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Some Problems in the Comparison of Tibetan, Burmese and Kachin Languages

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A. Problems in the Lexical Comparison of Tibetan and Burmese

Generally speaking, a glance at the Tibetan and Burmese vocabulary will clearly show that they contain certain number of words among which correspondences in form and meaning can be readily established. As for these words, the form *abc* in either of the languages corresponds in principle to *a′b′c′* in the other, and the syllables CV# and CVC to those CV# and CVC, respectively. Accordingly, we can easily set up correspondences among them for each of the constituent elements of the syllable: initial consonant, (nuclear) vowel, final consonant. To give some examples:

		Written Tibetan CV#	:	Written Burmese CV#
1.	'bitter'	*kha-ba*	:	*khaa*^{2}-
2.	'to borrow'	*skyi-ba*	:	*khyei*^{2}-<khyiy^{2}-
3.	'to steal'	*rku-ba*	:	*kho*^{2}-<khɯ^{2}-
4.	'to bend'	*dgu-ba*	:	*kwei*^{3}-<kuy^{3}-
5.	'nine'	*dgu*	:	*ko*^{2}<kɯ^{2}
6.	'to spit'	*thu*	:	*thwei*^{2}-<thuy^{2}-
7.	'axe'	*sta-ri*	:	*thaa*^{2} 'sword, knife'
8.	'thin'	*phra-ba*	:	*paa*^{2}-
9.	'father'	*pha*	:	*a-pha*
10.	'to weep'	*ngu-ba*	:	*ngo*-<ngɯ-
11.	'five'	*lnga*	:	*ngaa*^{2}
12.	'ear'	*rna-ba*	:	*naa*^{2}
13.	'sun'	*nyi-ma*	:	*nei*<niy
14.	'near'	*nye-ba*	:	*nii*^{2}
15.	'to die'	*shi-ba*	:	*sei*-<siy-
16.	'to eat'	*za-ba*	:	*caa*^{2}-
17.	'nose'	*sna*	:	*hnaa*
18.	'fire'	*me*	:	*mii*^{2}
		WrT CVC	:	WrB CVC
19.	'difficult'	*khag-pa*	:	*khak*-
20.	'pig'	*phag*	:	*wak*
21.	'short'	*thung-ba*	:	*tɔng*^{2}-

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22.	'to smell'	*snam-pa*	:	*nam*^{2}-
23.	'name'	*ming*	:	*a-maň*
24.	'eye'	*mig*	:	*myak*
25.	'three'	*gsum*	:	*sum*^{2}
26.	'to kill'	*gsad-pa*	:	*sat-*
27.	'to rub'	*shud-pa*	:	*sut-*
28.	'road'	*lam*	:	*lam*^{2}
29.	'hand'	*lag*	:	*lak*
30.	'to give'	*gnang-ba*	:	*hnang*^{2}-
31.	'one'	*gcig*	:	*tac*
32.	'black'	*nag*	:	*nak-*

The Tibetan and Burmese words compared above are extremely similar both in form and in meaning. Nevertheless, their close similarity should not be taken as due to borrowing from one language to the other. Rather, we should consider that each pair of the collated words was derived from a common original stem since both belong to the basic vocabulary of the respective languages[1]. On the basis of such examples as those above it is not difficult to set up correspondences and to assume the common form for each.

Thus,

WrT	:	WrB	WrT	:	WrB
kh-	:	*kh-*	*-a*	:	*-aa*
rk-, sk-	:	*kh-*	*-u*	:	*-o*<-ɯ
dg-	:	*k-*	*-i*	:	*-ei*<-iy
st-	:	*th-*	*-ag*	:	*-ak*
sh-	:	*s-*, etc.	*-ang*	:	*-ang*, etc.

For convenience of reference, I shall tentatively term the words of this stock 'Group-A'[2]. However, the evidence provided by 'Group-A' examples alone is still insufficient to establish correspondences as proof of the genetic relationship between these two languages. Given only such examples as these, we could as well conclude that the bifurcation of these languages took place in the fairly recent past.

Apart from the correspondences deduced from the 'Group-A' pairs, a different series of correspondences can be set up on the basis of other groups of words among which similarities, while more remote than the 'Group-A' type, also indicate a genetic relationship between the languages. Let us consider first a simple example of such pairs. In one of his articles R. A. Miller compared WrB *rei*^{2} 'to write, delineate' with WrT *ri*-in *ri-mo* 'figure, picture, painting, drawing', per-

1. There are, however, a few words that are suspected to have been borrowed from one language to the other, e. g. 'fan' WrT *g-yab*: WrB *yap*.
2. It must be understood, however, that this label is used only for convenience here; it is not my intention to draw a clear distinction between words of this stock and others.

haps with the correspondence WrT *r-* : WrB *r-* (e. g. 'bone' WrT *rus* : WrB *ro*^{2} <rɯ^2) in mind[3]. But, in fact, it must be WrT *hbri-ba* 'to write' that corresponds to WrB *rei*^{2}-<riy^2-. It is not necessary here to seek to equate the WrB word for 'to write' to the WrT for 'picture, drawing', We may simply compare the WrB form for 'to write' with the WrT for 'to write'. It is probably because he intended to establish the correspondence WrT *r-* : WrB *r-* that he avoided the latter comparison. However, the replacement of the WrT counterpart of his proposed correspondence by *br-* raises a big problem: the constituent element *b-* preceding *r-*, which may be regarded as the kernal of the initial in the proto-language, is totally lost in WrB. In other words, the kernal consonant of the Proto-Tibeto-Burman initial is not preserved in the initial of the WrB form in question. Similar loses are observed in some other cases where the reconstructable TB initials are other than *br-[4]. Thus, we may note the parallel cases where the WrT counterparts have initials *gr-*, *khr-*, *skr-* and *dr-*, as in the following:

'chest'	WrT *brang*	:	WrB *rang*
'shade'	*grib-ma*	:	*a-rip*
'to vie with, fight'	*hgran-pa*	:	*ran* 'quarrel'
'to redeem'	*hgrol-ba*	:	*rwei*^{2}-<ruy^2-
'firm'	*mkhrang*~*khrang*	:	*rang*^{3}-
'insane'	*hkhrul-ba*	:	*ruu*^{2}-
'to swell'	*skrang-ba*	:	*rəng-*
'to draw, pull'	*bdren-pa*	:	*run*^{2}-
'warm'	*dron*	:	*hrin*^{2}- 'hot'[5]

We have to assume that the correspondences of this series (WrT *br-*, *gr-*, *khr-*, *dr-* : WrB *r-*) originated in the different TB initials from those found in the following examples (WrT *gr-*, *br-*, *dr-* : WrB *kr-*, *pr-*, *phr-*, *khr-*):

'song'	WrT *bgro*	:	WrB *kro*^{2}<krɯ^2
'to number'	*hgrang-ba*	:	*krang*^{3}-
'to strain, depurate'	*bgrung-ba*	:	*krəng-* 'to draw a line'
'wild yak'	*hbrong*	:	*prəng* 'a kind of buffalo'
'to sprinkle'	*sbron-pa*	:	*phran*^{2}-
'to scratch one's self'	*hphrug-pa*	:	*phrək*
'six'	*drug*	:	*khrək.*

I shall tentatively represent the TB initials based on the latter correspondences as *gr-, *br-, *dr-, etc. and those based on the former ones as *gr$_2$-, *br$_2$-, *dr$_2$-,

3. R. A. Miller (1956: 37).
4. Similar correspondences obtain between Tibetan and Kachin (Hanson), e. g. 'to wind up' WrT *hgril-ba*: K rit, 'to write' WrT *hbri-ba*: K rit, 'to scratch' WrT *hbrad-pa*: K ma-ret, 'to be separated' WrT *hbral-ba*: K ran. In addition, we find such an alternation as *grogs*~*rogs* 'friend' even in Written Tibetan. cf. Balti rox 'to help'.
5. Miller equated WrB *hrin*^{2} to WrT *tshan* 'hot, warm' (1956: —), but it seems to me to be more properly compared with WrT *dron.*

etc.

Thus,

TB *gr-, *br-, *dr- → WrT *gr-, br-, dr-* : WrB *kr-, pr-, phr-, khr-*

TB *gr_2-, *br_2-, *dr_2- → WrT *gr-, br-, dr-* : WrB *r-, hr-*.

