Problems of the B′ tone in Proto-Karen (PK)[1]

Theraphan L-Thongkum

Department of Linguistics, Chulalongkorn University

0. Abstract

The contents of this paper were extracted from "A view on Proto-Karen phonology and lexicon". The reconstruction of Proto-Karen (PK) has previously been attempted by a few SEA specialists: Haudricourt (1946, 1953); Jones (1961); Burling (1969); Benedict (1972, 1979, 1983); Solnit (2001) and Manson (2009). One of the most controversial aspects of previous PK reconstructions seems to have been the number of the PK tones and the development of tones in modern Karenic languages. To offer another new look at PK based on fresh data collected by myself (except Bwe), PK phonology and lexicon were reconstructed. A word list consisting of 2,000 items with English and Thai glosses was devised. Three tones, i.e. *A *B and *D were reconstructed. The correspondences of tones in the modern Karenic language varieties studied are illustrated. In order to argue that it is too early to reconstruct the PK B′ tone (or *C) proposed by Haudricourt (1975), somewhat contradictory evidences are presented.

1. Introduction

One of the most controversial aspects of previous PK reconstructions seems to have been the number of the PK tones and the development of tones in Karenic languages:

Jones (1961): 2 tones (*high and *low in both non-checked and checked syllables)

Burling (1969): 6 tones (4 in non-checked syllables and 2 in checked syllables)

Haudricourt (1946): 3 tones (2, i.e. *A and *B in non-checked syllables and *C in checked syllables)

(1975): 4 tones (3, i.e. *A [level], *B [falling] and *B′ [rising] in non-checked syllables and *C in checked syllables)[2]

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[1] Extracted from "A view on Proto-Karen phonology and lexicon" (L-Thongkum, ms.)

[2] A detailed discussion and expansion of Hauricourt's views is to be found in Mazaudon (1977).

[3] For more information on the development of Karen tones, see Mazaudon (1977), Weidert (1987) and Manson (2009).

Solnit (2001): 4 tones (3, i.e. *A, *B and *B′ in non-checked syllables and *D in
checked syllables)

Shintani (2003): 4 tones (3, i.e. *1, *2 and *2′ in non-checked syllables and *3 in
checked syllables)

Manson (2009, 2011): 4 tones (3, i.e. *A [high], *B [low] and *B′ [mid] in non-
checked syllables and *C [mid+glottal] in checked syllables)

With regard to the B′ tone, it is interesting to note that Haudricourt's proposal (1975)
is most accepted by current Karen linguistic specialists.[3]

2. PK tones

Three tones, i.e. *A, *B and *D were reconstructed (L-Thongkum, ms.). The
correspondences of tones in the modern Karenic language varieties are illustrated in Figure 1.
The *A and *B tones occur in non-checked syllables while the *D tone occurs in checked
syllables or checked syllables which have become smooth syllables. As a result of the eight
patterns of tonal correspondences presented in Luce (1959) and the adopted concept of tone-
box adopted, the *B′ tone (equivalent to the *C tone in Tai languages) was reconstructed by
some Tibeto-Burman specialists to solve the tonal problems in a small number of words, e.g.
'pus, paddy, blow, breathe, many, child' etc., which have tone A in Sgaw but tone B in Pwo
(see Appendix 1 for details). Perhaps it is too early to reconstruct the *B′ tone (or *C). When
carefully looking at the tone boxes in Shintani (2003) and Manson (2009), it is amazing to
see that the so-called B′ tone in modern Karenic languages has completely merged with the
A, B or D tone, unlike the *C tone in Tai languages and dialects spoken both inside and
outside Thailand and in the Mien or Yao languages spoken in Thailand and Guangxi
province, southern China, which I had the opportunity to work on during our several field
trips in China, Laos and Vietnam (see L-Thongkum, 1991,1993,1997; Kullavanijaya & L-
Thongkum, 2000). I feel that the development of the PK *B′, based on the tone-box concept

proposed by Shintani and Manson, does not sound convincing even though their views can be
traced back to Haudricourt's proposal in 1975. The uncommon type of tone splitting of the B
tone in some Sgaw varieties, e.g. the PK tone *B > B13-2 (CVʔ^{21}) and *D > D12 (CVʔ^{45}) − 3
(CV^{53}), see Figures 2 and 3, may be one of the reasons why the *B′ tone was reconstructed.

