

DRAFT VERSION – comments welcome

Combinatory sound alternations in proto- pre- and real Tibetan: The case of the word family *mra(o) ‘speak’, ‘speaker’, ‘human’, ‘lord’

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1. Introduction

Apart from underdescribed Pyu, Tibetan is the oldest documented Tibeto-Burman language with an originally phonemic script, and at the same time, Tibetan is the language that shows the most complex syllable structure in its script: (C)(C)C(C)V(C)(C) or (P₁) C_R (G) V (F₁) (F₂).¹ It is therefore often silently assumed that the spellings as found in the dictionaries for Classical Tibetan reflect an old stage of Tibeto-Burman, cf. Matisoff's (2003: 12) suggestion for the proto-Tibeto-Burman syllable structure, which only differs in the vowel slot: (P₂) (P₁) C_i (G) V (:) (C_f) (s). However, the combinatory restrictions in Old and Classical Tibetan alike² and the first sound change to be described below indicate that the maximally complex syllable is only of a secondary character.

Careful diachronic and synchronic comparison of related words within Tibetan allows us to establish at least four major sound changes in the development of Old Tibetan or its ancestor(s). These are: 1. regressive metathesis, 2. alternation between homorganic nasals and oral stops, 3. jotisation, and 4. vowel alternations. The latter three sound changes are also quite common across Tibeto-Burman languages, but they are far from being exceptionless sound laws and never fully affected Tibetan, nor, as it seems, any other Tibeto-Burman language. Moreover, their direction or non-reversibility cannot be established.

In Tibetan, all four sound changes can combine. Together with dialectal variation or repeated borrowing from different Tibeto-Burman and non-Tibeto-Burman languages or from different stages of one or more Tibeto-Burman languages, this may lead to practically uncontrollable variation, preventing any serious reconstruction.

¹ Here and in the following C stands for any consonant, N for nasals, O for oral stops, and V for vowels. Small letters refer to the concrete phoneme. The indexed forms C_i (Matisoff) and C_R stand for the root consonant or radical, which can be filled with any of the consonants represented by the 30 letters of the Tibetan alphabet. The oral stops and affricates display a triple opposition of [–voice –aspiration] : [–voice +aspiration] : [+voice –aspiration]. It is not really an initial, since it can be preceded by one or two elements, which may be derivational or grammatical prefixes or simply lexical(ised) elements. The first pre-radical slot (P₁) can be filled with 8 consonants: *g, d, b, m, h, r, l, or s*. The post-radical slot (G) can be filled with 4 glides or semivowels *y, r, l, or v*. The first final slot (F₁) can be filled with 9 consonants: *g, y, d, n, b, m, r, l, s*, plus *h*, the second final slot (F₂) only with *d* or *s*, the distribution of which is phonetically conditioned. In Classical Tibetan, *h* in slot F₁ merely serves some orthographic purposes, but in Old Tibetan, it seems to reflect an original aspirate.

² In binary or triple clusters, there are quite a few restrictions for slot P₁: only the homorganic nasals (written as either *m* or *h* – the latter originally a voiced velar or laryngal [ɣ] or [ɦ]) can combine with C_R [–voice +aspiration]; by contrast, they cannot combine with C_R [–voice –aspiration] and with nasals. All other pre-radicals can only combine with C_R [±voice –aspiration]. P₁ cannot have the same articulatory position as C_R, except when P₁ is *r, l, or s*. P₁ and G cannot be filled with the same consonant. *b* cannot immediately precede a nasal, but may appear in position P₂. P₂ cannot be filled when C_R is a labial. *l* does not regularly appear in triple clusters (the only attested form: *lgyamtshva* for a special type of salt might be a loan or some dialectal variant).

Ternary clusters, however, are extremely restricted: P₂ can only be filled with *b* as a grammatical prefix, and while P₁ can only be filled with *r* or *s*, G can only be *y* or *r*. More particularly, C_R can only be a velar [–voice –aspiration] or [+voice –aspiration]. There are thus only six possible combinations: *brky, bsky, bskr, brgy, bsgy, bsgr*.

