

## AN OUTLINE OF THE HISTORICAL PHONOLOGY OF THE DIALECTS OF NAR-PHU (NEPAL)

**Martine Mazaudon**

Lacito, CNRS, Paris

### SUMMARY

The dialects of Nar (local name Tshiprungtan, also known as Nar-mä 'lower Nar') and Phu (or Nar-tö 'upper Nar') are spoken in two villages in a small valley north of Manang in Nepal. They undoubtedly belong to the TGTm group of languages (Tamang-Gurung-Thakali-Manang). Notwithstanding the existence of a significant number of Tibetan roots, the basic vocabulary remains TGTm, including the test-root 'seven' Phu <sup>55</sup>pɿ, Nar <sup>54</sup>ni < TGTm \*<sup>B</sup>h<sub>nis</sub> (vs WT *bdun*).

From the phonological correspondances we can define two distinct dialects, different from each other and distinct from Manangba. For instance, the development of the Proto-Tamang \*voiced series under Proto-tone \**B* into an aspirated series, which is a striking feature of Manangba, is not found in Nar-Phu (e.g. TGTm \*<sup>B</sup>dap 'needle' > Nar <sup>112</sup>dou, Phu <sup>11</sup>to;ɦ, Man <sup>31</sup>the). Like the dialects of Tamang proper, Nar and Phu preserve the old velar + *l* clusters (TGTm \*<sup>B</sup>gliŋ 'snow' > Nar <sup>12</sup>gliŋ, Phu <sup>21</sup>gliɦŋ; cf. Risiangku Tamang <sup>21</sup>kliŋ), against all the rest of the TGTm languages which have lost them, either through coalescence (as in Gurung), or by the loss of the velar (Marpha and Syang), or by loss of the liquid (Tukche and Manang, including the Praka dialect, which is only marginally distinct from Manang proper).

A rather large number of lexical items are not direct cognates between Nar and Phu; many of these may be loanwords from Tibetan. Among cognates, divergent outputs can be observed for some diachronic rules; for example, certain old stopped rimes which are reflected as diphthongs in Nar complete their evolution to a monophthong in Phu (e.g. 'needle' quoted above, or TGTm \*<sup>B</sup>kat 'voice' > Nar <sup>54</sup>k<sup>2</sup>e, Phu <sup>43</sup>ke).

On the other hand, some developments are shared by the three languages of the area (Manang, Nar and Phu), e.g. the shift of short \**e* to the opening diphthong *je*, TGTm \*<sup>B</sup>me 'cow' > Nar <sup>112</sup>mjeɦ, Phu <sup>22</sup>mjě, Praka <sup>31</sup>mie.

From the diachronic point of view, the most interesting developments are found in the system of vowels (and rimes). The disappearance of old final stops has led to a proliferation in the number of vowels and diphthongs, which give the dialects a distinctive typological appearance. Changes in the vowels

in open syllables have also contributed to the enrichment of the vocalic system.

The system of initials and initial clusters is characterized by a high degree of conservatism, similar to that of Eastern Tamang (Risiangku). The Nar-Phu dialects are useful, along with Gurung, in reconstructing velar clusters, which are weak in Tamang, and in confirming some other initial clusters and an occasional final, which would otherwise be attested only in the eastern part of the family. They are also useful for lateral initials and the old vocalic length contrast. Tones correspond regularly to those of other TGTm languages. Among finals, the nasals and *l*, *r*, *s* are preserved. Overall, the Nar-Phu dialects are a little less conservative than the dialects of Tamang proper.

## 1. THE DEVELOPMENT OF MORPHEME AND SYLLABLE STRUCTURE

Two opposite types of evolution in morpheme and syllable structure can be observed in Nar-Phu.

### 1.1 LOSS OF THE FINAL SYLLABLE OF DISYLLABIC MORPHEMES IN PHU

This development, which has been described for Dzongkha (Mazaudon and Michailovsky, 1989) has been observed in Phu but not in Nar. The roots involved are shared with Tibetan, rather than strictly TGTm roots. Further study is needed to decide whether these words could have been borrowed from Tibetan directly in their present sesquisyllabic form.

