ORIGIN OF DUHUMBI NON-NATIVE AND MARGINAL PHONEMES AND ALLOPHONES

Accompanying ZIP files: DZ.zip; LH.zip; TR THR DR.zip

As is explained shortly in §2.2 of the Duhumbi grammar, Duhumbi has a number of non-native and marginal phonemes and allophones whose attestation in the language is largely restricted to loan lexemes. This section discusses these phonemes and their respective origins. Lexemes with accompanying recordings are shaded grey.

ORIGIN OF THE NON-NATIVE RETROFLEX CONSONANT PHONEMES

Table 1 presents a list of all attestations of the retroflex consonant phonemes in the lexicon and their source lexemes and forms. In addition to the lexical items in Table 1, there is also a large number of lexical items where Duhumbi has an alternative lexeme or an alternative pronunciation without the retroflex consonant, and these have not been included in this list. The zip file TR THR DR.zip contains recordings of the shaded examples.

TABLE 1. NON-NATIVE CONSONANT PHONEMES AND THEIR ORIGIN LEXEMES.

lexeme		gloss	origin	gloss			
tr[t]							
batro	bartor	parrot	AS ভাটো bhatou,	parrot			
			TSB bato:				
gotrap	gɔːtap	armour	Tib. go-krab	armour, coat of mail			
maktro	makţɔː	war	Tib. dmag-	war			
			ḥkhrug				
metrom	meţɔm	matchbox	Tib. me-sgrom	fire box			
ngosumtrimme	ŋɔːsumʈimme	really	Tib. ṅo-so	result, response, reaction			
potrang	portan	incense stick	TT pøţaŋ	incense sticks			
trak	ţak	truck	ENG truck	truck			
tra	taː	obedience	Tib. phra	phra subtle, minute			
tra shi {da}	ta: ci {da:}	be obedient	Tib. phra-ma	to cheat, to make malicious			
			byed-pa	gossip, to slander			
trashiyangcho	taːɕijaŋtɕʰɔː	auspiciousness and	Tib. bkraḥ-śis	auspiciousness and prosperity			
�		prosperity	g.yaṅ-chags				
tre	te (nat.	year of monkey	Tib. sprel	monkey, year of monkey			
	[wixq])						
tring	tiŋ	Corrugated	HIN टीन trīn 'tin'	Corrugated Galvanised Iron sheet			
		Galvanised Iron					
	2	sheet					
truktru	tuktu	heavy woollen	Tib. btsugs-sgrug	lit. 'pierce-pluck'			
		blanket					
thr [th]							
kangthri	kaŋtʰi	chair	Tib. kaṅ-khri	chair			
ngangthruk	ŋaŋtʰuk	goose chick	Tib. ṅaṅ -phrug	young of a goose			
thrim {da}	thim {dax}	convict (v.tr.)	Tib. khrims-pa	rule, law, regulation			
thrim	thim	law, rule, regulation	Tib. khrims	rule, law, regulation			
throbata 🕸	t ^h ɔːbaːtaː	fearful mask	Tib. khro ba kra	fearful mask			
thrungthrung	t ^հ սդt ^հ սդ	black-necked crane	Tib. khruṅ-khruṅ	crane			

