The syllable finals of Tibetan loan words in Lepcha orthography

R.K. Sprigg

I. Reading and writing

Though Lepcha has probably been written at least since the reign of Chador Namgyal, the third Maharajah of Sikkim (1700-1717), the number of Lepchas with the skill to read and write the Lepcha script must always have been very small: a first estimate of the Lepcha population of Sikkim, in 1840, put it at only three thousand; in the Sikkim census of 1891 a total of 5,762 was recorded, to which should be added the Lepcha population of the Darjeeling District of Bengal, numbering 3,952 according to the 1872 census.[1] It seems a fair assumption that only about a quarter of those 19th-century totals could have been adult males, and, therefore potentially literate in Lepcha. Moreover, the Lepcha population was scattered over a wide area; and the tree population was sufficiently numerous at that time to make communications difficult: The gazetteer of Sikhim records that nowhere in Sikkim was there a settlement large enough even to be termed a village.[2] In the 18th century, therefore, reading and writing were probably confined to a few handfuls of Lepcha monks, perhaps less than a hundred, renderingTibetan Buddhist texts into Lepcha;[3] in the following century, in 1845, Stark and Niebel, Christian missionaries in Darjeeling, began extending Lepcha literature somewhat by translating The Bible. The year 1849 saw the beginning of printing in Lepcha, with Genesis and part of Exodus being printed at the Baptist Mission Press, Calcutta. Printing must have brought with it a greater consistency in letter shapes.

II. Vowel symbols

A. Tibetan

As far as vowel symbols are concerned, the Tibetan script has five, as I see it, three of which are superscript, i, e, and o, the fourth, u, is subscript, and the fifth, a, is symbolized syllabically or semi-syllabically, sharing a symbol with one of the thirty gsal-byed sum-cu, or radicals:

ཀ --- ཨ (ka --- a, [kɑ] --- [ʔa]),

but alphabetically, by the postscript symbol a chung,

-ཱ (-'), e.g. དགའ (dga'),

when it is necessary to avoid confusion between a syllable containing a member of the (five) sngon-'jug, or prefix, series, prescript g, d, b, m, and ', and a syllable containing a member of the gsal-byed sum-cu in initial position, e.g.

དག (dag).[4]

B. Lepcha

In order to symbolize the Tibetan vowel sounds the Lepcha script deploys a set of eight vowel symbols in open syllables, and a slightly different set, of nine, in closed syllables, with average phonetic values as follows:

open:	-a	-á	-i	-u	-ú		-e	-o	-ó
	[-ə:	-a:	-i:	-ɯ:	-u:	-e:	-ɛ:	-o:	-ɔ:
closed:	[-ə:-	-a-	-i/ɪ-	-ɣ-	-u/ʊ-	-e-	-ɛ-	-o-	-ɒ-
	-â-	-á-	-í-	-u-	-ú-	-e-	-ya-	-o-	-ó-:

e.g.

open:	–	-ᴄ	ꜱ-	-ɔ	-ɔ	ᴢ̣	ᴢ̣	ı-	ı~
closed:	~	"	ꜱ~	"	"	"	-ν	"	"

It will be seen from the above series that two vowel symbols, i and o, are prescript, three, á, u, and ú, are postscript, as also is ya, one (e) is subscript, one (â) is superscript, and two (í and ó) are at once prescript and superscript, while for a the same principle as for Tibetan, sharing a symbol with an initial consonant, has been followed.[5]

Some writers, however, use â instead of a, e.g.

    ᴢᴄ̃ 'á-kâ for ᴢᴄ 'á-ka [akə:] 'hand',

thus making the representation of the vowels entirely alphabetic, with one symbol to each vowel.

To add to the confusion, a, which I have shown above only in the open-syllable series, is used by some writers in the closed-syllable series where others use á, e.g.

    ᴄᴥ sam for ᴄᴥᴄ sám [sam] 'three',

even by the same writer; this becomes possible because of the difference that I have shown above in the number of vowel symbols as between open syllables and closed syllables (and between nasal-initial and non-nasal-initial syllables).[6]

The relationship of the vowel symbols to the initial-consonant symbols suggests that the general principle has been followed of turning the model script, possibly a cursive Tibetan hand of the 'khyug-yig type, counter-clockwise through ninety degrees, with the result that the Lepcha symbols corresponding to the Tibetan superscript vowel symbols i and o are prescript, and the Lepcha u and ú are not subscript but postscript (e, however, is, irregularly, not prescript but subscript).[7] Such a process would be familiar to Tibetan monks (and, perhaps, to Chador Namgyal himself during his years of exile in Lhasa) through the practice of using the symbols t-, th-, d-, n-, and sh- reversed for the

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Sanskrit retroflex series ṭ-, ṭh-, ḍ-, ṇ-, and ṣ-, none of
which had been introduced into the Tibetan script in its
original form.[3] Accordingly, all the symbols corresponding
to the rjes-'jug of the Tibetan script except two, -g, -d,
-n, -b, -m, -r, and -l, appear in Lepcha not as postscript
but as superscript; only -ng and its complementarily distributed
anusvāra-like symbol nyín-dó (Tib. nyi-zla 'sun-moon') -ang
[-ɒŋ] differ, being prescript, with -ng preceding the
prescript vowel symbols í, o, and ó; e.g.

＇ ‾ ＾ ｅ ＂ ꝏ ‥; but ꞓ- and ꞔ)-

-k -t -n -p -m -r -l;   -ng   -ang ([-ɒŋ]).

The ninth and tenth members of the rjes-'jug class, -' and
-ɡ, have no corresponding symbol in Lepcha, except for the
possibility that -ǎ is derived from -'. If so, it is
irregular, in being postscript rather than superscript
(unless Haarh is correct in attributing its origin to the
subscript a-chung used in Tibetan as equivalent to the ā
of Sanskrit; 1959, 119).