For the latter correspondences we find also the following examples which parallel with those given above:

'to loose'	WrT *hgrol-ba*	:	WrB *yay*^{3}-
'to be distorted'	*hkhrul-ba*	:	*yway*^{3}-<*y^woy^3-
'fly'	*sbrang-ma*	:	*yang*
'to rot'	*hdrul-ba*~*rul-ba*	:	*yi*=ri 'to be rotten'.

For these WrB forms we may assume *ray^3, *r^woy^3, *rang and *ri as their Ancient or Archaic Burmese (=AncB or ArcB) forms. As *r-* changes to *y-* in WrB, there are not a few cases where *r-* was changed to *y-* in orthography[6]. It is supposed that the WrB forms given above might have suffered from such orthographic revisions.

Among the words whose TB forms has been ambiguously postulated is the numeral 'six'. The correspondence between the finals of WrT *drug* and WrB *khrɔk* is a regular one corroborated by the following parallel examples:

'poison'	WrT *gdug-pa*	:	WrB *tɔk-* 'to be poisoned'
'cavern'	*phug-pa*	:	*a-pɔk* 'cavity'
'to pierce'	*hbugs-pa*	:	*pɔk-*
'building'	*zug-pa*	:	*chɔk-* 'to build, erect'
'to bend'	*hgugs-pa*	:	*kɔk-*

etc.[7]

The common form of initial for WrT *dr-* : WrB *khr-* has hitherto been explained as a sequence of the kernal consonant r- with a preceding prefix d- or kh-[8]. But TB *dr- did not become WrB *tr- in parallel with the respective shifts of TB *gr- and *br- to WrB *kr-* and *pr-*, as shown above. I consider it likely that all TB *dr- shifted to *khr-* in Written Burmese. In parallel with 'six', TB *dr- may be assumed for WrT *hdrub-pa* : WrB *khyup-*<*khrup- 'to sew' and WrT *dri-ma* : WrB *khyei*^{2}<*khriy^2 'excrement'[9]. This assumption could also be supported by the alternation between *dr-* and *gr-*, not rarely observed in Ancient Tibetan documents, such as in *hdrul*~*hgrul* 'to go as post runner', *hdron*~*hgron* 'to travel' and *hdron-po*~*hgron-po* 'merchant, traveller'[10]. In addition to the above, a different correspondence can be set up between WrT *dr-* and WrB *ch-*,

6. Cf. T. Nishida (1955: 24–25).
7. Cf. T. Nishida (1972: 257).
8. For instance, R. Shafer postulates *t-r'uk in 'Phonétique comparée de quelques préfixes simples en sino-tibétain (1950: 151). P. K. Benedict, on the other hand, sets up *d-ruk (1972: 94). The writer is inclined to consider WrT *du-ba* 'smoke' and WrB *kho*^{2}<khɯ^2 as cognates.
9. P. K. Benedict equates WrB *khyei*^{2} with WrT *lci-ba* (=ltśi-ba) 'dung' (1972: 39).
10. F. W. Thomas (1955).

e. g. 'to pull down' WrT *hdral-ba* : WrB *chway-*<*ch^{w}oy- 'to pull, draw'
'to be mixed with' *hdre-ba* : *chɔ-*<*chö- 'to solder'.

This may be compared with the affricate initials corresponding to WrT *dr-* in some of the Tibetan dialects in the narrow sense. For this set of correspondence I shall tentatively assume TB *dr_3-.

When we make a comparative study of two or more related languages, it is not always necessary to compare the sequence of phonemes *abc* in Language A with that of the same or similar type *a'b'c'* in Language B. The sequence *abc* in A may well correspond to *d'e'f'* in B. Moreover, as we have seen above, the kernal consonant of the initial in A may not necessarily correspond to that in B. In the lexical comparison of Tibetan and Burmese, mistakes of this kind have often been committed. This is the result of attempting to extend Group-A-type correspondences to other pairs. Take for instance WrT *mthong-ba* 'to see'. In a comparison with WrB, only its stem -thong has been taken up, and the corresponding WrB form then searched for. Thus it has been equated to WrB *thang* 'to be visible, appear', which appears closest to it in both form (-thong) and meaning ('to see'), hence the correspondences WrT *th-* : WrB *th-* and WrT *-ong* : WrB *-ang* being set up. In such cases, the semantic difference between WrT 'to see' and WrB 'to be visible' is hardly considered. Besides, we note here a preoccupation that the so-called WrT prefix *m-* would naturally be expected to drop in Written Burmese. Nevertheless, in this case, *m-* was in reality not dropped in Written Burmese, for WrT *mthong-ba* corresponds to WrB *mrang-* 'to see'. The semantic correspondence between the two forms are by far more obvious. Accordingly, the WrT prefix in this case appears as the initial kernal consonant in WrB, while the WrT kernal corresponds to the WrB medial *-r-*. Thus the correspondences between these initials may be represented as (1) WrT *mth-* : WrB *mr-*. In parallel with this, we have WrT *mthon-po*~*mtho-ba* 'high' : WrB *mrang*^{3}-. Further, on the basis of the following examples it may be possible to set up the correspondences : (2) WrT *md-* : WrB *mr-* and (3) WrT *mj-* : WrB *mr-* :

(2) 'narrow' WrT *mdah* : WrB *hmraa*^{2} [11]
'valley' *mdo* : *mro*^{3} 'a fortified place, city'
(3) 'tail' *mjug-ma* : *a-mrii*^{2}.[12]

There is a considerable number of examples where WrT CVC corresponds to WrB CV# among the Tibetan and Burmese words other than those of the 'Group A' stocks.

I WrT CVC *-ang*, *-ung* : WrB *-ei*<-iy
e. g. 'foot' WrT *rkang-ba* : WrB *khrei*<khriy

11. If we postulate TB *mlda for this set as Kun Chang & Betty Shefts 1975 do, it is necessary to explain why *mlda did not become *mzha that would be expected. Cf. R. Shafer. Dwags mla: Old Bur. mla: Kachin m-la (1970: 389).
12. In Proto-Burmese *mliy and *muy<*mruy may be set up for 'tail', cf. T. Nishida (1972: 325).

'copper'	*zang*<*gzangs	:	*krei*^{2}<kriy^2
'wine'	*chang*	:	*sei*<siy
'wind'	*rlung*	:	*lei*<liy.

We have to make a distinction between the correspondence WrT *-ang* : WrB *-iy* recognized in the examples given above, and those (1) WrT *-ang* : WrB *-ang* (2) WrT *-i* : WrB *-ei*<-iy which can be established on the basis of the 'Group-A' stocks.

(1) WrT *-ang* : WrB *-ang*

e. g. 'to give'	WrT *gnang-ba*	:	WrB *hnang*^{2}-	
'simple, single'	*rkyang-pa*	:	*khyang* 'a single one'	
'clean, pure'	*gtsang-ba*	:	*cang-* 'to be cleared from dirt'	
'tense, tight'	*thang-po*	:	*tang*^{2}- 'to tighten, become tight'	

(2) WrT *-i* : WrB *-ei*<-iy

e. g. 'four'	WrT *bzhi*	:	WrB *lei*^{2}<liy^2
'heavy'	*lji-po*	:	*lei*^{2}<liy^2
'to die'	*shi-ba*	:	*sei*<siy

cf. also 'to borrow', 'sun' given above.

For these sets of correspondences we may postulate the following TB finals:

(i) TB *-ang	: WrT *-ang*	: WrB *-ang*	
(ii) TB *-ang$_2$	: WrT *-ang*	: WrB *-ei*<AncB -iy	
(iii) TB *-i (or -iC ?)	: WrT *-i*	: WrB *-ei*<-iy.	

It does not seem proper to assume the correspondence WrT *-a* : AncB -iy on an analysis of the WrT reflex *-ang* in the second correspondence set as -a-ng. The AncB final -iy in the third set might possibly reflect TB* -VC. On the contrary, we should set up TB* ma-ng for the cognate set WrT *mang-po*: WrB *myaa*^{2} 'many', which underwent the successive shifts maa<mnaa<myaa. cf. p. 10

II WrT CVC *-in* : WrB CV# *-ei*<AncB -iy

e. g. 'to give'	WrT *sbyin-pa*	:	WrB *pei*^{2}-<piy^2-
'to proceed'	*phyin-pa*	:	*prei*^{2}-<priy^2- 'to run'.