In my opinion, the three reconstructed three tones, namely, *A, *B and *D are
sufficient to handle the unusual development of tones B and D in some modern Sgaw
varieties. Even though the addition of the *B′ tone may help make the reconstruction of the

proto tones in some PK roots possible, I am still reluctant to accept this solution. There might be a better solution, if we could assemble more fresh data, especially on the Karenic languages spoken in Myanmar.

3. Tonal development in Sgaw Karen

Based on the development of tones A and B, Sgaw may be said to have at least four major varieties. The varieties which I have had the opportunity to work on have two, three or four tones in the non-checked syllable, see Figure 2. Among the ethnic Karen in Thailand, the Sgaw are the majority, at possibly one-third. Therefore, Sgaw has widely been studied in comparison with the other Karenic languages spoken in Thailand as can be seen in the Bibliography of Karen Linguistics (Manson, 2010). However, I have used only my own field data for the PK reconstruction presented here. Among the Karenic languages, I think that Sgaw is the easiest to work on because of its simpler phonetics and phonology. More information on the profiles of the six ethnic Karen groups existing in Thailand is to be found in Schliesinger (2000).

N. Pa-O

	*A	*B	*D
1	31¨	55	21'
2	31¨	55	21'
3	33	53	45'

S. Pa-O

	*A	*B	*D
1	31¨	33	21'
2	31¨	33	21'
3	53	55	45'

Kayan

	*A	*B	*D
1	53	11	45'
2	53	11	45'
3	33	11	21'

E. Kayah

	*A	*B	*D
1	33	11	55
2	33	11	55
3	11	11	33

W. Bwe

	*A	*B	*D
1	55	33	33
2	55	33	33
3	33	33	11

Kayaw

	*A	*B	*D
1	55	11	33
2	55	11	33
3	33	11	33

N. Sgaw

	*A	*B	*D
1	33	31˜	45'
2	33	31˜	45'
3	33	11¨	21'

S. Sgaw

	*A	*B	*D
1	55	45'	21'
2	55	45'	21'
3	33	31	11¨

N. Pwo

	*A	*B	*D
1	35	33	45'
2	55	33	45'
3	55	11¨	21'

S. Pwo

	*A	*B	*D
1	53	55	21'
2	31¨	55	21'
3	31¨	33	45'

Figure 1 Proto-Karen tones and their tonal developments in modern Karenic languages

(1)

	*A	*B	*D
1	33	11¨	45'
2	33	11¨	45'
3	33	11¨	21'

(2)

	*A	*B	*D
1	33	31˜/21'	45'
2	33	31˜/21'	45'
3	33	11¨	21'/53

(3)

	*A	*B	*D
1	55	11¨	45'
2	55	11¨	45'
3	33	11¨	21'

(4)

	*A	*B	*D
1	55	45'	21'
2	55	45'	21'
3	33	31	11¨

Figure 2 Tones in the four varieties of Sgaw

In addition to the four tonal patterns illustrated in Figure 2, the Sgaw variety spoken in Pai district, Mae Hong Son province, has an unusual split in the B column: B1 = 11¨, B2 = 21' (CVʔ²¹) and B3 = 11¨, D12 =45' (CVʔ⁴⁵) while D3 = 53. Even though there are two tones in the B column, the non-checked syllables having the Category-I initials (e.g. *ph, *hm, *s) and the Category-III initials (e.g. *b, *m, *l) have the same tone, i.e. 11¨, while those having the Category-II initials (e.g. *p, *ʔb, *ʔ) have tone 21'. This means that the non-checked