The ya-btags and ra-btags symbols of Tibetan, which
are subscript, appear regularly as postscript symbols in
Lepcha; e.g.

ɬ , ꞩ; kya, kra [kjə: krə:] .

Something rather similar to the turning principle,   the
mirror image, has been applied within the Lepcha script
itself, to devise ml- from m-; e.g.

ma ꝛ; ꞡ mla;

but the other members of the lateralized series do not
follow this principle, and, moreover, have no model in
Tibetan:

ɬ   ꝋ   ꝯ   ꞇ   ꝗ   ✗

kla   gla   pla   fla   bla   hla

(gla and fla seem to be modifications of ga and fa by
adding a cross-bar or a loop).[9]

III. Khampa Tibetan into Lepcha orthography

Having outlined the orthographic resources available to
Lepcha writers at least by the 1840s (when Hodgson made a
first collection of Lepcha manuscript books), including
alternative means of symbolizing [ə:] in open syllables as
a or as ȃ, and [a] as ǎ or as a, I can now proceed to my
main task of describing how Lepchas seem to have dealt with
the problem of fitting Tibetan loan-words into a Lepcha
mould, bearing in mind the important fact that the majority
of the Tibetans with whom the Lepchas first came in contact
were immigrants from Kham, in the east of the Tibetan-
speaking area, via the Chumbi valley;[10] their descendants
claim Khampa ancestry to this day.[11]

A. Tibetan -a, -ag(s), -ang(s), -ab(s), -am(s), -ar

With this Khampa origin in mind perhaps the most interesting relationship in Lepcha loan-word orthography is:

	i	ii	iii	iv	v	vi
T.	-a	-ag(s)	-ang(s)	-ab(s)	-am(s)	-ar
L.	-ó	-ak/-ók ̷	-ang/-óng	-óp	-óm	-ór/-ó	/-ó ̷
	[-ɔːˡˣ	-ɒk/-ɔː	-ɒŋ	-ɒp	-ɒm	-ɔr/-ɔː]

e.g.

i.
rma	brnya	gla	ja	'dra-'dra	dbu-skra
mó	nyó	ló	có	rán-ró ([ɖ-])	'ú-kró ([t-])
sore	borrow	wages	tea	equal	hair

rgya	kha	mkha'	dbu-zhwa	na-bza'	slob-grwa
gyó/gyá	khó/khá	khó/khá	'ú-shó	ná-zó	lóp-kró ([t-])
hundred	mouth	heavens	hat	clothes	school

bya		snag-tsha	khra	nyi-zla
byó		nók-tshó	hró	nyín-dó
bird/fowl		ink	hawk	sun-moon [symbol]

ii.
ldag	g.yag	(b)klags/klog	phyag	nag	snag-tsha	a-rag
lók	'yók	hlók	chók	nók	nók-tshó	'á-rók
lick	yak	read	hand	black	ink	arrack

bshags	bag-chags	ljags	don-dag	khrag	thag-ring
shók	pak/pók-chó	jó/ják	tán-dók	hrók	thak/thák-ríng
repentence	compassion	tongue	meaning	blood	long distance

lag
lók
hand

iii.
glang	mang	dmangs	gnang		dbang	nang	chang
lóng	móng	móng	nóng		bóng	nóng	chóng/cháng
ox	many	crowd	bless, grant		power	inside	beer

-khang	btang/gtong	zangs	a-zhang	bang-chen	rkang
-góng	tóng/tong	sóng	'á-jóng	póng-cen	kóng/káng
house	dispatch/give	copper	uncle	messenger	foot

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grwa-tshang   bzang-po (ad-ma) yang-rtsi
kra-tshóng [t-] zóng   (pem) yóng-tsu
hermitage   good   Pemionchi (lotus perfection)

iv. zhabs chab   tshab srab   rgyab
    shóp chóp/cháp   tshóp sóp   gyóp/gyáp
    foot water   deputy bridle back

v. lam zam-pa nyams   mnam   lham
   lóm sóm-pu nyóm   nóm   lhóm
   road bridge decline smell boot

vi. bcar   mar   dar   thar   dar
    có   mór   dór   thór   tór/tár
    enter presence of butter spread escape silk

The lip-rounding that has resulted in phonetic spellings
in ó in the Lepcha words in (i) -- (vi) above is one of the
features in the phonetic realization of the /a/ phoneme
in one of the Kham dialects of Tibetan described in Ray 1965
for two speakers from Hor and Dzahuk, to the north west of
Kanze, in north-eastern Kham; e.g.

i. /jáwà/ rgya- India, /ndá/ zla-ba moon
ii. /máqmi/ dmag-mi soldier, /táq/ stag tiger, /syãq/
    bshags repent, /tendáq/ don-dag meaning, /trhàq/ khrag
    blood, /tháq/ thag distance
iii. /tráqmo/ grang-mo cold
v. /láŋgàq/ lam-ka road, /náŋkhà/ nam-mkha' sky, /kháŋ/
   khams Kham, lhàŋ/ lham shoes; cf. also /mombo/ mang-po
   many, /kong/ rkang foot
vi. /yá/ yar up.[13]

I have myself observed lip-rounding in the words glang
'ox', nang 'inside', and gtsang 'Tsang' as pronounced by
Tenzing Namdak, a Khampa of Khungpo Tengchen (the Denchin
Gomba of Teichman 1922, 79, 231), fifty or sixty miles to
the north west of Kanze.

