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The Naga Branches of Kukish.
Vocalism

Introduction

Scholars working on Sino-Tibetan languages have generally assumed that Old Bodish (classical Tibetan) is the most archaic of any of the Sino-Tibetan languages. Because of its many prefixes and its complex verb forms it does appear the most archaic. But some years ago I observed that Old Bodish is far from archaic in its vocalic system, which is more limited than that of many other languages of the family¹. And there is reason to believe that some of the Old Bodish prefixes were innovations in proto-East Bodish, and were not characteristic of proto-West Bodish, and hence were not characteristic of Sino-Tibetan². Moreover, Stuart N. Wolfenden began to suspect that the prefixes of some of the southern Tibeto-Burmic languages were more archaic in some respects than those of Old Bodish³. But, since he did not work out the phonetic shifts he thought that the prefixes of one language were replaced by other prefixes in other languages⁴, whereas actually they had only undergone phonetic change. If Wolfenden had pursued his studies further, he would have found that proto-Kukish was a much more archaic language than Old Bodish, in prefixes as well as in vocalism⁵.

We have only modern forms of the Kukish languages from which to reconstruct proto-Kukish, and all of them have suffered

¹ *The Vocalism of Sino-Tibetan*, JAOS 60 (1940), p. 307.

² See my *Studies in the morphology of Bodic Verbs*, BSOAS 13 (1950), part 4.

³ *Outlines of Tibeto-Burman Linguistic Morphology*, London 1929.

⁴ Oral communication.

⁵ For phonetic for Naga Kukish prefixes see my *Phonétique comparée de quelques préfixes simples en sino-tibétain*, BSL XLVI (1950), pp. 144—177.

phonetic decay. But some of them are archaic in some respects, as Luṣei in finals, and some in others, as Lamgang and Ao in prefixes. And we have a great many Kukish languages and dialects, more than for any other section of the Sino-Tibetan family. The languages listed in the *Linguistic Survey of India* as Kuki-Chin are not the only Kukish languages. All the languages and dialects grouped in the *Survey* as "Naga" are essentially Kukish, except for the northeasternmost group of "Naga", which is Baric (i. e., closely related to Garo, Bodo, etc.). Since a number of rather extreme phonetic shifts disguise many parallels so that they no longer have a close phonetic resemblance to each other, it is not surprising that Sten Konow, in charge of the non-Aryan sections of the *Survey*, classified the Naga languages separately; for he was forced to center his attention upon grammatical analysis of texts¹ and he made no serious attempt to work out the phonetic equations. Some of Konow's Naga groups, particularly the two southernmost, were badly jumbled. The correct classification of the Naga Kukish languages, as will appear in this article, is:

- Luhupa Branch
 - Maring Unit
 - Maring
 - Khoibu
 - Tangkhul Unit
 - Ukhrul
 - Phadang
 - Tsamphung
 - Kupome Unit
 - Kupome
 - Khunggoi
 - Central Luhupa (C)
 - Northern Luhupa (N)
- Western Branch
 - Maram
 - Kwoireng
 - Kabui
 - Khoirao
 - Empeo

¹ Personal communication.

Northern Naga Branch

Hlota

Ao Unit

Tsungli

Longla

Mongsen

Tsangki

Khari

Tengsa

Rong (Leptsa)

Yatsam

Yatsumi

Thukumi

Eastern Branch

Rengma

Simi (Sema)

Kezama

Sopvoma

Zumomi

Dayang

Angami

Tengima

Tsakrima¹

Dzuna

Kehena

Mima

Mikir does not belong to any of the Naga branches of Kukish, contrary to Konow's view, and has been omitted from consideration here. Southern Luhupa, despite its name, does not belong in the Luhupa Branch.

Rong, spoken in Sikkim and vicinity — some 400 miles from the Naga Hills — and classified by Konow in his "Non-pronomi-

¹ If the following three divisions of Tsakrima actually exist, it will require more accurate recording in order to establish the divisions. Most of the apparent phonetic differences are probably due to different attempts to record the same phonemes. There are, however, undoubted phonetic differences between Tsakrima and Tengima. In this article, Kehena serves to illustrate Tsakrima.

nalized Himalayan Dialects", may not only be assigned to the Ao Unit but to the Tengsa subunit, and as being slightly closer to Tengsa than to Yatsam. This should not be taken to infer, however, that Yatsam and Tengsa are not often closer in form to each other than either is to Rong — as the latter during its period of separation has developed some independent phonetic and lexical features — but only that Rong is closest of all to Tengsa.

Each of the above branches is well defined, and the statement that they are all essentially Kukish should not be taken to infer that they have no divergencies from each other or from such branches of Kukish as Central or Old Kukish, but only that these differences are comparatively minor.

Southern Kukish, Lakher, Old Kukish, Central Kukish, and Northern Kukish make up what I have designated the "Central Core" of Kukish; except for Burmese loan words in some Southern Kukish languages and Meithlei loan words in some Old Kukish languages, they agree closely in vocabulary. The Naga Kukish languages do not agree with the Central Core languages as the latter do among themselves, but rather as the latter might be spoken after long periods of migration and separation from the parent stock. The southernmost of these Naga Kukish groups, the Luhupa Branch, borders on Central Core Kukish territory and diverges little from the latter; the divergence progresses as one moves further north. In part this divergence is no doubt due to poorer and less extensive recording of the more northern Naga languages, in part due to phonetic shifts which disguise parallels, but in part it may be due to the coinage of new words or the adoption of loan words, or to the retention of some words from a substratum language. For comparison with the Central Core languages, Luṣei has been chosen because we have an extensive vocabulary of this language of the Central Branch; where the stem is lacking in Luṣei (L.), the form has been supplied when possible from Pankhu or Haka, both Central Branch languages, or from the Ngente dialect of Luṣei; if the stem does not occur in the Central Branch, the form has been supplied when possible from Thado (Northern Branch) or from Old Kukish. Citation of still other Central Core languages would confuse the reader, so that failure to cite a form from a specific Central Core language does not always mean that the stem is not found there.

Because of the many phonetic shifts and the large number of Kukish languages spoken in the Naga Hills alone, we must limit our attention here to the phonetics of the finals, i. e., to the part of a word following the consonantal initial or initial cluster. Although phonetic equations for initials and prefixes cannot be set forth here for lack of space, they are taken into account in the reconstructed forms for proto-Kukish (K.). Dialects or languages will be omitted whenever we have insufficient data to determine the equations for the phoneme under consideration; and to economize on space, sometimes only one language of a branch will be given to represent the languages of that branch where no phonetic shift occurs in the final under consideration.

Sometimes one will find a certain Kukish phoneme represented by two or more symbols in a certain language. Some of the irregularities are not due to poor recording, but to borrowing from a related language, some to the effect of the initial on the final, some — it may be suggested — are due to the effect of a phoneme which no longer exists in Kukish, as in the word for 'tongue' in table 6; but some are due to the inability of untrained recorders to consistently note an unfamiliar phoneme, and then we can only indicate by the limited number of variants what the real phoneme probably was.

Words in roman type in the tables denote unexplained vocalic exceptions, sometimes not due to poor recording but to insufficient comparative data on unusual phonetic combinations.

The amount of materials on the languages and dialects of course varies greatly. And in the phonetic equations where only one example was found to support it, the reader has sometimes been warned of this by a subscript one₍₁₎¹.

¹ Only a few phonetic symbols require definition: γ is a guttural fricative; $\acute{s}$, $\acute{z}$ are palatals; d' , etc., palatalized; $\acute{r}$, trilled; ' , as 'a , 'i , or 'a' , 'i' , denotes the glottal opening and glottal stop respectively; ϕ , as u in English *but*, *cut*; $\ddot{a}$, a vowel somewhere between French *faire* and English *at*; $\ddot{u}$, as in German?; $\acute{e}$, $\acute{u}$, mixed vowels, approximately in oral position of e , u ; $\acute{a}$, as in English *all*; e' , o' , etc., phonemes between e and i , between o and u , which cannot be more precisely described.

In the reconstruction of Kukish, X denotes some occlusive; S some affricate or sibilant; B , D , Kukish initials that are generally surd but with unexplained sonants appearing in some

(continued ad head of p. 475)

Final Vowels

Table 1. Final -a (Voc. 1, 2)¹

Meaning	K.	L.	Ukhrul	Maram	Kvoireng	Kabui	Khoirao	Empeo
1 many, all	* <i>ya</i>	<i>za</i>	- <i>ya</i> -	...	...	- <i>dzu</i>	- <i>ya</i>	...
2 palm, sole	* <i>m-ya</i>	<i>za</i>	<i>mā-ya</i>	...	...	...	<i>pa-ya</i>	...
3 bird	* <i>p-t-ua</i>	<i>va</i>	<i>va</i>	...	...	...	...	...
4 come	* <i>ra</i>	...	<i>ra</i>	<i>ru-</i>	...	...	<i>ra-</i>	...
5 yam	* <i>hra</i>	- <i>hra</i>	<i>ha-</i>	...	<i>tša-ryu</i>	<i>hru</i>	<i>tša-ra-</i>	- <i>reo</i>
6 ten	* <i>k-t-rà</i>	- <i>ra</i>	<i>t'ā-ra</i>	<i>ke-ro</i>	<i>kā-ryu</i>	- <i>ru</i>	<i>tša-ra</i>	<i>ga-reo</i>
7 arrow	* <i>m-la</i>	...	<i>mā-la</i>	- <i>lo</i>	...	<i>lu</i>	<i>n-la</i>	...
8 song	* <i>hla</i>	<i>hla</i>	<i>la</i>	...	<i>tša-lui</i> ³	...	...	<i>leo-</i>
9 tooth	* <i>hà</i>	<i>ha</i>	<i>ha</i>	- <i>yu</i>	- <i>hu</i>	<i>hu</i>	- <i>ya</i>	- <i>geo</i>
10 chin	* <i>m-k'a</i>	<i>k'a</i>	<i>mā-k'a</i>	<i>ma-k'o</i>	...	<i>ku-</i>	<i>n-k'a</i>	...
11 bitter	* <i>k'à</i>	<i>k'a</i>	- <i>k'a</i>	...	...	<i>ku-</i>	<i>ka-</i>	...
12 moon	* <i>S-k'la</i>	<i>t'la</i>	<i>ka-</i>	<i>sī-ko</i>	<i>tša-hyu</i>	..	<i>l'a</i>	<i>keo</i>
13 body hair	* <i>ya</i>	...	- <i>ha</i>	...	- <i>gyu</i>	- <i>hu</i>	...	...
14 five	* <i>p-r-và</i>	<i>va</i>	<i>p'ā-na</i>	<i>mā-nu</i>	<i>mā-nyu</i>	<i>pā-nu</i>	<i>mā-na</i>	<i>mā-neo</i>
15 fish	* <i>v'à</i>	<i>v'a</i>	<i>va-</i>	...	..	...	...	...
16 spear	* <i>r-na?</i> <i>r-v'a?</i>	...	...	<i>a-nu</i>	- <i>nyu</i>	...	<i>na-i</i>	<i>hū-neo</i>

17 flesh	*sà	śa	sa	...	...	...	-sa	...
18 animal	*sà	sa	sa	...	...	...	-sa	...
19 hot	*sa	śa	-sa	t'u-	-tyu-	su-	-sa-	...
20 far	*da	...	-ta-	-du-	-dyu-	du-	-da-	deo-
21 ear	*k-Na	na	k'ā-na	...	...	nu-	(in-)	...
22 nose	*hna	(hñār)	na-	(na-)	-nyu	nu-	na	-neo
23 father	*pà	pa	...	-p'u	-pyu	-pu	pa	-peo
24 thin	*r-pà	pa	...	...	-pyu-	pu-	-pa-	-peo
25 iron	*k₂-p'a	...	...	ke-p'u	...	...	kā-p'a	...
26 seek	*p'a	...	-p'a	...	p'yu-	p'u-	p'a-	peo-
27 good	*p'ra	t'a	-p'a	...	...	...	...	...
28 hear	*Xa	...	-śa	su-	tsu-	tsu-	tśa	seo
29 thick	*ts'ā'?	ts'ā'	-śa	su-	-su-	su-	-sa-	seo-
30 eat	*fā'?	fā'	-tsa	tu-	tyu-	tu-	ta-	teo-
	a	a	a	u ^b	yu ^b	u	a	co

Meaning K. L. Tsamphung

1 night	*v-ya	...	nā-yu-
2 arrow	*m-la	...	mā-lu
3 ear	*k-Na	na	k'ā-nu
		(H)	
	a	a	u

Meaning	K.	L.	Mongsen	Khari	Tsangki	Hlota	Tsungli	Longla	Tengsa	Yatsam	Rong
1 bird	* <i>p-t-wa</i>	<i>wa</i>	<i>wa-</i>	<i>o⁻ⁱ</i>	<i>wa-</i>	<i>wo-</i>	<i>wo-</i>	<i>wa-</i>	<i>u-</i>	<i>u-</i>	<i>fo</i>
2 ten	* <i>k-t-z-rà</i>	<i>-ra</i>	<i>te-ra</i>	<i>ta-ra'</i>	<i>te-ra</i>	<i>ta-ro</i>	<i>tā-rū</i>	<i>tē-ro</i>	<i>t'e-lu</i>	<i>tē-lo</i>	...
3 come	* <i>ra</i>	...	<i>ra</i>	<i>ra</i>	<i>ra</i>	<i>ro-</i>	<i>-ru</i>	<i>ve-a</i>	...	<i>lo-a</i>	...
4 lightning	* <i>hla</i>	...	<i>-la</i>	...	<i>-la</i>	...	...	<i>-lo-</i>	...	...	...
5 tooth	* <i>hà</i>	<i>ha</i>	<i>-pa^s</i>	<i>-p'a</i>	<i>-pa</i>	<i>-ho</i>	<i>-bu</i>	<i>-p'u</i>	<i>-p'u</i>	<i>-bu</i>	<i>-fo</i>
6 bitter	* <i>k'sà</i>	<i>k'sa</i>	<i>-k'sa</i>	<i>k'sa</i>	<i>-k'a</i>	<i>k'o-</i>	<i>-k'u</i>	<i>-k'u</i>	<i>-k-la</i>	<i>k'u-(la)</i>	...
7 five	* <i>p-p-nà</i>	<i>na</i>	<i>p'a-na</i>	<i>p'a-na</i>	<i>p'a-na</i>	<i>na-ro</i>	<i>pu-nu</i>	<i>po-ro</i>	<i>p'u-nu</i>	<i>p'o-ro</i>	<i>fā-ro</i>
8 fish	* <i>v'à</i>	<i>v'a</i>	<i>-na</i>	<i>-n'a</i>	<i>-na</i>	<i>-ro</i>	<i>pu-ro</i>	<i>-ro</i>	<i>-nu</i>	<i>-ro</i>	<i>ro</i>
9 bow	* <i>la</i>	...	<i>la-saⁿ</i>	...	...	<i>-lo</i>	<i>la-saⁿ</i>	<i>lu</i>	<i>lu</i>	<i>lo</i>	...
10 ear	* <i>k Na</i>	<i>na</i>	<i>-na-roⁿ</i>	<i>-hna-</i>	<i>-na-</i>	<i>-no</i>	<i>-na-roⁿ</i>	...	<i>lā-saⁿ</i>	<i>-na-loⁿ</i>	<i>-no-r</i>
11 nose	* <i>hna</i>	...	<i>-na</i>	<i>-na'</i>	<i>-na</i>	<i>ke-nu</i>	<i>nì</i>	<i>nyì-</i>	<i>na-</i>	<i>-no-</i>	<i>nā-</i>
12 child	* <i>fà</i>	<i>fa</i>	<i>-f'a-</i>	...	...	<i>-tso-</i>	<i>-t'si-</i>	...	<i>-t'su</i>	...	...
13 eat	* <i>fà²</i>	<i>fà'</i>	<i>t'sa</i>	<i>t'sa-</i>	<i>t'sa</i>	<i>tso</i>	<i>-t'si</i>	...	<i>tyu</i>	<i>t'su^c</i>	...
14 meat	* <i>sà</i>	<i>sa</i>	<i>-sa</i>	...	...	<i>-so</i>	<i>si</i>	...	...	...	...
15 animal	* <i>sà</i>	<i>sa</i>	<i>sa-</i>	...	<i>sa-</i>	...	<i>si-</i>	...	...	...	<i>sā-</i>
16 speak	* <i>ša²</i>	...	<i>sa</i>	<i>-ša-</i>	<i>sa</i>	...	<i>si</i>	<i>sa</i>	<i>si-</i>	<i>sa</i>	...
17 moon	* <i>S-k'la</i>	<i>t'la</i>	<i>la-ta</i>	<i>lè-ta</i>	<i>la-ta</i>	<i>tso-ro</i>	<i>yi-ta</i>	<i>lu-ta</i>	<i>lu-ta</i>	<i>lo-ta</i>	<i>lā-ro</i>
18 father	* <i>pà</i>	<i>pa</i>	...	<i>-ba</i>	...	...	<i>bū</i>	...	<i>-pu</i>	...	<i>bo</i>
	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>o</i>	<i>u, o⁹</i>	<i>u, o⁹</i>	<i>u¹⁰</i>	<i>u, o⁹</i>	<i>o¹⁰</i>

For additional Hlota, Tsungli, Tengsa, and Rong comparisons, see foot of p. 476

languages; $E = \check{e}$, $\bar{e}$, and/or ia ; $O = \check{o}$, $\bar{o}$, and/or ua ; $A = \check{a}$ and/or $\bar{a}$; $I = \check{i}$ and/or $\bar{i}$; $U = \check{u}$ and/or $\bar{u}$; other capital letters, K , T , N , etc., denote fluctuations between unaspirated and aspirated initials — thus, K denotes that both k and k^h appear as the initial in the root; φ denotes a bilabial fricative. The difference between r^1 and r^2 is not known to appear in the Naga branches of Kukish. The grave accent, as $\grave{a}$, denotes a tone, probably corresponding to the “falling tone” of Burmese.

McCulloch's accent marks, probably indicating tones, occur so seldom that they have been omitted as useless. Long and short vowels have generally not been marked here, in the northern Naga languages particularly, either because of unreliability in recording length or because only long or only short vowels have been recorded and there is no likelihood of confusion.