1.1 The combinatory fury: overview

One of the most interesting cases is a word root of ultimately Eastern Iranian origin, relating to the act of speaking, characteristic for human beings and particularly for rulers: *mra(o). It must have been borrowed into several Tibeto-Burman languages, as we find various ‘cognates’ for several related meanings across the Tibeto-Burman languages. This word or word family must have entered Tibetan at a very early stage or must have been borrowed repeatedly, as one can find all sorts of derivations.

Table 1 Overview: combined sound changes for the root *mra(o)

			Vowel alternations (not morphologically triggered)					
Alteration of homorganic nasals and oral stops	nasal base form	metathesis←	→jotisation	(<i>mye-</i>) ³	–	<i>Mya/v</i> (3)	(<i>myi</i>) ³	–
			↑		↑			
			*mre	*mro	† <i>Mra</i> (3)	*mri-	*mru	
			↓	↓	↓	↓	↓	
			<i>smre</i> (1)	*smro	<i>smra</i> (1/2)	*smri	*smru	
			<i>sme-</i> (1)	<i>smo</i> (1)	<i>Sma</i> (3)	<i>smi-</i> (2)	<i>Smu</i> (3)	
			<i>rme-</i> (1)	<i>rmo-</i> (1/2)	<i>rma-</i> (1/2/3)	<i>rmi</i> (2)	<i>Rmu</i> (3)	
			*dme	<i>dmo</i> (1)	<i>dma-</i> (2)	<i>dmi-</i> (2)	<i>Dmu</i> (3)	
	<i>m(y)e-</i> (2)	<i>mo</i> (1/2)	<i>ma</i> (2/3)	<i>m(y)i-</i> (2/4)	<i>Mu</i> (3)			
	secondary voiced	metathesis←	→jotisation		–	(<i>ʃ</i>) <i>bya</i> (?1/2)	† <i>byi</i> (2)	
					↑	↑		
			<i>bro</i> (1)		<i>Bra</i> ? (3)	*bri-		
			↓	↓	↓	↓		
			*sbro		<i>Sbra</i> ? (3)	*sbri		
			*sbo		*sba	<i>/-zbi-/</i> (2)		
			*rbo		*rba	<i>*rbi>/-lbi-/</i> (2)		
			<i>dbo-</i>		<i>Dbra</i> ? (3)	–		
	<i>bo-</i> (1)		–	–				
	secondary unvoiced	metathesis←	→jotisation	<i>spyo</i> (1)		<i>dpyas</i> ? (1)		
			–	–	<i>p(h)ya-</i> (1/2/3)	<i>-phyi</i> (2)	–	
			↑	↑	↑	↑		
			*p(h)re-	*p(h)ro	<i>p(h)ra-</i> (1)	<i>p(h)ri-</i> (1)	<i>phru-</i> (2)	
			↓	↓	↓	↓	↓	
			*spre	*spro	<i>spra-</i> (4)	*spri	<i>spru-</i> (2)	
<i>/spe-/</i> ? (1)			<i>spo-</i> (2/?3)	<i>Spa</i> ? (3)	<i>Sp(y)i</i> ?? (3)	<i>spu-</i> (2/?3)		
*rpe			*rpo	*rpa	–	*rpu-		
<i>dpe</i> ? (1)	<i>dpo-</i> ? (2)	<i>dpa-</i> ? (1/2)	–	–				
–	<i>p(h)o</i> (2)	–	–	<i>/pū-/</i> (2)				

As Table 1 shows, the combination of the four sound alternations yields, without the questionable forms, more than 40 different valid combinations, attested in even more semantically related words, some of them to be found only in the most archaic layer,

³ In the case of the Old Tibetan forms *mye-* and *myi*, it is not fully clear, whether the palatal glide reflects an original palatal, such as in the forms *bya* or *phya*, or whether it is merely conditioned by the palatal vowels *e* or *i* as in other cases of Old Tibetan orthography. The two forms are thus given here in brackets, their equivalents are also found in the last line of this box.