‘rope’	Phu <sup>54</sup> 4 <sup>4</sup> thakp <sup>2</sup>
‘bile’	Phu <sup>55</sup> 33 <sup>3</sup> tʃhɪkp(a)

### 1.2 EXPANSION BY EPENTHESIS OR DIMIDIATION

In both Nar and Phu, sonants can lead to an expansion of what is a *monosyllable in neighbouring dialects (and seems reconstructible as a monosyllable)* into a disyllabic or sesquisyllabic form.

In Nar (but not in Phu) a final vowel is added, in some words, after the final sonants *m*, *r* and *l*:

‘gold’	TGTm * <sup>B</sup> mar > Nar <sup>11</sup> 22 <sup>2</sup> mare (~ <sup>21</sup> 2mar), Phu <sup>22</sup> mar
‘star’	TGTm * <sup>B</sup> sar > Nar <sup>43</sup> 54 <sup>4</sup> sar <sup>2</sup> , Phu <sup>32</sup> sar
‘gum’	TGTm * <sup>A</sup> ɲil/nil > Nar <sup>23</sup> 32 <sup>2</sup> ɲil <sup>1</sup> ɛ, Phu <sup>10</sup> ɲil
‘shoulder’	TGTm * <sup>A</sup> bam > Nar <sup>22</sup> 1 <sup>1</sup> pɔʔi:mə

‘bear’ Nar <sup>22/11</sup>*toma* (cf. Tukche <sup>h</sup>*tom*, Sahu <sup>l</sup>*tawam*)

and occasionally after stops:

‘lung’ TGTM \*<sup>B</sup>*glop*/\*<sup>B</sup>*glwap* > Nar <sup>11/11</sup>*glǝbɛ* (cf. Phu <sup>21</sup>*lǝh*)

In Phu (but not in Nar), optional insertion of an echo vowel occurs inside some velar + sonant clusters:

‘cubit, elbow’ TGTM \*<sup>A</sup>*kru* > Phu <sup>55/55</sup>*kuru* with an undimidiated variant: <sup>33</sup>*kru* <sup>42</sup>*naŋ* / <sup>22/22</sup>*kuru* <sup>42</sup>*naŋ*

‘snow’ TGTM \*<sup>B</sup>*gliŋ* > Phu <sup>21</sup>*glihŋ* with a dimidiated variant <sup>21</sup>*g<sup>h</sup>liŋ*

## 2. THE EVOLUTION OF INITIAL CONSONANTS

### 2.1 PROTO-TGTM INITIALS

Proto-TGTM initials have tentatively been reconstructed as shown in the two tables below. Parentheses indicate problematic reconstructions.

aspirated	p <sup>h</sup>	t <sup>h</sup>	ʈ <sup>h</sup>	tʂ <sup>h</sup>	(tɕ <sup>h</sup> )	k <sup>h</sup>	
voiceless unasp.	p	t	ʈ	ts	(tɕ)	k	(?)
voiced	b	d	ɖ	dz	(dʒ)	g	
voiceless nasal	h <sub>m</sub>	h <sub>n</sub>			h <sub>ɲ</sub>	h <sub>ŋ</sub>	
voiced nasal	m	n			ɲ	ŋ	
voiceless fricative				s	ɕ		h
voiced fricative				z	ʒ		
voiceless glide		h <sub>l</sub>	h <sub>r</sub>		h <sub>j</sub>	h <sub>w</sub>	
voiced glide		l	r		j	w	

Table 1. TGTM plain initials

	p <sup>h</sup>	p	b	h <sub>m</sub>	m	t <sup>h</sup>	t	d	ʈ <sup>h</sup>	ʈ	ɖ	tʂ <sup>h</sup>	ts	dz	s	k <sup>h</sup>	k	g	ŋ
l,r	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	+	+	+	-
j	+	+	+	+	+	-	-	-	-	-	-	+	+	+	+	+	+	+	+
w	*	*	*	*	*	+	+	+	+	+	+	+	+	+	+	+	+	+	+

\* only with V = /i/

Table 2. TGTM initial clusters

### 2.2 TONE AND MANNER

Proto-TGTM is reconstructed with a three-way manner contrast between \*aspirated, \*voiceless unaspirated, and \*voiced initial consonants (Mazaudon 1978). Across all TGTM dialects, the loss of the old voicing contrast has led

to a two-way split of the proto 2-tone system into 4-tone systems, with complete loss of the voicing contrast in nasals, liquids and sibilants, while the stops retain some trace of it in the guise of weak voicing or a breathy voiced pronunciation of the old voiced stops (and the following vowel). Variability in the realization of these initials is common in all TGTm dialects, with pronunciations of low-toned initials varying from weak voice to complete voicelessness, with more or less breathiness on the following vowel. The same variation is found in Nar and in Phu, with voiceless realizations being somewhat more common in Phu than in Nar.