Comparable lip-rounding has also been noted by Walsh
(1905) in the Tromowa dialect, of the Chumbi valley (gro-mo),
on the route by which the ancestors of leading present-day
Sikkimese-Tibetan families entered Sikkim some four centuries
ago; e.g.

i. lo-o gla-ba hire, ro-jo rwa- horn, pho-di pha-gi
   yonder, yo-di ya-gi that up there, nam-zo na-bza'
   apparel
ii. tog-ko skrag-pa frighten

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iii. mong-pu mang-po many, long-po lang-ba rise, se-byom
sbrang-bu bee, long-sha glang-sha beef, phong-po
bang-po bosom, byong brang breast, gyong-bo grang-mo,
cold, tong-bo btang/gtong dispatch/give

v. pho phar yonder

There are, however, a considerable number of exceptions
to the above relationship; e.g.

i	ii	iii	iv	v	vi
T. -a	-ags	-angs	-ab	-am	-ar
L. -á	-ák	-áng	-áp	-ám	-ár; e.g.

i.
lha	sha	dga'	grwa-tshang		bya	ka-ba	na
lhá	shá	gá/gó	krá-tshóng ([t̠ -])		pyá/cá	ká-wó	ná
god	meat	joy	hermitage		bird	pillar	illness

la	rta	nya	na-bza'	bkra-shis		ma-ni
lá	tá	nyá	nám-zó	krá-shi ([t̠ -])		má-nyi
pass	horse	fish	clothes	Tashi (Ding)		mani

ii.
ljags	dmag	phag-ze		chag	sngags
ják	mák	phák-zu		chák/chók	ngá/ngó/ngók
tongue	army	hog's bristle		fodder	magic

iii.
shangs	chang	grang-ba	byang	sprang-po
sháng	sháng	k(h)yáng	cáng	pyáng long-po
nose	beer	cold	north	beggar

iv.
yab	bslabs/slob	rgyab
yáp	hláp	gyáp/gyóp
father	learn/teach	back

v.
khams	khams	gnam	rnam-thar	skam-po
khám	khám	nám	nám-thár	kám-phó
Kham	health	sky	legend	dry

vi.
dmar	bar	dkar-phyogs
már	pár/par	kár-chó
red	middle	white side

These exceptions I take to have entered Lepcha from one
of the Tibetan dialects in which vowel sounds corresponding
to the a of examples such as these have non-rounding as
their lip-action feature; e.g. (Lhasa)

(i) [⁻l̥a _tɕha _tɟadzã: (ii) _dʑa: ⁻mɑ: (iii) ⁻ɕã: ⁻tɕhã:

lha bya   grwa-tshang   ljags dmag   shangs chang

(iv) _jɤp ⁻lɤp (v) ⁻kham ⁻nam (vi) ⁻phɑ: _mɑ:]

yab bslabs   khams gnam   phar mar

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Some of these words have the spread-vowel phoneme /a/ in Ray's Kanze Khampa too, not his rounded-vowel phoneme /á/; e.g. /kà/ ka-ba pillar, /pa/ ba cow, /syà/ sha meat, /ga/ dga' be better, smile, /ca/ ja tea, /na/ na sick, /la/ la pass, /tà/ rta horse, /nya/ nya fish, /khàlaq/ kha-lak food, /jà/ brgya hundred, /kàbò/ dkar-po white, /màbò/ dmar-po red.

Similarly, the vocabulary of the Tromowa and Sikkimese dialects in Walsh 1905 contains: bya bya, kya skra hair, phag-ko phag-pa pig, pyang long sprang-po beggar, bip-kya-po si rgyab-pa whistle.

Exceptionally, -ag(s) corresponds to -ek in Lepcha in the case of khyag(s)-pa 'ice', for which the Sikkimese is khe(k) (Walsh 1905, 21).

B. Tibetan -o, -og, -ong(s), -ob, -om, -or

Since Tibetan words in -a, -ag(s), -ang(s), -ab(s), -am(s), and -ar, when taken into Lepcha, have been symbolized with lip-rounding, backness, and either openness or half-openness ([-ɒ- -ɔ- -ɔ:]), it is reasonable to expect a closer degree of aperture for the contrasting Tibetan finals in o when borrowed into Lepcha; and this is regularly so. I know of the following relationships:

	i	ii	iii	iv	v	vi
T.	-o	-og	-ong(s)	-ob	-om	-or
L.	-o	-ok	-ong	-op	-om	-or
	[-o	-ok	-oŋ	-op	-om	-or/ɷr]; e.g.

i.

gro	do(-)	rdo-rje	gling		lo	hlo	rdo	rmo
kyo	to	dor-ji, dur-ji	líng	lo	lo	hlo	do	mo
wheat	load	Darjeeling		year	south		stone	plough

ii.

g.yog	chog	sgrog		gshog
'yok[14]	chok	rok	([r/ɖ-])	shok
work	fit for	read		cut, cleave

iii.

'grong	gdong	dgongs	tshong/btsongs	stong
krong	([t-])	dong	gong	tshong/tsong[15]	tong
die		face	meditate	trade/sell, Limbu	thousand

grong		gong
kyong/krong	([t-])	gong
village		price

iv.

thob	dpon-slob
thop[14]	pân-lop/lok
get	chief, Penlop (but slob-grwa 'school' is rendered

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as l̀op-kró rather than as lop-kró, perhaps through an association with bslabs).

v. sgom-chen khrom
   gom-chen hrom ([t̠h-])
   hermit market

vi. 'khor-lo phyag-sor skor phor-pa nor
    khor-lo chók-sor kor phor nor
    wheel finger circle cup mistake, wealth; but
    sgor-mo kóm (rupee) coin.