There is a possibility that the final nasal of these WrT forms might be analyzable as an old suffix -n; thus, sbyi-n-pa and phyi-n-pa. The writer considers that the correspondences of this kind presents an important problem for the comparative study of Tibeto-Burman languages.

III WrT CVs *-as, -es, -us* : WrB CV# *-aa, -i, -o*

e. g. 'son'	WrT *sras*	:	WrB *saa*^{2}
'food'	*zas*	:	*caa*
'right'	*g-yas*	:	*lak-yaa*
'to know'	*shes-pa*	:	*si-*
'bone'	*rus*	:	*ro*^{2}<rɯ^2
'knee'	*pus-mo*	:	*pu-chac*
'to endeavor'	*hgrus-pa*	:	*kro*^{2}<krɯ^2

Stuart Wolfenden once showed that WrT -Vs derived from *-Vds[13]. According to him, WrT *rus* 'bone', *gnyis* 'two', *rgyus-pa* 'fine thread' and *tshos* 'paint, coloring matter, dye' were derived from the respective earlier forms *ruds, *(g)nads, *rgyuds-pa and *tshods[14]. There is no doubt that his theory has contributed to our knowledge of the WrT forms. But the writer would like to contend that the WrT forms in -Vs might include some from *-Vgs$_2$ as well as those from *-Vds. For instance, the above mentioned WrT *pus-mo* 'knee' can be shown to have come,not from *puds-mo, but from Archaic Tibetan *bugs-mo.

In the Balti and Purik dialects of Tibetan, bux-mo and puks-mo are found for 'knee'[15]. Since Balti -x regularly corresponds to WrT *-gs*, we may set up Archaic Tibetan *bugs-mo for 'knee'[16]. Similarly, as Purik has kuks-ko for WrT *kos-ko* 'chin', it is possible to reconstruct Archaic Tibetan *kogs-ko.

Apart from 'knee', though it may be difficult to find direct evidence to distinguish *-gs from *-ds, I shall tentatively postulate *-gs for 'son', 'food', 'right', 'to know', and *-ds for 'bone' in accordance with their correspondences with the Archaic Chinese forms: 'son' 子 tsi̯əg, 'food' 食 d̂i̯ək, 'right' 右 giŭg, 'to know' 知 ti̯ĕg, 'bone' 骨 kwət[17].

Accordingly, it will become clear that WrB totally lost the elements corresponding to Archaic Tibetan *-gs and *-ds.

IV WrT CVC *-ib*(s) : WrB CV# *-ii*

e. g.	'to mount'	WrT *chib(s)-pa*	:	WrB *cii*^{2}-
	'darkness'	*srib(s)*	:	*sii*- 'dim'

As the earlier forms of WrB *cii*^{2} and *sii*- we may assume *clib and *slib.

V WrT CVC *-al, -il* : WrB CV# *-aa, -ii*

e. g.	'clear'	WrT *gsal-ba*	:	WrB *saa*-
	'frog'	*sbal-ba*	:	*phaa*^{2}
	'loins'	*mkhal-pa* 'kidney'	:	*khaa*^{2}
	'to divide'	*gsil-ba*	:	*sii*^{2}-
	'dew'	*zil-ba*	:	*chii*^{2}
	'fat'	*tshil*	:	*chii*

The correspondence WrT *-al* : WrB *-aa* should be distinguished from that WrT *-al* : WrB *-ay*:

e. g.	'to save'	WrT *sgrol-ba*	:	WrB *kay*-
		pf. *bsgral*	:	
	'clay'	*zhal-ba*	:	*lay* 'a field of rice'[18]

13. S. Wolfenden 1937.
14. S. Wolfenden 1938.
15. T. Nishida (1970: 190).
16. The Amdo form wüi-mo 'knee' affords proof for the voiced initial *b- of the proto-form but not for the final *-gs.
17. B. Karlgren 1957.
18. This equation might be unwarrantable, cf. WrT *zhing* 'field'.

'vermilion' *mtshal* : *ray*^{2}- 'to be of a bright red color'[19]

These divergent sets of correspondences have their parallels in WrT *-ul* : WrB *-wei*<-uy and WrT *-ul* : WrB *-uu*, found in the following typical examples.

	WrT	WrB		WrT	WrB
'silver'	*dngul* :	*ngwei*<nguy	'insane'	*h̲khrul-ba* :	*ruu*^{2}
'snake'	*sbrul* :	*mrwei*<mruy			

It is not clear, however, whether we should distinguish them by assuming TB *-V-C (-a-l and -u-l) for former correspondences and TB *-VC (-al and -ul) for the latter, since the reflex -l of the former sets could hardly be taken simply as an element peculiar to Tibetan. Likewise, it is difficult to decide whether the correspondence WrT *-il* : WrB *-ii* should be ascribed to TB *-iC or *-i-C, because there is some possibility that the WrB final *-ii* might be derived partly from ArcB *-iy.

VI WrT CVC *-ug* : WrB CV♯ *-ɔ*<AncB -ö

		WrT		WrB
e. g.	'to slip'	*h̲khyud-pa*	:	*khyɔ*^{2}-<khyö^{2}-
	'to pass, traverse'	*rgyud-pa*	:	*kyɔ*-<kyö- 'to step or pass over'
	'joy, joyfulness'	*brod-pa*	:	*pyɔ*-<pyö- 'to enjoy one's self'
	'loose, relaxed'	*glod-pa, hlod-pa*	:	*lyɔ*^{3}-<lyö^{3}- 'to loose, lax'

Thus WrB *-ɔ* and its AncB counterpart -ö no doubt correspond to WrT *-ud* or *-od*, and the final consonant of their proto-form may be considered to have been the factor that caused the centrality of the AncB reflex. It is also supposed that the Group-B toneme to which these AncB and WrB forms belong must have been originated in it[20].

Accordingly, we are not permitted to analyze the TB forms of these finals into -u-d or -o-d. TB *-Vd : WrT *-ud, -od* : WrB *-ɔ*<AncB -ö.

More generally, there is the following observation that has been made regarding WrT and WrB. Take for instance WrB *khyo*^{2}<khyɯ^{2} 'to wash, bathe' and *cho*^{2}<chɯ^{2} 'to dye'. The former can be equated to either WrT *h̲khru-ba* 'to wash, bathe' or *h̲khrud-pa* 'id.' (pf. *bkrus*. fut. *bkru*) and the latter, to either *tshon* 'paint' or *btso-ba* or *h̲tshod-pa* (pf. *btsos*, fut. *btso*. imp. *tshos*) 'to dye'. This has led scholars to emphasize the comparison of 'word families' in one language with those in the other, rather than comparing individual words. The germ of this concept 'word family' was already seen in A. Conrady's *Eine Indochinesische Causativ-Denominativ Bildung und ihr Zusammenhang mit den Tonaccenten* (Leipzig 1896). It was only after B. Karlgren's publication of the article 'Word Families in Chinese' as a review of W. Simon's *Tibetisch-Chinesische Wortgleichungen* that much importance came to be attached to this concept. S. Wolfenden's presentation of the 'word

19. There is a parallel set WrT *-ol*: WrB *-way*<AncB -^{w}oy, e. g. 'to part' WrT *h̲gol-ba*: WrB *kway*, 'to hang down' WrT *h̲jol-ba*; WrB *chway*<ch^{w}oy 'to hand up.'
20. T. Nishida (1955: 31, 34).

families' of Tibetan and Kachin further contributed to enhance this tendency[21]. Nevertheless, the writer believes that the lexical comparison based on 'word-families' constitutes only part of the procedure in determining the most proper formal and semantic relations in the comparison of individual words. By the mere collation of a 'word family' in one language with one in another we will fail to establish correspondences between the languages compared, and we will not succeed in elucidating the character of their proto-language.

Furthermore, there is a considerable possibility that overemphasis on the 'word family' might lead us to mistaken formalism. Thus we may arrive at the conclusion, with S. Wolfenden, that, as there is no Chinese word that corresponds to WrT *brgyad* 'eight', so there is no Tibetan word that corresponds to Ch. 八 pwât 'id.'[22].