A remarkable development is found in Manang, where the old \*voiced series under tone \*B has become aspirated. This development is not found in Nar-Phu, confirming, if need be, the difference between the two valleys.

Phonetically, as in the majority of TGTm dialects, the 4 tones in Nar and Phu are realized as two high tones with clear voice quality and two low tones with breathy voice quality.

Lateral series

As a rough approximation, we have said that the proto-Tamang voicing contrast in liquids was completely lost in modern TGTm dialects. I have argued elsewhere that the Syang dialect preserves a trace of the Proto-Tamang voiceless lateral initial in the form of a *fricative* initial *hl* < \**hl*, in opposition to the Syang voiceless *hl* < \**HL*, which possibly reflects an older cluster (Mazaudon, 1978). The contrast in Nar and Phu between a plain voiced lateral *l* (with high tone) < \**hl*, as in ‘water-god’, and a fricative lateral *ɬ* < \**HL*, as in ‘god’, tends to confirm the reconstruction of two different high series laterals \**hl* and \**HL* in Proto-Tamang.

TGTm	Ris.	Sahu	Tag.	Tukche	Marpha	Syang	Gha.	Praka	Nar	Phu
*HL	hl	l	l	hl	l,hl	hl	l	hl	hɬ,l	hɬ
*hl	l	l	l	l	l	hɬ	l	l	l	l
*hV/_i,e	l	l	l	l	l	hɬ	l	l	hɬ,l	hɬ
*l	l	l	l	l	l	l	l	l	l	l

- ‘god’

TGTm \*<sup>A</sup>HLa (TTM except Ris \*<sup>A</sup>hl)a > Nar <sup>43</sup>læ, Phu <sup>43</sup>hɬɛ
- ‘water-god’

TGTm \*<sup>A</sup>hlu (Tam) > Nar <sup>54</sup>lu, Phu <sup>43</sup>lu
- ‘ladder’

TGTm \*<sup>A</sup>hl*i* (GT) > Nar <sup>54</sup>hlɪ, Phu <sup>43</sup>hlɪ
- ‘tongue’

TGTm \*<sup>B</sup>hlɛ > Nar <sup>54</sup>ɛ, Phu <sup>43</sup>hɬɛ
- ‘mortar’

TGTm \*<sup>A</sup>laŋ (TTM) > Nar <sup>21</sup>la<sup>6</sup>ŋ, Phu <sup>10</sup>la<sup>6</sup>ŋ

## 2.3 PLACE OF ARTICULATION

- The place of articulation of simple initial consonants has remained unchanged in Nar-Phu as across all of TGTm.
- Labial initial clusters have been preserved, as everywhere in TGTm.
- Differences are noted in the evolution of velar initial clusters.

### *Velar plus r clusters*

Velar plus *r* clusters are apparently fully preserved in Nar-Phu and in Gurung; almost fully preserved in Risiangku Tamang; partly preserved in the other Tamang dialects, and in Manang-Praka; and completely lost in the three Thakali dialects (Tukche, Marpha and Syang).

'head/hair'	TGTm * <sup>A</sup> <i>kra</i> > Nar <sup>43</sup> <i>kræ</i> / <sup>54</sup> <i>kræ</i> , Phu <sup>44</sup> <i>kre</i> (cf. Tangbe <sup>43</sup> <i>krə</i> )
'filth'	TGTm * <sup>A</sup> <i>gri</i> > Nar <sup>21</sup> <i>gri</i> , Phu <sup>11</sup> <i>gri</i>
'one'	TGTm * <sup>B</sup> <i>grik</i> > Nar <sup>11</sup> <i>gri</i> / <sup>12</sup> <i>gri</i> :, Phu <sup>22</sup> <i>gri</i> :/ <sup>22</sup> <i>kri</i> (cf. Tangbe <sup>11</sup> <i>gi<sup>h</sup></i> )
'enemy'	TGTm * <sup>B</sup> <i>gra</i> > Nar <sup>13</sup> <i>græ</i> , Phu <sup>11</sup> <i>kre</i> : (cf. Tangbe <sup>20</sup> <i>də</i> )
'wheat'	TGTm * <sup>B</sup> <i>grwa</i> > Nar <sup>231</sup> <i>grɔ</i> , Phu <sup>21</sup> <i>grɔ̃</i> (cf. Tangbe <sup>11</sup> <i>go<sup>h</sup></i> )

### *Velar plus l clusters*

Velar plus *l* clusters are preserved in Nar-Phu, as in all Tamang dialects, while they are lost in all other TGTm dialects.