syllables in PK, i.e. *CV^B has become CVʔ^{21} (checked-syllable) in this modern Sgaw variety, provided that their initials or onsets are p-, t-, c-, k-, d- (<*ʔd-), b- (<*ʔb-) and ʔ; for example, *ce^B > ceʔ^{21} 'left (side)', *ʔe^B > ʔeʔ^{21} 'dung, excrement', *ʔde^B > deʔ^{21} 'frog', *ʔbaŋ^B > bɔʔ^{21} 'bamboo shoot' and so on. Instead of the more common B12-3 like the split-pattern in (2), it has become B13-2. See Figure 3.

In other words, *B>B13-2 means that in some Sgaw varieties, instead of a more usual split pattern, i.e. B12-3 as in (1), the unusual pattern as in (2) which was caused by the mergers of B1 with B3 (11̇) and becoming a checked tone of B2 (21'). Moreover, D3 has also become a non-checked tone (53) as is shown in Figure 3.

(1) usual pattern   (2) unusual pattern

	*B	*D
1		
2		
3		

(Two tones in the B and D columns)

	*B	*D
1	11¨	
		45'
2	21'	
3	11¨	53

(still two tones in the B and D columns)

Figure 3 Unusual tone split in the B column in MHS Sgaw

Could this unusual splitting and merging pattern as in (2) have been regarded as an irregular pattern of tonal correspondence? Could this be one of the reasons why the PK *B′ tone has been postulated? The irregular pattern of tonal correspondences which can be seen when the three major branches of modern Karenic languages are compared, as illustrated in the Appendix, could also be another reason why tone *B′ was reconstructed.

4. Discussion

Benedict (1979: 13) reconstructs eight PK roots with final *-s, i.e. *khrus 'bone', */büs 'carry with headstrap', *khwis 'comb', *ŋas 'five', *lis 'four', */kus 'nine', *[hy]as 'pungent', *hnəs 'seven' when I reconstruct *-t in most of them. See Figure 4. In modern Karenic languages, the correspondences of tones in these words are not neat, for example, the CK varieties have tone D while the NK and SK ones tend to have tone A or B. If we agree with Benedict's reconstruction of the *-s, then, we have to say that the PK *-s > *-t in NK (Pa-O) which has been retained until today. In CK, this *-s had become *-t and later the *-t became *-/ or *-ø in some CK languages. As for SK, the *-s was completely dropped very early. As a result, these roots have their own history of tonal development.

	PB	TL
five	*ŋas	*ŋjat^D
pungent, spicy hot	*[hy]as	*hat^D (other solution: *ha$^{B′}$)
seven	*hnəs	*/nwet^D
to comb	*khwis	*khwit^D
nine	*/kus	*kot^D
bone	*khrus	*khrwit^D (other solution: *khrwi$^{B′}$ or *khru$^{B′}$)
carry by the headstrap	*/büs	*/bwit^D (other solution: */bwi$^{B′}$ or */bu$^{B′}$)
four	*lis	PNK *lit^D, PCK *hlwi^A, PSK *lwi^B

Note: PB = Paul K. Benedict (1979)   TL = Theraphan L-Thongkum (ms.)

Figure 4 PK *-s, *-t^D or *-ø$^{B′}$

The reconstruction of the *-s seems to help solve some problems of the irregular tone correspondences, even though there is no /-s/ in modern Karenic languages. It is worth to pointing out that in Proto-Tibeto-Burman (PTB), *-s was also reconstructed, e.g. *was 'bee (Apis cerana)', *rus 'bone', *s-nis 'seven' etc. Between the two solutions, i.e. the *B′ tone and the *-s, if I have to choose one, my preference would be the *-s. However, I wonder why the *-s has not been kept in any Pa-O and Pwo language varieties, since the speakers of Pa-O and Pwo have been in close contact with Austroasiatic speaking peoples both in the past and the present. It is known that Austroasiatic languages have final fricatives. To reach a definite conclusion, perhaps we need more solid data especially on Central Karen (CK) languages spoken in Myanmar collected by professional linguists and well-trained linguistic students.