Considering that WrB *-ui* (=the writer's *-o*<-ɯ) correspondes to WrT *-ud*, S. Wolfenden equated WrB *khro*^{2} 'to wash' and *cho*^{2}- 'to dye' above with WrT *hkhrud-pa* and *htshod-pa*, respectively, and, in stead of comparing WrB *kho*^{2}-<khɯ^2- 'to steal' with either of WrT *rku-ba* (pf. *(b)rkus*, fut. *brku*, imp. *rkus*) 'id.' or *rkun-ma* 'thief', he supposes *rkud-pa, not attested in Tibetan literature, as the correct WrT form corresponding to WrB *kho*^{2}-[23]. But it seems to me that the *-d* that occurs in WrT *hkhrud-pa* and *htshod-pa* was not a constituent element of their stems, but, as we will infer from their future forms, was a suffix indicating the 'present' tense[24]. Hence WrB *khyo*^{2}, *cho*^{2} and *kho*^{2} should be compared with WrT *hkhru-ba*, *tsho-ba* and *rku-ba*, respectively. The correspondence WrB *-o*<AncB -ɯ: WrT *-u*, *-o* is quite regular. It can also be supported by the fact that this correspondence differs from that of VI above mentioned: WrT *-ud*, *-od* : WrB *-ɔ*<AncB -ö.

So far I have considered some of the problems involved in the lexical comparison of Tibetan and Burmese. There still remains much to be clarified as to phonemic correspondences between these languages. Even among the words

21. In his article 'Concerning the Origins of Tibetan brgiad and Chinese pwât 'Eight' (1938: 165–66), Wolfenden also says: 'In pursuing comparative studies of the vocabularies of the Sino-Tibetan languages we are today possessed of two methods of approach. The first of these... is that of setting up simple word equations from language to language; the second that of comparison by word families only, taking the family as our smallest operating unit. The first method passes from language to language lifting single words from each, without delving down in any way into what we might call the soil beneath them, so that we might, in fact, term such surface operations the 'horizontal' method. We have, as it were, plucked a flower without what bush we took it. The second method, on the other hand, seeks, in the first place not to set up equations between single words in two or more languages, but first of all to gather the word families of each separate language, and only then, after we have gained a clearer view of the general background of the words composing them, to begin comparative work. This method, from which the individual words have sprung, we might, if we so wished, call the 'vertical' method. We have then not only the flower but the actual bush on which it is growing.'
22. Cf. S. Wolfenden 1937.
23. Cf. S. Wolfenden (1938: 154–).
24. T. Nishida (1956: 38).

belonging to the basic vocabularies of the languages there are not a few of them which show no similarities at all to each other. For example, the WrT forms for 'cloud', 'white' and 'seven' are *sprin, dkar-po* and *bdun*, respectively, but it is not clear whether they are related to WrB *tim, phruu* and *khu-hnac*.

Though correspondences can be set up with the WrT forms for a large part of the vocabulary of the Gyarong language, which is spoken in a fairly wide area in East Tibet near the border of China and in Szu-chuan Province, some forms of its vocabulary are more closely similar to the corresponding WrB forms. Thus, the words for 'cloud', 'white' and 'seven' are ztim, kə-prom and kəsnəs in the Tsakunao dialect of Gyarong[25]. In fact, the forms related to those of Gyarong-Burmese are found among the languages surrounding the areas where the Tibetan languages (in the narrow sense) are spoken. From the standpoint of Tibeto-Burman as a whole, it seems to me that we may regard the Tibetan forms as diverging rather than otherwise. Moreover, not a few of the Gyarong forms which have their cognates both in Tibetan and Burmese are found to be closer to the WrB cognates than to the WrT ones although cognates to WrT forms admittedly predominate in the Gyarong vocabulary. For instance, Gyarong mjag~mnag 'eye' and mjas~mnas 'many' are closer to WrB *myak* and *myaa*^{2} than WrT *mig*<myig and *mang-po*. To give some other similar examples (Tsakunao dialect):

	Gyarong		WrB	WrT
'shoulder'	rpia	:	*pa-khum*^{2}	*phrag-pa*
'wine'	tʃhi	:	*sei*<siy	*chang*
'water'	tʃi	:	*rei*<riy	*chu*
'to go'	ka-tʃhi	:	*prei*^{2}<priy^2 'to run'	*phyin-pa*
'to sit'	ka-nə	:	*nei*<niy	*gnas-pa*
'wind'	khə-lə	:	*lei*<liy	*rlung*
'hundred'	po-rje	:	*raa*<ryaa	*brgya*
'red'	kəwurni~kəwurnə	:	*nii*	*dmar-po*.

Besides these examples, we can mention some morphemes which have no WrT counterparts but only the WrB corresponding forms. For instance,

(Suomo dialect)	Gyarong		WrB	WrT
'rain'	təmu	:	*mo*^{2}<mɯ^2	*char-ba*
'tail'	ta jmi	:	*a-mrii*^{2}	*mjug-ma*
'deep'	kərnaks	:	*nak-*	*zab-pa*
'red'	rɲi	:	*nii-*	*dmar-po*
'to borrow'	ka rŋa	:	*hngaa*^{2}-	*g-yar-ba*

25. Cf. King Pheng 1949, where he presents a detailed discussion about the correspondences between WrT and Gyarong. I once set up the correspondence WrT *spr-*: Gyarung zt-: WrB *t-* on the basis of their words for 'cloud'. But since then I have been not able to add any other example to support it. For the present, I shall regard the WrT form (*sprin*), on the one hand, and the Gyarong and WrB forms (ztim and *tim*), on the other, as having derived from different stems. Cf. also Kachin sú'mùy.

'lungs'	tər rts'os	:	*a-chut*	*glo-ba*
'goat'	tʃ'ət	:	*chit*	*ra-ma*
'to wear'	ka wat	:	*wat-*	*gyon-ba*
'to stand'	ka rjap	:	*rap-*	(*zhabs*)
'to release'	nə lɐt	:	*hlwat-*	*hgrol-ba*
'drum'	tə rbo	:	*prɔ*^{2}~*byɔ*^{2}	*rnga*

Side by side with the comparative studies of Tibetan and Burmese, we must take into account some of the linking languages between Tibetan and Burmese, such as Gyarong[26].

B. Tibetan, Burmese and the Kachin Language

Next, I shall proceed to consider the Kachin language as a link between Tibetan and Burmese to see how this will effect the comparative study of Tibeto-Burman.

First, I shall show the Kachin counterparts of the above given Written Tibetan and Written Burmese words of the 'Group-A' stocks[27].

1.	'bittər'	khâa-	11.	'five'	ma'ngàa
2.	'to borrow'	khôy-	12.	'ear'	nàa
3.	'to steal'	la'kúu-	13.	'sun'	níi
4.	'to bend'	ma'kôo-	14.	'near'	nìi-
5.	'nine'	ca'khúu	15.	'to die'	sìi-
6.	'to spit'	ma'thôo-	16.	'to eat'	sháa-
7.	'knife'	ɴthùu	17.	'nose'	la'tîi
8.	'thin'	phâa-	18.	'fire'	wân
9.	'father'	waa	19.	'difficult'	yak-
10.	'to weep'	ngúu-	20.	'pig'	wâ'

26. We may mention Manchad, reported by A. H. Francke 1917, as one of the most typical linking languages between Tibetan and Burmese. R. Shafer classifies the language (Mantśati) under the West Himalayish languages. However, it has quite a number of forms closely similar to the Burmese though those resembling the Tibetan generally predominate in it.

E. g.	Manchad	WrT	WrB
'Hundert'	rā	*brgya*	*ra*<rya
'Achat'	re	*brgyad*	*hrac*
'Feld'	rhi	*gzhi*	*mrei*<mriy
'Tag'	rhag	*zhag*	*a-rak*
'Pferd'	rhang	*rta*	*mrang*^{2}
'Stein'	rhag	*rdo*	*kyɔk*<klɔk
'Hund'	khui	*khyi*	*khwei*^{2}<khuy^2
'Blut'	shui	*khrag, shwa*	*swei*^{2}<suy^2
'sprechen'	pra-i	x	*prɔ*^{2}-
'Wasser'	ti	*chu*	*rei*<riy
'schwer'	lhi-(i)	*lci-ba*	*lei*^{2}<liy^2
'Zunge'	lhe	*lce*	*hlya.*

27. These Kachin forms are taken from the Bhamo dialect, for which see T. Nishida 1960. Cf. La Raw Maran 1971, J. A. Matisoff 1972b and R. Burling 1971.