'ox'	TGTm * <sup>B</sup> <i>glap</i> > Nar <sup>11</sup> <i>glou</i> , Phu <sup>11</sup> <i>glo</i> :
'place'	TGTm * <sup>A</sup> / <sup>B</sup> <i>gla</i> : > Nar <sup>11</sup> <i>kla<sup>h</sup></i> , Phu <sup>11</sup> <i>gla</i> :
'to swallow'	TGTm * <sup>A</sup> <i>gloŋ</i> > Nar <sup>33/22</sup> <i>klɔ<sup>h</sup>ŋba</i>

## 2.4 SOME IRREGULAR CORRESPONDENCES

In Phu (but not in Nar) we notice two groups of recurrent irregular correspondences which will require further study. Both of these groups are reconstructed in other TGTm languages with initials in the dental area, simplex or affricated. They may indicate the presence of doublets in TGTm.

### *Phu s vs other TGTm ts/tsh/dz*

s/tsh		
'hair'	Phu <sup>44/31</sup> <i>kra:səm</i>	TGTm * <i>btsham</i>

s/dz		
‘daughter’	Phu <sup>33</sup> <sup>42</sup> sæ <sup>h</sup> me	TGTM * <sup>B</sup> dzam(e, i)
‘tip’	Phu <sup>31</sup> sɔ <sup>h</sup> / <sup>54</sup> so	TGTM * <sup>A</sup> dzo
‘nest’	Phu <sup>21</sup> sã <sup>h</sup> ŋ	TGTM * <sup>A</sup> dzaŋ

Phu **k/kh/g** vs other TGTM or Tibetan **t/th/d**

‘fathom’	Phu <sup>11</sup> gjä <sup>h</sup> m	Dz dom, WT ‘dom(s)(-pa)
‘heart’	Phu <sup>4</sup> kî:	TGTM * <sup>A</sup> tiŋ (Nar <sup>43</sup> tiŋ)
‘house’	Phu <sup>31</sup> gim	TGTM * <sup>B</sup> dim (Nar <sup>101</sup> dim)
‘palm’	Phu <sup>33</sup> ja: <sup>42</sup> khil	Manang <sup>55</sup> ja: <sup>32</sup> <sup>33</sup> thili, Nar <sup>44</sup> ja: <sup>54</sup> thil, or <sup>33</sup> ja <sup>32</sup> thiŋ, TT * <sup>A</sup> thiŋ
‘siblings’	Phu <sup>44</sup> khe:	Tuk. <sup>u</sup> thet ‘sons and daughters’ Ris. ‘thetmai ‘family’

3. THE EVOLUTION OF VOWELS AND RIMES

3.1 PROTO-TGTM RIMES

For Proto-TGTM we can reconstruct the following vocalic system:

Simple vowels

<i>short</i>			<i>long</i>			No nasality contrast No length contrast in closed syllables
i		u	i:		u:	
e			e:		o:	
a			a:			

Complex nuclei

	iu	ui	iu
(ie)	io	oi	ioi
	ia	ai	iai
(i = j and u = w)			

Final consonants

stop	p	t	k
nasal	m	n	ŋ
fricative		s	
liquid		l	r
(semi-vowel)		i	u

3.2 OPEN RIMES

The most salient feature in the evolution of open rimes for both dialects is the centralisation of proto \*short vowels, and the diphthongisation of short \*e

to \**je*. The old long vowels have not changed in quality, and their length is becoming progressively reduced and redundant as compared to the newly formed quality contrasts.

### Proto short vowels

The centralisation of peripheral vowels (\**i* \**a* \**u*) is more advanced in Phu than in Nar.