¹ The equations here are with Luṣei, as a representative of Central Core Kukish. The equations between Luṣei and Old Bodish (classical Tibetan), Burmese, Chinese, and Siamese and Lao will be found in my article on *The Vocalism of Sino-Tibetan*, JAOS 60 (1940), pp. 302—337; 61 (1941), pp. 18—31. Thus, in equating Naga vowels with Luṣei, we are at the same time equating them with the principal literary languages of the Sino-Tibetan family. At the head of most tables will be found the corresponding table numbers in the above-mentioned article (abbreviated to *Voc*).

² $H = \text{Haka}$.

³ A typographical error for *-liu*?

⁴ $Th = \text{Thado}$.

⁵ Sometimes *o*.

⁶ But *u* after Kwoireng sibilants and $*h$?

⁷ From *wa-* by contraction.

⁸ The initial labial cannot be explained at present, and the reader is justified in regarding these Ao comparisons with skepticism. They are added because the Ao vowels agree and because we find initial h in this stem in all the other members of the Northern Naga Branch, i. e., in Hlota, Thukumi, and Yatsumi. I suspect that this Kukish stem, generally $*ha$, is in some way connected with the common Tibeto-Burmic stem $*swa$ ‘tooth’, and that the labial initial which appears in the Ao Unit is paralleled by the *w* of $*swa$, but I cannot prove it.

⁹ We find continual fluctuation between *o* and *u* in all recordings of the Ao dialects, indicating that they have a single back vowel, a phoneme between *o* and *u*, and that *o* and *u* are probably allophones of the single vowel. The primitive vowel *a* is probably retained in Tṣungli, Tengsa, and Yatṣam when in the first part of a compound; see nos. 9 and 10 above. Some initials particularly sibilants, seem to alter the vowel to *i* in Tṣungli.

¹⁰ But $\check{a}$ when in first part of compounds.

Meaning	K.	L.	Rengma	Dayang
1 palm, sole	* <i>m-ya</i>	...	...	...
2 bird	* <i>p-t-wa</i>	<i>va</i>	{ <i>tě-ye</i> (Gr) <i>te-ga</i> (B)	- <i>gvu</i>
3 ten	* <i>k-tʔ-rà</i>	- <i>ra</i> (H)	<i>se-ráʔ</i>	<i>tši-yi</i>
4 spleen	* <i>t La</i>	<i>la</i>	...	...
5 tooth	<i>hà</i>	<i>ha</i>	<i>ha</i>	- <i>hu</i>
6 chin	* <i>m-k'a</i>	<i>k'a</i>	<i>so-k'e</i>	...
7 bitter	* <i>k'à</i>	<i>k'a</i>	- <i>k'a</i>	...
8 white ant	* <i>m-k'ra</i>	- <i>t'a</i>	- <i>ša</i>	...
9 moon	* <i>S-k'la</i>	<i>t'la</i>	...	{- <i>k'i</i> {- <i>kü</i>
10 five	* <i>p-r-nà</i>	<i>na</i>	(pu- <i>u</i>)	<i>pa-nu</i>
11 spear	* <i>r-na</i> <i>r-w'a</i>	...	...	- <i>nu</i>
12 flesh	* <i>sà</i>	<i>ša</i>	<i>t'a</i>	- <i>ši</i>
13 far	* <i>da</i>	...	...	...
14 ear	* <i>k-Na</i>	...	<i>ni-</i>	- <i>ki-ni</i>
15 nose	* <i>hna</i>	...	<i>hni-</i>	- <i>ni-</i>
16 father	* <i>pà</i>	<i>pa</i>	- <i>pe</i> (B)	- <i>pu</i>
17 mushroom	* <i>pà</i>	<i>pa</i>	...	...
18 thin	* <i>r-pà</i>	<i>pa</i> (Th)	...	...
19 fruit	* <i>r²aʔ</i>	<i>raʔ</i>	- <i>ra-</i>	...
20 eat	* <i>fàʔʔ</i>	<i>faʔ</i>	...	<i>tši</i>
	<i>a</i>	<i>a</i>	<i>a, e</i> ¹	<i>a</i> ²

Meaning	K.	L.	Hlota
19 palm, sole	* <i>m-ya</i>	...	<i>myo-ku</i>
20 potato	* <i>hra</i>	- <i>hra</i>	<i>horo</i>
21 chin	* <i>m-k'a</i>	<i>k'a</i>	<i>k'o-</i>
22 vein	* <i>r-t'a</i>	<i>t'a</i>	- <i>t'o</i>
23 pain	* <i>na</i>	<i>na</i>	<i>no-</i>
24 hear	* <i>Xa</i>	...	<i>zo-</i>

Meaning	K.	L.	Tsungli	Tengsa
25 shoulder	* <i>pà</i>	...	- <i>pu</i>	...
26 thin	* <i>r-pà</i>	<i>pa</i> (Th)	<i>pu</i>	- <i>pu</i>

Meaning	K.	L.	Rong
22 vein	* <i>r-t'a</i>	<i>t'a</i>	- <i>so</i>

Zumomi	Kežama	Sopvoma	Tengima	Kehena
-m-zi	...	...	-džu	...
-wu	...	...	{t'e-vu t'e-vü	vü-
tšü-yi	tši-ro	tši-ro	kě-ro	kě-řü
-l'u-	...	...	...	...
-hu	-fű	-hu	hu	hü
-m-k'u	...	...	-me-k'u	...
ku-	...	...	k'u	...
...	...	...	mě-krö	...
-k'i	-krű	-k'ro	krö	krü
po-nu	pa-nu	po-vo	pě-nu	pe-nu
-nu	...	...	re-nu	...
-ši	...	...	...	...
...	...	-do-	...	...
-ki-ni	kě-nű	nu-	-neu (St)	nű
-hni-	hnu-	(-hnuu)	-hneu (St)	ni-
-pu	p'ű	-p'u	pu	po
{-pvu	...	...	...	...
{-p'u	...	...	{-re-p'ű (Mc) re-pvo (B)	...
...	...	...	ro-	...
tšu-	...	-to	tši	tu
u ²	ű	u, o ³	u, ö ⁴	ü

The final vowel in all the languages except Rengma is probably generally a rounded *i* or an unrounded *u*, but too many different authors agree on exceptions to doubt that initials have influenced the finals.

¹ I. e., ä; *i* after *n*.

² But *i* after **r*, **l*, *n*, and sibilants; the *i* is probably not the standard *i*, as there is some fluctuation with *u* or *ű*.

³ *o* after dentals and *r*.

⁴ *o* or *ö* after *r*; *eu* (St) after *n*. None of the vowels are probably standard; cf. Kehena.

Table 2. Final *-i* (Voc. 4)

Meaning	K.	L.	Ukhrul	Kupome	Phadang	Maram	Kwoireng	Kabui	Khoirao	Empeo
1 boundary	* <i>t-ri</i>	<i>ri</i>	<i>t'ā-ri</i>	...	...	...	...	...	...	<i>he-r'ai</i>
2 four	* <i>b-n-d'li</i> ²	<i>li</i>	<i>mā-ti</i>	<i>mā-lew</i>	<i>ma'eu</i>	<i>mā-dai</i>	<i>mā dai</i>	<i>pā-dai</i>	<i>ma-tti</i>	<i>ma-dai</i>
3 boat	* <i>m-hli</i> ²	...	<i>mā-ri</i>	<i>ma-hrew</i>	<i>ma-ri</i> ¹	<i>mā-li</i> ¹	<i>m-li</i>	<i>hli</i> ¹	<i>li</i>	...
4 this	<i>hi</i>	<i>hi</i>	<i>hi</i>	...	...	...	...	<i>-hai</i>	<i>hi</i>	...
5 parrot	* <i>M-kì</i>	<i>-kì</i>	<i>-tsi</i>	...	...	...	...	...	...	...
6 horn	* <i>t-n-r-kì</i>	<i>kì</i>	<i>-nā-tsi</i>	<i>mā-tsew</i>	<i>-tse</i>	...	<i>-ke</i>	<i>-tsai</i>	<i>-tsi</i>	<i>-ke</i>
7 hundred	* <i>kri</i>	...	...	...	...	<i>hai</i>	<i>kai</i>	...	<i>ki</i>	<i>kai</i>
8 to fear	* <i>kri</i>	<i>tì</i>	<i>-nā-tsi</i>	...	<i>n-dze</i>	...	...	...	...	...
9 wind	* <i>k'li</i>	<i>t'li</i>	...	...	...	...	...	...	...	...
10 salt	* <i>m-p-tsi</i>	<i>tsi</i>	<i>mā-tsi</i>	<i>mā-tsew</i>	<i>ma-tse</i>	...	...	...	...	<i>iu-kai</i>
11 blood	?	<i>t'i</i>	<i>-si</i>	<i>mā-sew</i>	<i>-si</i>	<i>-pei</i>	<i>mā-t'ai</i>	<i>n-tai</i>	<i>n-tsi</i>	<i>en-dzai</i>
12 die	* <i>t'i</i>	<i>t'i</i>	<i>-t'i</i>	...	<i>tse-</i>	<i>lei-</i>	<i>-dzai</i>	<i>yai</i>	<i>-yi</i>	<i>-dzai</i>
13 sun	* <i>k-p-ni</i>	<i>ni</i>	...	...	...	...	<i>sai-</i>	<i>t'ai-</i>	<i>si-</i>	<i>-dzai-</i>
14 aunt	* <i>ni</i>	<i>ni</i>	<i>-ni</i>	...	...	...	<i>-nai-</i>	<i>nai-</i>	<i>ni</i>	<i>-nai</i>
15 husk	* <i>p'i</i>	...	...	...	...	...	...	...	...	...
16 cloth	* <i>p'i</i>	...	...	...	...	<i>-pei</i>	<i>-p'ai</i>	<i>p'ai</i>	<i>n-p'i</i>	<i>-pai</i>
17 man	* <i>-mi</i>	<i>mi</i>	<i>mi</i>	...	<i>me</i>	<i>-pei</i>	<i>-p'ai</i>	<i>p'ai</i>	<i>-p'i</i>	<i>pai</i>
	<i>i</i>	<i>i</i>	<i>i</i>	<i>ew</i>	<i>e</i>	<i>ei</i>	<i>ai</i>	<i>ai</i>	<i>i</i>	<i>ai</i>

N. Luhupa -*ü*: 3 *ma-hlä*, 5 *-k'ā-tsä*, 10 *n-tsä*, 11 *ā-sü*, 17 *mä*.
 Tsamphung -*ü*: 5 *rā-tsä*, 11 *-zi*, 17 *mä*.

¹ Borrowed from a Luhupa dialect?

² The initial of this stem was probably a palatal sibilant of some kind, but cannot be identified with any known TB initial.

³ For the irregularity of the vowel, cf. Phadang.

Meaning	K.	L.	Túngli	Longla	Mongsen	Khari Tsangk	Tengsa	Rong	Hlota
1 boundary	* <i>t-rí</i>	<i>rí</i>	- <i>rø</i>	...	...	...	...	...	- <i>rú</i>
2 four	* <i>b-n-d'li</i>	<i>li</i>	<i>pe-zø</i>	<i>p'ê-zé</i>	<i>p'ê-lí</i>	<i>p'ê-lí</i>	<i>p'a-le</i> ¹	<i>fá-lí</i>	<i>mè-zú</i>
3 flea	* <i>hli</i>	<i>-hli</i>	<i>a-zø</i>	...	...	...	...	...	...
4 heavy	* <i>li</i>	...	...	...	...	...	...	<i>li</i>	...
5 this	* <i>hi</i>	<i>hi</i>	...	...	...	...	...	...	<i>hi</i>
6 horn	* <i>t-p-r-kí</i>	<i>kí</i>	<i>zø</i>	...	...	...	...	...	- <i>t'sú</i>
7 bile	* <i>kri</i>	...	- <i>sø</i>	...	...	...	...	<i>kri</i>	bitter
8 to fear	* <i>kri</i>	<i>tí</i>	- <i>tsø</i>	<i>k'i</i>	<i>tsi-</i>	...	<i>tsé-</i>	...	<i>k'yu</i>
9 borrow	* <i>k'i</i>	...	- <i>gi</i>	...	...	...	...	...	<i>k'i</i>
10 thatch	* <i>ni</i>	...	- <i>zø</i>	...	- <i>i</i>	...	...	...	...
11 salt	* <i>m-z-tsú</i>	<i>tsí</i>	<i>mè-tsø</i>	...	...	<i>ma-tsí</i>	...	...	...
12 seed	* <i>tsí</i>	<i>tsí</i>	<i>mè-tsø</i>	...	...	...	...	...	- <i>t'i</i>
13 blood	² <i>t'i</i>	<i>t'i</i>	<i>zø</i>	- <i>yi</i>	- <i>yi</i>	- <i>i</i>	- <i>i</i>	<i>vi</i>	...
14 comb	* <i>m-t'i</i>	...	<i>mè-sø</i>	...	...	...	...	...	...
15 die	* <i>t'i</i>	<i>t'i</i>	<i>sø</i>	<i>sé</i>	<i>tsí-</i> (C)	<i>sí-</i>	<i>sé</i>	...	<i>ts'i-</i>
16 sun	* <i>k-ní</i>	<i>ní</i>	<i>nø</i>	...	- <i>ní</i>	...	...	<i>nyi</i>	- <i>ní</i>
17 aunt	* <i>ní</i>	<i>ní</i>	- <i>nø</i>	...	...	...	...	<i>nyi-</i>	...
18 spear	* <i>Ní</i>	...	<i>nø</i>	...	- <i>ní</i>	...	...	...	...
19 be	* <i>ní</i>	<i>ní</i>	...	...	...	...	<i>nyi</i>	<i>nyi</i>	...
20 the gums	* <i>m-r'-hni</i>	<i>hni</i>	- <i>no</i>	...	...	...	...	...	...
21 man	* <i>-ní</i>	<i>ní</i>	...	...	- <i>ní</i>	...	<i>mè-</i>	<i>ní</i>	...
	<i>i</i>	<i>i</i>	<i>ø</i>	<i>i</i> ³	<i>i</i>	<i>i</i>	<i>i</i> ⁴	<i>i</i>	<i>i</i> ⁵

¹ Not a mistake in the final vowel, for we find *p'ê-le* in closely related Yatsam although *-i* is the ordinary correspondent for this final in Yatsam.

² See note 2 of p. 478. ³ *ê* after sibilants. ⁴ *e* after labials?

⁵ *ü* under unknown conditions — perhaps after **r*, **l*.

Meaning	K.	L.	Rengma	Dayang	Zumomi	Kezama	Sopvoma	Tengima	Kehena
1 boundary	* <i>t-ri</i>	<i>ri</i>	- <i>re</i>	...	...	...	...	<i>t'e-ri'a</i> (B)	...
2 four	* <i>b-n-dli?</i>	<i>li</i>	<i>ke-ze</i> ¹	<i>bi-di</i>	<i>bi-di</i>	<i>pe-di</i>	<i>pa-dai</i>	<i>da</i>	<i>da</i>
3 bow	* <i>t?-li</i>	<i>li</i>	<i>le-</i>	...	<i>-li-</i>	...	...	<i>-lla</i> (B)	...
4 horn	* <i>t-n-r-ki</i>	<i>ki</i>	...	...	<i>-ki-</i>	...	...	<i>ka</i> (B)	...
5 dirty	* <i>kri</i>	...	...	...	...	...	...	<i>-kra</i>	...
6 hundred	* <i>kri</i>	...	<i>tse</i>	<i>-ke</i>	<i>-ke</i>	<i>kri</i>	<i>kre</i>	<i>kra</i>	<i>kra</i>
7 deer	* <i>m-?-t-k'i</i>	<i>-k'i</i>	...	...	...	...	...	<i>te-k'a</i>	...
8 wind	* <i>k'li</i>	<i>t'li</i>	...	...	...	...	...	<i>-k'ra</i>	...
9 thatch	* <i>yi</i>	...	...	<i>-yi</i>	<i>-yi</i>	...	...	<i>-ya</i>	...
10 salt	* <i>m?-tsi</i>	<i>tsi</i>	<i>tse</i>	...	<i>-m-ti</i>	...	...	<i>m?-tsa</i>	...
11 seed	* <i>tsi</i>	<i>tsi</i>	...	...	<i>-ti-</i>	...	...	<i>tse</i>	...
12 blood	?	<i>t'i</i>	<i>-zie</i>	...	<i>-zi</i>	...	...	<i>-za</i>	...
13 die	* <i>t'i</i>	<i>t'i</i>	<i>se-</i>	<i>ti</i>	<i>ti-</i>	<i>tsi-</i>	<i>t'i-</i>	<i>sa</i>	<i>sa</i>
14 sun	* <i>k-ni</i>	<i>ni</i>	<i>-ye-</i> (Gr)	...	...	<i>-nyi-</i>	...	<i>na-</i>	<i>na-</i>
15 aunt	* <i>ni</i>	<i>ni</i>	...	...	<i>-ni</i>	...	...	<i>-na</i>	...
16 spear	* <i>Ni</i>	...	...	<i>-ni</i>	...	...	...	...	...
17 be	* <i>ni</i>	<i>ni</i>	...	<i>-ni</i>	<i>-ni</i>	...	...	...	...
18 husk	* <i>p'i</i>	...	...	...	<i>-pi-</i>	...	...	<i>p'a</i> (B)	...
19 cloth	* <i>p'i</i>	...	<i>pe</i>	<i>-p'i</i>	<i>-pi</i>	...	...	<i>p'e</i> (Mc)	...
20 man	* <i>mi</i>	<i>mi</i>	<i>-me</i>	<i>mi</i>	<i>-mi</i>	<i>-mi</i>	<i>mai</i>	<i>ma</i>	<i>-ma</i>
	<i>i</i>	<i>i</i>	<i>e</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>ai</i>	<i>a</i>	<i>a</i>

¹ Misprint for *pe-ze*.