21.	'short'	ka'tún-	27.	'to rub'	ka'tsút-
22.	'to smell'	ma'nàm-	28.	'path'	làm
23.	'name'	'a'mìng	29.	'hand'	la'tá'
24.	'eye'	'a'myí'	30.	'to give'	cò'-
25.	'three'	ma'sùm	31.	'one'	la'ngây
26.	'to kill'	sat-	32.	'black'	'a'chà

All the words except six of them; 17. 'nose', 18. 'fire', 29. 'hand', 30. 'to give', 31. 'one' and 32. 'black' may be regarded as cognate to the Tibetan and Burmese words given in A. On the basis of them the following correspondences may be set up as to the initial (C-) and the final (-VC):

1. For C-,

	WrT		WrB		Kachin	examples
I.	*kh-*	:	*kh-*	:	kh-	1[28]
II.	*sk-*	:	*kh-*	:	kh-	2
III.	*rk-*	:	*kh-*	:	k-	3
IV.	*kh-*	:	*kh-*	:	y-	19
V.	*dg*	:	*k-*	:	k-	4
VI.	*dg-*	:	*k-*	:	kh-	5
VII.	*st-*	:	*th-*	:	th-	7
VIII.	*th-*	:	*th-*	:	th-	6
IX.	*th-*	:	*t-*	:	t-	21
X.	*ph-*	:	*p-*	:	ph-	8
XI.	*ph-*	:	*ph-*	:	w-	9
XII.	*ph-*	:	*w-*	:	w-	20
XIII.	*ng-, lng-*	:	*ng-*	:	ng-	10, 11
XIV.	*rn-, sn-*	:	*n-*	:	n-	12, 22
XV.	*ny-*	:	*n-*	:	n-	13, 14
XVI.	*m-*	:	*m-*	:	m-	23, 24
XVII.	*gs-*	:	*s-*	:	s-	25, 26
XVIII.	*sh-*	:	*s-*	:	ts-, s-	15, 27
XIX.	*z-, dz-*	:	*c-*	:	sh-	16
XX.	*l-*	:	*l-*	:	l-	28

Correspondences I and II, and Correspondences VII and VIII may be united into one, considering WrT *sk-* and *st-* to have been derived from s-kh- and s-th-, respectively[29]. If we assume WrT *ny-* here as a conditioned variant of n- before a high vowel, we may treat XV as a subset of XIV[30].

2. For -VC,

XXI.	WrT *-a*	:	WrB *-a, -aa*	:	Kachin -aa	1, 8, 9, 11, 12, 16
XXII.	*-a*	:	*-aa*	:	-uu	7

28. The numbers refer to those given to the above examples.
29. Cf. Li Fang-Kuei 1933.
30. Cf. T. Nishida (1960: 121).

XXIII.	*-u*	:	*-o*<-ɯ	:	-uu	3, 5, 10
XXIV.	*-u*	:	*-wei*<-uy	:	-oo	4, 6
XXV.	*-i*	:	*-ei*<-iy	:	-ii	13, 15
XXVI.	*-i*	:	*-ei*<-iy	:	-oy	2
XXVII.	*-e*	:	*-ii*	:	-ii	14
XXVIII.	*-ag*	:	*-ak*	:	-ak	19
XXIX.	*-ag*	:	*-ak*	:	-a'	20
XXX.	*-ad*	:	*-at*	:	-at	26
XXXI.	*-am*	:	*-am*	:	-am	22, 28
XXXII.	*-ung*	:	*-ɔng*	:	-un	21
XXXIII.	*-um*	:	*-um*	:	-um	25
XXXIV.	*-ud*	:	*-ut*	:	-ut	27
XXXV.	*-ing*	:	*-aň*	:	-ing	23
XXXVI.	*-ig*	:	*-yak*	:	-yi'	24

Apart from the words of the 'Group A' stocks, we find several other cognate sets in which one or the other of the above correspondences can be established. For instance, under Correspondence I, there are

'room' WrT *khang-pa* : WrB *a-khan*^{2} : K kaân

'to cough' *khogs-pa* : *khrɔng*^{2}- : ca'khrûu-, and

under Correspondence II, besides

'leg' WrT *rkang-pa* : WrB *khrei*<khriy : K la'kò

we may refer to 'dog' WrT *khyi* : WrB *khwei*^{2}<khuy^2 : K kûy.

In addition to those examples given above under I-IV, the following cognate sets also exhibit the correspondence WrT *sk-* : WrB *k-* : K k-,

'language' WrT *skad* : WrB *cakaa*^{2} : K 'a'kàa[31]

'star' *skar-ma* : *kray* : sha'kàn.

Under Correspondence XXI (WrT *-a* : WrB *-aa* : K -aa) may enter the following sets:

'hundred' WrT *brgya* : WrB *ta-raa*<-ryaa : K la'shàa

'arrow' *mdaḥ* : *hmraa*^{2} : pa'làa

'fish' *nya* : *ngaa*^{2} : ngáa.

Under Correspondence XXII (WrT *-a* : WrB *-aa* : K -uu) may be included the following sets:

'root' WrT *rtsa* : WrB *mrac*<*mrca : K 'a'rûu

'frog' *sba-l* : *phaa*^{2} : shûu[32].

31. The correspondences between the forms for 'to call' and 'language' in these languages are as in the following:

	WrT	WrB	Kachin
'to call'	*khug-pa*	*khɔ-*	x
'to call'	*skad-pa*	x	sha'káa
'language'	*skad*	*cakaa*^{2}	'a'káa.

32. Besides, we have the following examples for WrT *-a*: Kachin -uu; 'lead' WrT *zha-nye*: Kachin chuu, 'hen' WrT *bya*: Kachin ûu<wûu.

Besides these, it is possible to establish several other correspondences that may be considered certain.

I. 'tooth' WrT *so* : WrB *swaa*^{2} : K waa
'to go' *so-ng*[33] : *swaa*^{2} [34] : wâa- 'to come'

Since these examples make clear that Kachin waa has been derived from swaa, we have to set up the correspondence WrT *s-* : K zero[35], which differs from XVII above, and that WrT *-o*[36] : WrB *-wa* : K -wa.

II. 'excrement' WrT *dri-ma* : WrB *khyei*^{2}<khriy^2 : K chíi
'to sew' *h̲drub* : *khyup-*<khrup- : chuy-
'to scratch' *h̲drad-pa* : *khrac-* : ma'chit-

These cognate sets enable us to set up the correspondence WrT *dr-* : WrB *khr-* : K ch-. In contrast with this we find the following examples for WrT *khr-* : WrB *khr-* : K khr-,

'to wash' WrT *h̲khru-ba* : WrB *khyo*^{2}-<khrɯ^2- : K khrût-
'to fear' *skrag-pa*<s-khrag : *khrɔk-* : khrît-

I shall tentatively postulate TB *dr- for the former and TB *khr- for the latter to distinguish between these correspondences[37].

The crucial fact here is that it sometimes happens that a set of correspondence which obtains between Written Tibetan and Written Burmese must be further divided into two or three sets when Kachin is added to the comparison of these languages. For instance, with only the above examples considered, Kachin gives kh- and y- for WrT *kh-* : WrB *kh-*, and kh- and k- for WrT *rk-*, *sk-* : WrB *kh-*. Further, the cognate forms that exemplify WrT *-a* : WrB *-a* correspond to the Kachin forms with -a or -u. Now, how should we consider such diversification? This would not be so simple a problem as to be solved by assuming that consonantal or vocalic alternation might have been once operative in Kachin. If the diversity that is reflected by the Kachin cognate forms cannot be ascribed to the difference of the nature of phonemes in TB, we will have to suppose that it has come into being through the different conditions to which Kachin alone was exposed in the course of its individual development. In either case, however, we should not be too rash to venture a hypothesis on the assumption that the phenomena would be peculiar to Kachin. For it will be naturally expected that there would be some other TB language that show correspondences parallelling to those of Kachin.

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33. WrT *so-ng* is the perfect form of *h̲gro-ba* 'to go'.
34. The corresponding Arakanese form stands for 'to come': cf. B. Houghton, "The Arakanese Dialect of the Burman Language", *JRAS* 1897.
35. I have no special reason to consider this s- as a prefix. I think that WrB *-wa* has been derived from AncB -^{w}ɔ. T. Nishida (1972: 258).
36. There is some probability that WrT *o* has derived from C-u-wa, C-o-wa, and C-a-wa. I surmise that this is one type of process through which Tibetan might have lost its suffix -pa∼-ba.
37. Cf. pp. 4– of this paper.

