

Lolo-Burmese Rhymes

Graham Thurgood
UC Berkeley

Although numerous different rhymes can be found in Written Burmese, it is not clear that all of these can be reconstructed at the Lolo-Burmese level. Below evidence is given for the reconstruction of a specific set of rhymes with the core of the evidence coming from Written Burmese, Lahü, Lisu, Akha, Sani, and Nasu data, but a broader range of data is examined with respect to specific problems.

A large number of writers have tentatively reconstructed Lolo-Burmese rhymes,¹ but the rhymes have never been the specific focus of a study. This study provides that focus while it gives evidence for the reconstruction of a given set of rhymes. Open rhymes, nasal rhymes, and stopped rhymes will each be discussed in turn.

Frequently each rhyme has multiple reflexes in each of the related languages which depend upon the nature of the root initial consonant or consonant cluster, and even on the tone. Because of the large number of rhymes, only those rhymes which are controversial in some sense are supported in this paper with extensive evidence. When dealing with a rhyme like *-a where all previous investigators have set it up and where there is over a hundred excellent examples found in the literature, I see no reason to either comment or offer further evidence. Sufficient evidence can be readily found in a work such as Schafer's Introduction to Sino-Tibetan. In short, this study is a commentary on rhymes which does not replicate evidence found elsewhere.

The open rhymes. The following rhymes are reconstructable at the Lolo-Burmese level:

*-i	*-ay	*-u
*-ö		*-o
*-ay		*-ul
	*-a	

Sufficient comparative evidence exists to reconstruct all of the above rhymes with confidence.

1. The *-ö rhyme. The Written Burmese representation of this rhyme presents at least a minor problem of interpretation, but it appears as though an i were written over a u:

o	i
u	u

Wolfenden (1929) originally suggested on the basis of certain comparisons with modern Tibetan dialects that this diagraph symbolized a front rounded vowel, and the comparative evidence within Lolo-Burmese supports his early contention. Ahi, Akha, and Lisu all provide evidence for *- \bar{o} .

Corresponding to Written Burmese -ui, Akha and Ahi invariably have an - \bar{o} in certain modern dialects. Little variation exists in the correspondences between Written Burmese, Ahi, and Akha; with only a small number of exceptions, an -ui in Written Burmese corresponds to an - \bar{o} in Akha and Ahi. In fact, the *- \bar{o} rhyme is the sole source of the - \bar{o} reflex in Akha.

In Lisu, which in contrast to Ahi and Akha does not have a modern front unrounded vowel, an incredible number of different reflexes exist written in a number of different transcriptions: -i, - \bar{i} , - \bar{u} , -o, -u, - \bar{u} , - \bar{u} , etc. Partial order exists among these reflexes; after modern Lisu bilabial or palatal root initial consonants an unrounded high vowel is found, while after a modern Lisu dental or velar root initial consonant a rounded back vowel occurs. The range and nature of the Lisu reflexes of *- \bar{o} indicate both a rounded and a front vowel component to the proto-rhyme. Since Lisu lacks a modern rounded front vowel, the language reacted in some instances by eliminating the rounding component and in other instances by eliminating the front component.

The final piece of evidence suggesting that this rhyme should be reconstructed as *- \bar{o} instead of *- $\bar{a}w$ or *- $\bar{u}w$ is, of course, the representation in Written Burmese. Writing - \bar{o} as an i over a u seems like a quite reasonable way to represent a vowel with both a rounded and a front component.

2. The *-ay rhyme. The correspondence is best represented by the set: Written Burmese -ai, Sani - \bar{a} . While this is not a heavily attested rhyme, it has clear and distinctive reflexes.²

3. The *-u and *-o rhymes. There is some question about whether we are dealing with one or two rhymes here. Schafer (1966-7) suggests *-o and -au (for Loloish), while Matisoff (1967) suggests *-u and *-aw,³ but even if both are set up at the proto-stage it is clear that they were at least in partial complementary distribution.

4. The *-ul rhyme. Nowhere in Lolo-Burmese is the final -l explicitly retained. Rhymes which extra-Lolo-Burmese evidence establishes as having had an -l final do, however, occur in Nasu in a 32 stopped tone. The unique tone and

rhyme correspondences do require that a separate *-ul rhyme be reconstructed.

The nasal rhymes. The nasal rhymes which can be reconstructed at the Lolo-Burmese level are:

*-iŋ	*-im	*-uŋ	(*-u.ŋ)	*-um
	(*-i.n)		(*-un)	
		*-aŋ		*-am
		*-an		

1. The *-in rhyme. Both Schafer (1966-7) and Benedict (1972) note that TB *-in and TB *-iŋ merge into Lolo-Burmese *-iŋ. The evidence is clear, straightforward, and abundant. Note that this rhyme should not be confused with the Written Burmese rhyme written -in which is discussed below.