Table 3. Final -u (Voc. 6)

Meaning	K.	L.	Maring	Khoibu	Ukhrul	Phadang	Kupome	Khunggoi
1 rat	*b-yù	-zu	yu-	...	...	ma-su ¹	ma-džeu	...
2 beer	*yu	zu	...	...	...	...	tšeu ²	džu
3 creeper, fish poison	*k-r ² u	ru	(k-rew)	...	...	...	k-rew	k ² u-ru
4 head	*lu	lu	lu	lu	...	...	...	...
5 wax	*lu	lu (OK ³)	-lu	...	...	...	...	-lu
6 poison	*hu	hu (Th)	...	...	...	hu	...	...
7 butterfly, caterpillar	*ku	...	...	...	ku-	ku-	...	ku-
8 fall down	*klu	flu	...	...	...	ku-	...	...
9 smoke	*m-k ² u	-k ² u	-k ² u	...	(k ² -ut)	(-k ² ut)	(-k ² u)	-k ² u
10 dove	*m-k ² ru	t ² u-	...	...	-sâ	...	...	...
11 elder	*yu, *u ²	u	u-	...	...	...	...	...
12 porcupine	*-r-k ² u ²	-k ² u ²	-r-k ² u	...	...	n-k ² u	-k ² u	...
13 mother, female	*nà	nu	-nu	nu-	...	...	...	...
14 pigeon	*Nu	...	...	...	-nâ	...	...	...
15 breasts, milk	*-r ² -hnu	hnu-	...	...	-nâ	...	...	...
16 steal	*m-r ² -yu ²	rûk ²	...	...	...	...	...	ma-hu-
	u	u	u	u	â	u	ew, eu	u

¹ For ma-zu.² For džeu.³ OK = Old Kuki.

Meaning	K.	L.	Maram	Kwoireng	Kabui	Khoirao	Empeo
1 rat	* <i>b-yù</i>	-zu	-ya	tā-dza	...	n-yu	-za
2 steal	* <i>m-r²-yu</i>	rūkē	rā-ya-	-ya-	han-	n-hu-	hə-ga-(St)
3 breasts, milk	* <i>hnu</i>	hnu-	-na	...	nan-	...	...
4 beer	* <i>yu</i>	zu	-yan	dza	yan	-yu	dza
5 butterfly,	* <i>ku</i>	...	-kau	...	...	...	...
caterpillar							
6 fall down	* <i>ku</i>	tu	kau-	kau-	...	...	...
7 smoke	* <i>m-k'u</i>	-k'u	...	-k'ae	-k'au	...	...
8 see	* <i>nu</i>	...	...	...	...	nu-	...
9 mother, female	* <i>nü</i>	nu	...	...	nan	-nu	-nao
10 hawk	* <i>M-r-mu</i>	mu	-mau	...	mau-	...	...
	<i>u</i>	<i>u</i>	<i>a, au</i>	<i>a, au</i>	<i>au</i>	<i>u</i>	<i>a, ao</i>

One might think that the phoneme represented by *a* and *au* (*ao*) in Maram, Kwoireng, and Empeo was *-a(u)* in which the first vowel of the diphthong is strongly stressed and the second is a semivowel which might not be easily heard by Europeans. Such diphthongs are found in New Burmese. But when we note

that Maram, Kwoireng, and Empeo all have *-a* in the first two words, and agree in having *-au* in the last seven words of the table, we must seek some other solution. None can be offered here except the negative one, that it is not due to the initials.

Meaning	K.	L.	Hlota	Tsungli	Mongsen	Tsangki	Khari	Rong
1 frog	* <i>n</i>	- <i>a</i>	- <i>vu</i>	...	...	...	...	...
2 smoke	* <i>m-k'u</i>	<i>k'u</i>	- <i>k'u</i>	- <i>k'o</i> ¹	- <i>k'o</i> ¹	...	- <i>kü</i>	...
3 mother's brother	* <i>k'u</i>	...	...	- <i>k'u</i>	- <i>k'u</i>	- <i>k'u</i>	...	- <i>ku</i> ²
4 see	* <i>nu</i>	...	...	<i>nu</i>	<i>nu</i>	...	...	...
5 greasy	* <i>t'u</i>	<i>t'u</i>	...	...	...	...	...	<i>su</i>
6 equal	* <i>t'u</i>	<i>t'u</i>	...	...	...	...	...	<i>pür-su</i> ³
7 breasts	* <i>r-hnu</i>	<i>hnu</i>	...	...	...	...	...	<i>nu</i>
8 grandfather	* <i>pu</i>	<i>pu</i>	...	- <i>pu</i>	...	...	...	...
9 bud	* <i>m pu</i>	...	...	...	...	...	...	<i>bu(v.)</i>
10 carry on shoulder	* <i>t-pu</i>	<i>pu</i>	<i>pu</i>	- <i>pu</i>	...	...	...	<i>bü</i>
11 to blow	* <i>p'u</i>	...	...	- <i>pu</i>	...	...	...	...
12 to wear	* <i>bu</i>	<i>bu</i>	...	...	...	...	...	<i>bu</i>
		(Th)						
13 dove	* <i>m-k'ru</i>	<i>t'u</i>	- <i>k'u</i>	<i>zø-i</i>	...	...	...	...
14 horn	* <i>k'ru</i>	...	...	<i>zø</i>	...	...	...	...
	<i>u</i>	<i>u</i>	<i>u</i>	<i>u</i> ⁴	<i>u</i>	<i>u</i> ₁	<i>ü</i> ₁	<i>u</i>

¹ Note that this word was irregular in Ukhrul; see table 3, no. 9, above.

² Paternal²uncle.

³ Root *su*.

⁴ But **k'ru* > Tsungli *zø*.

Meaning	K.	L.	Rengma	Zumomi	Dayang	Tengima
1 frog	*u	-u	sa-gge	...	...	-u ¹
2 rat	*b-yü	-zu	...	-zi	...	t'e-zu
3 beer	*yu	zu	...	zi	...	dzu
4 butterfly, caterpillar	*ku	...	...	...	...	k'u-
5 smoke	*m-k'u	...	-ke-	-m-k'i	-k'u	-k'u
6 see	*u	...	...	...	...	u
7 breasts, milk	*-r ² -hnu	hnu-	nie-	...	...	-nu
8 grandfather	*pu	pu	...	...	...	-pu-
9 carry on shoulder	*t ² -pu	pu	...	pu-	pu-	...
10 armadillo	*p'u	-p'u	-p'e	-p'u	...	-p'u
11 nest	*ar-t ² -bü	bu	...	pu-	...	-bu
12 hawk	*M-r-mu	mu	...	...	...	rë-mu
13 porcupine	*-r-kü	-kü	...	-tse-ku	...	tse-kru ²
14 steal	*m-r ² -yu	rük	ke-rä-he	...	...	rä-yu- (St)
15 dove	*m-k'ru	t'u-	in-sä	me-ke-du	...	më-k'ru
16 elder	*yu, *u ²	u	sa-gä	...	...	...
	u	u	e ³	u ⁴	u	u

¹ Toad.² By metathesis of *r* and *k*.³ Sometimes written ä²⁴ *i* after *z* < **y*. Zumomi -*m-k'i* 'smoke' is probably incorrect, as indicated by the Dayang form.

Table 4. Final -*ua*

	nine	foot	rain	
K.	* <i>t-kuà</i>	* <i>k'ua</i>	* <i>r'ua</i> ²	<i>ua</i>
L.	<i>kua</i>	...	<i>rua</i> ²	<i>ua</i>
Ukhrul	<i>tšì-kõ</i>	...	- <i>rõ</i>	<i>õ</i>
Phadang	<i>tšì-ku</i>	...	<i>ru-</i>	<i>u</i>
Kupome	<i>s-k'o-</i>	<i>k'o-</i>	<i>ro-</i>	<i>o</i>
Khunggoi	<i>tša-ko</i>	<i>k'u-</i>	<i>ru-</i>	<i>u:</i>
Kabui	<i>tšã-ku</i>	<i>k'u</i>	...	<i>u</i>
Khoirao	<i>tšã-ku</i>	<i>n-k'u</i>	...	<i>u</i>
Empeo	<i>šu-gui</i>	...	- <i>ru</i>	<i>u</i>
Hlota	<i>to-ku</i>	...	- <i>ru</i>	<i>u</i>
Rengma	<i>ta-kka</i> (B)	...	- <i>r'a</i>	<i>a</i>
Zumomi	<i>t'u-ku</i>	...	- <i>ru</i>	<i>u</i>

Table 5. Final -e

Meaning	K.	L.	Maram	Kwoireng	Kabui	Khoirao	Empeo (St)
1 lip	*ke	...	...	-gi	-tsi	me-ki	...
2 iron	*M-Gre?	...	...	-gi	...	-n-gri	hě-gei
3 pull	*tse	...	tsi-	...	...	tsi-	...
4 head	*pe	...	-pi	-pi	pi	pi	-pei
5 goat	*me	me	-mi	ka-mi	...	ka-mi	kĩ-mei
6 flesh	*m'e?	m'e (OK)	ke-mi	-mi	...	...	hĩ-mei
7 earth	*k-m-de?	...	...	kā-d-di	kā-n-di	n-d'a	gø-dei
8 give	*pe?	{pe pēk'}	pi-	pi-	ti-	pi-	pe-
	e	e	i	i	i	i	e ¹

¹ But -e < *.e?

Meaning	K.	L.	Rengma	Kezana	Sopvoma	Zumomi	Dayang	Tengina	Kehena
1 raw	*ye?	...	tě-gĩ	...	...	...	...	...	...
2 head	*pe	...	-pĩ	-psü	-ppi	-tsü	-tsu	-tsü-	pi
3 give	*pe?	{pe pēk'}	-pĩ	psü	pi-	tsü-	tsü	tsü	pi
4 goat	*me	me	-mĩ	-mũ-	...	-nye'	-mbyě-	{-nü mũ-}	-mmi
5 earth	*k-m-de?	...	ka-zĩ	...	...	...	...	kĩ-dzö	...
	e	e	i	ũ	i	ũ	ũ	ũ	i

Except for Rengma the above equation holds only for words with labial initials, and in Zumomi and Dayang only after *labial stops; we have too little comparative materials to determine whether the equation would be true after other initials.

Table 6. Final *-ei* (Voc. 5)

Meaning	K.	L.	Maring	Ukhrul	Phadang	Kupome	Khunggoi
1 I	* <i>ei</i>	...	...	...	<i>i</i>	ai	<i>ei</i> ¹
2 left	* <i>t-p'-wei</i>	<i>vei-</i>	...	...	...	wai-	...
3 earth	* <i>n-lei</i>	<i>lei</i>	<i>t'ai</i>	<i>nā lei</i>	<i>m-li</i>	m-lai	m-la
4 white ant	* <i>lei</i>	<i>lei-</i>	...	<i>lei-</i>	<i>lei</i> ²	<i>lei-</i>	<i>lei-</i>
5 tongue	* <i>m-lei</i>	<i>lei</i>	<i>mā-lei</i> (Si)	ma-lə	...	...	...
6 buy	* <i>k-ʔ-lei</i>	<i>lei</i>	<i>lei-</i> (Si)	...	...	...	...
7 squirrel	* <i>k-r-ʔ-hlei</i>	<i>-hlei</i>	...	<i>k'ā-lei</i>	...	...	...
8 I	* <i>kei</i>	<i>kei</i>	<i>kei</i>	...	...	...	...
9 spear	* <i>k-fei</i>	<i>fei</i>	<i>tsei</i>	<i>kā-tsei</i>	<i>ka-d'i</i>	kā-d'ai	ka-tsai
10 calf of leg	* <i>t'ei</i>	...	...	...	<i>-t'i</i>	<i>-t'ei</i>	...
11 fruit	* <i>t'eì</i>	<i>t'ei</i>	<i>hei</i>	<i>t'ei</i>	<i>t'i</i>	<i>t'ei</i> <i>t'ai</i>	<i>t'ai-</i>
12 great	* <i>Dei</i>	...	...	...	<i>-di-</i>	...	...
13 foot	* <i>p'ei</i>	<i>p'ei</i>	<i>p'ai-</i>	<i>p'ei</i>	<i>p'i-</i>	<i>p'ei-</i>	<i>-p'ai</i>
14 cloud	* <i>t-meì</i>	<i>-meì</i>	<i>rā-mai</i>	...	...	mai	...
15 fire	* <i>meì</i>	<i>meì</i>	<i>mei</i>	<i>mei</i>	<i>mi</i>	mai	<i>mei</i>
16 tail	* <i>k'-r-meì</i>	<i>meì</i>	<i>kā-mei</i>	<i>-k'ā-mei</i>	<i>-ka-mi</i>	-ka-mai	kā-mai
17 to bite	* <i>m-keì</i>	<i>keì</i>	...	<i>-mā-kei</i>	<i>n-ki-</i>	...	ma-ka-
18 know	* <i>t'eì</i>	<i>t'eì</i> ²	...	<i>-t'ei</i>	<i>t'i-</i>	...	...
	<i>ei</i>	<i>ei</i>	<i>ei</i>	<i>ei</i>	<i>i</i>	<i>ei</i>	<i>ei</i> ²

¹ Written *ee*.² Borrowed.

	Khoibu	Tsamphung	C.	N.
3 earth	<i>t'ă-lei</i>	<i>ŋă-lei</i>	<i>ŋă-laĩ</i>	<i>mă-lai</i>
11 fruit	...	<i>-t'ei</i>	<i>-t'ăĩ</i>	<i>-t'ai</i>
13 foot	...	<i>ă-p'ei</i>	...	...
15 fire	<i>mei</i>	<i>ă-mei</i>	<i>maĩ</i>	<i>mai</i>
	<i>ei</i>	<i>ei</i>	<i>ai?</i>	<i>ai</i>

Since this final is recorded *-ei* in Ukhrul, the most accurately recorded of the Luhupa languages, the fluctuations between *-ai* and *-ei* in Maring, Kupome, and Khunggoi leave little doubt that the actual pronunciation in those languages is *-ei*, an awkward diphthong to record in Indic script and one which Singh and Gordon's recorder avoided by using *-ăĩ* which effectively distinguished it from **-ai*, for which they used *-ăĩ*. Northern Luhupa, and perhaps Central Luhupa, seems actually to pronounce the final **-ei* as *-ai*.

Meaning	K.	L.	Maram	Kwoireng	Kabui	Khoirao	Empeo
1 I	* <i>ei</i>	...	<i>e-</i>	<i>i</i>	<i>aʔ(Si)</i>	<i>hei(Si)</i>	<i>i(St)</i>
2 left	* <i>t-p-i-wei</i>	<i>vei-</i>	<i>sa ve-</i>	<i>we-</i>	<i>m-bai</i>	...	<i>i'(St)</i>
3 tongue	* <i>m-lei</i>	<i>lei</i>	...	...	<i>ba-rei¹(Si)</i>	<i>li¹</i>	<i>bä-le¹</i>
4 buy	* <i>k-p-lei</i>	<i>lei</i>	<i>li-</i>	...	...	...	...
5 house	* <i>kei</i>	...	<i>-ke</i>	<i>-ki</i>	<i>kai</i>	<i>-kei</i>	<i>ki</i>
6 pl.	* <i>v'ei?</i>	<i>nei</i>	...	...	...	<i>nei(Si)</i>	...
7 elder	* <i>tsei?</i>	...	...	<i>-tsi</i>	<i>-tsäi(Si)</i>	<i>tsai</i>	<i>-si</i>
brother							
8 calf of leg	* <i>tei</i>	...	<i>-ti-</i>	...	...	...	...
9 fruit	* <i>t'e</i>	<i>t'ei</i>	<i>t'e</i>	<i>-si</i>	<i>ka-t'ai</i>	<i>-t'ei³</i>	<i>-tsi(St)</i>
10 great	* <i>Dei</i>	...	<i>di-</i>	<i>-de-</i>	<i>dai-</i>	<i>-t'ei-</i>	<i>di-</i>
11 have	* <i>nei</i>	<i>nei</i>	<i>ni-</i>	...	<i>nai-</i>	...	...
12 foot	* <i>p'ei</i>	<i>p'ei</i>	<i>-pe</i>	<i>{-p'e -p'i}</i>	<i>p'äi-(Si)</i>	<i>p'ei(Go)</i>	<i>-pi</i>
13 fire	* <i>mei</i>	<i>mei</i>	<i>-mi</i>	<i>-mi</i>	<i>m'äi(Si)</i>	<i>mei(Si)</i>	<i>mi</i>
14 tail	* <i>k'-r-mei</i>	<i>mei</i>	<i>-me</i>	<i>-mi</i>	<i>-mai</i>	<i>-nei</i>	<i>-mi</i>
15 to bite	* <i>m-kei</i>	<i>kei</i>	<i>ma-ke-</i>	<i>ma-ki-</i>	<i>kai-</i>	<i>n-kei-</i>	<i>n-ki</i>
16 know	* <i>t'ei</i>	<i>t'ei?</i>	<i>te-</i>	<i>se-</i>	<i>tai-</i>	...	<i>tsi-</i>
	<i>ei</i>	<i>ei</i>	<i>ei</i>	<i>ei</i>	<i>äi?</i>	<i>ei⁴</i>	<i>i</i>

¹ The *ts* found in Old Bodish (classical Tibetan) *ltsé* 'tongue' may have caused the irregularity we find here in the vowels before the affricate dropped in Kukish; irregularity in the vowel is also found in this stem in some Tibeto-Burmic languages outside of Kukish.

² P = Pankhu.

³ In compounds.

⁴ Singh and Gordon wrote *-ai* where better recorders had *-ei*, and I have transcribed their *-äi* as *-ei* in this column. In Kabui, I have not done this, for Singh gave no. 13 as *mai* and McCulloch more often had *-ai*.