thrung {da}	tʰuŋ {daː}	be born (H)	Tib. ḥkhruṅs-pa	born, give birth, arise (H)
zhukthri	zukt ^h i	throne (H)	Tib. bźugs-khri	chair (H)
dr [d]	1 40(2	()		()
cakdrom	tcak¹dəm	steel box	Tib. lcags- sgrom	iron box
dra	da	enemy	Tib. dgra	enemy
dra chak {ta}	da: tcʰakta:	be disciplined	Tib. dgra	enemy
drandrin	dandin	reception	Tib. mgron-	invite guests
			ḥdren	
drangbu	daŋbu	honest	Tib. draṅ-po	honest, straightforward
dramze 日	damze	Brahmin	Tib. bram-ze	Brahmin
drangnga	daŋŋa	urinary tract infection	Tib. graṅ-nad	gonorrhoea
drangdu le {da}	daŋdu le {da}	steam raw cotton for purification	TT łaŋḍu ~ ḍuḍu	steam cotton thread to increase its' strength
dre 🕸	фе	demon	Tib. ḥdre	ghost, demon, evil spirit
dri	di	yak cow	Tib. ḥbri	female yak
dribu 🕸	dibu	devotion	Tib. ḥgri-ba	attachment, devotion
dribu 🕸	dibu	fruition	Tib. bras-bu	effect, fruition, result, goal/aim
drinlam 😩	dinlam	karmic debt	Tib. drin-lan	repaying or returning kindness, gratitude, showing gratitude, repay a favour
dringdring	diŋdiŋ	healthy	TT diŋdiŋ	healthy
dripa	dipa	central warp rod	Tib. gril-ba	wrap (v. tr.)
drok ⊕	фж	support (in rel. sense)	Tib. grogs	friend, companion, assistant, helper
droma	dɔːmaː	bulrush	Tib. gro-ma	bulrush
druba 🚭	dubar	religious practitioner	Tib. sgrub-pa	siddha, accomplished master
drukpa	dukpa:	sixth	Tib. drug-pa	sixth
drup {ta} �	dup {ta}	achieve, practice	Tib. sgrub	achieve, accomplish, complete; do, perform, cultivate, practice
drupzhi	dup¹zi	door frame	Tib. gru-bźi	square
jikdra	dzikda:	fear	Tib. ḥjigs-skrag	fear
khandro(ma)	kʰandəː (ma)	fairy	Tib. mkhaḥ- ḥgro	fairy, dakini
lamdro 🚳	lamdər	luck	Tib. lam-ḥgro	luck
ledripa 🚳	ledipa:	karmic obscuration	Tib. las-kyi grib- pa	karmic obscuration
lejumdre 🏟	ledzumde	karmic cause and effect	Tib. las-rgyu- ḥbras	causality of actions, principle of cause and effect
mandro	mandər	medicament	Tib. sman-sgrub	various medicines
namdru	namdu	airplane, helicopter	Tib. gnam-gru	airplane
ngodrup 🚱	ŋɔːdup	accomplishment	Tib. dṅos-grub	accomplishment, achievement, siddhi
ngonedrangne	ŋɔːneːd̞aŋneː	truthfully	Tib. dṅos-gnas draṅ-ṅes	'actually, really, truly' and 'genuine, provisional'
tsondru 🏟	tsəndu	effort	Tib. btson- ḥgrus/btson- sgrus	strong effort, vigour, diligence

As is clear from the semantic fields that the lexemes of Table 1 belong too, mainly religious terms, relatively modern tools and technologies, and more complex feelings, emotions etc., these terms represent rather recent loans into Duhumbi from the source languages. They occur most frequently in narrations of Bodish origin, such as the Ling Gesar and Khandro Drowa Zangmo stories: the source language is thus mainly Tibetan, whether directly or indirectly through Brokpa or Chocangaca. Older Bodish loans into Duhumbi with clusters have largely preserved their original pronunciation, even in those lexemes where Central Tibetan varieties now pronounce a retroflex phoneme. The only lexeme for which a loan origin could not yet be found is *trimba* [timba] 'red sky'.

ORIGIN OF MARGINAL CONSONANT PHONEME /LH/

The marginal consonant phoneme /lh/ appears to occur only in two native lexemes, namely beylhap 'flame' and khowlhap 'wave', although there is a Tibetan noun rlabs 'wave, billows' that may be the root of these compounds. Some speakers will also use the phoneme /lh/ in hangpa [$\frac{1}{2}$ water vapour', although the native lexeme appears to be hangpa [$\frac{1}{2}$ hangpa:], cf. Tibetan rlan-pa 'vapour, steam'. The lexemes lhak { $\frac{1}{2}$ [$\frac{1}{2}$ water $\frac{1}{2}$ to exceed', lhaken [$\frac{1}{2}$ also have clear Bodish cognates, namely the Tibetan lexemes lhag-pa 'to be left, remain', lhag 'exceeding, more, beyond, excellent, surpassing, left-over, more than', and lhag-ma 'leftovers and remainders, excess, remaining portions, extra, surplus'. Probably related is also Duhumbi lhakta zej { $\frac{1}{2}$ lakta: zej] 'to make up something'. The zip file LH.zip contains recordings of the shaded examples.