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Appendix 1

DATA : Cognate sets for investigating the PK*B′
The word list was kindly provided by Matisoff, April 2013.
The data was mostly drawn from my field notes, except Bwe which was from Henderson (1997).
Those marked with * were from R.B. Jones (1961).

	N. Karen	C. Karen				S. Karen	
	S. Pa-O	Kayan	Kayah	Kayaw	Bwe	N. Pwo	S. Sgaw
arm, hand	cû (A12)	-	-	cī̄ (D)	cū (D12)	cōu (B12)	cɨ́ (A12)
bee	wàt (D12)	hwɛ́ʔ (D12)	wɛ́ (D12)	hwē̄ (D)	wē̄ (D12)	kwɛ́ (A23)	kwɛ́ (A12)
blow	ʔû (A12)	ʔúʔ (D12)	ʔó (D12)	ʔū (D)	ū (D12)	ʔóu (A23)	ʔú (A12)
bone	chə̰̀ut (D12)	chwíʔ (D12)	khrwí (D12)	klī (D)	khwī(D12)	xēi (B12)	xí (A12)
breathe, breath	sâ (A12)	θáʔ (D12)	sé (D12)	sā (D)	θɛ̄ (D12)	sā (B12)	sá (A12)
carry by headstrap	- / být (RJ)*	bwíʔ (D12)	wí (D12)	bī (D)	-	ʔwī̄ (B12)	wí (A12)
child	- / pò (RJ)*	{ phɔ́ʔ (D12) / càʔ (D3) }	{ phú (D12) / cē (D3) }	{ phɨ́ (D) / cā (D) }	phō (D12)	{ ̄phū (B12) / sā (B12) }	{ phú (A12) / sáʔ (B12) }
evening	~ hâ (A12)	~ háʔ (D12)	~ hé (D12)	~ hā (D)	~ hɛ̄ (D12)	ɣáʔ (MP,RJ)* / ɣà (BP,RJ)*	~ há (A12)
fang, canine tooth	- / mṵ̂ (RJ)*	mɛ̀ʔ (D3)	-	mē̄ (D)	mɛ̀ (D3)	mó (MP,RJ)* / móʔ (BP,RJ)*	mɛ́ (A12)
flea	khlə̂n (A12)	khlɛ́ʔ(D12)	klá (D12)	klē (D)	klē (D12)	khlɛ̌i (A1)	klí (A12)
itch, itchy	sàʔ (D12)	θáʔ (D12)	sé (D12)	sɔ̄ (D)	θā̄ (D12)	sáʔ (D12)	sàʔ (D12)
many, much	ʔâ (A12)	ʔá? (D12)	ʔé (D12)	ʔō (D)	ɛ̄ (D12)	ʔā̄ (B12)	ʔá (A12)
moon, month	lâ (A12)	lá (A12)	lē (A12)	lá (A12)	lɛ́ (A12)	lá (A23)	lá (A12)
muddy	dû (A12)	núʔ (D12)	dó (D12)	dū (D)	du⇐ (D12)	dɔ̄ɨ (B12)	dú (A12)
oil, fat, grease	-	-	sú (D12)	sū (D)	θō̄ (D12)	sū (B12)	sú (A12)
paddy, unhusked rice	bɨ̂ (A12)	bə́ɨʔ (D12)	bó (D12)	bī̄ (D)	bū (D12)	bɨ̄ (B12)	bɨ́ (A12)
pus	-	-	mī̄ (A12)	mí (A12)	mí (A12)	phēi (B12)	phí (A12)
right side	thwɛ̂ (A12)	thwɛ́ʔ (D12)	thwá (D12)	thē̄ (D)	thwē̄ (D12)	thwɛ́ (MP,RJ)* / -thwè (BP,RJ)*	thwɛ́ (A12)
roast	- / khô (RJ)*	chɔ́ʔ (D12)	chɨ́ (D12)	chū (D)	-	ʔánʔxóʔ (MP,RJ)* / -ʔànxò (BP,RJ)*	xó (MS) / -xó (BS)
sheep	sō (A12)	θɔ̄ (A3)	-	só (A12)	θú̄ (A12)	θòn (MP,RJ)* / -θòn (BP,RJ)*	sú (A12)
spicy hot, pungent	hàp/t (D12)	hɛ́ʔ (D12)	hé (D12)	hē̄ (D)	hɛ̄ (D12)	ɣɛ̄ (B12)	hɛ́ (A12)
strike, hit hard (with the fist)	tɔ́ŋ (B3)	də̀u (B)	thɔ̀ (B)	thə̀ (B)	tō (B)	thə̀ (B3)	tɔ̂ (B3)
trap (v.)	dɔ̂ŋ (A12)	-	-	dɔ̄ (D)	dā̄ (D12)	dóʔ (D12)	dòʔ (D12)
whip, strike	-	phlíʔ (D12)	plí (D12)	plē (D)	plɛ̄ (D12)	phláʔ (D12)	phlàʔ (D12)