Meaning	K.	L.	Hlota	Tsungli	Longla	Mongsen	Tsangki	Khari	Tengsa	Rong
1 left	* <i>t-pʔ-wei</i>	<i>vei-</i>	...	...	...	...	...	...	...	<i>vi-</i>
2 earth	* <i>v-lei</i>	<i>lei</i>	- <i>li-</i>	<i>li</i>	- <i>li</i>	- <i>li</i>	- <i>li</i>	- <i>li</i>	- <i>li</i>	...
3 tongue	* <i>m-lei</i>	<i>lei</i>	<i>n-li</i>	<i>me-li</i>	- <i>mi-li</i>	- <i>mi-li</i>	- <i>mi-li</i>	...	...	- <i>li</i>
4 buy	* <i>k-pʔ-lei</i>	<i>lei</i>	...	- <i>li</i>	...	<i>li</i>	...	<i>li</i>	- <i>li</i>	...
5 ladle	* <i>lei</i>	- <i>lei</i>	...	...	...	...	...	...	...	- <i>li</i>
6 squirrel	* <i>k-pʔ-hlei</i>	- <i>hlei</i>	...	...	...	...	...	...	...	<i>ka-li</i>
7 house	* <i>kei</i>	...	- <i>ki</i>	<i>ki</i>	...	- <i>ki</i>	...	...	...	...
8 I	* <i>veiʔ</i>	<i>vei</i>	...	<i>ni</i>	...	<i>ni</i>	...	<i>ni</i>	...	...
9 great	* <i>Dei</i>	...	...	...	...	...	...	...	...	<i>ti</i>
10 have	* <i>nei</i>	<i>nei</i>	...	...	...	...	...	...	...	<i>nyi</i>
11 leg	* <i>pʔei</i>	<i>pʔei</i>	- <i>pi</i>	- <i>pi</i>	...	- <i>pi</i>	...	...	...	...
12 fire	* <i>mei</i>	<i>mei</i>	- <i>mi</i>	<i>mi</i>	<i>mi</i>	<i>mi-</i>	<i>mi-</i>	...	...	<i>mi</i>
13 widow	* <i>hmei</i>	<i>hmei-</i>	- <i>mi</i>	<i>mi-</i>	...	<i>mi-</i>	...	...	...	...
14 tail	* <i>kʔ-pʔ-mei</i>	<i>mei</i>	- <i>mʔi</i>	...	...	- <i>mi</i>	...	- <i>mi</i>	- <i>mi</i>	...
	<i>ei</i>	<i>ei</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>i</i>

Meaning	Yatsam	Yatsumi
2 earth	- <i>li</i>	...
3 tongue	- <i>mi-li</i>	<i>mú-lö</i>
12 fire	<i>mi-</i>	<i>mö</i>
	<i>i</i>	<i>ö</i>

Meaning	K.	L.	Rengma	Kezama	Sopvoma	Zumomi	Dayang	Tengima	Keheha
1 I	*ei	...	...	i-ye	yi	i-	i-	...	i
2 left	*t-p?-wei	vei-	...	...	...	...	...	-vi	...
3 tongue	*m-lei	lei	...	mē-li	ma-li	-mi-li	-mi-li	mē-lū	mē-l'e
4 ladle	*lei	-lei	...	...	...	...	...	li-	...
5 squirrel	*k-r?-hleì	(Th) -hleì	...	...	...	-ki-li	...	...	ke-ŕ-i
6 house	*kei	...	ka	{ -k'le ke	-t'ŕi	-ki	-ki	ki	ki
7 I	*nei?	vei	...	...	...	ni-	ni, ni	...	...
8 fruit	*t'ei	t'ei	-ša	...	...	-ti	-ti	si	...
9 great	*Dei	...	...	...	...	...	...	-di	...
10 foot	*p'ei	p'ei	p'a	p'e	-p'i	...	...	p'i	p'e
11 fire	*mei	mei	ma	-me	-mi	-mi	-mi	mi	mi
12 widow	*hmei	hmei-	ma-	...	...	...	...	-mi	...
13 tail	*k-r-mei	mei	-ma	...	...	-m'i	...	mi	...
14 to bite	*m-kei?	kei	un-ka-	...	...	mi-ki-	...	me-ki-	...
15 know	*t'ei?	t'ei?-?	...	...	...	i-ti-	...	si-	...
	ei	ei	a	e	i	i	i	i	i?

Table 7. Final -ai (Voc. 8)

Meaning	K.	L.	Maring	Ukhrul	Phadang	Kupome	Khunggoi
1 husk	*wai	-vai	wai	...	...	...	...
2 god	*t ² -rai	...	t ² -rai	...	...	...	...
3 navel	*M ² -lai	lai	pā-lai	...	...	...	...
4 to tear	*kai	...	...	...	-kai-	...	ma-k'i-
5 fish	*k'ai	...	...	k'ai	k'ai	k'i	k'i
6 half	*k'ai	...	...	...	...	-k'i	k'i-
7 crab	*t ² -yai	ai	ai	...	...	...	...
8 tumeric	*yai	ai-	ai-	...	...	hi	...
9 deer	*nai	sa-vai	sā-vai	sa-vai	...	...	...
10 elephant	*-k-sai	sai	ki-sai	...	...	...	...
11 cool	*dai	dai	dai-	...	...	...	...
12 near	*hnai	hnai	...	-vā-nai	nai-	...	...
13 excrement	{ *bai ? *pai ? }	...	...	pai	...	...	...
14 the plains	*p'ai	p'ai-	p'ai-	...	...	...	...
15 pumpkin	*mai	mai	mai-	k'ā-mai-	ka-mai-	sa-mi-	...
16 face	*hmai	hmai	mai	mai	mai	mai ¹	mai ¹
17 late	*Xlai	tlai	...	-tai	...	...	...
	ai	ai	ai	ai	ai	i	i

¹ Borrowed (?), as English *face*.

Khoibu, 10 k'ā-sai; Tsamphung, 5 -k'āi; N. Luhupa, 5 k'i.

Meaning	K.	L.	Maram	Kwoireng	Kabui	Khoirao	Empeo
1 god	* <i>tʰ-rai</i>	...	<i>sǎ-ra</i>	<i>tʰa-ra</i>	<i>ra</i>	<i>tʰe-rai</i>	<i>hə-ra</i>
2 navel	* <i>Mʰ-lai</i>	<i>lai</i>	<i>-la</i>	<i>tʰa-la</i>	<i>-la</i>	...	<i>tə-la</i>
3 fish	* <i>k'ai</i>	...	<i>-ka</i>	<i>tʰǎ-k'a</i>	<i>k'a</i>	<i>k'ai</i>	<i>sə-ka</i>
4 crab	* <i>tʰ-rai</i>	<i>ai</i>	<i>-ya</i>	<i>tʰa-ya</i>	<i>ya</i>	<i>tʰǎ-yai</i>	<i>hə-gga</i>
5 tuneric	* <i>yai</i>	<i>ai-</i>	...	<i>tʰǎ-ya</i>	...	...	...
6 deer	* <i>nai</i>	<i>sa-nai</i>	...	...	<i>tʰǎ-nai</i> ¹	<i>k'ǎ-nai-</i>	...
7 near	* <i>hrai</i>	<i>hrai</i>	<i>-na-</i>	<i>-na-</i>	<i>na-</i>	<i>-nai-</i>	<i>na-</i>
8 excrement	{* <i>bai?</i> * <i>pai?</i> }	...	...	...	...	...	<i>-pa</i>
9 3 ^d pers. pron.	* <i>pai</i>	...	...	...	...	<i>pai</i>	...
10 pumpkin	* <i>mai</i>	<i>mai</i>	<i>sǎ-ma-</i>	<i>-tʰa-ma-</i>	<i>-ma</i>	<i>mai-</i>	<i>hə-ma-</i>
	<i>ai</i>	<i>ai</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>ai</i>	<i>a</i>

Meaning	K.	L.	Rengma	Kezama	Sopvoma	Zumomi	Dayang	Tengima	Kehena
1 god	* <i>tʰ-rai</i>	...	<i>te-tʰ-</i>	<i>rə-</i>	<i>-ra-</i>	<i>-ya-</i>	<i>-ya-</i>	<i>-r'o-</i>	<i>-r'o-</i>
2 navel	* <i>Mʰ-lai</i>	<i>lai</i>	...	...	...	<i>-p'o-la</i>	...	<i>-l'o</i>	...
3 fish	* <i>k'ai</i>	...	...	...	...	<i>-k'a</i>	<i>-ka</i>	<i>k'o</i>	...
4 half	* <i>k'ai</i>	...	...	...	...	<i>t'ü-k'a</i>	...	...	...
5 crab	* <i>tʰ-rai</i>	<i>ai</i>	<i>tʰe-gu</i>	...	...	<i>-tsu-go</i>	...	<i>se-go</i>	...
6 excrement	{* <i>bai?</i> * <i>pai?</i> }	...	<i>-bu</i>	...	...	<i>-ba</i>	...	<i>bo</i>	...
7 3 ^d pers. pron.	* <i>pai</i>	...	...	...	...	<i>pa</i>	<i>pa</i>	<i>po</i>	<i>po</i>
8 face	* <i>hrai</i>	<i>hrai</i>	<i>-m'o</i>	...	...	...	...	<i>m'o-</i>	...
	<i>ai</i>	<i>ai</i>	<i>ö, u</i>	<i>ö₁</i>	<i>a₁</i>	<i>a</i>	<i>a</i>	<i>o</i>	<i>o</i>

¹ Borrowed.

Meaning	K.	L.	Hlota	Tsungli	Longla	Mongsen	Tengsa	Rong
1 husk	* <i>wai</i>	- <i>vai</i>	...	<i>wa-</i>	...	...	...	...
2 leg	* <i>M²-vai</i>	...	<i>n-dra</i>	- <i>mo-la</i>	...	...	...	...
3 god	* <i>lai</i>	<i>lai</i> (OK) ¹	...	<i>ne-la</i>	...	...	...	...
4 navel	* <i>M²-lai</i>	<i>lai</i>	<i>n-na</i>	- <i>pe-la</i>	...	...	...	...
5 dig	* <i>lai</i>	<i>lai</i>	...	- <i>la</i> ²	...	...	...	...
6 prawn	* <i>kai²</i>	<i>kai-</i>	...	...	...	...	...	- <i>gi</i>
7 crab	* <i>t²-vai</i>	<i>ai</i>	...	...	...	...	...	<i>tā-hi</i>
8 listen, obey	* <i>,-vai</i>	<i>vai</i>	- <i>ad-</i>	- <i>na</i>	- <i>na</i>	<i>na</i>	...	...
9 to play	* <i>tsai</i>	<i>tsai</i>	<i>tsa-</i>	...	...	...	...	...
10 near	* <i>hnai</i>	<i>hnai</i>	...	- <i>na</i>	...	- <i>na</i>	...	...
11 3 ^d pers. pron.	* <i>pai</i>	...	...	<i>pa</i>	...	<i>pa</i>	<i>pa</i>	<i>pi</i> ³
12 pumpkin	* <i>mai</i>	<i>mai</i>	...	<i>ma-</i>	...	...	...	...
13 face	* <i>hmai</i>	<i>hmai</i>	- <i>m'a</i>	<i>ma</i>	...	<i>ma</i>	...	<i>mi-</i>
14 forget	* <i>hmai</i>	<i>hmai</i>	...	- <i>ma</i>	...	...	...	...
	<i>ai</i>	<i>ai</i>	<i>a</i>	<i>a</i>	<i>a</i> ₁	<i>a</i>	<i>a</i> ₁	<i>i</i> ²

¹ < **n-la*.² To plough.³ There.

Table 8. Final -o (Voc. 3)

Meaning	K.	L.	Maring	Ukhrul	Phadang	Kupome	Khungoi
1 field	*lò	lo	lau	lui	leou	...	lau
2 take	*lò	lo	wa lau-	...	...	...	...
3 stone	*kò	...	...	-gui	...	-gau	-ko
4 head	*m-sò-ko	...	...	kui	kyew	kau	-kau
5 white	*wò	wò	wau-	-nui	...	...	-wau-
6 fry	*j'-wò	...	...	-nui	...	...	...
7 thorn	*m-so,ò	...	...	-sui	...	...	...
8 panjie	*k,ò-so,ò	so	sau	...	ka-seu	ka-sau	ka-sau
9 get up	*t'ò	t'ò	-n-t'au-	-t'ui	t'au-	...	t'au-
10 young	*n-r,ò-no	no	...	-vǎ-nui	...	...	...
11 paddy	*p'ò	p'ò-	...	...	...	-p'au	-p'au
12 take	*k'ò	...	...	-k'ui	kau-	...	kau-
	o	o	au	ui	eu?	au	au

Tsamphung, 4 kau; C. Luhupa, 4 -kao; N. Luhupa, 3 -gau, 4 -kao.

Meaning	K.	L.	Maram	Kwoireng	Kabui	Khoirao	Empeo
1 face	*yo	...	yo	ta-yo	you	-yau	...
2 see	*yo	zō ^(H)	yo-	...	yau-	yau-	...
3 to burn	*ro	...	ro-	...	...	ka-ran	ru-
4 field	*lō	lo	-lo	tśa-lo	lau	lău (Si)	lu
5 take	*lō	lo	lo-	lo-	lað (Si)	lău- (Si)	lu-
6 high	*ko	...	-go-	-ko-	kau-	kău- (Si)	...
7 call	*ko	ko	...	ko-	kau-	...	ku-
8 basket	*k'o	k'o	...	...	...	k'ao (Si)	...
9 white	*po	po	...	...	nau-	-pou- (Si)	...
10 thorn	*u-so?	...	...	...	...	...	-tu
11 panjie	*k-p-so	so	-to	-t'o	sao	-tau	-tū
12 stone	*m-to	...	-to	tă-tto	tau	n-tau	ən-dzu-
13 get up	*t'o	t'o	to-	...	t'au-	t'ău- (Si)	...
14 soft	*p-r-p-no	no	...	...	...	...	nu-
15 paddy	*p'o	p'o-	...	...	...	-p'au	...
	o	o	o	o	au	au ¹	u

¹ The *a* of the diphthong is probably short, judging from Singh's transcription.

Meaning	K.	L.	Hlota	Tsungli	Rong
1 dead	* <i>ro</i>	<i>ro</i>	...	- <i>ro</i>	...
2 field	* <i>lò</i>	<i>lo</i>	...	<i>lu</i>	...
3 take	* <i>lò</i>	<i>lo</i>	<i>hlo-</i>	...	...
4 head	* <i>m-sʔ-ko</i>	...	<i>ku-ri</i>	{ - <i>ku-</i> - <i>ko-</i>	...
5 basket	* <i>kʰo</i>	<i>kʰo</i>	...	...	<i>ku-mu</i>
6 to boil	* <i>so</i>	<i>śo</i>	...	- <i>so</i>	<i>tsu</i>
7 thorn	* <i>m-soʔ</i>	...	...	...	<i>dzu</i>
8 panjie	* <i>kʰ-so</i>	<i>so</i>	...	...	<i>tsu</i>
		(H)			
9 dig	* <i>tʰo</i>	...	...	- <i>to</i>	<i>du</i>
10 young	* <i>v-rʔ-no</i>	<i>no</i>	...	<i>nu</i>	...
	<i>o</i>	<i>o</i>	<i>o,u</i> ¹	<i>o,u</i> ¹	<i>u</i>

4, Longla, Tengsa -*ko*, Tsangki -*ku-*; Yatsumi, 2 -*lu*, 4 *ku*; Thukumi, 2 -*lu-*.

Meaning	K.	L.	Reng- ma	Keza- ma	Zumo- mi	Da- yang	Tengi- ma	Kehe- na
1 to burn	* <i>ro</i>	...	<i>ro-</i>	...	...	...	<i>re-wa-</i>	...
2 field	* <i>lò</i>	<i>lo</i>	<i>lo-</i>	<i>lâ</i>	- <i>lu</i>	- <i>lu</i>	<i>le</i>	<i>le-</i>
3 take	* <i>lò</i>	<i>lo</i>	...	...	<i>lu-</i>	<i>lu</i>	<i>le</i>	...
4 to call	* <i>ko</i>	<i>ko</i>	<i>ko-</i>	<i>kâ</i>	<i>ku-</i>	<i>ku</i>	<i>ke</i>	...
5 panjie	* <i>kʰ-so</i>	<i>so</i>	...	...	- <i>śu</i>	...	<i>kě-tʰe</i>	...
		(H)						
6 a fly	* <i>ma-tʰoʔ</i>	<i>tʰo</i>	...	...	- <i>m-tʰu</i>	...	...	...
7 get up	* <i>tʰò</i>	<i>tʰo</i>	...	...	...	...	<i>se</i>	...
8 dig	* <i>tʰo</i>	...	...	...	...	...	<i>tʰe</i>	...
9 to dry	* <i>pʰo</i>	<i>pʰo</i>	<i>pʰo-</i>	...	...	...	...	...
	<i>o</i>	<i>o</i>	<i>o</i>	<i>â</i>	<i>u</i>	<i>u</i>	<i>e</i>	<i>e</i>

¹ Probably a single phoneme between *o* and *u*, or *o* and *u* are allophones.

Table 9. Final *-au* (Voc. 7)

Meaning	K	L.	Maring	Ukhruł Kupome	Maram Kwoireng	Kabui Khoirao	Empeo
1 sheep	* <i>yau</i>	<i>yau</i> (OK)	<i>yaõ</i> (Si)	<i>yaõ</i>	...	...	<i>yao</i> (Si)
2 rich	* <i>han</i>	<i>hao-</i>	...	- <i>haõ</i>	...	...	...
3 grasshopper	* <i>k'au</i>	<i>k'ao</i>	...	<i>k'aõ</i>	...	...	...
4 bag	* <i>k'au</i>	<i>k'ao</i> (Th)	<i>kau</i>	<i>k'aõ</i>	<i>ta-k'au</i>	<i>k'ao</i>	- <i>kau</i>
5 fat	* <i>f'au</i>	<i>f'ao</i>	...	<i>f'aõ</i>	<i>f'au</i> ¹	<i>f'au</i>	- <i>sau</i>
6 younger	* <i>nau</i>	<i>nao</i>	<i>naõ</i> (Si)	- <i>naõ</i>	...	...	- <i>nau</i>
7 language	* <i>pau</i>	<i>pau</i> (OK)	...	<i>paõ</i>	...	...	- <i>pau</i> -
8 old	* <i>pau</i>	...	...	...	- <i>pau</i>	- <i>pau</i>	- <i>pãõ</i> (St)
	<i>au</i>	<i>ao</i>	<i>aõ</i>	<i>aõ</i>	<i>au</i>	<i>au</i>	<i>ãõ</i>

5, Phadang, C. and N. Luhupa *f'au*.¹ Loan word.

Since the most careful recorders — Lorrain and Savidge for Lúsei, Pettigrew for Ukhrul, and Singh for a number of languages — noted this final as *-ao*, this would probably be more accurate for all the Luhupa and Western Branch languages.