Among the majority of forms in the 'Group A' stocks, the CVC type of forms in WrT corresponds to the same type in WrB. Nevertheless, as I have shown above already, there is also a considerable number of WrB forms of the CV# type whose WrT cognates belong to the CVC type. In such cases the corresponding Kachin forms are mostly of the CVC type, not of the CV#.

'clear'	WrT *gsal-ba* :	WrB *saa* :	Kachin sân
'to speak'	*gsung-ba* :	*cho*^{2}-<chɯ^2 :	ka'tsûn
'foot'	*rkang-ba* :	*khrei*<khriy :	la'kòng
'to listen'	*nyan-pa* :	*naa-* :	nâng etc.

However, there is also a group of the Kachin forms of the CVC type that correspond to the WrT and WrB forms of the CV# type, the TB forms of which thus may be reconstructable as of the CV#.

	WrT	WrB	TB		Kachin (Bhamo)	Kachin (Assam)	TB[38]	Kachin
'body'	*sku*	*ko*<kɯ	*s-ku	:	khum	kûm	(zero :	-m)
'salt'	*tshwa* <*tsha-ba	*chaa*^{2}	*tsha	:	cûm	júm	(zero :	-m)
'flesh'	*sha*	*a-saa*	*sha	:	shân	san	(zero :	-n)
'water'	*chu*	*rei*<riy	*tru, *tri	:	Ntsin	N'chin	(zero :	-n)
'bone'	*ru-s*	*a-ro*^{2}<a-rɯ^2	*ru	:	Nrang	N'ráng	(zero :	-ng)
'horn'	*rwa* <*ru-ba	*khyo*<khrɯ	*khru	:	Nrung	rung	(zero :	-ng)

To these Kachin forms are added -m, -n or -ng. There are two possible interpretations of this fact. (1) The proto-forms of these morphemes were of the CVC type in TB, but later changed to the CV# type in WrT and WrB while the original type was retained in Kachin. (2) They were of the CV# type in TB, but -m, -n or -ng was attached to them later in Kachin, thus producing the CVC type peculiar to it, in other words, -m, -n, and -ng were Kachin suffixes (such as to be affixed to some kind of nouns) or, simply, extentive consonants.

At present there is no positive grounds for chosing either of these hypotheses. However, it is found even between some Kachin dialects that some forms of the CVC type in one dialect correspond to those of the CV# type in the other, e. g.

'head'	Myit. pô :	Bhamo pông :	Assam pông
'foot'	la'kô :	la'kông :	lugón
'horse'	kumrâa :	kumrâng :	gúmráng
'white'	phrô[39] :	phrông :	phong

38. The forms of the Assam dialect of Kachin are quoted from C. R. MacGregor *Outline Singpho Grammar* (no date or place).

39. Strictly speaking these forms might not be regarded as those of the Myitkyina dialect. Incidentally, Hanson gives the following examples to show the difference between Jingpaw and Khauri finals: 'child' Jingpaw ma: Khauri mang, 'a person' Jingpaw masha: Khauri mashang. O. Hanson, 'The Kachin Tribes and Dialects' *JRAS* (1907: 386). It may be noted that the last given Khauri form mashang is closely similar to PLB *dzang 'person'.

Actually the function of these elements are still not clear, but I shall tentatively regard them as Kachin extentives[40]. It appears to me that such elements as these, whose functions cannot be defined distinctly yet, must have played an important role among the Tibeto-Burman languages in general.

Apart from the forms of the 'Group A' stocks, that can be easily equated to each other, we should also give due consideration to parallelism among the correspondences that may be established between those cognate forms whose relationship will not be easily detectable on account of their outward dissimilarities. This being done, we should proceed to focus our efforts on the reconstruction of the proto-form of each individual word. In such cases the Kachin form will often provide valuable evidence. I shall argue about the reconstruction of the proto-forms for several sets of cognates in connection with the Kachin forms.

1. 'horse': Kachin kum-râng corresponds to WrB *mrang*^{2}. Since kum- is a prefix, we learn that the initial *m-* of the WrB form was part of the old prefix. This line of speculation will yield an interesting result. I have mentioned above that the initial *m-* of WrB *mrang-* 'to see' corresponding to WrT *mthong-* was once a prefix[41]. By analogy of this example there is a strong probability that WrB *mrang*^{2} 'horse' might also be derived from TB *m-thang/*mdang. Thus it is through the medium of the Kachin form that the relation between WrT *rta* and WrB *mrang*^{2}, which appear at first glance to have come from different proto-form, becomes clear. Kachin also has dialectal kumrâa for kumrâng (cf. p. 15). Accordingly, the latter form may be analyzed as ku-m-ra-ng. On the other hand, with many other parallel examples, we will probably be able to consider WrT *rta* to have come from *r-tha, and we may hence postulate TB *m-tha/*r-tha for it, assuming the following process of development : WrT *rta*<r-tha, WrB *mrang*^{2}<*m-tha-ng^2, Kachin ku-m-ra-ng~ku-m-ra<*m-tha.

2. 'root': Kachin a-rûu corresponds to WrB *mrac* and WrT *rtsa*. The initial *m-* of the WrB form must have been originally a prefix such as seen in the examples of 'to see', 'valley', 'arrow', 'horse' and 'high' above. For WrT *rts-* : WrB *mr-* we may add the following examples: 'river' WrT *rtsa-ng* : WrB *mrac*, 'grass' WrT *rtswa*<rtsa-ba : WrB *mrak*. The final *-c* of the WrB form may be assumed to have been the initial corresponding to WrT *ts-*. Therefore, we cannot but think that WrB *mrac* was derived from *mrtsa through metathesis. TB *m-r-tsha may be set up for 'root'. For Kachin rûu we can assume *mruu<mr-tshu: for WrT *-a*:

40. Such extentive consonants can be found among the Chin languages.

E. g.	Tiddim	WrB	Lushai
'what'	bang	*ba*	?
'year'	kum	*khu-hnac*	kùm
'thin'	pan	*paa*^{2}-	pán
'sweet'		*khro-*<khruu-	thlúm

Tiddim (Henderson, E. 1965) Lushai (Bright, W.)

41. Cf. p. 5 of this paper.

WrB *-aa* : Kachin -uu. cf. pp. 12~13.

3. 'skin': Kachin phyîi corresponds to WrB *a-rei*<a-riy. We can easily surmise from the process of development of these languages, for instance, from the history of Burmese, that Kachin phyîi has come from *phrii. Accordingly we may well assume Kachin-Burmese *phriy for 'skin'. WrT *pags*<bags and Chinese 皮 bhia<bhra (?) might probably have been derived from a root common with *phriy (hence TB *phriy, *bags 'skin')[42].

4. 'tears': Kachin myí' pyìi corresponds to WrB *myak-raň* (myí'- and *myak-* 'eye'). The above example 'skin' also exemplifies Kachin py- : WrB *r-*. For the correspondence of the finals (Kachin -ii : WrB *-aň*<-æɦ, -aň) we may give the following examples as in parallel with 'tears'[43]:

'thread'	Kachin rîi	:	WrB *khyaň*<khræɦ
'acid'	khrii-	:	*khyaň*<khraň
'sick'	ma'cîi	:	*naa-kraň*^{2}-<kyaň.

I shall postulate Kachin-Burmese *præɦ for 'tears'. On the other hand, might WrT *mchi-ma* and Chinese 淚 lḭwəd originate from *m-phri-(m- standing for mig 'eye'?) and *phri-wəd>*phli-wəd>lḭ-wəd, respectively?

5. 'head': Kachin 'a'-pòng<a-pò-ng corresponds to WrB *uu*^{2}, and Kachin 'a'-puu 'bowels' to WrB *uu*. Inferred from the WrB *uu*^{2} and the corresponding WrT form *dbu* 'head', it is almost certain that the initial of the Kachin form was originally 'voiced'. Accordingly, we may set up *C-bu/*bo- as the proto-form for 'head' and *bu as that for 'bowels'. We should then assume the successive changes *buu>wuu>uu for both WrB *uu*^{2} and *uu*.

6. 'right side': Kachin khràa corresponds to WrB *lak-yaa* and Kachin pày 'left side' to WrB *lak-way* 'id.' WrB *lak-* in these forms signify 'hand', and this language expresses such spatial relations as 'right' and 'left' in connection with 'hand'[44]. It is possible to assume on the basis of the Kachin forms that WrB *-yaa* 'right' has developed from khraa through raa while WrB *-way* 'left' from *bay in parallel with the above forms for 'head' and 'bowels'. Thus both the Kachin and WrB forms have been derived from khraa 'right' and bay 'left'. But it is not clear if Kachin had expressed 'right' and 'left' in connection with 'hand' at some earlier stage of its development.