The Lepcha hlók (Tib. klog) is irregular -- one would have expected hlók -- unless the Lepcha loan-word is based not on the present-tense form but on the past-tense form (b)klags.

For the Kham dialect of the Kanze area Ray 1965 ascribes lip-rounding to his /o/ phoneme, with a degree of aperture between /á/ and /u/; his examples include /syòq/ gshog carve, /lòq/ slob teach, /sò/ so tooth, /lhò/ lho south, /mbo/ 'bab fall, /ŋhoŋbo/ sngon-po blue, /nthoŋ/ 'thung drink (cf. Lepcha thang/thóng [thɒŋ], not thúng or thung).

C. Tibetan -u, -ug(s), -ung(s), -ub(s), -um(s), -ur

The correspondences for the finals containing a and o, in sections (A) and (B) above, are pretty regular and almost free from exceptions; but this is not so for Lepcha correspondences to the above finals, containing u. Lepcha offers a choice between a rounded close or closish back vowel, symbolized by ú, and a spread close or half-close back vowel, symbolized by u; and both are to be met with, though the ú spellings are probably the commoner; so I give them first.

1. Lepcha -ú, -úk, -úng, -úp, -úm, -úr

	i	ii	iii	iv	v	vi
T.	-u	-ug(s)	-ung	-ub	-ums	-ur
L.	-ú	-ú/-úk	-úng	-úp	-úm	-úr/-ú
	[-uː	-uː/ɒk	-ɒŋ	-ɒp	-ɒm	-ɒr/uː] ; e.g.

i. sku dbu zhu chu 'khru bcu-dpon
   kú 'ú shú chú hrú-búm ([t̠h-]) cú-p̂an
   body head petition water wash/holy vessel leader of ten

ii. <u>bzhugs</u> <u>'brug</u> <u>sku-rzugs</u> <u>thugs</u> <u>smyu(g)-gu</u> <u>mjug</u> <u>rmugs</u>
   jú   prú   kú-zú   thú   nyú-gú   júk   múk
   sit   Bhutan body   mind   pen   end   mist

    <u>'ug-pa</u>
    wúk-po
    owl

iii. <u>chung</u> <u>'khrung</u>   <u>gsung</u> <u>rlung</u>
    chúng hrúng ([ʈh-]) súng lúng
    small be born   speak wind

iv. <u>sgrub-bde</u>   <u>grub-thob</u>   <u>nub</u>
   rúp-di ([ɖ-]) rúp-thop ([ɖ-]) núp
   Dubde   saint   west

v. <u>shum</u> <u>'bum</u>   <u>yum</u>
   shúm búm   yúm (also, irregularly, yám)
   weep one hundred thousand mother

vi. <u>spur</u> <u>gur</u> <u>'gyur</u>   <u>khur-ba</u> <u>phur-bu</u>
   púr   kúr gyúr/gyú khú   phúr-bo, phu-bo
   corpse tent change bread   Jupiter, Thursday

Ray 1965 describes his Kham phoneme /u/ as being rounded and back; his examples include: /syuq/ 'ju/zhu melt, /luo/ klog read, /mhùq/ rmugs mist, /nyhùq/ smyu(g)-gu pen, /sùŋ/ gsum three, /lùŋ/ rlung wind, and /cuciq/ bcu-gcig eleven.

2. Lepcha -u, -uk, -ung, -up, -um

The other set of correspondences, of Tibetan -u, -ug(s), -ung, -ub, -um, and -ur with Lepcha -u, -uk, -ung, -up, and -um, is as follows:

	i	ii	iii	iv	v	vi
T.	-u	-ug(s)	-ung	-ub	-um	-ur
L.	-u	-u/-uk	-ung	-up	-um	-u
	[-w:	-w:/ɤk	-ɤŋ	-ɤp	-ɤm	-w:]; e.g.

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Back:mid, Text:mid :: mid-W:0.24, B-Peak:74 :: gamma:1, B:145, W:220

i. g.yu   bsu   'bu   'ju/zhu bu-tsha
    'yu   su   bu   ju/shu   nu-tsho
    turquoise   accompany   worm   melt   clan, generation

ii. dbyug lug   phyugs   phyug-po   rgyug   -gzugs
    'yuk   luk   phyuk   phyuk-bo   gyuk   mu/ma-zu
    throw sheep herd   rich   run   body

iii. snyung thung   gsung
     nyung   thung   sung/súng
     ill   short/scarce chronicle

iv. sgrub
    rup ([ɖ-])
    get

v. snum   zlum-po
    num   dum-po/pu
    oil   pillar

vi. phur-pa   phur-bu
    phu-bo   phu-bo, phúr-bo
    peg   Jupiter, Thursday

Ray's Kham-dialect phoneme /ɨ/, 'mid central unrounded' (1965, 5), has among its examples /mbɨ/ 'bu worm, /cɨ/ bcu ten, /gɨ/ dgu nine, /sɨ/ su who, /chɨ/ chu water, /ndzɨgɨ/ mdzug-gu finger, toe.