Meaning	K.	L.	Hlota	Rengma	Zumomi	Tengima
1 grasshopper	* <i>k'au</i>	<i>k'ao</i>	...	<i>se-k'u</i>	<i>t'la-ku</i>	...
2 bag	* <i>k'au</i>	...	<i>-k'u</i>	<i>k'u</i>	<i>si-pa-ku</i>	<i>lo-k'ä</i>
3 fat	* <i>t'au</i>	<i>t'ao</i>	<i>t'u-</i>	...	...	...
4 younger	* <i>nau</i>	<i>nao</i>	...	...	...	<i>nä</i>
	<i>au</i>	<i>ao</i>	<i>u</i>	<i>u</i>	<i>u</i>	<i>ä</i>

3, Mongsen *so*; 4, Tsungli, Khari, Rong *nu*, Tengsa *-no*, Kezama, Sopvoma *no*, Dayang *-nu*.

Table 10. Final *-ui* (Voc. 9)

Meaning	K.	L.	Maring	Ukhrul	Phadang	Khung- goi	N.
1 bury	* <i>wui</i>	<i>vui</i>	...	...	<i>tša-hui-</i>	...	...
2 cane	* <i>t²-hrui</i>	<i>hrui</i>	<i>-k-rui</i>	<i>-t'i-rä</i>	<i>ti-rui</i>	<i>-ru</i>	...
3 creeper	* <i>k²-hr²ui</i>	<i>hrui</i>	<i>rui</i>	<i>k'ä-rä</i>	<i>ko-rui</i>	<i>ku-ru</i>	...
4 elephant	* <i>m-yui</i>	<i>ui</i>	...	<i>mä-v'ä</i>	<i>ma hui</i>	...	<i>mä-p'ä</i>
(II)							
5 dog	* <i>yui</i>	<i>ui</i>	<i>ui</i>	<i>fä</i>	<i>hwi</i>	<i>hu</i>	<i>p'ä</i>
6 water	* <i>Dui</i>	<i>tui</i>	<i>yui</i>	<i>tä-rä</i>	<i>t'ui</i>	<i>de-ru</i>	<i>ai-tšü</i>
7 egg	* <i>Dui²</i>	<i>tui</i>	<i>wa-yui</i>	<i>har-rä</i>	...	...	<i>ha-tšü</i>
8 to laugh	* <i>m-nui</i>	<i>nui</i>	...	<i>-mä-nä</i>	<i>nui-</i>	...	...
9 female	* <i>pui</i>	<i>pui</i>	<i>-pui</i>	...	...	...	<i>-p'ä</i>
	<i>ui</i>	<i>ui</i>	<i>ui</i>	<i>ü¹</i>	<i>ui</i>	<i>u</i>	<i>ü²</i>

Meaning	Khoibu	C.	Tsämphung
6 water	<i>yui</i>	<i>tün-dü</i>	<i>tä-ri</i>
7 egg	<i>wa-yui</i>	<i>a-tü</i>	<i>nö-ri</i>
	<i>ui</i>	<i>ü</i>	<i>i</i>

¹ Gordon wrote *ü* uniformly, but Pettigrew evidently distinguished a difference in the vowel after *r* but had not quite corrected all the words.

² Perhaps the same as Ukhrul *ü*; see n. l.

Meaning	K.	L.	Maram	Kwoireng	Kabui	Kboirao	Empeo
1 bird	*Rui	...	-rui	-rui	{rui roi	roi	-rui
2 cane	*t ² -hrui	hrui	...	...	rui	t ² a-rui	...
3 creeper	*k ² -hr ² ui	hrui	...	...	loi	...	-rui
4 water	*Dui?	tui	-dui	t ² a-dui	dui	dui	dui
5 egg	*Dui?	tui	...	...	-dui	...	...
6 to laugh	*m-nui	nui	nyu-	nui-	noi-	noi	nui-
7 female	*pui	pui	-pui	-pui	-pui	pui	-pui
	ui	ui	ui	ui	ui, oi	ui, oi	ui

We have insufficient data to say whether final *-ui generally tends toward oi in Kabui and Khoirao, or whether this tendency only appears after liquids and n.

Meaning	K.	L.	Hlota	Tsungli	Tengsa	Tsangki	Yatsam	Zumomi	Dayang	Tengima
1 cane	*t ² -hrui	hrui	-r ² ui	-r ² ui	...	-r ² ui	-f ² ui	...	...	t ² e-r ² ui
2 creeper	*k ² -hr ² ui	hrui	...	...	...	...	-ke-yi	...	...	ke-r ² ui
3 water	*Dui	tui	-t ² ui	tso	-t ² ui	...	t ² ui	-z ² ui	z ² ui	dz ² ui
4 egg	*Dui?	tui	-t ² ui	-tso	-t ² ui	...	...	...	...	dz ² ui
5 to laugh	*m-nui	nui	...	me-n ² ui	m ² a-n ² ui	...	...	n ² ui	n ² ui	n ² ui
6 female	*pui	pui	-p ² ui	...	-p ² ui	...	...	...	-p ² ui	p ² ui
	ui	ui	ui	o	ui	u ₁	u	ui	ui	ui

r probably alters the vowel in Tsungli, Zumomi, and Tengima.

Table 11. Final *-oi*

Meaning	K.	L.	Ukhrul	Pha- dang	Khung- goi	Kabui	Khoi- rao	Em- peo
1 buffalo	* <i>loi</i>	<i>loi</i>	<i>-lui</i>	<i>-loi</i>	<i>-loi</i>	<i>-r^soi</i>	<i>-loi</i>	<i>-lli</i>
2 crooked	* <i>-koi</i>	<i>koi</i>	<i>-mũ-k'ui</i>	<i>n-koi-</i>	<i>ma-koi-</i>	<i>koi-</i>	<i>-koi-</i>	...
3 bee	* <i>k'oi</i>	<i>k'oi</i>	<i>k'ui</i>	...	<i>k'oi-</i>	<i>k'oi-</i>	...	<i>gi-</i>
	<i>oi</i>	<i>oi</i>	<i>ui</i>	<i>oi</i>	<i>oi</i>	<i>oi</i>	<i>oi</i>	<i>i</i>

Medial Vowels and Final Consonants

Luhupa and Western Branches

In the phonetic development of medial vowels and final consonants the Naga branches of Kukish differ considerably. The two southernmost branches, Luhupa and Western, generally conserve most medial vowels and final consonants; the next group to the north, the Northern Naga Branch, conserves most final consonants but the medial vowels have often undergone environmental phonetic shifts; the most northern of the Naga branches, Eastern, has lost all final consonants except in Rengma and the medial vowels of Kukish have undergone phonetic shifts, often environmental. In view of this divergent development, the branches will be taken up in the above order in the ensuing pages.

Since the Luhupa and Western branches generally preserve medial vowels and final stop and nasal consonants, the comparisons are generally apparent and the evidence for the exceptions rather than the rules will be presented here.

However, one correspondence should be noted. Luṣei has been recorded with both long and short medial vowels. And the Luhupa branch, not a Central Core Kukish group, but a little more distantly related, confirms the long and short medial *a*. The evidence for this is found in Maring and Ukhrul:

above **tšak*, L. *tšak-a*, Maring *-t'ak*; one **k'at*, L. *k'at*, Maring *k'at*, Ukhrul *k'at-*; kill **t'at'*, L. *t'at'*, Maring *hat-*, Ukhrul *-t'at*; to cry **krap'*, L. *tap'*, Maring *tšap-*, Ukhrul *-tšap*; thou **nan*, L. *nan*, Maring *nan*; foolish **pav*, L. *pav-*, Maring *pav-*; dream **man*, L. *man*, Ukhrul *man*; vegetables **γàn*, L. *an*, Ukhrul *han*; price **man*, L. *man*, Maring *-man-*, Ukhrul *-man*; jungle, village **ram*, L. *ram*, Maring, Ukhrul *ram*; way **lam*, L. *lam*, Maring, Ukhrul *lam*; to

gape *M²-ham*, L. *ham*, Ukhrlul *ham-*; hair **sam*, L. *sam*, Maring, Ukhrlul *sam*; to smell **m-nam*, L. *nam*, Maring *-ma-nam-*, Ukhrlul *-nă-nam*; sit **Bam*, Ukhrlul *-pam*; man's sister **far*, L. *far-nu*, Maring *tšar*, Ukhrlul *-tsar-*; old **tar*, L. *tar*, Maring *tar-ra*; new **t'ar*, L. *t'ar*, Ukhrlul *-t'ar*.

a crow **γāk*, L. *-āk*, Maring, *āk*; broad **-pāk*, Haka *pak*, Maring *pāk-*; sister or daughter's husband **māk*, L. *māk-*, Ukhrlul *-māk*; choke **m-hāk*, L. *hāk*, Ukhrlul *-mă-hāk*; reap **γāt'*, L. *āt'*, Ukhrlul *-hāt'*; to chop **sāt'*, L. *šāt'*, Ukhrlul *-sāt'*; to span **M²-k'āp*, L. *k'āp*, Ukhrlul *-k'āp*; to shoot **kāp'*, L. *kāp'*, Ukhrlul *-kāp*; mosquito **krāu*, Ukhrlul *-tšāu*; dear (in price) **tān*, Old Kuki *tān*, Maring *tān-*; light (in weight) *yān'*, L. *zān'*, Maring *yān-*; high, tall **sān'*, L. *sān'*, Ukhrlul, *-sān*; arm **bān*, L. *bān*, Maring *-bān¹*, Ukhrlul *pān¹*; to cross **t²-kān*, L. *kān*, Ukhrlul *-kān*; light (n.) **γwār*, L. *vār*, Maring *wār*; solder **hār*, L. *hār*, Ukhrlul *hār*; shoulder **dār*, L. *dār*, Maring *dār-*; flower **pār*, L. *pār*, Maring *pār*.

The following evidence is sufficient to show that Khoibu, a dialect of Maring, also distinguishes long and short *-a-*: way **lam*, Khoibu *lam-*; hair **sam*, Khoibu *sam*; a crow **γāk*, Khoibu *-āk*; sky **M²-r-wān*, L. *wān*, Khoibu *-wān*; light (n.) **γwār*, Khoibu *wār*; flower **pār*, Khoibu *pār*.

For Western Kukish languages except Empeo we are mostly or entirely dependent on Mc Culloch, who, although his system of recording was primitive, managed to denote long and short *-a-* surprisingly well:

Table 12. Medial *-ă-*, *-ā-* (Voc. 19)

Meaning	K.	L.	Maram	Kwoireng	Kabui	Khoirao
1 to drink	<i>*tš'ak</i>	...	<i>sak-</i>	<i>sāk</i>	...	<i>-sak-</i>
2 one	<i>*k'at</i>	<i>k'at</i>	...	<i>k'at</i>	<i>k'at</i>	<i>k'at</i>
3 kill	<i>*t'at'</i>	<i>t'at'</i>	...	...	...	<i>t'at-</i>
4 to cry	<i>*krap'</i>	<i>tap'</i>	<i>ha-</i>	<i>kap-</i>	<i>kap</i>	...
5 thou	<i>*nan</i>	<i>nan</i>	<i>nan</i>	<i>nan</i>	<i>nan</i>	<i>nan</i>
6 foolish	<i>*pan</i>	<i>pan-</i>	<i>-pan-</i>	<i>-pan-</i>	<i>pan-</i>	<i>-pan</i>
7 price	<i>*man</i>	<i>man</i>	...	...	<i>-man</i>	<i>man-</i>
8 way	<i>*lam</i>	<i>lam</i>	<i>lam</i>	<i>lam</i>	<i>lam</i>	<i>lam</i>

¹ Final consonant of this root is irregular only in Maring and Ukhrlul.

Meaning	K.	L. Maram	Kwoi- reng	Kabui	Khoirao
9 hair	* <i>sam</i>	<i>sam</i>	<i>tam</i>	- <i>t'am</i>	<i>sam</i> - <i>sam</i>
10 clan, village	* <i>hnam</i>	<i>hnam</i>	- <i>nam</i>	<i>nam</i>	<i>hnam</i> - <i>nam</i>
11 sit	* <i>Bam</i>	...	<i>bam-</i>	<i>bam-</i>	<i>bam-</i> - <i>bam</i>
12 a crow	* <i>γāk</i>	- <i>āk</i>	- <i>γāk</i>	<i>n-hek</i>	- <i>γāk</i> - <i>γāk</i>
13 broad	*- <i>pāk</i>	...	...	...	- <i>pāk-</i> <i>m-pāk-</i>
14 joint	* <i>tšān</i>	<i>tšān</i>	- <i>sān</i>	...	... - <i>tšān</i>
15 hawk	* <i>k-lān</i>	...	<i>lan-</i>	- <i>len</i>	- <i>lān</i> <i>kā-lān</i>
16 mosquito	* <i>krān</i>	...	- <i>hām</i> ¹	- <i>k'en</i>	- <i>k'ān</i> - <i>k'ān</i> (Go.)
17 high, tall	* <i>sān'</i>	<i>sān'</i>	<i>tān-</i>	- <i>t'en-</i>	<i>sān-</i> - <i>tān-</i>
18 arm	* <i>bān</i>	<i>bān</i>	...	- <i>ben</i>	<i>bān</i> <i>wān</i>
19 to dance	* <i>m-lām</i>	<i>lam</i>	...	<i>lem-</i>	<i>lām</i> ...

Also: deaf **pan*, Maram -*pan*-; word **tšam*, Old Kuki *tšam*, Khoirao *tšam*; dear (in price) **tān*, Old Kuki *tān*, Kabui *tān*.

There is one irregularity in Kwoireng (no. 1), where length of *a* is not significant since *-*ā*- became Kwoireng -*e*-, and one in Maram (no. 15). An error of about 3 per cent even in presentday recording of long and short vowels would not be too serious.

Khunggoi, like Kwoireng, has -*a*- for *-*a*- and has -*e*- for *-*ā*-: drink **tš'ak*, Khunggoi *sak*-; one **k'at*, Kh. *kat*-; to cry **krap*', Kh. *tšat*-²; thou **nan*, Kh. *nan*; hair **sam*, Kh. -*sa*; sit **Bam*, Kh. *pān*-³; hawk **k-lān*, Kh. *ka-len*; mosquito **krān*, Kh. -*tšev*; high, tall **sān'*, Kh. -*sen*-.

Kukish *-*i*-, *-*u*-, *-*e*-, *-*o*- are conserved in the Luhupa⁴ and Western branches but no clear distinction between long and short is revealed by the records.

¹ Final consonant probably incorrect.

² -*t* incorrect for -*p*.

³ *-*m* probably drops in Khunggoi nasalizing the preceding

*-*ā*-, *-*i*-.

⁴ *-*ū*- > Ukhrul -*o*- after Ukhrul or Kukish *h*, however.

The diphthongs **-ia-* and **-ua-* are generally reduced to simple vowels:

**-ia-* > Maring *-ĩ-*: oil **hriak*, L. *-hriak*, Maring *-rĩk* (Mc.); low **hniām*, L. *hniām*, Maring *-nĩm-*. But 'oil' Khoibu *-rek*. And **-ia-* > Ukhrl *-e-*: to lick **m-liāk'*, Ukhrl *-mǎ-lek*; to be snapped **Xliāk'*, L. *tliāk'*, Ukhrl *-tek*; flying squirrel **t²-bian*, L. *bian*, Ukhrl *tšĩ-pen*; know **t'iam*, L. *t'iam*, Ukhrl *-t'em*; low **hniām*, L. *hniām*, Ukhrl *-nem*. And in Phadang and Kupome 'low' is respectively *-nem-* and *-nev-te*.

In the Western Branch: low **hniām*, L. *hniām*, Khoirao *-nem-*; cheek **biān*, L. *biān*, Maram *ben-*, Kabui, Khoirao *-ben*, but Kwoireng *-byān*, Empeo *-biya* (St.), *bia* (B.); sweep **p'iaĕ'*, L. *-p'iat*, *-p'ia'*, Empeo *pīāg-(ra)*; bad **tš'iat'*, L. *tš'iat*, *tš'ia*, Empeo *šia-(da)*.

**-ia-* = Maring *-ĩ-* = Khoibu, Ukhrl, Phadang, Kupome, Maram, Kabui, Khoirao *-e-* = Kwoireng *-ya-* = Empeo *-ia*.

The development of **-ua-* has been very similar except in Maring: brain **-k'luak*, L. *t'luak*, Ukhrl *-nǎ-tok*, Empeo *k'ua* (B.); river **kuan*, L. *kuan*, Maring *kon*, Khoibu *kon-*, Ukhrl *kon-*, Phadang *kōn*, Kupome *kon-ta*, Khunggoi, N. Luhupa *kon*; coffin, boat **r-Kuan*, L. *kuan*, Ukhrl *-k'on*, Phadang *-kon*, Tsamphung *-k'o*, Empeo *-kwō* (St.); fly, jump **guan'*, L. *zuan'*, Ukhrl *-yon*, Maram, Khoirao *yon-*; to crow **k'uan*, L. *k'uan*, Ukhrl *-k'on*, Kabui *k'on*; cloth **puan*, L. *puan*, Maring *pon-*.

**-ua-* = Maring, Khoibu, Ukhrl, Phadang, Kupome, Khunggoi, N. Luhupa, Tsamphung, Maram, Kabui, Khoirao *-o-* = Kwoireng? = Empeo *-wa*, *-wō*.

Empeo seems to still preserve diphthongs, but to drop Kukish final consonants after them, except perhaps before suffixes.

Northern Naga Branch

Table 13. *-ak, *-an (Voc. 19)

[illegible]

Also: bind **k-rak*, Túngli *-rak*; quick **r²-an*, L. *ran*, Túngli *-ran*; deaf **pan*, Rong *-pón*; foolish **pan*, L. *pan*, Rong *bón*; dry **krān*, L. *tan*, Hlota *-k'yan*. Also Khari *nak* 'black', *nan* 'thou'.