As we have just seen above, the Kachin cognates often have peculiar forms as compared with their WrT and WrB counterparts. However, it is for this peculiarity that we attach to them the greater importance which cannot be overlooked in the reconstruction of the TB forms. There are many other languages with such useful peculiarity as in Kachin that constitute the link between Tibetan

42. The Tamang language of Himalaya has dri 'skin' and phi 'bark' forms. It seems to me there was an alternation of initial clusters br- dr- gr- in some earlier stage of Tibeto-Burman.
43. For this AncB form, vid. T. Nishida (1955: 27 and 1972: 250).
44. Cf. T. Nishida (1958: 243).

and Burmese. These should we take into consideration in our comparative study.

C. Comparison of Morphological Processes

WrB *hnaa* 'nose' Rangoon dialect /hná-khâun/ corresponds to Lolo nɑ (Nyi nɑ 44, Ahi no 44, Lisu na 55- Hani nə 55-), Maru nǫ̰ 31, Lashi nǫ̰ 31, and has the common root with WrT *sna*, and Gyarong ʂne (Tsakunao) and ʃna (Suomo)[45]. Thus we can set up TB *sna for 'nose'. There are also the derived stems suffixed with -b or -m, TB *sna-b (WrT *snabs*: WrB *hnap*) 'nasal mucus', TB *sna-m (WrT *snam-pa*: WrB *nam-*<hnam-) 'to smell'. We have several other examples for WrT *sn-* : WrB *hn-* as well as a few for WrT *rn-* : WrB *hn-* and WrT *gn-* : WrB *hn-*. Hence it is almost beyond doubt that WrB *hn-* has originated from the initials like sn-, rn- and gn-. The same can be said of WrB *hm-*, *hñ-* and *hng-*. Therefore, the comparison with the WrT cognate enables us not only to infer the earlier form of WrB, but also often to explain the earlier state of the functionally contrastive element of a particular WrB form, as we have just seen above. For instance, the contrast between WrB *nɔk-* 'to be turbid' and *hnɔk-* 'to stir up' depends upon that between their initials (*n-* : *hn-*). When we compare these forms with their respective WrT cognates *nyog-pa* 'soiled, dirtied' and *rnyog-pa* 'to stir up', it will become obvious that WrB *n-* : *hn-* has originated from *n-* : *rn-*. Furthermore, as we can assume on a different line of reasoning that the perfect form of WrT *rnyog-pa* was *bV-rnyog-sV in the seventh century[46], it will become possible to postulate *bV-rnɔk-sV as that of Archaic Burmese as well.

Unlike the nasal or liquid (1-, r-) initials the WrB stop initials do not preserve the vestigial h- indicating the earlier r- or s- that marked the transitive or causative form of the verb. However, if a given WrB verb with a stop initial is found to correspond regularly to a WrT verb, we will probably be allowed to assume that the inflected forms of the written Tibetan verb supposed to have had in the seventh century also applied to the earlier state of the Written Burmese verb. Take for instance WrB *thok-* 'to consider', whose initial consonant, medial vowel and final consonant each correspond regularly to WrB *rtog-pa*<*r-o-thag-pa (pf. *brtags* or *brtag*, imp. rtogs or rtog). On the analogy of the seventh century WrT form, we may be able to postulate ArcB *r-thɔk.

It was precisely for this purpose that I had studied the WrT verbs and arranged their inflected forms into three distinct patterns in my paper of 1956: "A study of Tibetan verbal structure". At that time I thought that, provided that a given WrB verb is in regular phonemic correspondence with a WrT verb, our conclu-

45. For the data of Maru and Lashi, vid. T. Nishida 1973; for Tsakunao and the Suomo dialects of Gyarong, vid. Chin Pheng, 1949 and 1957–58.

46. T. Nishida (1956: 44). I have surmised that the so-called vowel alternations are not alternations but are actually one kind of phonemic morphemes suffixed or infixed. On ablaut theory, See R. A. Miller 1956 and E, G. Pullyeyblank 1965.

sions regarding the WrT verb would naturally apply to the WrB, and that this is the only procedure that might enable us to trace the morphological processes of Archaic Burmese. However, I noticed later that, if the Kachin forms were taken into consideration, we would have to set up several intermediate stages in between. Hence we must make clear the processes that might have intervened between the verbs of the Tibetan type and those of the Burmese type. I shall explain with an example.

WrT *hbug(s)-pa* (pf. *phug*, fut. *dbug*, imp. *phug*) 'to sting, make a hole' belongs to Pattern I.[47] In my opinion we may set up *d-bug-pa, pf. *b-bug-dV as the seventh century forms of this verb. The WrB form corresponding to this verb is *pɔk-* 'to pierce'[48]. Now, according to the principle delineated above, ArcB *d-pɔk-, pf. *b-pɔk-dV may be postulated for this. At this point, we will be confronted with the problem of how to treat Kachin ka'-pok- 'to dig out, hollow out'. There is no problem in considering the Kachin root -pok- to correspond to WrB *pɔk-* and WrT *hbug-*, but its prefix ka'- presents an important problem. Provided that the verb-stem formation with this prefix ka'- represents the morphological process of a certain stage which replaced that of Proto-Tibeto-Burman, the latter process being transmitted to the seventh century Tibetan language, should we assume an intermediate stage where Burmese and Kachin had the common verb-stem like *ka'-pɔk-? In other words, we should suppose that *pɔk-* has been derived from *d-pɔk (<*d-bɔg, pf. b-bɔg-dV) through an intermediate stage of ka'-pɔk-. This speculation seems to fit better for the cases in which the Kachin verbs have no WrT counterparts but only the WrB ones. For instance,

	WrB	Kachin		WrB	Kachin
'to bite, chew'	*waa*^{2} :	ka'wáa-[49]	'to throw'	*pac-* :	ka'pây-
'to hit'	*rok* :	ka'yet-	'to do, make'	*lup-* :	ka'lòo-
'to itch'	*yaa*^{2}- :	ka'yàa-	'to change'	*lay*^{2}- :	ka'láy
'to be ashamed'	*hrak-* :	ka'yá'-.			

That each set of these WrB and Kachin verbs has the same stem is clearly seen from the regularity of their correspondences. On the analogy of their Kachin counterparts, we may assume *ka'-waa^2- 'to bite', *ka'-ruɯk- 'to hit', *ka'-yaa^2 'to be itch', *ka'-hrak- 'to be ashamed', *ka'-pac 'to throw', *ka'-lup- 'to do', *ka'-lay^2- 'to change' each with the prefix ka'- as the respective earlier form of the above WrB.

At the present stage of its development, Kachin has lost this prefix in many of its verbs, e. g. sháa- 'to eat', prùu- 'to go out', tsap- 'to stand'. In spite of this, it can be easily supposed that even these verbs were once prefixed with ka'- like the others at a certain stage of its history. Thus we may say that Kachin repre-

47. There are the alternative forms: *hbig(s)-pa*, pf. *phigs*, fut. *dbig*, imp. *phig(s)*.
48. WrB has a derivative of this form *phɔk-* 'to make hole'.
49. This Kachin form is related to wáa 'tooth'. WrB *waa*^{2}- may probably be derived from swaa^2-.

sents a stage at which the prefix has been dropped from part of the verbs, or a stage at which the structural change already completed in Burmese which is still partially observable.