2. The *-i.n rhyme. Unquestionably a marginal rhyme at least in the numerical sense, this rhyme is suspect. Only the single word *ki.nl 'weigh' (WB khyin, Lahu chɿ, Lisu (Fraser) htsye⁴, and Akha tse^v) reconstructs regularly at the Lolo-Burmese level. Having a single example is not helped by the fact that the word means 'weigh'. Benedict (1972) sets up the correspondence of TB *-in > Written Burmese -aŋ and TB *-i.n > Written Burmese -in largely on the basis of the correspondences of this word and various parallels (see discussion of *-it rhyme below). While Written Burmese forms like bhɿn 'opium' and min 'fish' are borrowings, other -in forms like mɿn-ma 'woman' have a suffixal -n, a collectivizer, at the end which does not correspond to the -n on -in rhymes. All the evidence is not in, but at this point the *-i.n rhyme is marginal at best in Lolo-Burmese.

3. The *-un rhyme. Like the *-i.n rhyme above, the *-un rhyme does not reconstruct well on the Lolo-Burmese level despite the reputed sets offered by Schafer (1966-7, page 358 and 387) and despite the fact that a -un rhyme is found in Written Burmese.⁴ Irregularities exist with the tones or initial correspondences of most potential cognates.

4. The *-u.ŋ rhyme. Despite the existence of a large number of Written Burmese forms with a -uiŋ rhyme, I have not been able to assemble any likely looking sets of cognates. (see discussion of the *-u.k rhyme for a similar problem).

The stopped rhymes. The following stopped rhymes can be reconstructed at the Lolo-Burmese level:

*-ik	*-it	*-i.t	*-uk	*-ut	(*-u.k)
	*-ip			*-up	
			*-ok	*-ök	
	*-ak	*-at			
	*-ap				

Most of the work is based heavily in this section on correspondences originally noted in Matisoff (1972), The Loloish Tonal Split Revisited. What follows below is largely a number of small changes.

1. The *-it and the *-i.t rhymes. I have reconstructed the following correspondence as length differences because of the correspondence between Written Burmese rit 'reap' and Lushai riit 'reap' following the suggestion of both Benedict (1972) and Matisoff (1972), but there is no claim that the difference was manifested as length at the Lolo-Burmese stage.

<u>Tibeto-Burman</u>	<u>Written Burmese</u>	<u>Akha</u>
*-it	-ac	-eh
*-i.t	-it	-i, -ui, -eu

(The reconstructed length difference has a parallel in the nasal rhymes where TB *-in goes to WB -aŋ while TB *-i.n goes to WB -in, but as indicated in the discussion of *-i.n above, clear sets for the reconstruction of *-i.n have not been found).

2. The *-u.k rhyme. Like the *-u.ŋ rhyme discussed above, I have not found any solid cognates for this rhyme. A number of forms almost work, but at the present this rhyme cannot be reconstructed at the Lolo-Burmese level.

It is quite clear, however, that neither the *-u.ŋ nor the *-u.k rhymes can be completely dismissed. Benedict (1972) presents some extra-Loloish comparisons with Lushai which suggest vowel length considerations:

<u>Tibeto-Burman</u>	<u>Written Burmese</u>	<u>Lushai</u>
*tšuk	tsauk ^I	tšhuk 'steep (353)'
*s-nuŋ	hnāuŋ	hnuŋ 'the back (354)'
*m-yuŋ	lak-khyāuŋ	zuŋ 'finger (355)'
but,		

<u>Tibeto-Burman</u>	<u>Written Burmese</u>	<u>Lushai</u>	
*tu.k	thuik-thuik	thu.k	'thick (356)'
*mu.k	muik	mu.k	'dull; dark (357)'
*bu.k	wām-puik	pu.k	'cave; belly (358)'
*ku.ŋ	khuin	ku.ŋ	'branch (359)'

Something is occurring, but it is not clear what. The Lolo-Burmese evidence for establishing these rhymes has not been found yet.

3. The *-ök rhyme. This rhyme differs from the *-ok rhyme primarily in its Akha reflex. Interestingly, however, Lolo-Burmese *ʔtök 'cut by a blow' has a Lushai cognate työk 'break open' (<TB *s-tök) which suggests that further evidence for this rhyme as differentiated from *-ok will be found in Lolo-Burmese.

Conclusion. The above rhymes have been established on the basis of relatively strict rules for the correspondences between Written Burmese, Lahu, Lisu, Akha, Sani (Nyi), and Nasu. It should be noted that, while by and large the sets are dependable, a number of the sets in Schafer (1966-7) do not follow strict correspondences. The evidence for the controversial rhymes is presented below.