Table 14. **ā-* (Voc. 19)

Meaning	K.	L.	Hlota	Rong
1 to hawk up	<i>*m-k'āk</i>	<i>k'āk</i>	...	<i>k'ók</i>
2 son-in-law	<i>*māk</i>	<i>māk-pa</i>	...	<i>myók</i>
3 to jump	<i>*k-t'āk</i>	...	<i>t'ōk-</i>	<i>t'uk</i>
4 to spit	<i>*m²-t'āk</i>	<i>t'āk</i>	<i>n-t'ōk-</i>	<i>t'uk</i>
5 arm	<i>*bān</i>	<i>l'ān</i>	<i>-wō¹</i>	...
	<i>-ā-</i>	<i>-ā-</i>	<i>-ō-</i>	<i>-ó-²</i>

¹ Túngli *-ben*, Mongsen *-pen*. See following table.

² But *-u-* after Rong *ty* < **tś*, **tś'*; yet cf. Rong *tyan*- 'plantain' < **tśan*, L. *tśan*-, where we have Rong *-a-* instead of the *-ó-* expected.

Table 15. *-at, *-an, *-ap, *-am (Voc. 19)

Meaning	K.	L.	Hlota	Túngli	Mongsen	Tengsa	Rong
1 leech	*t-r-wat	-wat	-wa (Hut)	...	...	...	fót
2 one	*k'at	k'at	-k'a	ket	-k'at	...	kat
3 kill	*t'at	t'at	-t'at	-set	-set-	...	sót
4 heddle	*h'nat	...	...	-net	...	...	...
5 greens	*yan	an	...	-en	...	...	...
6 to cut	*tan	tan	tan-	ten	...	...	...
7 price	*man	man	-mā	...	...	...	...
8 weep	*krap'	tap'	kiap-	tsep	tsep	tšap	hryóp
9 snot	*hnap	hnap	...	nep	...	...	...
10 throw, strike	*tap?	...	...	-tep	...	...	...
11 hearth	*tap	tap	...	{-tep	...	...	pür-dap
				{-töp	...	...	
12 morrow	*nap	...	nyap-	{-nep	nib-	...	nap
				{nöp	...	...	
13 jungle	*ram	ram	...	rem	...	...	...
				{-röm	...	...	
14 otter	*hram	-hram	...	ši-rem	...	...	sā-rýóm
15 road	*lam	lam	{-lam	lem-	yem-	-lan	lóm
			{-lā	len	...	...	
16 mouth	*m ² -kam	kam	...	-köm	...	...	-góm
17 shore	*kam	kam	...	köm	...	...	...
18 hair	*sam	sam	-tsā	sem-	...	...	-tsóm
19 smell	*m-nam	nam	nnan	me-nem	...	...	nóm
	-a-	-a-	-a-	-ê. ¹	-é-	-a-	-ó-

After *-a-, final *-t appears to have dropped in Hlota except where a suffix is added; and *-n is preserved, but *-n and *-m have probably become merely a nasalization of the preceding vowel.

¹ Probably a mixed vowel, close to the *a* in *America*, as shown by the alternation with *ø*, especially before labial final consonants.

Table 16. *-i- (Voc. 14)

Meaning	K.	L.	Hlota	Tsungli	Tsangki	Khari	Tengsa	Rong
1 louse	* <i>hrík</i>	<i>hrík</i>	- <i>hrak</i>	...	...	...	...	<i>śak</i>
2 joint	* <i>sik</i>	...	...	...	...	...	...	<i>tsak</i>
3 cold	* <i>sik</i>	<i>śik</i>	- <i>tsak</i> -	- <i>sok</i>	...	...	- <i>tsik</i>	...
4 pinch	* <i>M-sik</i>	<i>śik</i>	...	...	...	...	...	<i>tsak</i>
5 eye ¹	* <i>mik</i> ?	<i>mit</i>	- <i>m'yek</i>	<i>nøk</i>	...	- <i>nük</i>	- <i>nyik</i>	- <i>mik</i>
6 mountain	{ * <i>fín</i> ? * <i>tsín</i> ? }	<i>fin</i> (H)	- <i>tsan</i>	...	...	...	...	<i>džán</i>
7 tree, wood	* <i>t'in</i>	<i>t'in</i>	<i>ts'an</i>	<i>son</i>	...	<i>sun-</i>	<i>san-</i>	<i>śan</i>
8 clean	* <i>m-t'in</i>	...	...	<i>nie-son</i> white	...	...	...	...
9 name	* <i>r-hmin</i>	<i>hmin</i>	<i>nyan</i>	- <i>u-ɸv</i>	...	...	- <i>nyin</i>	- <i>bryan</i> ²
	- <i>i-</i>	- <i>i-</i>	- <i>a-</i>	- <i>ɸ-</i> ³		- <i>j-</i> ⁴	- <i>j-</i> ⁵	- <i>a-</i>

¹ This word does not belong here, for it agrees vocally only in Tsungli, Khari, and possibly Tengsa; and the reason it has been placed here has been to show that it does not belong, but shows phonetic peculiarities in Northern Naga as in Central Core Kukish.

² < **mryan* < **rmyan*.

									Yatsam
10 heavy	*rit	rit	...	-ret	...	-ret	...	-let	...
11 die out	*mit	-mit	m'et-	...	...	...	...	...	met-
12 water leech	*m-klüt	klüt	...	me-let	...	...	...	...	hlet-
13 liver	*m-t'in	t'in	in-f'en	me-sen	...	...	...	...	...
14 ripe	*hmin	hmin	hmen-	-men	...	...	...	...	men
15 Job's tears	*mān	{ mām (L) min (Th)	...	men-	...	-men	...	men	...
16 nest	*t'ip	t'ip	-e-	-e-	-e-	-e-	-e-	-e-	-e-
17 powdered	*dip	dip	-sab	sep	...	...	...	...	-šap
18 sleep	*ip	...	...	yip	...	...	...	...	dyap
19 needle	*n-prim	tim _(H)	yip- -pyam	-džem	...	...	...	...	...
20 house	*yim'	in	-yā	yim	...	...	-yim	...	...
	-i-	-i-	-a- ⁶	-e- ⁷	-i-	-i-	-i-	-a-	-a-

³ But -o- after Kukish *t'.⁴ But -u- after Kukish *t'.⁵ But -a- after Kukish *t'.⁶ But yi- < *i-.⁷ But -i- after Tsungli y.

Corresponding to the low grade vowels *i* and *u*, Sino-Tibetan has respectively the *guna* grade *ě* and *ǝ* and the *samprasāraṇa* *ia* and *ua*¹, for which the combined symbols are *E* and *O*. The little data we have on these phonemes in Northern Naga Kukish indicates similar phonetic development to that of the corresponding low grades in Hlota and Tšungli.

Table 17. *-*E*- (Voc. 11)

Meaning	K.	L.	Tšungli	Rong
1 flat	* <i>p'ěk</i>	<i>p'ǝk</i>	- <i>pak</i>	...
2 lick	* <i>m-liak'</i>	<i>liak'</i>	<i>me-nak</i> <i>me-zǝk</i>	<i>lyak</i> ²
3 cat	* <i>měṇ</i>	...	...	<i>śi-myan</i>
4 handle	* <i>m-lian</i>	<i>lian</i>	...	- <i>lyan</i>
	- <i>E</i> -	- <i>E</i> -	- <i>a, ǝ</i> -	- <i>ya</i> -
5 scratch	* <i>m-ret</i>	...	<i>me-ret</i>	...
6 break up	* <i>p'riat</i>	<i>t'iat</i>	...	<i>bryat</i>
7 net	* <i>lən</i>	<i>lən</i>	- <i>len</i> ³	...
	- <i>E</i> -	- <i>E</i> -	- <i>e</i> -	- <i>ya</i> -
8 turn up	* <i>M²-lep</i>	<i>lep</i>	<i>lep</i>	...
9 cut	* <i>hlep</i>	<i>hlep</i>	- <i>lep</i>	...
	- <i>E</i> -	- <i>E</i> -	- <i>e</i> -	

We may note that *-*i*- and *-*E*- > Tšungli -*e*- before dentals and labials.

In Rong, *-*E*- became -*ya*-. The same development appears to have occurred in Hlota, but the only data we have is on *-*E*- before *-*k*: flat **p'ěk*, L. *p'ǝk*, Hlota -*pyak*-; lick **m-liak'*, L. *liak'*, Hlota *m-ya-k*-; sweep **p'iak'*, L. *p'iat*, Hlota *pyak* 'scrape clean'.

¹ See Voc. I, p. 312—313.

² To taste.

³ Trap.

Table 18. *-uk, *-un (Voc. 16)

Meaning	K.	L.	Hlota	Tsungli	Mongsen	Tengsa	Rong	Rong (M)
1 six	*t-r'uk	rək	ti-rok	te-rok	te-rok	t'ê-lok	tă-rok (H)	tă-rak
2 knee	*m-r-k'uk	kək (H)	-n-k'ok-	-mo-kok			...	...
3 belly	*puk	...	-pok	-pok	-pok	-buk	ta-bok (Feer)	tă-bak
4 owl	*t-buk	-buk	...	pok-	...	...	...	...
5 cave, hole	*pūk	pūk	...	-pok	...	...	...	...
6 finger	-ă-	-ă-	-o-	-o-	-o-		-o-	-a-
7 to pasture	*m-yun	zun	-ion-	me-yon	-mi-yun	...	...	...
	*hruv	hruv	...	...	...	...	...	rav
8 stone	*n-lun	lun	-lun	lun	-lun	lun-	lon (H)	lan
9 heart	*m-lun	lun	...	-m-lun	-m-lun	...	...	...
10 up	*tsun	tsun-	tsun	...	...	...	...	...
11 shield	*fun	...	-tsun	zon	-tsun	...	...	...
12 drink	*Tūn	...	...	...	...	...	t'on (H)	t'an
13 arrive	*tlun	-tlun	...	ton	tan	...	...	...
14 length	*dun	dun	...	...	...	...	...	-dan
15 wind	*m-pun	...	m-pon	mo-pun	m-un	mă-pun	...	...
16 carry	*p'un	...	...	-pun	...	...	...	...
17 urinate	*p-nun'	zun'	m-yon-	...	...	...	...	...
18 tree trunk	*kūn	kūn	...	kon-	...	...	...	kun
19 inside	*ts'un	ts'un	-tsun-	...	...	...	...	...
	-u-	-u-	-u-	-u-	-u-	-u-	-o-	-a-

1 Ng = Ngente.

2 Perhaps -u- < *-ă-.

In the above table, only Mongsen clearly shows *-uk > -ok, but *-un is retained. This is probably true, however, of Tsangki, a dialect of Mongsen: six *te-rok*, but shield *-tsun*, and wind *mê-*

puw. It is probable, then, that **-un* approaches *-on* phonetically in Hlota and Tsungli. There is no indication of such a shift in Longla, a dialect of Tsungli: six *te-rok*, shield *tson*, wind *mé-pow*. Meagre

Table 19. **-ut*, **-un*, **-up*, **-um* (Voc. 18)

Meaning	K.	L.	Hlota	Tsungli	Mongsen	Tengsa	Rong
1 hand	<i>*kut?</i>	...	...	...	...	...	...
2 mustache	<i>*gut?</i>	<i>kut</i>	<i>-k'e</i>	...	<i>-k'et</i>	<i>-k'at</i>	...
3 blow	<i>*mut?</i>	...	...	...	...	...	<i>-mat</i>
	<i>*hmut</i>	...	...	...	...	...	<i>mat, müt</i>
4 now	<i>*fun</i>	<i>tün-</i>	...	<i>tan</i>	...	...	...
5 to cover	<i>-u-</i>	<i>-u-</i>	<i>-e-</i>	<i>-a-?</i>	<i>-e-</i>	<i>-a-</i>	<i>-a-</i>
	<i>*kup</i>	...	<i>n-kap-</i>	<i>-kap</i> <i>kop-</i>	<i>-kap</i>	<i>-kap</i>	<i>kap</i>
6 bury	<i>*lap</i>	...	...	...	...	...	<i>lap</i>
7 to stoop	<i>*kup</i>	...	...	...	...	...	<i>gap</i>
8 suck	<i>*n-SUp</i>	<i>tšup-</i> (OK)	<i>n-tsap-</i>	<i>me-sep</i>	...	...	...
9 clinch (hand)	<i>*SUp?</i>	...	...	<i>-džep</i>	...	...	...
10 fist	<i>*tup?</i>	...	...	...	...	...	<i>-tap, -tūp</i>
11 sew	<i>*trup?</i>	...	...	...	...	...	<i>hrap</i>
12 knee	<i>*n-k'up</i>	<i>k'up</i>	...	<i>-mø-kop</i>	...	...	...

data on Yatsumi and Thukumi only permit the deduction that before **-k* the vowel **-u-* became *-o-*: six, Yatsumi, Thukumi *t'u-ro*; belly, Yatsumi *pok*, Thukumi *mi-po*.

13	take in mouth	<i>*um</i>	...	...	<i>am</i>	...	...	...	<i>am</i>
14	mother	<i>*um</i>	...	...	...	...	...	...	<i>um</i>
15	hot	<i>*lum</i>	<i>lum</i>	<i>-lum</i>	{ <i>lam</i> -(M) <i>-lem</i> (Cl, D)	<i>-lam</i> -(M) <i>-lem</i> (D)	<i>lam</i> -	<i>lam</i> -(v.)	
16	year	<i>*kum</i>	<i>kum</i>	...	{ <i>kam</i> (M) <i>kəm</i> (Cl)	<i>-kam</i> -	...	...	
17	bed	<i>*m-k'um</i>	<i>k'um</i>	<i>n-k'um</i>	<i>mə-kəm</i>	...	...	<i>-kam</i>	
18	sweet	<i>*k'um</i>	<i>t'um</i>	...	...	...	...	<i>klyam</i>	
19	mortar	<i>*sum</i>	<i>sum</i>	<i>-sam</i>	<i>sem</i>	<i>-sem</i>	...	<i>-tsam</i>	
20	to drum	<i>*iəm</i>	<i>tum</i>	<i>tam</i> -	<i>-tem</i>	...	...	...	
21	three	<i>*k-t'um</i>	<i>t'um</i>	<i>-t'am</i>	<i>-sam</i> (M) <i>-sem</i> (Cl) <i>-səm</i> (Cl)	<i>-sam</i>	<i>-sam</i>	<i>sam</i>	
22	gourd	<i>*yām</i>	<i>yām</i>	...	...	<i>am</i>	...	...	
		<i>-u-</i>	<i>-u-</i>	<i>-a-</i>	<i>-e, ə, a-</i>	<i>-e, ə, a-</i>	<i>-a-</i>	<i>-a-</i>	

*-u- before dentals and labials appears to have become -a- in both Yatsumi and Thukumi: hand *ka*, three -*san*.

Hlota had -e- before dentals and -a- before labials; the evidence for the first part of this statement is weak but is supported by a similar development of *-O- before dentals (see table 21 below). The same phonetic development seems to have occurred in Longla and T'sangki (hand -*k'et*, but three -*san*), and in Khari (hand -*k'et*, but cover -*gap* and three -*san*).

Table 20. *-Ok, -Ov (Voc. 17)

Meaning	K.	L.	Hlota	Tsungli	Mongsen	Khari	Rong
1 throat	*kʔ-hrok	hrok	-ro	-rok	...	...	...
2 husk	*hOk	...	...	...	...	...	hok (v.)
3 husk	*kok	...	...	...	...	...	-kok ¹
4 sweep	*rʔ-k'ok	...	...	kiok	...	...	...
5 bear (child)	*pOk	...	pok-	pok	...	...	...
6 hog	*gok	rok	wok-o	...	-ok	-uk	...
7 brain	*-k'luak	t'luak	...	-ko-lok	...	...	...
8 burst	*puak	puak	...	-pok	...	...	...
9 tree	-O-	-O-	-o-	-o-	-o-	-u-	-o-
10 the back	*tOv	...	-tov	ton	...	-don	ton
11 prawn	*ruav	...	...	ron	-ron-	-runi	...
	*kuv	-kuan	...	-kon	...	...	...
				-kun	...	...	...
12 drum, to crow	*k'uan	k'uan	-kon	-kon	-k'un	...	...
				-kun	...	...	...
	-O-	-O-	-o-	-o ^u -	-o ^u -	-o ^u -	-o-

1 Bark.

Table 21. *-On, *-op, *-Om

Meaning	K.	L.	Hlota	Tsungli	Rong
1 cloth	*puan	puan	m-pen- ¹	...	...
	-O-	-O-	-e-		
2 bind	*k'op	...	...	{ kap k'op	kop
3 a bear	*t-Xvom	vom	sě-van (B)	ši-am	...
4 to swell	*puam	puam	...	...	pūm-byom
5 to chew	*hmuam	hmuam	...	...	mom
	-O-	-O-	-a-	-a, o-	-o-

For Hlota and Tsungli, compare this equation with that of table 19.

Eastern Branch

*-ak (Voc. 19)

Zumomi -o: weave *Rak, Zumomi -yo-; to itch *m-t'ak, L. t'ak, Zumomi m-t'o'. Tengima -ā (Mc), -ō (B): duck *rak, Tengima rā 'to quack'; weave *tak', L. ta', Tengima -dā; to boil *klak, L. tlak, Tengima me-k'rō- (B).

Table 22. *-āk (Voc. 19)

Meaning	K.	L.	Rengma	Zumomi	Tengima
1 fork (of tree)	*kāk	kāk	...	-kū-ba	...
2 a crow	*gāk	-āk	-gu	-ga	...
3 to spit	*m-tšāk	tšāk	...	mu-ssü-	mě-tsa
4 sister's or daughter's husband	*māk	māk-pa	-mu	...	-ma-
	-āk	-āk	-u	-ü ²	-a

¹ To clothe.