Note: The original word list provided by Matisoff (personal communication in April 2013) consists of 32 items; however, only 24 items were used for the analysis of tone correspondences due to the lack of my field data. Unfortunately, the words 'grow, knock down/ slaughter, pure, rainy, skillful, snivel, sow (v.)' were not included in my 2,000-item word list when I conducted my fieldwork.

     RJ = Robert B. Jones   MP = Moulmein Pwo   BP = Bassein Pwo
     (B) = B123 (no split)   (D) = D123 (no split)

Appendix 2

Development of tone *B′ reconstructed by TB specialists

Patterns of tone correspondence in modern Karen

		N.Karen S.Pa-O	Kayan	C.Karen Kayah	Kayaw	Bwe	S.Karen N.Pwo	S.Sgaw	TL
I	moon, month	A	A	A	A	A	A	A	*A
	hit hard (with the fist)	B	B	B	B	B	B	B	*B
	itch, itchy	D	D	D	D	D	D	D	*D
II	blow	A	D	D	D	D	A	A	*A?
	flea	A	D	D	D	D	A	A	*A?
	bee (Apis cerana)	D	D	D	D	D	A	A	*D?
	bone	D	D	D	D	D	B	A	*D?
	carry by head strap	- / D (RJ)	D	D	D	-	B	A	*D?
	spicy hot, pungent	D	D	D	D	D	B	A	*D?
	trap (v.)	A	-	-	D	D	D	D	*D?
	whip, strike	-	D	D	D	D	D	D	*D?
III	arm, hand	A	-	-	D	D	B	A	??
	breathe, breath	A	D	D	D	D	B	A	??
	many, much	A	D	D	D	D	B	A	??
	muddy	A	D	D	D	D	B	A	??
	paddy, unhusked rice	A	D	D	D	D	B	A	??
	child	- / A (RJ)	D	D	D	D	B	A	??
	evening	A	D	D	D	D	- / B (RJ)	A	??
	fang, canine tooth	- / A (RJ)	D	-	D	D	- / B (RJ)	A	??
	oil, fat, grease	-	-	D	D	D	B	A	??
	right side	A	D	D	D	D	- / B (RJ)	A	??
	roast	- / A (RJ)	D	D	D	-	- / B (RJ)	- / A (RJ)	??
IV	pus	-	-	A	A	A	B	A	???
	sheep	B	A	-	A	A	- / A (RJ)	A	???

Note :   RJ = Robert B. Jones (1961)   TL = Theraphan L-Thongkum (ms.)
    - = no data or no cognate in my corpus
    Jones' original tone marks were converted to A, B, and D, i.e. - / A (RJ), - / B (RJ) or
    - / D (RJ).