Footnotes:

1. Burling (1967), Matisoff (1968, 1972), Schafer (1966-7), Benedict (1972), and Thurgood (forthcoming, 1975) have all discussed rhymes in their respective works.
2. Schafer has both a -ai and a -ay, but this is based solely on Written Burmese considerations and does not seem justified on the Lolo-Burmese level. Note that the WB word tshai 'ten' has irregular reflexes throughout Loloish.
3. Burling has both -o and -u, but his -o is equivalent to my *-ö.
4. This is not Burling's *-un rhyme which is equivalent to *-wan. Matisoff (1968) does suggest a *-un rhyme.

*-ay

	Written Burmese	Lahu	Lisu	Akha	Sani	Nasu	
*tsay ¹	tac-tshai	chi	tshi	tse [✓]	ts'ɿ 33	ts'a 21	'tén'
*way ¹	wai	vɛ	wu	zeu [✓]	vɛ 33	vɔ 213	'buy'
*?lay ²	hlâi		lɛ		hlæ 55	hlo 55	'change'
*lway ¹	lwai				læ 33		'easy'
*gray ¹	krai	kə ^T	ku- ^{IT}	gui [✓]	tʂæ 33		'star'
*pway ²	phwâi	-phɛ	-phə	pui [✓]		pɿ 55	'chaff'
*?ə-way ²	lak-wâi		ɿ		væ 55		'left (hand)'
*dzway ¹	a-tswai	cì	-chi ^I		tʂɿ 33	dʒɔ 21	'tusk'
*ray ²	râi		ní-wù				'bold'
*kway ²	khwâi		khə			k'ɛ 21	'split'

*-aw

	Written Burmese	Lahu	Lisu	Akha	Sani	Nasu	
*kwaw ¹	kho	qho	khu	ku [✓]		k'u 33	'call'
*graw ¹	kro			gu [✓]		dʒu 33	'call'
*baw ¹	po	pò	bu-jɛ				'float'
*baw ³	po'			bu			'float'
*graw ²	krô	-ku- ^T	-jũ	gu [✓]			'erve; sinew'
*baw ²	pô		bũ-lu			bu 33	'many'
*law ²	lô		lũ				'float'

This set and the following set for *-u are strictly speaking in complementary distribution. The velars, bilabials, and one l- initial in the first tone are here while another set of initials is found with *-u. But until more sets are examined it is safer to continue to reconstruct both rhymes; if it is not necessary to reconstruct both *-u and *-aw later it is easy enough to combine them.

*-u

	Written <u>Burmese</u>	<u>Lahu</u>	<u>Lisu</u>	<u>Akha</u>	<u>Sani</u>	<u>Nasu</u>	
*plu ¹	phru	phu	phu	pyu ^v	hli 33	t'u 24	'white; silver'
*u ³	u'	u	fu			fu 32s	'egg'
*su ¹	su	šu	sū	su ^v		su 33	'person'
*cu ²	tshū	chū	chū				'thorn'
*tu ¹	thu	thu	tha	tu ^v	t'y 33	t'u 33	'thick'
*tsu ¹	tshu	chu		tsu ^v		ts'u 33	'be fat'
*?tu ¹	thu	tu	tū	tu ^v			'stand'
*u ¹	u		wu	u ^T	y 33	wu 21	'bowels'
*N-du ²	tū	dū	dū	du ^v	dy 11		'dig'
*yu ¹	yu	yū	ra	yu ^v			'seize; take'
*?ə-ru ²	a-rū		wū	u ^v			'crazy'
*ru ²		Yŋ					
*?bru ¹	phru		pu	pu ^v			'porcupine'
*bru ¹		pū					
*nu ²	nū	nū	nū				'soft; tender'
*?nu ²					no 55	nun 44	
*lu ¹	(lu)? 'flutter'		lu	lu ^T		lu 33	'butterfly'

Note that all Lisu forms are cited in a standardized notation found in Thurgood (forthcoming, 1975) since the various orthographies and transcriptions often make it difficult to compare forms.

*-u

	Written <u>Burmese</u>	<u>Lahu</u>	<u>Lisu</u>	<u>Akha</u>	<u>Sani</u>	<u>Nasu</u>	
*p-							
*m-sul ¹	mrwe	hā-vī	xu/fwu			bu 32s	'snake'
*s-							
*r-mul ¹	mwē ^T	mu	mŋ		nu 44	*mrul	'body hair'
*r-kul ²	krwē	kī	cŋ	ku ^v	tšæ 55		'sweat'
*krul ²							
*ŋul ²	ŋwē			ngeu ^v			'silver; money'

*-it

	Written Burmese	Lahu	Lisu	Akha	Sani	Nasu	
*C-kit		qhê?		k'eha			'break off a piece'
*b(y)it		cha-pê?	tú-bì	beh-			'vulva'
*krit	khac					tš'i 32s	'scratch; scrape'
*N-krit	kyac	gê?		jeh ^I			'scrape'
*?rit	hrac	hí	hì	yeha	he 22s	xen 34	'eight'
*?nyit	hñac	ní	nyí	nyeha			'squeeze; press'
*s-nyit					ñe 44		
*yit	yac		yì	yeha	ji 22s		'drunk'
*kyit	khyac	chí?					'hot enough to burn'

In Matisoff's The Loloish Tonal Split Revisited
the first four were reconstructed as *-et while
the rest were *-it.