Table 23. *-av (Voc. 19)

Meaning	K.	L.	Rengma	Kezama	Sopvoma	Zumomi	Tengima	Tsakrma
1 come	* <i>wa</i>	...	gü	gwo	...	gwo	vo	vo-
2 down	* <i>k'la</i>	<i>t'la</i>	...	- <i>tro</i>	- <i>k'ro</i>	- <i>kwou</i>	<i>k'ro</i>	- <i>t'o</i>
3 thou	* <i>na</i>	<i>na</i>	<i>ne</i>	<i>no</i>	...	<i>no</i>	<i>no</i>	<i>no</i>
4 deaf	* <i>pa</i>	...	...	...	...	- <i>po</i>	<i>po</i>	...
5 tree	* <i>Ba</i>	...	...	...	...	- <i>bo</i>	- <i>bo</i>	...
6 body	* <i>ma</i>	...	...	...	...	...	- <i>mo</i>	...
7 dream	* <i>ma</i>	<i>ma</i>	...	...	...	- <i>mo</i>	- <i>hmo</i>	...
8 lose	{ * <i>ma</i> * <i>hma</i>	<i>ma</i>	- <i>m'e</i>	...	<i>moho</i>	...	...	...
9 dry	* <i>krav'</i>	<i>ta</i>	<i>ken-ko'</i>	...	...	...	...	...
	- <i>av</i>	- <i>av</i>	- <i>e</i> ¹	- <i>o</i>	- <i>o</i>	- <i>o (u)</i>	- <i>o</i>	- <i>o</i>

¹ But -*en* before a suffix; and -*äv*, -*äm* (?) after a sibilant: thousand **sa*, L. *sa*, Rengma *sa*; tall **säv*, L. *säv*, Rengma -*sa*.

*-ān (Voc. 19)

Tengima -a: a joint *tśān, L. tśān, Tengima k'ū-dza; light (adj.)

*yān', L. zān', Tengima mē-dza.

Table 24. *-at, *-ān, *-ap, *-am

Meaning	K.	L.	Rengma	Kezama	Sopvoma	Zumomi	Tengima	Kehena
1 leech	*t-r-wat	-wat	-be' (Hut)	re-yue (Hut)	e-ve (Hut)	-ive (Hut)	rè-va	...
2 vegetables	*yān	an	hem	...	...	...	ya	...
3 calf (of leg)	*m ² -tan	tan- (Th)	tšen	...	...	...	...	...
4 to cut	*tan	tan	...	...	...	...	da	...
5 bind	*p'an	...	p'en	p'ä	fu	pe- ¹	p'a	p'a-
6 price	*man	man	-men	ma	-mu-	-me	ma	ma
7 night	*yān	zān	-zen	...	...	...	zi	...
8 arm	*bān	bān	ben	ba	-ba	...	bi	bi
9 weep	*krap'	tap'	...	...	...	ka-	kra	...
10 span	*M ² -k'āp	k'āp	n-ka	...	...	...	...	...
11 shoot	*kāp	kāp'	...	...	...	ka-	...	...
12 jungle	*ran	ram	...	...	...	-ya	ra	...
13 path	*lan	lan	...	...	...	-la	...	...
14 hair	*sam	sam	-san	-ta	-su	-sa	t'a	...
15 jungle	*m-nam	...	...	...	...	...	n'a	...
16 snell	*m-nam	nam	...	...	...	m-na	mē-na	...
17 sit	*Bam	...	bein-	{ ba bā-	-bhu	...	ba	ba
	-at	-at	-e	-ā ²	-e	-e	-a	-a ²
	-an	-an	-en	-ān	-u	-u	-i	-i
	-ān	-ān	-ā	-ā ²	-a	-a	-a	-a ²
	-āp	-āp	-ā	-ā ²	-u	-u	-a	-a ²
	-am	-am	-an	-ān	-u	-u	-a	-a ²

¹ Dayang.

Table 25. **-ik*, **-in* (Voc. 14)

Meaning	K.	L.	Reugma	Kézama	Zumomi	Dayang	Tengima
1 louse	<i>*hrik</i>	<i>hrik</i>	...	...	...	...	<i>-r'i</i>
2 cold	<i>*sik</i>	<i>sik</i>	<i>-sé</i>	...	<i>si-</i>	<i>si</i>	<i>si</i>
3 black	<i>*fik</i> ? <i>*fik</i> ?	<i>-tsik</i> (U ¹)	<i>-tse</i>	...	<i>tsü-</i>	<i>-tsu</i>	<i>-ti</i>
4 pheasant	<i>*t-h'rik'</i> ?	<i>-hrit</i>	...	...	<i>-yü</i> <i>-yi</i>	...	<i>-r'i</i>
5 eye	<i>*mik'</i> ?	<i>mit</i>	<i>hæ</i>	...	<i>nye-ti</i> ²	<i>ni-ti</i>	<i>-hmi</i>
6 alive	<i>*hriw</i>	<i>hriw</i>	<i>-hriw</i>	<i>hri-</i>	<i>-hu</i>	<i>-hiü</i>	<i>-r'i</i>
7 mountain	<i>*fin</i> ? <i>*sin</i> ?	<i>fin</i> (Hg)	...	...	...	...	<i>tsi-</i>
8 tree, wood	<i>*fin</i>	<i>fin</i>	<i>sen</i>	...	<i>-sü</i>	<i>-sü</i>	<i>si</i>
9 heart	<i>*nin</i>	<i>nin</i> (Ng)	...	<i>-nyi-</i>	<i>-ni-</i>	<i>ni-</i>	<i>ni-</i>
10 full	<i>*plin</i>	...	...	...	...	...	<i>peti-</i>
11 marrow	<i>*r-Klin</i>	<i>tlin</i>	...	...	<i>-k'ü</i>	...	<i>keli</i>
	<i>-ik</i>	<i>-ik</i>	<i>-e</i>	?	<i>-i, -ü</i> ³	<i>-i, -ü</i> ³	<i>-i</i>
	<i>-in</i>	<i>-in</i>	<i>-en</i>	<i>-i</i>			

¹ U = Ukhrul.² The vowel *-e* probably incorrect; cf. Dayang *-i*.³ I.e., an open *-u* or an *-i* with lip rounding? There is too close agreement between the recording of *-ü* (or *-u*) in certain Zumomi and Dayang words and *-i* in certain others to assume that final **-ik*, **in* are represented in these dialects by a single phoneme. The final vowel here probably depends upon the initials, but we have insufficient examples to determine this here.

Table 26. *-it, *-in, *-ip, *-im (Voc. 14)

Meaning	K.	L.	Rengma	Zumomi	Tengima
1 extinguish	*mit	-mit	...	-n ^c e-	-m ^c e-
2 nest	*t ⁱ ip	...	-tse	...	...
3 soft	*m-hnip	hnip	...	-m-nye	-me-ne
4 sleep	*ip ²	...	dzi ² -	ze-	ze-(St.)
5 nail	*m-tin ³	tin	-tšen	-ti	-tse
6 liver	*m-t ⁱ in	t ⁱ in	...	-ši	-se
7 ripe	*hmin	hmin	-men	-ni	-me
8 needle	*m-prim	t ⁱ im (H)	pen	pu ¹	-pre
	-i-	-i-	-e- ²	-e, -i ³	-e

Table 27. *-uk, *-un (Voc. 16)

Meaning	K.	L.	Rengma	Zumoni	Tengima
1 six	*t-r ¹ uk	ruk	se-ŋo	so-ŋo ^{c4}	su-ru
2 kneə	*m-r-k ¹ uk	kuk (H)	k ^c o	-kwo-	-k ^c u-
3 owl	*t-buk ³	-buk	...	...	-pu
4 tomorrow	*tūk	-tūk	...	t ^c o-	-du
5 deep	*t ^c ūk	t ^c ūk	...	-t ^c o-	-su
6 borrow	*pūk	pūk	...	...	-pu
7 dull, green	*mūk	mūk	...	...	-mu(St.)
8 finger	*m-yun	zun	džon-u	...	...
9 boat	*RU ⁿ	...	ron	...	ru
10 heart	*m-lun	lun	mion ⁵	me-lo	-me-lu
11 come	*tlun	-tlün (P)	...	to-	...
12 belly	*PU ⁿ	p ^c ün (OK)	...	-p ^f o	...
13 gun-barrel	*pun	pun- (OK)	pon	...	pu
14 ant hill	*t-m-plUn	...	-pion	...	...
15 urine	*p-yun ⁷	zun ⁷	...	pu-žo	pe-dzu
	-ūk	-ūk	-o	}	-o
	-un	-un	-on		
				-o	-u

¹ There appear to be two cognate forms *m-Prim and *m-Prum; and, if the Zumomi back vowel is not due to the labial initial, the Zumomi form is probably from *m-Prum (see table 28).

² But *i*- < *yi- < *i³.

³ -e- before dental or labial stops; -i- before dental or labial nasals.

⁴ Dayang *tsu-gwo*. ⁵ Breast.

Table 28. *-ut, *-up, *-um (Voc. 18)

Meaning	K.	L.	Zumomi	Tengima
1 ashes	*wut	vut	ye-vu	...
2 to blow	*hmut	...		m'e-
3 to kiss	*m-SUp	...	mu-tzu- mu-tsü-	...
4 hot	*lum	lum	lü- ¹	le
5 eyebrow	*Kum	...	...	-ke (B)
6 year	*kum	kum	-ku	...
7 stoop	*kum	...	...	nu-ke
8 shoulder	*k ^c um	...	...	bu-k ^c e (B) ²
9 bend	*k ^c um	...	ku-wo	...
10 three	*k-t ^c um	t ^c um	kü-t ^c u	se
11 all	*pum	pum	-pu	pe-te
	-u-	-u-	-u-	-e-

We have an indication that *-u- before labials is represented in Rengma by -a- (three *k-t^cum, L. t^cum, Rengma ke-sán), in contrast with *-u- before gutturals > Rengma -o- (table 27). The same is probably true of Sopvoma: three *k-t^cum, Sopvoma ko-sa; but six *t-r¹uk, Sopvoma tso-ro.

*iak, *-ian, *-en

Tengima -e: lick *m-liak³, L. liak³, Tengima me-ye-; cheek *bian, L. biān, Tengima dzie (for the phonetic development, cf. Kəzama ke-bzo 'cheek'); joint *fen, Tengima -tše.

Table 29. *-En, *-iam

Meaning	K.	L.	Zumomi	Tengima
1 separate	*M ² -k ^c ren	t ^c en	...	-kri
2 net, snare	*len	lən	-li-	...
3 sharp	hriam	hriam	...	-ri-
4 make	*siam	śiam	śi-	si-
5 know	*t ^c iam	t ^c iam	i-ti-	si-
6 low	*hniam	hniam	-ni	...
	-E-	-E-	-i	-i

¹ Dayang -lu.

² Middle Burmese pǎ-k^cəm. For Tengima -u < *-a, see Table 1.

Table 30. *-ok, *-ov (Voc. 17)

Meaning	K.	L.	Rengma	Tengima
1 throat, windpipe	*k ^ɔ -hrok	hrok	...	-ro-
2 rice	*kOk	...	-ko	-ko
3 sweep	*r ^ɔ -k'Ok	...	k'o-	k'o-
4 sour	*krok	tok	...	-kro
5 pig	*qok	vok	te-bo	-vo
6 elephant	*t-m-plOn	...	pion	...
	-O-	-o-	-o-	-o-

Table 31. *-uak, *-uan

Meaning	K.	L.	Tengima
1 brain	*-k'luak	t'luak	-k'ru
2 burst	*puak	puak	pu-
3 drum; to crow	*k'uan	k'uan	ku-
	-ua-	-ua-	-u

Table 32. *-Ok, *-On

Meaning	K.	L.	Zumomi
1 pig	*qok	vok	-wo
2 brain	*-k'luak	t'luak	-k'o'
3 drum	*k'uan	k'uan	še-ku
	-Ok	-Ok	-o
	-On	-On	-u

Final Consonants

In the preceding consideration of medial vowels, the loss of certain final stop consonants and the modification of certain final nasals has occasionally been mentioned. But the data presented above shows so clearly that final occlusives and nasals are generally preserved in Luhupa, Western, and Northern Naga Kukish, with some exceptions in Hlota and some of the less known Luhupa languages, and that all final occlusive and nasal consonants have dropped in the Eastern Branch languages except

for nasals in Rengma, that it does not seem worth while presenting the obvious when many more important problems in Sino-Tibetan comparative grammar are still to be solved.

Table 33. Final

	1	2	3	4	5	6	7
	man's sister	old	hard	new	light (n.)	to shut	star
K.	<i>*far</i>	<i>*tar</i>	<i>*tar</i>	<i>*t'ar</i>	<i>*ɣwār</i>	<i>*k'ār</i>	<i>*ɣār</i>
L.	<i>far</i>	<i>tar</i>	...	<i>t'ar</i>	<i>vār</i>	<i>k'ār</i>	<i>ār-si</i>
Maring	<i>t'sar</i>	<i>tar-</i>	...	...	<i>wār</i>	...	<i>sor-</i>
Khoibu	...	...	...	...	<i>wār</i>	...	...
Ukhrul	<i>-tsar</i>	...	...	<i>-t'ar</i>	<i>hor</i>	...	<i>sir-</i>
Phadang	...	...	...	<i>-t'er-</i>	<i>hāl-le</i>	...	<i>sār-</i>
T'samphung	...	...	...	...	<i>wār</i>	...	<i>har-</i>
Kupome	<i>-dža-</i>	...	...	<i>-t'a-</i>	<i>-he-</i>	...	<i>su</i>
Khunggoi	<i>-tša-</i>	...	...	<i>-t'a</i>	<i>he-</i>	...	...
C. Luhupa	...	...	...	...	...	...	<i>sā-</i>
N. Luhupa	...	...	...	...	...	...	<i>sā-</i>
Maram	<i>-ti-</i>	<i>tei-</i>	<i>tei-</i>	<i>-tei-</i>	<i>va-bo-</i>	...	<i>sā-gai</i>
Kwoireng	<i>-tan-</i>	...	<i>-tan-</i>	<i>-sam-ba</i> ¹	<i>ben</i>	...	<i>tša-γān</i>
Kabui	<i>-tan-</i>	...	<i>tal-</i>	<i>tan-</i>	<i>γān</i>	...	<i>γān-</i>
Khoirao	<i>-tam-bui</i> ¹	<i>tam-pu</i> ¹	...	<i>-sam-ba</i> ¹	<i>{-γān-</i>	...	<i>tša-gan-</i>
					<i> yen</i>		
Empeo	...	<i>-tši-</i>	<i>tši-</i>	<i>-tši-</i>	...	...	<i>he-gi</i>
Hlota	...	...	...	<i>-t'an</i>	<i>wōn-</i>	<i>k'ān-</i>	...
Tsungli	...	<i>-tšen</i>	...	<i>-sen</i>	...	...	...
Longla	...	<i>-ten</i>	...	<i>-sen</i>	...	...	...
Mongsen	...	<i>-tšen</i>	...	<i>-sen</i>	...	...	...
Tsangki	...	...	...	<i>-sen</i>	...	...	...
Khari	...	<i>-tšin</i>	...	<i>-san</i>	...	...	...
Tengsa	...	<i>-tšen</i>	...	<i>-san</i>	...	...	...
Rong	...	...	...	...	...	...	<i>sā-hór</i>
Yatsam	...	<i>-džen</i>	...	<i>-sen</i>	...	...	...
Thukumi	...	...	...	...	...	...	...
Rengma	...	<i>-t'en</i>	...	<i>-sé</i>	...	<i>-k'en-</i>	...
Zumomi	...	<i>-te-mi</i>	...	<i>-t'e</i>	...	<i>k'a-</i>	...
Tengima	...	...	...	<i>-sa</i>	...	<i>k'a-</i>	...

¹ R. Shafer, *Problems in Sino-Tibetan Phonetics*, JAOS 64 (1944), pp. 137—143.

² Assimilated by following *l*.

But the evolution of **-r* and **-l* in the Naga Kukish languages is not clear from the preceding pages, and this will be presented here.

**-r* (Prob.¹ 22, 23)

8	9	10	11	12	13	14	15	
fowl	flower	gum	sour	mouth	horse	sell	ear	
<i>*yār</i>	<i>*pār*</i>	<i>m-tśar</i>	<i>*t'ūr</i>	<i>*hmūr</i>	<i>*kor</i>	<i>*yuar</i>	<i>*-kuar</i>	<i>-r</i>
<i>ār</i>	<i>pār</i>	<i>tśār-</i>	<i>t'ūr</i>	<i>hmūr</i>	<i>-kor</i>	<i>zuar</i>	...	<i>-r</i>
...	<i>pār</i>	...	...	<i>mur</i>	...	<i>-yo-(lak)</i>	...	<i>-r</i> ²
...	<i>pār</i>	...	...	<i>mur</i>	...	...	...	<i>-r</i>
<i>har</i>	...	...	<i>-t'ūr</i>	<i>mor</i>	(-gui)	<i>-yor</i>	...	<i>-r</i>
<i>her</i>	...	...	...	<i>mar-</i>	(-koi)	<i>yo-(lo)</i>	...	<i>-r</i> ²
...	...	...	...	<i>-mar</i>	(-gol)	...	...	<i>-r</i>
<i>ha</i>	<i>pe</i>	...	...	<i>mo-</i>	(-koi)	...	...	<i>-0</i>
<i>ha</i>	...	...	...	<i>-mo</i>	(-gol)	<i>yo ma</i>	...	<i>-0</i>
<i>ā</i>	<i>pie</i>	...	...	...	(-koi)	...	...	<i>-0</i>
<i>ha-</i>	<i>pie</i>	...	...	...	(-koi)	...	...	<i>-0</i>
...	...	...	...	<i>-mui</i>	<i>-koi</i>	<i>yoi-</i>	<i>-ko-si</i>	<i>-i</i> ³
...	<i>-pen</i>	...	...	<i>-mun</i>	<i>-kon</i>	<i>yon-</i>	<i>kon</i>	<i>-n</i>
...	...	...	...	...	<i>-kon</i>	<i>yon-</i>	<i>-kon</i>	<i>-n</i>
...	<i>pān</i>	...	...	...	<i>-kon</i>	<i>yon-</i>	<i>kon</i>	<i>-n</i>
...	<i>-pa</i>	...	...	<i>-mui</i>	<i>-kon</i>	<i>dzo-(lao)</i>	<i>-kon</i>	<i>-i</i> ⁵
{ <i>hān-</i>	...	...	<i>t'en</i>	<i>mē</i>	...	<i>yen-</i>	...	<i>-n, -~</i>
{ <i>hōn-</i>	...	...	...	...	...	...	...	...
<i>ān</i>	<i>ben</i>	<i>me-sen</i>	<i>-sen</i>	...	...	...	...	<i>-n</i>
<i>an</i>	...	...	...	...	...	...	...	<i>-n</i>
<i>ān</i>	...	...	<i>-sen</i>	...	...	...	...	<i>-n</i>
<i>an</i>	...	...	...	...	...	...	...	<i>-n</i>
...	...	...	<i>-s'an</i>	...	...	...	...	<i>-n</i>
<i>ān</i>	...	...	<i>-sen</i>	...	...	...	...	<i>-n</i>
...	<i>-bor</i>	...	<i>tśor</i>	...	...	...	...	<i>-r</i>
<i>ān-</i>	...	...	...	...	...	...	...	<i>-n</i>
<i>han-</i>	...	...	...	...	...	...	...	<i>-n₁</i>
...	...	...	<i>-śan</i>	<i>mañ-</i>	...	...	...	<i>-n, -w</i>
...	...	<i>-tta</i>	...	...	...	<i>ze</i>	...	<i>-0</i>
...	...	<i>-tsa</i>	...	<i>me</i>	...	<i>ze</i>	...	<i>-0</i>

³ Dropped before suffix or following part of compound?