\**i* > *ɪ*

‘man’ TGTm \*<sup>A</sup>*mi* > Nar <sup>22</sup>*mɪ<sup>h</sup>*, Phu <sup>21</sup>*mɪ<sup>h</sup>*

\**e* > *je*

‘wife’ TGTm \*<sup>A</sup>*be* > Nar <sup>21</sup>*bje*, Phu <sup>32</sup>*pje<sup>h</sup>*:

‘cow’ TGTm \*<sup>B</sup>*me* > Nar <sup>21</sup>*mje<sup>h</sup>*/<sup>112</sup>*mje<sup>h</sup>*, Phu <sup>22</sup>*mje<sup>h</sup>*/<sup>21</sup>*mje*/<sup>11</sup>*mje*, (cf. Tangbe <sup>21</sup>*me<sup>h</sup>*)

\**a* > Nar *æ*, Phu *ɛ*

‘goat’ TGTm \*<sup>A</sup>*ra* > Nar <sup>54</sup>*ræ*, Phu <sup>54</sup>*rɛ*

‘small bamboo’ TGTm \*<sup>Bh</sup>*ma* > Nar <sup>54</sup>*mæ*, Phu <sup>32</sup>*mɛ*

‘earth’ TGTm \*<sup>A</sup>*sa* > Nar <sup>54</sup>*sæ*, Phu <sup>43</sup>*sɛ*

\**o* > *ɔ*

‘deer’ TGTm \*<sup>A</sup>*pho* > Nar <sup>53</sup>*pho:*, Phu <sup>43</sup>*phɔ*

‘lake’ TGTm \*<sup>A</sup>*tsho* > Nar <sup>43</sup>*tshɔ*, Phu <sup>54</sup>*tshɔ* (cf. Tangbe <sup>443</sup>*tsho*)

\**u* > Nar *u*/*ʊ*, Phu *ʊ*

‘seed’ TGTm \*<sup>B</sup>*blu* > Nar <sup>21</sup>*blu*, Phu <sup>21</sup>*blʊ*

### Proto long vowels

The \*long vowels have retained their original quality and tend to shorten:

‘bark (of tree)’ TGTm \*<sup>A</sup>*phi:* > Nar <sup>443</sup>*phi:*, Phu <sup>44</sup>*phi:*

‘tail’ TGTm \*<sup>Ah</sup>*me:* > Nar <sup>54</sup>*mje:*, Phu <sup>44</sup>*mje(:)* (cf. Tangbe <sup>54</sup>*mě*)

‘waist’ TGTm \*<sup>A</sup>*kre:* > Nar <sup>43</sup>*kre*/<sup>54</sup>*kre*, Phu <sup>55</sup>*kre:*

‘blood’ TGTm \*<sup>B</sup>*ka:* > Nar <sup>554</sup>*ka:*, Phu <sup>33</sup>*ka:*

‘son-in-law’ TGTm \*<sup>A</sup>*ma:* > Nar <sup>33</sup>*ma<sup>h</sup>*, Phu <sup>21</sup>*ma<sup>h</sup>*

‘smallpox’ TGTm \*<sup>B</sup>*bro:* > Nar <sup>1</sup>*prɔ<sup>h</sup>*, Phu <sup>11</sup>*brɔ:*

‘nine’ TGTm \*<sup>B</sup>*ku:* > Nar <sup>54</sup>*ku*/<sup>54</sup>*kʊ*, Phu <sup>55</sup>*ku*

‘six’ TGTm \*<sup>B</sup>*qu:* > Nar <sup>212</sup>*qu:*, Phu <sup>21</sup>*qu*/<sup>11</sup>*qu:*

The length contrast has thus become associated with a quality contrast:

i	≠ i:	u	≠ u:
jɛ	≠ (j)ɛ(:)	ɔ	≠ o:
Nar æ / Phu ɛ ≠ a:			

(e.g. Phu <sup>22</sup>dɔ 'span' vs <sup>11</sup>tɔ: 'needle')

(e.g. Phu <sup>21</sup>dʊ 'grain' vs <sup>11</sup>dʊ: 'six')

### 3.3 PROTO-CLOSED RIMES

Final nasals have almost all been preserved, while final stops have all disappeared, producing a multiplication of vowels and diphthongs.