There are several instances where the alternation between onsets l and h in modern Western Kho-Bwa varieties has prompted the reconstruction of an onset cluster h. In that same section, it is also observed that many of the instances that attest to this alternation, Khispi, Duhumbi, Khoina h vs. other l have a written Tibetan spelling with a superscript syllable h and h and h and h are a written Tibetan spelling with a superscript syllable h and h and h and h and h are a written Tibetan pronunciation with a voiced lateral approximant h are root of the Duhumbi lexemes 'flame' and 'wave', and perhaps also 'to be in excess' may perhaps be added to this list. The exact ramifications that this observation may have for the reconstruction of Tibetan roots where in the spelling the syllable h is superscribed by another syllable, and roots with the spelling h and is yet to be determined.

Religiously educated speakers realise an unvoiced lateral fricative /lh/ in those lexemes of Bodish origin where other speakers realise a lateral approximant /l/, such as la [la: ~ la:] 'deity', cf. Tib. lha [la:] 'deity' and compounds that contain it, e.g. lhakhang [lakhang [lakhang] 'temple', cf. Tib. lha-khan [lakhang] 'temple', and lhabrujpa [labrujpa: ~ labryjpa:] 'painter of religious images', cf. Tib. lha-bris-pa [ladipa:] 'painter of religious images'. This is also observed in Standard Bhutan Tshangla (Bodt 2014: 401). Finally, some Duhumbi lexemes with a lateral approximant have an alternative realisation with a lateral fricative, such as lakpulikpi [lakpulikpi ~ hakpuhikpu ~ lakpulikpi 'feckless' and lo [lo: ~ lo:] 'South', cf. Tibetan lho 'South'.

ORIGIN OF NON-NATIVE CONSONANT ALLOPHONE /dz-/

The non-native consonant allophone /dz-/, occurring exclusively in onset position in a limited number of loan lexemes, is realised only by religiously educated speakers. Though this affricate may have been part of the original Proto-Western Kho-Bwa phoneme inventory, it has since been palatalised to /dz-/ in Khispi and Duhumbi. In loan lexemes, however, the voiced alveolar affricate

is commonly realised as voiced fricative /z/ by uneducated Duhumbi speakers: a similar observation can be made in Standard Bhutan Tshangla (Bodt 2014: 402). Some attestations of the voiced alveolar affricate with their source lexemes include zong [zon ~ dzon] 'fortress', cf. Tib. rdzon 'fortress'; zakazoko [za:ka:zo:ko: ~ dza:ka:dzo:ko:] 'messy', cf. Tib. dza-dzor ~ dza-re dzo-re 'msessy, untidy, junk'; zambuling ~ zamling [zambuling ~ dzambuling ~ dzamling] 'world', cf. Tib. dza-bu-glin 'world' and zane [za:ne: ~ dza:ne:] 'smallpox', cf. perhaps Tib. dza-tshag-nad 'pockmark-disease'. Examples on record where, on basis of the Chöke spelling, would expect the affricate dz-dz can be found in the zipt file DZ.zip, and include zong [zon ~ dzon] 'fortress', cf. Tib. rdzon 'fortress' and zonon [zo: ~ zo:mo:] 'male/female yak-cow crossbreed', cf. Tib. mdzo and mdzo-mo.

ORIGIN OF NON-NATIVE VOWEL ALLOPHONES /Ö, Ü/

The close-mid, front rounded vowel /ö/ is sometimes realised in loan lexemes in which the original lexeme, as reflected in the written Tibetan spelling, has rime {-on} and marginally also rimes {-ot, os, -or}. In many varieties of Central Tibetan and related Bodish languages such as Dzongkha, Brokpa and Chocangaca, these rimes are realised as [-ø:], and this is mirrored among some Duhumbi speakers. These speakers often have a Brokpa or Chocangaca-speaking family background, a long exposure to Brokpa speakers, or a religiously educated background. Other speakers realise these lexemes with the open-mid, back unrounded vowel /o/ [ɔ] if the coda consonant is preserved or a long, close-mid, front, unrounded vowel e [e:] if the coda consonant is elided. Examples include bulon [bulon ~ buløn] 'loan', cf. Tib. bu-lon 'loan'; chos [tchos ~ tche ~ tchø:] 'religion', cf. Tib. chos 'religion' and compound nouns containing this lexeme such as cheyok [tehejok~ tehø:jok] 'religious duty', cf. Tib. chos g.yog 'religious duty'; chorten [tehouten ~ tehøten] 'stupa', cf. Tib. mchod-rten 'stupa'; lonpo [lonpo: ~ lønpo:] 'minister', cf. Tib. blon-po 'minister'; gonpa [gɔnpa ~ gønpa] 'temple', cf. Tib. dgon-pa 'temple'; $lon \{da\}$ [lɔn ~ løn] come, cf. Tib. lon-pa 'reach, arrive'; pon [pon ~ pøn] 'chief', cf. Tib. dpon-po 'chief, master'; zhon [zon ~ zøn] 'youthfulness', cf. Tibetan *gzhon* 'youth', *bot* [bot ~ be: ~ bø:] 'Tibet', cf. *bod* 'Tibet', *chutshe* [tchutshe: ~ tchutshø:] 'time', cf. Tib. chu-tśod 'time, hour, watch'.

