what the phonological structure of Mal ultimately looks like. Whether this is permissible or not is an open question.

On the other hand, if we do not allow psycholinguistic factors to play a role in describing Mal phonology, the only other recourse we have is the history of the language to help us in describing it synchronically. Indeed, when we look backward in time to Proto-Tin and even earlier we see that there is external and historical evidence that Mal should be described as having the preglottalized series /ʎw/. For example, Mlabri, a language that links up with Mal at a Pre-Tin stage (Rischel 1989), contains the word /ʎyak/ 'to defecate' and several other words beginning with the preglottalized /ʎy-/ (Egerod and Rischel 1987). In other words, historical considerations would lead us to favor the interpretation of the preglottalized form /ʎy-/ for present day Mal instead of the two-syllable interpretation. In fact, to historically reconstruct Mal back through both a Proto-Mal and Proto-Tin stage, it would be most convenient to have the preglottalized form to start with!

Moreover, with regard to the word /ʎyah/ 'wife' we are faced with a similar situation. For example, in the "Y" dialect of Prai (i.e. "pyai", see Filbeck 1987), which is more closely related to Mal than Mlabri, the word for 'wife' is /yah/. For many years I explained the differences between /ʎiah/ (my original spelling for 'wife' in Mal) and /yah/ as one of shift in placing the crest of the syllable, i.e. from a Proto-Tin stage either Mal shifted the crest from /a/ to /i/ thus making /ʎiah/, or Pyai shifted the crest from /a/ to /i/ thus making /*iah/, or Pyai shifted the crest from /i/ to /a/ thus making /yah/. Now, however, we can present another explanation, viz. assuming the preglottalized /ʎy-/ interpretation for present day Mal, we can posit that it was this form that was the original Proto-Tin form and that (1) Pyai simplified the /ʎy-/ cluster to /y-/ but that (2) Mal retained the cluster. Again, the two-syllable spelling /ʎiyah/ can be explained as a more recent innovation occurring only in Mal, perhaps due to pressure from Thai phonological structure and reading habits.

In other words, historical considerations once more favor the preglottalized /ʎy-/ interpretation for Mal over the two-syllable interpretation or description.

Unfortunately there are no similar external data to support the consonant clusters /nw tw/ of the previous section. Yet, as was mentioned, there is plenty of internal "pattern pressure" (Pike 1947) from the numerous other labialized consonants to lend creditable support to this interpretation.

6. Conclusion

The discussion above has taken us to an update of Mal phonology. This update was needed because it provides crucial data necessary for further, more accurate reconstruction of Proto-Mal, Proto-Tin and on back to a Pre-Tin linkup with Mlabri. It also gives an insight into some changes that evidently are currently taking place in Mal and their possible source in the Thai language and reading habits that Mal people acquire from learning to speak and read Thai.

This contact with the Thai language, both in its spoken and written forms, raises the question of how much weight Thai linguistic structure and acquired reading habits should have in describing Mal B. In the above discussion I have tried to separate this Thai factor from Mal so as to describe Mal in its own terms. This does not mean, however, that on the practical level of spelling Mal words using the Thai alphabet accommodation isn't made to acquired reading habits built up from contact with the Thai language. Such accommodations are indeed made. But on the descriptive level they are not, nor should they be, normative for Mal phonological structure.

In an article of this nature, one more question comes to mind. Is there any more correcting and updating that needs to be done? That is, have we caught all the errors of field work and analysis so that now we have a "leakproof" phonological description of Mal B? Obviously this is too much to claim. No doubt there are other errors to be found and more updating to be done. But we will have to leave this for another time and another generation.

REFERENCES

- Egerod, Søren and Jørgen Rischel. 1987. A Mlabri-English Vocabulary. *AO* 48: 35-88.
- Filbeck, David. 1966. *Phonemes of Mal*. M.A. thesis, Indiana University.
- Filbeck, David. 1971. *T'in, a historical study*. Ph.D. dissertation, Indiana University.
- Filbeck, David. 1975. *Phonemes of Mal*. Lincoln, IL: LCC Press.
- Filbeck, David. 1976. Mal (Thin). In *Phonemes and Orthography: Language Planning in Ten Minority Languages of Thailand*, ed. by W.A. Smalley (Pacific Linguistics Series C, No. 43). Canberra: Australian National University, p.239-57.
- Filbeck, David. 1978. *T'in, a historical study*. (Pacific Linguistics Series B. No. 49). Canberra: Australian National University.
- Filbeck, David. 1987. New ethnic names for the Tin of Nan province. *JSS* 75: 129-139.
- Pike, Kenneth L. 1947. *Phonemics: A Technique for Reducing Languages to Writing*. Ann Arbor: The University of Michigan Press.
- Rischel, Jørgen 1989. Can the Khmuic component in Mlabri ("Phi Tong Luang") be identified as Old T'in? *AO* 50:79-115.

8 June 1990

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