# Na-khi and Proto-Lolo-Burmese: A Preliminary Survey[1]

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1. Na-khi is a Tibeto-Burman language spoken around the town of Likiang (or Li-chiang) in Yünnan, southern China. It has been classified (by Matisoff 1972) as a member of the Mosoid branch of the Loloid group of Lolo-Burmese languages within the Tibeto-Burman stock. The data upon which this preliminary survey is based are exclusively from Rock (1963) who makes a definite distinction between Na-khi and the related Moso.

Rock points out that the Chinese refer to all the people of the Likiang area as Moso, and have done so for the past hundred years. Earlier writings, however, indicate that there were (at least) two tribes in the area, the Mo and the Hsieh (or, more fully, the mó-mán[a] and the xie-mán[b] — the 'Mo barbarians' and the 'Hsieh barbarians' — see Rock, p. xxvii). In Chinese, when the two groups were spoken of together, mó and xie were juxtaposed in the phrase mó xie èr zhǒng mán[c] 'Mo [and] Hsieh two kinds barbarians' or 'the two barbarian (tribes) Mo and Hsieh' (Rock, p. xxvii). This, coupled with the fact that xie was pronounced so when referring to a tribe could have given rise to the use of Moso to refer to both the Mo and the Hsieh. Rock believes that the name Hsieh ([ɕiɛ] in IPA) is in fact a Sinicization of the khi ([ɕi]) of Na-khi (p. xxviii).

The Moso (the 'Mo barbarians') are separated from the

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Na-khi by the Yangtze River, and, though their language is closely related to Na-khi, the two tribes must communicate by means of Chinese (Rock, p. xxvi).

Rock's dictionary is based on the Na-khi written language, rather than the spoken colloquial. The Na-khi writing system, a combination of pictographs and syllabic characters, probably goes back to earlier than the 13th century (Rock, p. xx). Thus, the dictionary contains 'many archaic words' and, furthermore,

> many words [have] been omitted for which no pictographs exist. Thus, the number of sound complexes found in the Dictionary are not those of the colloquial of which more exist, but those of the written language. [Rock, p. xvi]

The phonetic values given to the various written symbols are based upon a dialect of Na-khi spoken not in the town of Likiang itself (where, according to Rock, there is too much influence from Chinese so that the natives cannot pronounce certain words anymore), but rather in villages to the north and west of Likiang, in the Yangtze Valley. Only the priests read the Na-khi writing, and there is a difference between the literary language and the colloquial, as can be seen when Rock provides both forms.

Lacking a complete analysis of Rock's dictionary, it was thought best to retain his transcription system for comparative purposes, even though it is quite clear that his system could be simplified. In any event, his system is as follows:[2]

I. Initials

| | | | | | | |
|---|---|---|---|---|---|---|
| p' | t' | ts' | ch' | t'kh(y) | k' | Ø |
| | | ɑs' | | | | |
| bp | dt | ts | ch | gky | gk | |
| | | ds | | | | |
| b | d | tz | dsh | gy | g | |
| bb | dd | dz | ɑzh | | gg | |
| mb | nd | nds | ndsh | ngy | ng | |
| mbb | ndd | ndz | ndzh | | ngg | |
| ff | | ss | sh | xh(y) | ẋh | h |
| v | | sz,z | zh | | gh | |
| m | n | | | ny | n̄g | |
| | nn | | | | | |
| w | l | | | y | | |
| | ll | | | | | |

There are five major points of articulation, indicated in columns: labial (p', etc.); dental (t', etc. and ts', etc.); alveolar (actually alveo-palatal) (ch', etc.); palatal (or palatalized velar) (t'kh(y), etc.); and velar (k', etc.). In addition, there is a glottal spirant (h) and gh, a 'voiced uvular (or pharyngeal) fricative' (Rock, p. xxxi). Furthermore, a word may begin with no initial consonant (zero-initial), Ø in the chart.