D. Tibetan -ud, -un, -ul, -us

My Lepcha correspondences with Tibetan -ud, -un, -ul, and -us are few in number; as regards vowel quality they correspond to the minority type given above, at (C2), for correspondences with Tibetan -u, -ug(s), -ung, -ub, -um, and -ur:

	i	ii	iii	iv
T.	-ud	-un	-ul	-us
L.	-ut	-un	-u	-u/-ú
	[-ʏt	-ʏn	-ɯː	-ɯː/u:]; e.g.

i. phud   'tshud mthud   bdud   yud
   phut   tshut   thut   dut   yut
   first-fruits   enter   join together   devil moment

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ii. <u>sku-mdun</u> <u>bdun-phrag</u> <u>btsun-po</u> <u>thun</u>   <u>dgun</u>(-<u>ka</u>)

    <u>kum-dun</u> <u>dun-hrók</u> <u>tsun-mo</u> <u>thun</u>   <u>gun</u>

    presence week   revered space of time winter

iii. <u>'bul</u>/<u>phul</u> <u>sul</u>   <u>sbrul</u> <u>'phrul</u> <u>'dul</u> (exceptionally <u>dngul-chu</u>)

    <u>phu</u>   <u>su</u>   <u>bu</u>   <u>hryu</u>   <u>tyu</u>   <u>ngúl-chu</u>

    offer   trench snake magic   tame   mercury

iv. <u>nus</u>; but <u>lus</u> <u>dus</u>   <u>rgyus</u>

    <u>nu</u>;   <u>lyú</u> <u>tyú</u>, <u>tú</u>'⁶ <u>gyú</u>

    dare;   body time   intelligence.

Exceptionally, the Lepcha correspondence with <u>'khrud</u> 'wash' is not <u>khyut</u> but <u>khyú</u> (cf. Sikkimese and Tromowa 'khyu-u'; Walsh 1905, 33).

Corresponding to <u>sbrul</u> 'snake' Sandberg 1895 gives 'beu (byu)' (26) for Sikkimese, Walsh 1905 gives 'bi-u' for Sikhimese, 'bi-u' for Lower Tromowa, and 'du; bu' for Upper Tromowa (30), and Byrne 1909 gives 'bu' for Bhutanese.

Ray's phoneme /ɨ/ occurs in /drɨ/ <u>sbrul</u> snake and in /gɨŋkhà/ <u>dgun-ka</u> winter; for 'seven' <u>bdun</u> he gives /deŋ/, containing the front-spread-vowel phoneme /e/ (1965).

E. Tibetan -<u>od</u>, -<u>on</u>, -<u>ol</u>, -<u>os</u>

For these four Tibetan syllable finals the corresponding Lepcha finals are:

	i	ii	iii	iv
T.	-<u>od</u>	-<u>on</u>	-<u>ol</u>	-<u>os</u>
L.	-ât	-ân	-â/-a	-o/-â
	[-ə:t	-ə:n	-ə:	-o:/ə:]; e.g.

i. <u>gcod</u> <u>bod</u> <u>bya-rgod</u> <u>'dod</u>   <u>mchod</u> <u>yod</u> <u>mdzod</u>

    cât   pât   gât   dât/da chât   yât   zât

    cut   Tibet vulture   desire   sacrifice have treasury

    <u>'od</u>   <u>dus-tshod</u>

    wât   tú-tshât

    light season

ii. <u>tshon</u> <u>'byon</u> <u>dkon</u> <u>don</u>   <u>mgron</u>   <u>dgon-pa</u>

    tshân cân   kân   tân   grân/rân ([ɖ-]) gâm-po/-pú/-bo

    paint go   scarce meaning invitation   monastery

    <u>yon-tan</u>   <u>bcu-dpon</u>   <u>dpon-slob</u>

    yân-tan   cu-pân   nân-lop/k

    excellence leader of ten teacher/Penlow

(smon, however, also corresponds to mun in Lepcha when unstressed, as in mun-lom [mɤ̃n-] 'prayer'; dpon, similarly, also corresponds to pun in pun-di 'queen', and to pa-n in pa-no 'king', Tib. dpon-po 'lord', a title and term of address in Kham).

iii. gsol   'bol   skol   'dzol

    sâ   bâ   kâ   zâ

    offer/serve carpet boil mistake

iv. chos   gos   tshos   thos[16]   dos

    cho (earlier sho)   ko   tsho   thyo   do/to

    religion/book   clothing colour hear   load
(for chos in the sense of book' cf. also 'cho' in Sikkimese; Sandberg 1895, 43).

spos   'os   dngos

pâ   wâ/wa   ngâ

incense suitable reality

For -od in mchod the corresponding Lepcha finals are: -ât, -et, -e, and -o; e.g. chât phu 'offer a sacrifice' (mchod phul), chet mât tho 'make an offering', che-bo chet, chât-ten, cho-ten 'chorten' [stupa], presumably four different phonetic spellings for the same Tibetan lexical item varying with the dialect of origin from a central to a front vowel quality. It is interesting to note that the vowel sound that Ray heard for northern Khampa in bdun was more than centralized, so that he was obliged to assign it to his /e/ phoneme (front spread), as in /deŋ/ (1965, 9); it is not surprising, therefore, that he should also have assigned the vowel in bod 'Tibet', yod 'is', and dgon-pa 'monastery' and ga-tshod 'how much' to /e/, as in /peq/, /yeq/, /gemba/, and /katsheq/.

From my Khampa informant, Tenzing Namdak, I heard bzos in bzos-song 'made' pronounced with a central spread vowel.