⁴ *-m* < **-n* by assimilation toward the following labial consonant.

⁵ But *-n* after Empeo *-o*, except where assimilated by a following *l*.

Also: to open as a flower **par*ʹ, L. *par*ʹ Rong *bor*; solder **hār*, L. *hār*, Ukhrlul *hār*; iron **m²-t²ir*, L. *t²ir*, Maring *t²ir*; hole **k²ur*, L. *k²ur*, Ukhrlul *-k²ur*, Tsungli *-ken*; carry **p²ur*, L. *p²ur*, Tsungli *ben* (Cl), *pên* (M), Longla, Yatsám *pên*; bend **kūr*, L. *kūr*, Rong *gar*; the rains **fūr*, L. *fūr*, Ukhrlul *tsur*-; lip **hner*, C. and N. Lühupa *-nia*.

We may note certain irregularities in the vowels from the effect of the final; thus, although -*ä*- is generally preserved in Maram and Empeo, **-ar* > Maram *-ei*, and **-ar* and perhaps **-ār* > Empeo *-i*. But in general the vowels are what we might expect before a nonguttural final, indicating that **-r* became *-n*, as in Northern Naga; that this secondary *-n* affected a shift in certain medial vowels, and then fell in Eastern Kukish except in Rengma, like all other final consonants.

Final *-l (Prob. 20, 21)

**-l* is retained only in Maring: smooth **m-n²-nāl*, L. *nāl*, Maring *-nāl*-; yam **bāl*, L. *bal*, Maring *bāl*; war **t²-r²āl*, L. *rāl*, Maring *rāl*; to wriggle **tāl*, L. *tāl*, Maring *tāl* 'earthworm'; snake **p-r²āl*, L. *rāl*, Maring *p²rāl*; hair **hmul*, L. *hmul*, Maring *-mul*; to pasture **sēl*, Old Kuki *sēl*-, Maring *sil*-; to embrace **r²-kol*, Old Kuki *kol*-, Maring *rā-kol*-; toucan **pual*, Maring, L. *-puah* *polān* < **pot-rān*.

**-l* > *-n* in Khoibu: snake **p-r²rāl*, L. *rul*, Khoibu *p²urun*.

**-l* > *-i* in Ukhrlul: kidney **m-kal*, L. *kal*, Ukhrlul *-mä-kei*; smooth **m-n²-nāl*, L. *nāl*, Ukhrlul *-nä-nai*; yam **bāl*, L. *bal*, Ukhrlul *pai*; war **t²-r²āl*, L. *rāl*, Ukhrlul *rai*; bowels **k-r²il*, L. *rii*, Ukhrlul *-k²ä-rä*; charcoal **hol*, L. *mei-hol*, Ukhrlul *mä-hai*; snake **p-r²āl*, L. *rāl*, Ukhrlul *p²ärä*; twenty **m-kul*, Haka *kul*, Ukhrlul *mä-gä*. The last two examples look like an exception to the rule that **-l* > Ukhrlul *-i*. But Pettigrew's final -*ä* (written -*a*) seems often to be either a typographical error for -*ü* (written -*u*) or a failure on the part of Pettigrew to underscore all the -*a*'s he should have. Thus, although Pettigrew gives the Ukhrlul word for 'snake' as *p²ärä* (in his transcription *p²ara*), Gordon gave it as *p²ärü*, indicating that Pettigrew should have had

p'ara by his transcription but that he failed to underscore the final vowel or that it was omitted in printing. Similarly we may note that **-ui* became Ukhrul *-ǎ* or *-û*, depending on whether the underscore was omitted or not. The third piece of evidence showing that **ul* > **-ui* > Ukhrul *-û* is that the Phadang dialect of Ukhrul shows *-ui* < **-ul*; see below.

**-l* > Phadang *-i*: war **tʔ-r²āl*, L. *rāl*, Phadang *rai*; snake **p-r²āl*, L. *rul*, Phadang *p'ui*; twenty **m-kul*, Haka *kul*, Phadang *ma-kui*. But **-l* may have been preserved as *-n* in Phadang before a suffix: smooth **m-n²-nāl*, L. *nāl*, Phadang *ma-nān(-e)*.

**-l* > Khunggoi *-i* after **-a-*: smooth *nai*. But **-l* dropped in Khunggoi after **-u-*: snake *p'uru*, twenty *ma-ku*.

**-ul* > Maram *-ei*: twenty **n-kul*, Haka *kul*, Maram *ma-kei*; hair **hmul*, L. *hmul*, Maram *-mei*.

**-l* > Kwoireng *-i*: smooth *-nai-*, twenty *ma-kai*.

**-ul* > Kabui *-ui*: snake *an-rui*, twenty *t sui*. But to tend **səl*, Old Kuki *səl-*, Kabui *sen-*.

**-l* > Empeo *-i*: smooth **m-n²-nāl*, L. *nāl*, Empeo *nei*; yam **bāl*, L. *bāl*, Empeo *-bei*; war **tʔ-r²āl*, L. *rāl*, Empeo *-rei*; husband **pa-sal*, L. *pa-sal*, Empeo *bǎ-sei* 'male'; twenty **m-kul*, Haka *kul*, Empeo *v-kai*; hair **hmul*, L. *hmul*, Empeo *mai*.

Vowel + **l* > Hlota *-û*; finger **M-tsal*, L. *-tsal*, Hlota *-tsû*; arrow **t'al*, L. *t'al*, Hlota *-tsû*; war **tʔ-r²āl*, L. *rāl*, Hlota *-rû*; bowels **k-r²il*, L. *ril*, Hlota *-rû*; spittle **m-tsil*, L. *tsil*, Hlota *n-tsû*; snake **p-r²ul*, L. *rul*, Hlota *ndrû* < **n-rû* < **m-ru*; twenty **m-kul*, Haka *kul*, Hlota *mě-kû*; hail (n.) **pʔ-r²ial*, L. *rial*, Hlota *šě-hrû*, *-rû*; but perhaps *-u* after labials: hair **hmul*, L. *hmul*, Hlota *-m'u*.

**-āl* > Tsungli *-i* after nasals: thigh **mal*, L. *mal*, Tsungli *-mi*; smooth **m-n²-nāl*, L. *nāl*, Tsungli *-ni*. And **-il* > Tsungli *-i*: to wash **r-sil*, L. *sil*, Tsungli *-si*.

(Sibilant) + vowel + **-l* > Tsungli *-ø*: forehead **M-tsal*, Tsungli *nø-tsø*; spittle **m-tsil*, L. *tsil*, Tsungli *me-tsø*; testicle **til*, L. *til*, Tsungli *-tsø*; twenty **m-kul*, Haka *kul*, Tsungli *me-tsø*.¹

**r* + vowel + **-l* probably becomes in Tsungli only a trilled *r*, which Clark wrote as *r+r*, generally with some vo-

¹ < *me-ki*, the Mongsen form, by palatalization of the initial.

wel between: war $*t^2-r^2\bar{a}l$, L. $r\bar{a}l$, Tsungli $-rir$; bowels $*k-r^2il$, L. ril , Tsungli $-rer$; hail $*p^2-r^2ial$, L. $rial$, Tsungli rer , $r\bar{e}r$; snake $*p-r^2\bar{u}l$, Tsungli $perr$. One may note that in Kukish all the forms have r^2 ; I do not know whether this is significant or not.

$*-\bar{a}l$, $*-ul >$ Mongsen, Tsangki, and perhaps Khari $-i$: thigh $*mal$, L. $mal-$, Mongsen $-mi$; war $*t^2-r^2\bar{a}l$, L. $r\bar{a}l$, Mongsen $-ri$, Tsangki ri ; twenty $*m-kul$, Haka kul , Mongsen, Tsangki $me-ki$, Khari $ma-ki$.

For Rong, only one example: fence, wall $*pal$, L. pal , Rong $p\bar{o}l$; but since $*-r$ is preserved in Rong, it is likely that $*-l$ is.

$*-l$ drops in Eastern Kukish: Rengma $-ri$ war, re bowels, $pe'e$ snake, $n-ki$ twenty; Zumomi $\gamma\bar{u}$ war, $kke-\gamma\bar{u}$ or $-k'e-\gamma i$ bowels, $-pe-\gamma\bar{u}$ or $-pe-\gamma i$ snake, $-pfo-\gamma i$, $-po-\gamma\bar{u}$ hail (for the phonetic development after r^2 , cf. Tsungli above), and $-ti$ testicle. For Tengima: finger $*M-tsal$, L. $-tsal$, Tengima $-tse-$; war $*t^2-r^2\bar{a}l$, L. $r\bar{a}l$, Tengima $-r'e$; bowels $*k-r^2il$, L. ril , Tengima ra (B); spittle $*m-tsil$, L. $tsil$, Tengima $m\check{e}-tsa$; twenty $*m-kul$, Haka kul , Tengima $m\check{e}-ku$.

We may note certain sequences in phonetic shifts. $*-l$ must have changed $*-u-$ to $-e-$ in Maran before $*-l$ became Maram $-i$; for $*-ui$ did not become Maram $-ei$ but was preserved.

Similarly $*-l$ brought about the shift of $*-\bar{a}-$ to Empeo $-e$ before $*-l$ became Empeo $-i$; for $*-ai$ did not become Empeo $-ei$ but $-a$. And $*-l$ must have caused the shift of $*-u-$ to Empeo $-a$ before $*-l$ became Empeo $-i$; for $*-ui$ is retained in Empeo.

Summary

In the following summary the letters in parentheses represent corresponding phonemes for which evidence has not been presented here in order to save space; usually no certain phonetic shift is involved. For exceptions to the general equations in the summary, see the tables. Letters in roman type represent archaic phonemes (with no shift), those in italic type represent phonetic shifts from Kukish.

Final Vowels

K.	a	i	u	ua	e	ei	ai	o	au	ui	oi
L.	a	i	u	ua	e	ei	ai	o	ao	ui	oi
Maring	(a)	(i)	u	...	...	ei	ai	au	ao	ui	...
Khoibu	(a)	(i)	u	...	...	ei	ai ₁	...	...	ui	...
Ukhrul	a	i	û	ö	...	ei	ai	ui	ao	û	ui
Phadang	(a)	e	u	u	...	i	ai	eu ²	au ₁	ui	oi
Kupome	(a)	ew	ew, eu	o	...	ei	i	au	au	...	...
Khunggoi	(a)	(i)	u	u ²	...	ei?	i	au	...	u	oi
N. Luhupa	(a)	ü	...	...	...	ai	i	au, ao	au ₁	ü	...
C. Luhupa	(a)	(i)	...	...	...	ai ²	...	ao ₁	au ₁	ü	...
Tsamphung	u	ü	...	...	...	ei	ei ²	au ₁	...	i	...
Maram	u, o	ei	au	...	i	e ¹	a	o	au	ui	...
Kwoireng	yu	ai	au	...	i	e ¹	a	o	au	ui	...
Kabui	u	ai	au	u	i	ei?	a	au	au	ui, oi	oi
Khoirao	a	i	u	u	i	ei	ai	au	au	ui, oi	oi
Empeo	eo	ai	ao	ui	ei	i	a	u	ao	ui	i
Hlota	o	i	u	u	...	i	a	o, u	u	û	...
Tsungli	u, o	ø	u	...	...	i	a	o, u	u ₁	ø	...
Longla	u, o	i	...	...	...	i	a ₁	...	...	...	...
Mongsen	a	i	u?	...	...	i	a	...	o ₁	...	...
Khari	a	i	ü ₁	...	...	i	...	...	u ₁	...	...
Tsangki	a	i	u ₁	...	...	i	...	...	...	u ₁	...
Tengsa	u	i	...	...	...	i	a ₁	...	o ₁	ü	...
Rong	o	i	u	...	...	i	i	u	u ₁	...	...
Yatsam	u, o	...	...	...	...	i	...	...	...	u	...
Yatsumi	...	(ĩ)	...	...	...	ö	...	...	...	...	...
Thukumi	(a)	(ě)	...	...	...	...	...	...	...	...	...
Rengma	a, e	e	e	a	ĩ	a	ö, u	o	u	...	...
Kezama	ü	i	...	...	ü	e	o ₁	ä	o ₁	...	...
Sopvoma	u, o	ai	...	...	i	ĩ	a ₁	...	o ₁	...	...
Dayang	u	i	u	...	ü	i	a	u	u ₁	ü	...
Zumomi	u	i	u	u	ü	i	a	u	u	ü	...
Tengima	u, o	a	u	...	ü	i	o	e	ä	ü	...
Kehena	ü	a	...	...	i	i ²	o	e ₁	...	...	...

Medial Vowels¹

K.	a	ā	i	U	e	ia	O	ua
L.	a	ā	i	U	e	ia	O	ua
<u>Maring</u>	a	ā	(I)	(u)	...	ī	(o, u)	o
Khoibu	a	ā	(i)	...	...	e	(o)	o
Ukhrul	a	ā	(i)	(u)	(e)	e	(o)	o
Phadang	(A, e)	(A, e)	(I)	(u)	...	e	(o)	o
Kupome	(A, e)	(e, A)	(i)	(u)	...	e	(o)	o
Khunggoi	a	e	(i)	(u)	(e)	...	(o)	o
N. Luhupa	(a, e, ea)		(I)	...	...	...	(o)	o
C. Luhupa	(a, e, ea)		(I)	...	...	...	(o)	...
<u>Tsamphung</u>	(A)		(a, i)	...	...	...	(o)	o
Maram	a	ā	(i)	(u)	...	e	(o)	o
Kwoireng	a	e	(I)	(u)	...	ya	(o)	...
Kabui	a	ā	(i)	(u)	(e)	e	(o)	o
Khoirao	a	ā	(i)	(u)	...	e	(o)	o
<u>Empeo</u>	(A)	(A)	(I, e)	(u)	...	ia	(o)	wa
Hlota	a	o	a-G	o-k		ya-k	o-G	
			a-L ²				e-D	
			e-D	o ^u -D			a-L	
				e-D				
				a-L				

¹ In the two northern branches of Kukish the development of medial vowels often depended on the following Kukish consonant. These final consonants are denoted by a hyphen following the vowel; thus, in the *U* column, Hlota *o-k* denotes that *-*U-* > Hlota *-o-* before *-*k*, and Hlota *o^u-D* denotes that *-*U-* > Hlota *-o^u-* (a sound between *o* and *u*) before *-*D*. Some of these consonants coincided in their effects on the preceding vowel, because they are produced in a certain position in the mouth, and they may be grouped together; symbols for these groups are: G, guttural; D, dental; L, labial. The final consonants in this table represent Kukish consonants, and not necessarily the final consonants actually found in the languages under which they are given; thus, after Tengima in the table will be found *a-k* under the *a* column, which means that *-*a-* became Tengima *-ā-* before Kukish *-k*. Kukish *-k*, like all other final consonants, has dropped in Tengima.

² But Hlota *yi-* < *-*i-*.

Tsungli	a-G	...	ø-G ¹	o-k	a-G	o-k
	e-D		e-D	u ^o -D	e-D	o ^u -D
	e-L		e-L ²		e-L	
Longla	a-G	...	...	...	...	...
Mongsen	a-G	...	...	o-k	...	o-k
	e-D?			u-D		o ^u -D
	e-L			e-D?		
Khari	a-G	...	i	...	...	...
Tsangki	a-G	...	e-D	...	...	...
Tengsa	a	...	i-G ³	u-D	...	...
			e-D	a-D		
				a-L		
Yatsam	a-G	...	...	...	...	...
Rong	o	o ⁴	a-G	o-G	ya	o
			a-L	a-D		
			e-D	a-L		
Rengma	e-D ⁵	u-k	e	o-G	...	o-G
	e-D			a-L?		
	a-L					
Kezama	o-D	...	i-D	...	...	...
	ä-D?					
	ä-L?					
Sopvoma	o-D	a-n	...	a-L?	...	...
	e-t					
	u-n					
	u-m					
Zumomi	o-G	ü-k?	i-G?	o-G	i-D	o-k?
	e-D		e-t	u-D	i-L	u-D?
	a-L		e-p	u-L		
			i-n			
			i-m			

¹ But Tsungli -o- after Kukish *t^c.² But Tsungli -i- after Tsungli y.³ But Tengsa -a- after Kukish *t^c.⁴ But Rong -u- after ty < *tš, *tš^c?⁵ But Rengma -a- after a sibilant.

Tengima	ā-k	a-G	i-G	u-G	e-G?	o-G	u-n
	o-n	i-n	e-D	e-D	i-D		
	a-D		e-L	e-L	i-L		
	a-L						
Tsākrima	o-n	...	...	...	...	...	...
Kehena	a-D	i-n	...	...	...	...	...
	a-L						

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Maps

For a general map of the Naga languages, see *The Linguistic Survey of India*, Vol. 3, pt. 2 (Calcutta 1903), facing p. 193. For more detailed maps, see Hutton, *Angami*, facing pp. 5, 15; Hutton, *The Sema Nagas*, facing p. 3; Mills, *Lhota*, following p. 232; Mills, *Ao*, before p. 1 and facing p. 4. Maps in these last four works cover more than the titles of the works indicate. Also Hodson, map facing p. 1.