Rock distinguishes 14 manner series (some of them confined to single points of articulation), though what some of the distinctions really are is not all that clear. In any event, the manners (indicated in the chart in rows) are: voiceless aspirated stop (or fortis affricate) (p', etc.); voiceless aspirated affricate, lenis (ds'); voiceless unaspirated stop (or fortis affricate) (bp, etc.);[3] voiceless unaspirated affricate, lenis (ds); voiced stop (or affricate), lenis (b, etc.); voiced stop (or affricate), fortis and long (bb, etc.);[4] prenasalized stop (or affricate), lenis (mb, etc.); prenasalized stop (or affricate), fortis (mbb, etc.); voiceless fricative (ff, etc.); voiced fricative (v, etc.); nasal (m, etc.); fortis and long dental nasal (nn);[5] semi-vowel and lateral (w, etc.); and fortis and long lateral (ll).[5] What the difference between his sz (which he identifies with IPA [z]) and his z might be cannot be determined.

There are a few important pecularities about the transcription. Rock describes kh as a palatal fricative, which justifies considering the sequence t'kh(y) a palatal affricate (the y is written before vowels other than i). There is a sequence khu in addition to khyu, but the former may be related to h (cf. ʒkhu and ʒhu, both glossed as 'stomach of a ruminant'). It seems as though the only palatalized velar to become an affricate is the voiceless aspirated one t'khy (or [tɕ'y]), probably from earlier *k'y.

Note that ng is the velar nasal [ŋ], while both ng and ngg are prenasalized velar stops. Unaspirated ch is rare (occurring only in the syllable chěr), as are ff and v. In one case Rock transcribes ʟfa 'to ferment' (rather than ffa), but this is a loan from Chinese fa.[a] There are several other unique initials:

dgy dtgy tgky (tkhy) dty

The first three of these perhaps represent remnants of a dental prefix. tkhy occurs as an alternate form in a single word, ʒtgkye ~ ʒtkhye 'cremate', where, maybe, the prefixed palatalized unaspirated voiceless velar has become an unaspirated palatal affricate (parallelling t'khy). The

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sequence dty occurs in only one word, ³dtyu 'to boil', but this seems to have developed from ³dgyu 'to boil'.[6]

II. Rhymes.

(a) simple vowels and diphthongs[7]

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| i | ĭ | ǐ | | | ü | u | ū | |
| ü | | | | | | iu | | |
| | | | | | | ou | | |
| e | wue | ŭe | | | | o | ō | wuo |
| ö | | | ěr(h) | | | | | |
| ä | | | (ăr) | | ŭ | aw/ŏ | | |
| | | | a | ā | | | | |
| | | (w)uà | oa | (ùa) | wua | | | |
| | | | ʿa | | | | | |

A macron represents vowel length, though long vowels are rare except in words with zero-initial (and there is no word "ī"). The symbols are fairly straightforward except as follows: ĭ is a high front vowel, 'slightly centralized' (Rock, p. xxxĭ). ü is a high front rounded vowel following all initials other than gn, kh, ɬh, ndd, ll, gg and ngg, where it is a high back unrounded vowel. (This is Rock's list, but there is no word knŭ in the dictionary.) ö is front rounded [œ]; ä is [ɛ]; ŭ is [ʌ]; both aw and ŏ are [ɔ] (though aw is often confused with a). ěr is a 'retroflexed mid-central vowel with slight pharyngeal constriction' (Rock, p. xxxi); ěrh is the same as ěr, but written in what Rock identifies as Chinese loan words; ăr is probably the same, slightly lower, following only h. wuà (uà after initial w) has 'prominence' on a; wua (ùa) after initial w) has 'prominence' on u (Rock, p. xxxii). Finally, ʿa is a 'low back vowel with laryngeal constriction like Arabic ʿasin' (Rock, p. xxxi).

(b) nasalized rhymes

| | | | | |
|---|---|---|---|---|
| | | un | | |
| | | ùen | | |
| | | on | | |
| an | ān | | | n = nasalized vowel |
| ùan | uàn | | | |

Nasalized rhymes in Na-khi are secondary, and have nothing to do with nasal finals in Proto-Lolo-Burmese.