In this connection, I shall refer to the two interesting facts that may corroborate this assumption. In the first place, we must note the use of ka-~kə- in Gyarong which corresponds to that of ka'- in Kachin. We may consider that there are two strata, with the newer overlapping with the older one of Archaic Tibetan, discernible in the system of Gyarong verbs. It is a fairly complicated system, but I shall take up only the base forms of Gyarong verbs here. Gyarong (Suomo dialect) kə*r*dzok 'to be finished', ka*p*tsak 'to filter', ka*z*bjang 'to train', for instance, correspond to WrT *rdzogs, btsag* and *sbyang*, respectively. The prefixes r-, p- and z- in Gyarong are the old prefixes corresponding to the respective WrT *r-, b-* and *s-*. The prefix ka-~kə- preceding them belongs to the newer stratum of the language. In case of Gyarong verbs all the base forms may take this prefix. It is almost certain that this prefix which corresponds to Kachin ka'- is the secondary element that developed in Gyarong after it had shifted from the older stage of the Tibetan type to the newer one. Ka-~kə- is often found affixed even to the Gyarong counterparts of the Kachin verbs whose base forms do not take the prefix ka'-. Thus Gyarong ka-za 'to eat', ka-tʃut 'to go out', ka-rjap 'to stand' (cf. the corresponding Kachin verbs given above). This will considerably strengthen our ground for reconstructing the prefixed forms *ka'-sháa-, *ka'-prùu-, *ka'-tsap, etc. for the prefixless Kachin forms. Further, the comparison with Gyarong will make it clear that even the Kachin verbs with either of the prefixes sha'- and ca'- once had this prefix. The derivation of the transitive-causative forms with either sha'- or ca'- is a morphological process that Kachin commonly employs; thus,

Intransitive-Base			Transitive-Causative	
kyâa-	'to be soft'	→	sha'kyâa	'to soften'
tsáp-	'to stand'	→	sha'tsáp	'to make stand'
that-	'to be thick'	→	ca'that	'to make thick'
rot-	'to rise'	→	sha'rot	'to raise'
khrit-	'to fear'	→	ca'khrit	'to frighten' etc.

This derivational pattern may be comparable with Pattern III of the seventh century Tibetan that contrasts with Patterns I and II. Gyarong also shows the corresponding derivational pattern. However, its causative prefix sə- is not replaced by ka-~kə- but infixed between the latter and the verb-stem. Thus,

Base			Causative	
ka-top	'to beat'	→	ka-sə-top	'to make beat'
ka-kri	'to break'	→	ka-sə-kri	'to make break'
ka-rjap	'to stand'	→	ka-sə-rjap	'to make stand' etc.

It is hightly probable that the affix sə- indicating 'causativity' was used as an infix at the stage when the prefix ka- could be affixed to all the base forms of the

verbs[50]. Therefore, it may be reasonable to suppose that Burmese had once passed through the stage exemplified by Gyarong before it shifted to that of the morphological type of Kachin.

Another important indication of the relationship between the Gyarong and Kachin verbal system is that they both have the 'pronominal' suffixes. Kachin has the following verbal suffixes though these are not commonly used in the spoken language.

ka'-lòo-'ay 'to do'

ngay ka'loo-ngay (-ng-'ay) 'I do'	anthe ka'loo'-ka'ay (-ka'-'ay) 'We do'
nang ka'loo-Ntay (-Nt-'ay) 'Thou dost'	nanthe ka'loo-ma'tay (-ma-t-'ay) 'You do'
khyi ka'loo-'ay (-'ay) 'He does'	shathe ka'loo-ma'ay (-ma-'ay) 'They do'[51]

Gyarong (Tsakunao dialect) ka-piɛ 'to do' takes the following 'pronominal' suffixes.

kə-pang (-ng<*ngo) 'I do'	kə-pai (-i) 'We do'
ngatə-pao (-o<*no) 'Thou dost'	ngatə-pai (-i) 'You do'
nga-piɛ (-zero) 'He does'	nga-pai (-i) 'They do'[52]

Though the suffixes for 'singular persons' of these languages seem to agree well, the relation between those for 'plural persons' is not clear'. Such 'pronominal' suffixes are not recognized either in Tibetan or in Burmese. Nevertheless I think that this is a very interesting fact that will require our further detailed investigation.

In the second place, I should like to remark on some suffixes attached to the base form of the verb. The base form of the WrT verb takes the suffix -pa~ba, which expresses the content of the verb as a 'process' or 'state', in other words, functions as the marker of the 'verbal noun', e. g. *h̲gyur-ba* 'chang (ing)', *rdung-ba* 'beat (ing)', *rgyug-pa* 'run (ning)', *gnas-pa* 'liv (ing)', etc. But for the Tibetan group of languages and Meithei no other TB languages, including Gyarong, has the suffix corresponding to WrT *-pa~-ba*. However, Burmese and Kachin have a different suffix comparable with WrT *-pa~-ba*. In Burmese -te~-de written-*saň* may be suffixed to the base form of the verb. Its AncB form was-sæɦ (=seɦ). For example, the suffixed form for 'to hear' is *kraa*^{2}*-saň* in WrB and klaa^2-sæɦ in AncB. To these correspond Rangoon câa-de, and Tavoy/Mergui câa-he. It is likely that -he in the latter two dialects corresponds to Kachin -'ay. Moreover, their relation will be made clearer by the fact that the Hkakhu dialect of Kachin

50. For the details of Tibetan Causative formation, see Shefts B. Chang 1971.
51. In En Khun (恩昆) dialect of Kachin, 'pronominal' suffixes in imperfect forms are as follows: (Institute of National languages, 1959)

1 sg	n^1	ŋai^3	1 pl	ka^{ʔ1}	ai^3
2 sg	n^1	tai^3	2 pl	mǎ^1	tai^3
3 sg		ai^3	3 pl	ma^{ʔ1}	ai^3

Cf. The forms of Chin languages (See E. Henderson 1957, 65).
52. It is interest to note that Kachin ka'loo corresponds to WrB *lup*: 'to do', but Gyarong ka-piɛ to WrT *byed-pa* 'to do'.

uses -de in place of -'ay[53]. However, it is still doubtful if we can directly equate AncB -sæɦ to Kachin -'ay, since Kachin -'ay functionally contrasts with -say, which latter marks the 'perfect' form of the verb. This -say can be analyzed as -s-'ay. Indeed this first element -s is the suffix that directly corresponds to WrT *-s* added to the perfect form. These facts could be interpreted as follows. It is certain that AncB -sæɦ was originally the marker of the 'perfect' form but later came to be used as that of the 'base' form. This is exactly equalled by the use of the perfect form of WrT as the base form in Present-day Tibetan. For instance, WrT *h̲chad-pa* 'to tell' has the inflected forms: pf. *bshad*, fut. *bshad*, but the Spoken Tibetan uses only the perfect form bshad [ɕɛ^1], and not the base form *h̲chad* [tɕɛ^1][54].

Accordingly, we may probably postulate the 'base' marker -'aɦ and the 'perfect' marker *-saɦ for Burmese-Kachin which replaced the respective markers -pa~-ba and -s<*-dV of Ancient Tibetan.

In the foregoing, I have discussed the morphological development of verbs in Tibetan, Gyarong, Kachin and Burmese though it is restricted to their base forms, and eventually assumed that these base forms have shifted from the Archaic Tibetan, the Gyarong, the Kachin, finally to the Burmese type[55]. As a matter of course, there is a sufficient possibility for finding other languages that represent the intermediate types. As for Kachin, I have considered only one aspect of the language. It is closely related to the Chin group of languages as well as Tibetan and Burmese treated here. In our comparative study of Tibeto-Burman we should not neglect to investigate the morphology of such languages as Chin that have drifted westwards.

Nevertheless it is an important fact that generally speaking, Gyarong and Kachin represent the intermediate stage between Tibetan and Burmese. This

53. Hertz (1935: 16 fn.). We can cite the similar form of suffixes in the Lolo-Burmese languages, Lisu -ah, Lahu -veh, Bisu -ŋɛ, Akha -ɦɯ, Maru -ru which perhaps derived from the same origin. And it is a very interesting fact that these forms of verb ending are also the particles of genetive forms.
54. Cf. Chin Pheng 1956.
55. I have established three patterns in 7th century Tibetan, based on the description by Paṇḍita Thonmi Sambhoṭa and surmised that the Tibeto-Burman languages had the following stages of development.

	1st stage, prefix	Tibetan suffix	2nd stage, prefix	Gyarong suffix
pattern I. II.	{g-d}	{pa-ba}	ka-, kə-	zero
pattern III.	{g-d}-s	{pa-ba}	ka-sa-, kə-sə-	zero
	3rd stage, prefix	**Kachin suffix**	**4th stage, prefix**	**Burmese suffix**
pattern I. II.	ka', zero	'ay	zero	s-æɦ
pattern III.	sa, ca	'ay	zero, h-, s-	s-æɦ

is most clearly seen in their morphological structure. Thus we should lay emphasis upon the consideration of morphological structures in the comparative study of these groups of languages in the future. Further, we cannot expect fruitful results from our studies unless we endeavor first to establish the principles that may be comparable with those of stem formation in Indo-European linguistics before we deal with a diversity of possible correspondences.

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