F. Tibetan -ad, -an, -al, -as

The usual Lepcha correspondences with Tibetan -ad, -an, -al, and -as are:

	i	ii	iii	iv
T.	-ad	-an	-al	-as
L.	-et	-an/-en	-e	-e
	[-et	-ɛn	-ɛː/eː	-ɛː]; e.g.

i. gshad   khyad   ltad-mo   lhad   thams-cad;   but   pad-ma

    shet   khyet   tet-mo   hlet   thám-cet   pe-ma

    tell   difference   spectacle alloy all   lotus

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ii.
spyan	snyan	nyan	gdan	gsan	'gran		dran
can/cen	nyan	nyan	dan/den	sen	gyan		kren
eye	ear	listen	cushion	hear	compete with	long for

iii.
khral	gral	zhal	bal	gsal	rgyal	
khe	khe	she/jál	pe	se	gye/gyál	
revenue	seat	face	wool	clear	win	

iv.
sras	gnas	las		dbu-rngas	mkhas-pa	sdong-ras
se	ne	le		'u-nge	khe	dong-re
son	cave	action/fate	pillow	wise	wick

'bras-ljongs; but	'bras-khu
ren-jong [ɟ/r-]	byá-khú[17]
Sikkim	rice water

In kren above the Lepcha final is not [en] but [-en];
exceptionally, Tibetan -an corresponds to -ón, e.g. sman
món medicine (cf. Sprigg 1966, 8). Exceptionally, Tibetan
-al corresponds to Lepcha -ál in nál-lóm 'dream' (mnal-lam),
nyál-hri 'couch' (nyal-khri), gyál/gye 'win' (rgyal), and
and jál/she 'mouth' (zhal).

Ray 1965 gives the following comparable forms in /e/
from the Kham dialect of Kanze: (i) /syèq/ bshad tell,
/kèq/ skad language, /geqpo/ rgad-po old man, /còjeq/ bco-brgyad
eighteen; (ii) /zyeŋba/ gzhan-pa other; (iv) /kandreq/
ga-'dras how.

G. Tibetan -e, -egs, -eng, -eb(s), -em(s), -er, -ed,
-en, -el, -es

The above Tibetan finals correspond with Lepcha as
follows:

	i	ii	iii	iv	v
T.	-e	-eg(s)	-eng	-eb(s)	-em(s)
L.	-e (-u, -i)	-e(k)	-eng (-ung)	-ep	-em (-âm)
	[-e: -u: -i:	-e:/ek	-eŋ -ɤŋ	-ɛp	-em -ə:m]; e.g.

i.
kh(y)e	'dre	nye	'bre	dge-ba	bde-ba;
kh(y)e	re,	gre nye	fri	ge-wó	de-wó;
cheap	devil	near	measure	merit	joy;

tshe	rtse;	rdo-rje		sgrub-sde
tshu	tsu;	dor-je,	dor/dúr-ji	rúp-di ([ɟ-])
life	peak;	dorje, jewel		Doobdi

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ii. legs-rgya 'gegs   'thegs reg
     le-gyó   ge(k)   the   rek
     good deed obstruct   depart touch

iii. 'phreng-ba; but seng-ge
     ph(y)eng-bo;   sung-gi
     rosary   lion

iv. 'thebs gleb
     thep   lep ([ʔl-])'⁶
     grasp   press down

v.   tshems ltem; but sems btsems
     tshem   tem;   sâm   tsâm
     tooth   full;   mind sew

	vi	vii	viii	ix	x
T.	-er	-ed	-en	-el	-es
L.	-er/-e	-et	-en	-e	-e (-a/-â)
	[-ɛr/e:	-et	-ɛn/en	-e:	-e: -ə:]; e.g.

vi. gter   ner   gser gnyer-pa   spyi-nyer sder-ma
     ter   nyer   jer   nyer-bo   ci-nye   la-/lá-de
     treasure wane   gold housekeeper steward   plate

vii. phyed   skyed   shed
     phyet ([ph-])   k(y)et   shet
     half   interest strength

viii. mkhyen rten   bden   chen-po
      khyen   ten   den ([-en])   chen-po/-bo
      know   established   belief   large

ix. brel-ba   drel sbrel;   exceptionally shel
     nye-wo   kre   bye;   sher
     business mule fix together;   glass

x.   bzhes   bgres-po   nyes; but tshes nges
     je ([ʒ-])   kre ([t-])   nye;   tsha   nga/â
     eat, drink   old   wrong;   date   truth

     rjes
     je
     after

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Since [ts(h)-], [s-], and [ŋ-] are not, or formerly were not, phonetically possible in close and half-close front-vowel syllables in Lepcha, the back and central vowels [-ɯː], [-ɤ-], and [-ə:] (-u, -a/-a) have been used in order to preserve the initial [ts-], [tsh-], [s-], or [ŋ -], hence the spellings tshu, tsu, sung-, tsha, and nga/nga above (but, exceptionally, -es correspon: to Lepcha -ó in zó (mdzes-po) 'beautiful').

It is interesting to note that the Lepcha orthographers who wrote -i for Tibetan -e in word-final position ([- ɩ]) chose to follow their ears rather than their eyes; e.g.

T. rdo-rje   sgrub-sde seng-ge   -e [- ɩ]
L. dor-/dur-ji rúp-di   sung-gi   -i [-i].

H. Tibetan -i, -ig(s), -ing, -ib, -im(s), -ir, -id,
                                              -in, -il, -is

With the above Tibetan syllable-finals the corresponding Lepcha finals are:

	i	ii		iii	iv		v	
T.	-i	-ig(s)		-ing	-ib		-im(s)	
L.	-i	-ik/-i	(-uk/-u)	-ing	-ip	(-up)	-im	(-um)
	[-iː	-ɩk/iː	-ɤk/ɯː	-ɤŋ	-ip	-ɤp	-im	-ɤm]; e.g.

i. sli   bzhi   mi   khyi khri   shi dri
    li   ji/shi mi   khyi hri ([ʈh-])   shi ri ([ɖ-])
    apple four   man   dog   seat   die smell

    ri   spyi-gnyer 'bri/bris
    ri   ci-nye   pi (cf. Sikk. pi; Sandberg 1888/95, 51)
    mountain steward   write

ii. mig rig   rigs; but tshig rtsig-pa yig   gzigs
     mík rík/ri   ri;   tshuk tsuk-po yuk   zu
     eye knowledge race;   word wall   letter see

iii. shing zhing gling   snying ring lding-dpon
     shíng shíng líng   nyíng ríng díng-pân
     wood field region/slope   heart far subaltern

iv. grib;   but srib   zhib   bzhibs
     kríp ([ʈ-])   sup   shup   zhíp/zup
     stain   darkness flour suck