*-i.t

*V-ci.t	chit	á-chê?	á-chì	ci-	tš'i 22s	tš'i 55	'goat'
*ri.t	rit	Yè?	Yì				'reap'
*q-tsi.t	chit	chî?	tshì	tsui-	tš' 55		'pinch'
*N-krit	krit	gê?	jê				'grind'
*krit					k'u 44		
*N-tit/k				dui-			'soak in water'
*N-kyit		jí?		ji-			'move'
*s-gyit			cì		tsz 55		
*N-tsit	cit	jí?					'split, divide'
*tsit					ts'i 32s		
*N-dzi.t				ceu-			'pinch'
*s-dzi.t	mut-tshit		mŷ-tsi				'beard'
	pâ-cí?-mu						

Notes on Other Sets

*-ek. In Matisoff (1972) this rhyme correspondence is noted. It can be interpreted as an example of an *-ik rhyme in the vicinity of a preceding r. Thus the examples are *ʔbrek, *ʔ-prek 'be (68)'; *tek 'kick (14)' WT rdeg; *r-lek 'testicle (170)' WT rlig-pa; *trek, *ʔdrek 'thunder and lightning (67)'; *k-rek, *s-rek 'pheasant'. Only with *bek 'give (3)' is there no obvious evidence of the vowel lowering influence of the r. A glance at *(s-)rik 'twist (130)' shows that the rhyme reflexes for this form follow the same pattern as the *-ek rhymes above. All the above *-ek rhymes can thus be alternately interpreted as *-ik rhymes in the vicinity of an r.

Anonymous. 1959. Li-su yü yü-ga kang-yao [An outline of Lisu grammar]. Publication of the Minority Language Bureau of the Chinese Academy of Sciences. Peking: Scientific Publishing Co.

Benedict, Paul K. ca. 1941. Rhyming dictionary of Written Burmese. Compiled under the supervision of Paul K. Benedict.

Benedict, Paul K. 1972. Sino-Tibetan: a Conspectus. Contributing editor, James A. Matisoff. Cambridge University Press, Cambridge.

Fraser, J. G. 1922. Handbook of the Lisu (Yawyin) Language. Rangoon.

Hope, Edward R. 1970. Notes on Lisu phonology and its implications for choosing a writing system for the language. MS.

Hope, Edward R. 1972. The Deep Syntax of Lisu Sentences: a transformational case grammar. Ph. D. thesis, Australian National University

Kao Hua-nien. 1958. Yi-yü yü-fa yen-chiu [A study of the grammar of the Yi dialect]. Peking: Scientific Publishing Co. August 1958.

Lewis, Paul. 1968. Akha-English Dictionary. Cornell Linguistic Series, No. 70.

Ma Hsüeh-liang. 1951. Sa-ni Yi-yü yen-chiu [A study of Sani (Nyi), a Yi dialect]. Publication of the Chinese Scientific Institute. Peking: Advanced Studies Publishing House. April 1951.

Matisoff, James A. 1968. "Review of R. Burling, Proto-Lolo-Burmese". Lg. 44.4, 879-897.

Matisoff, James A. 1972. The Loloish Tonal Split Revisited. Research Monograph No. 7, Center for South and Southeast Asia Studies, U.C., Berkeley. 88pp.

Matisoff, James A. October 19-22, 1973. Problems and progress in Lolo-Burmese: Quo Vadimus? Paper circulated at the Sixth International Conference on Sino-Tibetan Language and Linguistic Studies.

Matisoff, James A. (forthcoming). A Lahu-English dictionary. MS.

Schafer, Robert. 1966-7. Introduction to Sino-Tibetan. Otto Harrassowitz, Wiesbaden.

Thurgood, Graham. (forthcoming). "Lisu and Proto-Lolo-Burmese". Acta Orientalia Volume 37, 1975.

Baron, Stephen. 1973. Sani etymological concordance and summary of correspondences. Lgcs. 246 term-paper. MS.

Burling, Robbins. 1967. Proto-Lolo-Burmese. IJAL Vol. 33, No. 2, Part II, Bloomington, Ind. Published simultaneously by Mouton and Company, The Hague.

[My sincere thanks to Julian K. Wheatley who translated the Chinese sources for me].