In addition to those lexemes that have clear Bodish cognates, among those speakers that realise the rounded vowel $/\ddot{o}/$ in these phonotactic conditions, this phonological change is expanding into lexemes that have no clear attested Bodish cognates yet. Examples include con [tcon \sim tcøn] 'crook' and con {da} [tcon \sim tcøn] 'to be harmed'; and thon {da} [thon \sim thøn] 'to take'.

The close-mid, front, rounded vowel $/\ddot{o}/$ can also be found as allophone of the open-mid, back, unrounded vowel /o/ [ɔ] in native lexemes with an off-glide /j/. Here, it is less obvious what the phonotactic or sociolinguistic factors that trigger a realisation of the rime -oj [-ɔj] with a close-mid front rounded vowel $[-\ddot{o}j]$ are, but Khispi speakers tend to favour the realisation as $[-\ddot{o}j]$. Examples include *choy* [tchoj ~ tchoj] 'this side'; *doy* {da} [dɔj ~ døj ~ duj] 'look'; and *shoj* [cɔj ~ cøj] 'bull'.

A similar rounding of the vowel can be seen in the alternation between realisations with a close, back rounded vowel u [u] and a close, front rounded vowel \ddot{u} [y] in borrowed lexemes with rimes {-un, -ud, -ul, -us}. An examples for rime -ut includes: dut [dut \sim dyt] 'demon', cf. Tib. bdud 'demon'. Examples for rime -un include tun {da} [tun \sim tyn] 'to join; plan', cf. Tib. stun-pa 'to agree, be accordant with, rely on'; thun {da} [thun \sim thyn] 'to match', cf. Tib. mthun-pa 'to agree with'; tsunmo [tsunmo: \sim tsynmo:] 'queen', cf. Tibetan btsun-mo 'queen'. Examples for rime -us include tun {ta} [rujpa: laŋ \sim ryjpa: laŋ] 'to excert', cf. Tib. tun tun

bśus-pa 'to copy'; *dus* [dus ~ dys ~ dy ~ dyj] 'time', cf. Tib. *dus* 'time, period'; *dujma* [dujma: ~ dyjma:] 'shortcut', cf. Tib. *hdus-pa* 'condensation, conglomeration, aggregate'. Finally, examples for rime -ul include *bruj* [bɪuj ~ bɪyj ~ bɪul ~ bɪyl] 'year of snake', cf. Tib. *sbrul* 'snake'; *dujpa* [dujpa: ~ dyjpa:] 'dust', cf. Tib. *rdul-ma* 'dust'; *pruj* {ta} [pɪuj ~ pɪyj] 'to transform', cf. Tib. *sprul-ba* 'to juggle, to make phantoms, appear, to change, to transform'; *phuj* {da} [pʰuj ~ pʰyj] 'to offer', cf. Tib. *ḥbul-ba* 'to give, offer'; *thuy* {da} [tʰuj ~ tʰyj] 'to subdue', cf. Tib. *btul-ba* 'to subdue'; *ngoy* [ŋɔj ~ ŋuj ~ ŋyj] 'silver, money', cf. Tib. *dnul* 'silver, money' and *yul* [jul ~ jyl] 'region', cf. Tib. *g.yul* 'land, area'.

Again, in those speakers that realise the rounded allophone, this phonological change is expanding into lexemes that have not yet been attested to have Bodish cognates, such as *achun* [atchun ~ atchyn] 'younger paternal uncle, stepfather', cf. TSD *achun* [atchun] 'younger paternal uncle'. The rounded allophone is also sometimes realised in lexemes with the off-glide /y/, as in *bruy* $\{da\}$ [bɪuj ~ bɪyj] 'to write', cf. TSD *bruj* $\{bo\}$ [bɪuj], but Tib. /pbri-ba 'to write'.