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v. <u>gzim</u>　　<u>khyim</u>　<u>khrims</u>
　　<u>zum</u>/<u>zím</u>　<u>khyum</u>　<u>hr(y)ím</u>/<u>hryum</u>　([tʰ/tʃ-])
　　sleep　　house　law

	vi	vii	viii	ix	x
T.	-<u>ir</u>	-<u>id</u>	-<u>in</u>	-<u>il</u>	-<u>is</u>
L.	-<u>ír</u> (-<u>er</u>)	-<u>ít</u>	-<u>ín</u> (-<u>un</u>)	-<u>i</u> (-<u>u</u>)	-<u>i</u> (-<u>u</u>)
	[-ɩr　-ɛr	-it	-ɩn　-ɤn	-i:　-ɯ:	-i:　-ɯ:]; e.g.

vi. <u>btsir</u>
　　<u>tser</u>
　　squeeze

vii. <u>'khrid</u>　<u>gnyid</u>　<u>brjid</u>
　　<u>hrít</u>　　<u>nyít</u>　<u>jít</u>
　　lead　　sleep　splendour

viii. <u>drin</u>　　　<u>spyin</u>　<u>rin-chen</u>;　　　　　　but <u>zin</u>
　　<u>krín</u> ([t-])　<u>pyín</u>　<u>rín-chen</u>;　　　　　　　<u>sun</u>
　　kindness　　glue　Rinchen (<u>rin</u> 'value');　seize

ix. <u>dril-bu</u>;　　　　　　　　　　　but <u>bsil</u>
　　<u>hri-bo</u> ([ʈh-]), <u>kri-bo</u>/<u>po</u> ([ʈ-]);　<u>su</u>
　　bell;　　　　　　　　　　　　　　wash

x. <u>gnyis</u>　<u>mkhris-pa</u>　<u>phyag-bris</u>;　　　but <u>rtsis-pa</u>
　<u>nyi</u>　　<u>khi-bo</u>　　<u>chók</u>-/<u>chák</u>-/<u>chá-ri</u>;　<u>tsu-bo</u>
　two　　gall　　　letter;　　　　　　　astronomer

In section (G) above I pointed out that Lepcha spellings in u and a/â corresponding to Tibetan e for syllables with initial [ts(h)], [s], and [ŋ] were due to the phonetic impossibility of combining those initials with a Lepcha half-close front spread vowel (e), hence either the syllable-initial consonants or the vowel ([e]) needed to be modified; in their case it was the vowel that was accommodated to those types of consonant. Comparable modifications have been applied to Lepcha syllables corresponding to Tibetan finals in -ig(s), -ib, -im, -in, -il, and -is where the Lepcha syllable has as its initial consonant [j], [ts(h)], [z], or [s]; in order to preserve the syllable-initial consonant there has been a change of vowel from i to u ([ɩ, i(:)] to [ɤ, ɯ:]). Similarly, the Lepcha use of e in (vi) tser corresponding to the Tibetan btsir may be because [ts-] can combine with [-er] but not with [-ɩr].

Though the limited powers of combination of syllable-initial [j], [ts(h)], [z], and [s] can be invoked to explain

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some instances of -uk, -up, -um, and -u ([-ɤk, -ɤp, -ɤm, -ɤn, -ɯ:]) as the corresponding Lepcha syllable finals to -ig, -igs, -ib, -im, -in, -il, and -is, that explanation will not serve for the -yum of such lexical items as khyum and hryum ([ʈʃ-]) and the -up of shup (Tib. zhib). As far as khyum is concerned, Benedict wishes to treat the Lepcha -yum as a reflex of PST *-yum, with -im as the Tibetan reflex and -iôŋ as the Chinese (personal correspondence), the Lepcha being, therefore, the most conservative of the three. My main reason for resisting the significance that he gives to the Lepcha form here is that I believe khyum to be less than three of four hundred years old in the language. I take khyum to have been introduced into Lepcha to account for the substantial stone-built structures that the Lepchas found early Tibetan immigrants introducing into Sikkim, houses appropriate to the much higher altitudes of Tibet, with its much colder climate, from Yatung, for example, in the Chumbi valley, at 9,950 feet. Such houses are well suited to areas of Tibetan colonization in northern Sikkim, where Lachen and Lachung are both at 8,800 feet; but for the warmer climate of the lower southern valleys, ranging from Peshok (2,600), Rongli (2,700), Rhenock (3,200), and Kalimpong (4,100) to the three former capitals of Sikkim, Pemionchi (6,910), Tumlong (5,290), and Gangtok (5,800), it was the Lepcha li, which could be easily dismantled to meet the needs of a semi-nomadic population, that was the more suitable type of dwelling.

Tentatively, I would account for the the -yu- ([-jɤ-]) of khyum and hryum, and the -u- of shup, as a fairly creditable phonetic approximation to the somewhat centralized close to half-close front vowel ([ɪ]) that I have noted for Sikkimese Tibetan in, for example, [chɪm], [thɪm], [zɪm], and [ɲɪm] (khyim, khrims, gzim, nyi-ma), as opposed to the close front vowel ([i]) that I have noted for original Lepcha lexical items spelt with -im and -ip ([-im, -ip]); e.g. 'a-pím skirt, h(y)íp shave.