*Nasal finals are preserved:*

- in Nar, fully, and without any change in vowel quality
- in Phu, almost completely except that:
  - the velar nasal can be reduced, by an optional rule, to nasality of the vowel.
  - the dental nasal palatalises *a* preceding \**a* to *ɛ*.

\*ŋ > Nar ŋ, Phu ŋ / ̃

'sour'	TGTM * <sup>A</sup> kjuŋ > Nar <sup>54</sup> kjuŋ, Phu <sup>22</sup> kjuŋ
'hole'	TGTM * <sup>B</sup> khuj > Nar <sup>554</sup> khuj, Phu <sup>43</sup> khũ
'valley'	TGTM * <sup>A</sup> sjoŋ > Nar <sup>43</sup> ffjɔŋ, Phu <sup>434</sup> ffjɔ̃:
'long bone'	TGTM * <sup>A</sup> kaŋ > Nar <sup>54</sup> kaŋ, Phu <sup>43</sup> kaŋ
'daughter-in-law'	TGTM * <sup>A</sup> tsaŋ > Nar <sup>54</sup> tsaŋ, Phu <sup>443</sup> tsã:
'wood'	TGTM * <sup>B</sup> siŋ > Nar <sup>54</sup> fiŋ

\*an > Nar an, Phu ɛn

'rice'	TGTM * <sup>A</sup> kan > Nar <sup>22</sup> kan/ <sup>43</sup> kan, Phu <sup>54</sup> kɛ̃n (cf. Manang <sup>32</sup> kjě)
'medicine'	TGTM * <sup>A</sup> hman > Nar <sup>54</sup> man, Phu <sup>53</sup> mɛn/mən
'panther'	TGTM * <sup>A</sup> tsjan > Nar <sup>44</sup> paŋ/ <sup>44</sup> tsjɛn, Phu <sup>31</sup> tfjɛn

\*m > m

'language'	TGTM * <sup>A</sup> tam > Nar <sup>53</sup> tam
'ear of grain'	TGTM * <sup>A</sup> hnam > Phu <sup>55</sup> nam

#### Occlusive finals

Occlusive finals are lost in both dialects. Their reflexes are:

- simple vowels in both dialects:



\*at > e in Phu and in Nar (more open after /r/)

full TGTm \*<sup>B</sup>h<sub>nat</sub> > Nar <sup>53</sup>ne

eight TGTm \*<sup>B</sup>brat > Nar <sup>112</sup>preːfi, Phu <sup>11</sup>pre (cf. Tangbe <sup>11</sup>preʔ)

louse TGTm \*<sup>B</sup>s<sub>jat</sub> > Nar <sup>554</sup>fje

work TGTm \*<sup>B</sup>g<sub>jat</sub> > Nar <sup>112</sup>gje, Phu <sup>111</sup>gjeː (cf. Tangbe <sup>11</sup>kjeʔ)

• diphthongs in both dialects:

\*et > je

‘right’ TGTm \*<sup>A</sup>ket (TT) > Nar <sup>54</sup>kje/<sup>54</sup>kje, Phu <sup>43</sup>kje/kjeː

‘shame’ TGTm \*<sup>A</sup>pet > Nar <sup>55</sup>pje

\*ut > yi

‘ball of wool’ TGTm \*<sup>B</sup>thut ‘to join at the end of a rope’ > Nar <sup>554</sup>thyiː, Phu <sup>55</sup>thy/<sup>44</sup>thyi (cf. Manang <sup>44</sup>thi)

\*ot > oe, we

‘load’ TGTm \*<sup>B</sup>dot > Nar <sup>212</sup>dœ / <sup>212</sup>døe

‘(?) colour’ TGTm \*<sup>A</sup>tshon/<sup>B</sup>tshot > Nar <sup>44</sup>tshøe, Phu <sup>443</sup>tshøː

• a diphthong in Nar and a plain vowel in Phu:

\*ap > Nar ɔu, Phu oː

‘beer mash’ TGTm \*<sup>A</sup>bap > Nar <sup>12</sup>pɔu/<sup>32</sup>pɔu, Phu <sup>11</sup>po<sup>fi</sup>ː<sup>54</sup>kheː  
(‘beer mash’); <sup>11</sup>po<sup>fi</sup>ː/<sup>31</sup>poː ‘beer’ (cf. Tangbe <sup>10</sup>bɔ<sup>fi</sup>p)