For Khampa forms corresponding to Classical Tibetan forms spelt with -i(-) Ray 1965 gives:

i. /syɨ/ shi die, /zyɨ/ bzhi four (Sikkimese zhi; Sandberg 1888/95, 59), /rɨ/ mountain ri, /chɨ/ khyi dog;

ii. /syɨq/ shig louse, /nyɨq/ mig eyes;

iii. /nyhɨng/ snying heart; vii. /nyɨq/ gnyid sleep.

The degree to which the Lepcha language has admitted loan-words from Tibetan might appear from my lists of examples to be very great indeed; but it should be borne in mind that it varies with the spoken dialect and with the written style. The two dialects associated with Sikkim and with the court life of the Sikkim ruling family, the Ilammo and the Renjongmo dialects, contain loan-words, especially honorific words (cf. Mainwaring 1876, 133-5), that were unfamiliar to my informant K.P. Tamsang, a

Tamsangmo-speaker from Bong Bustee, near Kalimpong: the Kalimpong area was under Bhutanese administration from approximately 1707 to the end of the Anglo-Bhutan War, in 1865. Further, Mainwaring included in his Dictionary words from the Lepcha Buddhist text ta-she sung and from the Gospel translations that may well be confined to literary usage, especially where the translation is from a Tibetan original. The number of loan-words that I have cited in my examples is, therefore, likely to be misleadingly large.

NOTES

1. On the origin of the Lepcha script cf. Haarh 1959 (108), Chakraborty 1978 (xvii-xix), and Sprigg 1982, 20 and 29-30; and, for the Lepcha population, Sikhim 1894, 27, 259, and Darjeeling 1947, 77.

2. Sikhim 1894, 4.

3. From Sikhim 1894 (257-8) I calculate the total population of the five monasteries to which Lepchas could be admitted as 113; but probably a fair proportion of these monks would have been of Tibetan stock (Sikkim Bhutiyas).

4. Cf. de Kőrös 1834, 1-2, 17; on the syllabic status of ༠ , ༠ , ༠ (ka, kha, ga), etc. in an otherwise alphabetic writing system see Sprigg 1978, 185.

5. Cf. Sprigg 1983, 316.

6. Cf. Sprigg 1983, 315-23, and Sprigg to appear.

7. This turned relationship was first brought to my notice by my former colleague Burton-Page, Lecturer in Hindi and Nepali, at the School of Oriental and African Studies; later I found the same relationship published in Haarh 1959. I cannot, however, follow Haarh in attributing this process to Chinese influence: 'the old Lepcha script was written in vertical columns, in Chinese style from the right to the left, while the single word was written in Indo-Tibeto-Burman style in the normal horizontal direction' (110); and 'the old Lepcha script was shaped at a time when the Lepchas were under Chinese influence' (113). There is no evidence that the Lepchas, in the impenetrable forests of Sikkim, south of the Himalayas, were ever in contact with Chinese, except very indirectly, from the 16th century onwards, through immigrants from eastern Tibet.

8. Cf. de Kőrös 1834, 21, and the log-yig drug (ta, tha, da, na, sa, and kṣa of Das 1902, xix; for an undated gloss on the rgyal-rabs gsal-ba'i me-long referring to na-log, ṣha-log, and tha-log see Miller 1976, 90, 92.

9. This device therefore follows the principle used in representing the assibilated initial clusters of Greek: ༠ , ༠ , ༠ .

10. Hodgson's collection of Lepcha books · as made in the

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East India Company's newly established settlement of Darjeeling in the 40s of the last century, and was deposited in the India Office Library in 1864. The books, approximately 27 in number, have been bound in volumes 77, 79, 80, and 81 of the Collection. They are probably the oldest extant.

11. Cf. also Sprigg 1982, 19-20; the Sikkim royal family traced its origin to Minyak, Menyak, or Menya, the valley of the lower Nya, or Yalung, to the south west of Darchendo (Tachienlu), between Lithang and Derge (Sikhim 1894, 7, note; cf. also Teichman 1922, 4.

12. But [-ɔ̃:] when the syllable-initial consonant has nasality, e.g. mo, nyo; cf. Sprigg to appear.

13. It is noteworthy that Ray 1965 does not report comparable lip-rounding for the Tibetan dialect of Bathang in southern Kham, though it is considerably nearer to Sikkim than Kanze is.

14. Commonly pronounced [ʔjɔk] and [thɔp] in the Kalimpong area, whence the spellings 'yúk, thúp; cf. Mainwaring 1876: 'The Lepchas are apt to pronounce this letter [o] as u, and hence when writing, to confound it with ꠲, this error should be avoided and corrected in the Lepchas' (9).

15. Cf. Sikhim 1894: 'The Lepchas and Bhuteas call them [the Limbus] Tshong (which in the vernacular means 'a merchant' and the Limbus were the chief cattle-merchants in Sikhim)' (37). This etymology, though doubtful, seems to me more likely than the alternative suggestion gtsang 'Tsang', because gtsang should have given a Lepcha spelling tsóng ([tsɒŋ]).

16. The final -yú of the Lepcha lyú and tyú may be an attempt at a phonetic spelling for the close front rounded vowel ([y]) of lus and dus as pronounced in the Lhasa dialect; cf. also thyo for thos (Lhasa [thɵ̀:]) at (E) below.

17. Cf. also Sikkimese [bjaʔ] 'paddy', from my own notes, and, from Walsh 1905, Sikkimese and Tromowa bya-su 'bras-sus 'grain (parched)' (19).

18. The Lepcha syllable-initial glottal-plosive clusters are not distinguished orthographically from simple initials apart from [ʔj-] versus [j-] ('y- v. y-); they comprise: [ʔm-, ʔɲ-, ʔj-, ʔl-, ʔs-, ʔr-] (Sprigg 1966, 6-8).

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