‘needle’ TGTm \*<sup>B</sup>dap > Nar <sup>112</sup>dou, Phu <sup>11</sup>tɔːfi (cf. Tangbe <sup>21</sup>təp <sup>44</sup>gaŋ ‘needle-holder’)

‘fire tongs’ TGTm \*<sup>B</sup>gap > Nar <sup>112</sup>gou, Phu <sup>111</sup><sup>122</sup>gau

‘cover’ TGTm \*<sup>A</sup>gap > Nar <sup>21</sup>gou, Phu <sup>11</sup>gaː

‘ox’ TGTm \*<sup>B</sup>glap > Nar <sup>232</sup>glou, Phu <sup>11</sup>gloː

‘door’ TGTm \*<sup>B</sup>h<sub>m</sub>rap > Nar <sup>54</sup>mrou, Phu <sup>32</sup>mroː (cf. Tangbe <sup>43</sup>nəp)

‘leafy vegetable’ TGTm \*<sup>A</sup>qap > Nar <sup>11</sup>tou/<sup>21</sup>tou

‘snot’ TGTm \*<sup>B</sup>h<sub>nap</sub> (except Sahu \*<sup>A</sup>) > Nar <sup>54</sup>nou (cf. Phu <sup>44</sup>na, Tangbe <sup>43</sup>nəp)

\*at / k\_\_ > Nar ʔe, Phu e

‘voice’ TGTm \*<sup>B</sup>kat (except Gha \*<sup>A</sup>kat) > Nar <sup>54</sup>keː/<sup>54</sup>kʔe, Phu <sup>43</sup>ke

The resulting phonological systems are typologically very different from those of other TGTm dialects, with the partial exception of Manang. For instance, the following minimal contrast can be cited in the Phu dialect:

' <i>Arundinaria sp.</i> '	TGTm * <sup>A</sup> <i>hma</i> >	Phu <sup>32</sup> <i>mɛ</i>
'fire'	TGTm * <sup>A</sup> <i>hmje</i> >	Phu <sup>54</sup> <i>mje</i>
'tail'	TGTm * <sup>A</sup> <i>hme</i> >	Phu <sup>44</sup> <i>mje</i>
'level measure'	TGTm * <sup>B</sup> <i>hnat</i> >	Phu <sup>65</sup> <i>ne</i>

These four rimes would sound alike to an inhabitant of Risiangku.

### 3.4 OLD DIPHTHONGS

Some of the old diphthongs have survived and add to the complexity of the modern systems.

\**ai* > *ɛi*

'iron'	TGTm * <sup>B</sup> <i>phai</i> > Nar <sup>53</sup> <i>phe<sup>i</sup></i>
'ceiling-lath'	Nar <sup>12</sup> <i>grei</i> (cf. Ris <sup>4</sup> <i>krai-<sup>2</sup>sin</i> )

Rising diphthongs have become simple vowels:

\**wa* > *o*, *ɔ* (The reflex in Phu seems to be a more closed *o* in closed syllables and a more open *ɔ* in open syllables)

'clothes'	TGTm * <sup>A</sup> <i>kwan</i> > Nar <sup>54</sup> <i>kon</i> , Phu <sup>54</sup> <i>kon</i>
'song'	TGTm * <sup>B</sup> <i>gwai</i> > Nar <sup>12</sup> <i>gwe<sup>h</sup></i> , Phu <sup>11</sup> <i>gøi</i>
'saliva'	TGTm * <sup>B</sup> <i>thwa</i> > Nar <sup>54</sup> <i>tho:</i> , Phu <sup>44</sup> <i>thɔ:</i>
'tooth'	TGTm * <sup>A</sup> <i>swa</i> > Nar <sup>54</sup> <i>sɔ</i> , Phu <sup>32</sup> <i>sɔ</i> (cf. Tangbe <sup>43</sup> <i>sə</i> )
'wheat'	TGTm * <sup>B</sup> <i>grwa</i> > Nar <sup>231</sup> <i>grɔ</i> , Phu <sup>21</sup> <i>grɔ̃</i>
'fontanel'	TGTm * <sup>B</sup> <i>hɥwa</i> > Nar <sup>53</sup> <i>ɥɔ</i> , Phu <sup>54</sup> <i>ɥɔ</i>
'trap'	TGTm * <sup>B</sup> <i>hɥwa</i> > Nar <sup>54</sup> <i>ɥo</i>

\**ja* > Nar *jæ*, Phu *jɛ*, as would be expected of \**j* + \**a*

'meat'	TGTm * <sup>A</sup> <i>sja</i> > Nar <sup>54</sup> <i>çæ</i> , Phu <sup>43</sup> <i>ʃjɛ</i>
'hundred'	TGTm * <sup>B</sup> <i>gja</i> > Nar <sup>21</sup> <i>gjæ</i> , Phu <sup>21</sup> <i>gjæ</i> / <sup>21</sup> <i>gjɛ</i> (cf. WT <i>brgya</i> , Ris <sup>21</sup> <i>kjarca</i> )

\**ja* results in a stronger palatalisation of the vowel in some words in Nar:

'arrow'	TGTm * <sup>A</sup> <i>hmja</i> > Nar <sup>54</sup> <i>mjɛ</i> , Phu <sup>32</sup> <i>mja</i> (This is the only example of <i>ja</i> in Phu.)
'panther'	TGTm * <sup>A</sup> <i>tsjan</i> > Nar <sup>44</sup> <i>paŋ<sup>44</sup>tsjɛn</i> , Phu <sup>31</sup> <i>tʃjɛn</i>

## SOURCES

Nar-Phu data were collected by the author in collaboration with Boyd Michailovsky during two short sessions lasting a few days each in 1977 and 1978. Data quoted here from Manang, Tangbe and Risiangku are also the author's. Gurung and Thakali are cited from SIL publications, especially by W. Glover et M. Hari. Praka is the form of Manangba collected by Hoshi in Braga.

## TRANSCRIPTION

The transcription follows the IPA. Tones are according to Chao Yuenren's five point scale, occasionally extended to 0 for a very low pitch. The tones of disyllabic units are transcribed by a formula preceding the whole tonal unit. Redundancy has been retained between length and vocalic quality, and between tone and breathiness (transcribed <sup>h</sup>), or tone and voicing, wherever it was perceived. This is because the range and conditioning of the (rather important) phonetic variation of the phonemes and of the tones is not yet fully understood.

## ABBREVIATIONS

TGTM: Tamang-Gurung-Thakali-Manang (see Mazaudon 1978)  
TT: reconstructible for Tamang and Thakali only  
TTM: reconstructible for Tamang, Thakali, and Manang branches  
Tam: reconstructible for the Tamang branch only  
Dz: Dzongkha  
WT: Written Tibetan  
Tuk: Tukche dialect of Thakali  
Ris: Risiangku dialect of Tamang

## REFERENCES

- GLOVER, Warren W., Jessie R. GLOVER and Deu Bahadur GURUNG.  
1977. *Gurung-Nepali English Dictionary*. (Pacific Linguistics, C-51.)  
Canberra: The Australian National University.
- HALE, Austin (ed.) 1973. *Clause, Sentence and Discourse Patterns in Selected Languages of Nepal*. (SIL publications in Linguistics and

related fields, 40.) Norman, Oklahoma: Summer Institute of Linguistics.

HARI, Maria. 1971. *A Vocabulary of the Thakali Language*. Summer Institute of Linguistics mimeo.

HOSHI, Michiyo. 1984. "A Prakaa vocabulary — a dialect of the Manang language." Anthropological and Linguistic studies of the Gandaki Area in Nepal II. *Monumenta Serindica* 12:133-202.

MAZAUDON, Martine. 1973. *Phonologie du Tamang*. (Langues et Civilisations à Tradition Orale, 4.) Paris: SELAF.

———. 1978. "Consonantal mutation and tonal split in the Tamang subfamily of Tibeto-Burman." *Kailash* 6.3:157-79.

———. 1985. "Dzongkha number systems." *Southeast Asian Linguistic Studies presented to André-G. Haudricourt*, ed. by Suriya Ratanakul, David Thomas and Suwilai Premsirat, 124-157. Bangkok: Mahidol University.

MAZAUDON, Martine and Boyd MICHAILOVSKY. 1989. "Lost syllables and tone contour in Dzongkha." *Prosodic Analysis and Asian linguistics: to honour R. K. Sprigg*, ed. by David Bradley, Eugénie J. A. Henderson and Martine Mazaudon, 115-136. (Pacific Linguistics, C-104.) Canberra: Australia.