some of them attested in the western-most, but certainly not most archaic dialects, Balti and Purik. A few more combinations seem to be reflected in clan, tribal, and regional names, particularly because ethnical self-designations often intend to mean nothing else than ‘human being’ or ‘people of the same language’. However, since such names could always have had a different origin, their formal similarity might be merely accidental. They are thus given here with a question mark. A question mark follows also those forms, where the semantic relation with speech acts or humanity is least obvious.

In the table, grey shaded cells refer to hypothetical combinations, not attested in Tibetan or not attested with a meaning relevant for the discussion. The numbers added in brackets refer to the semantic groups of *verba dicendi* (1), human beings or family terms (2), clan and tribal names (3), and simian beings (4). The full word forms with their meanings will be listed towards the end of the article in § 3.5, p. 25.

1.2 Methodological considerations

I made these observations while trying to trace the origin of certain Tibetan tribal names, particularly the names Rma and Rmu/Dmu/Mu. This attempt is embedded in a larger linguistic and historical context (see Zeisler to appear). While the linguistic and historical arguments quite embarrassingly tend to circularly depend on each other, the sound changes in question were observed also by other scholars, earlier and independent of my considerations for Tibetan prehistory. The methodology applied here is that of textual and historical philology.

Both types of philological studies were the main fundament for the establishment of the Indo-European language family, the reconstruction of proto-Indo-European, and the sub-classification of the daughter languages and similarly for the Semitic and a few other well-established language families. Philology not only implies the careful comparison of lexical items, morphological systems, and syntax of languages, but also, or more importantly, the close reading of ancient documents. This allows the establishing of meanings and meaning shifts through detailed detective work and the interpretation of words, phrases, or syntactical constructions in their particular contexts. It also allows to reconstruct to a certain degree the historical and sociolinguistic background of language development. Unlike most modern more technically oriented linguistic approaches, traditional philology aims at a language in its entirety, including the level of idiosyncratic *parole*, and it does not restrict itself to a subset of genres or, as in the extreme case of comparative lexicostatistics, to an extremely reduced subset of the lexicon. However, detective work and interpretation, informed as they may be, are prone to subjectivity, they belong to the arts not to science in the strict sense.⁴

The art of textual interpretation is based on experience in reading difficult texts as much as on common sense. Like in comparative philology, difficult or occult passages may be decoded by comparing parallel attestations in the same or similar texts or contexts (sometimes also on the base of translations into other languages). In interpreting any given utterance, we may assume that its author is a rational person and uses exactly the communicative means that are necessary for making him- or herself understood, following largely the Gricean principles. That is, the communicative contribution is as informative as required, does not contradict the author’s beliefs (at least, if the author does not signal anything to the contrary, as in fiction), it is relevant, and finally, ambiguities are avoided and the statement is not artificially obscured (Grice: 1975: 45f.).

⁴ I do, by no means, intend to insinuate that linguistics in general and historical linguistics in particular is a science or can rely only on scientific or merely outwardly scientific looking methods.

It is true, that these principles may not fully hold in esoteric traditions, such as Indian or Tibetan tantrism. Tibetan scholars, therefore, often claim that the difficulty of Old Tibetan texts is the result of the ancient authors' predilection to speak in riddles. Most of the oldest Tibetan documents, however, were written for administrative purposes. Some of them were political propaganda, intended to legitimise the ruling family or to construct the fiction of a 'nation'. If, at the time of their composition, these texts were as enigmatic as they are now, they would have failed to serve their exoteric, political purpose. Therefore, if we are able, by means of careful internal analysis and cross-linguistic comparison, to establish a different meaning of a word, which, much better than the conventional dictionary meaning, fits into the particular context, we should not miss the chance to reconstruct a little piece of evidence from the ancient language.

Similarities between languages may always be due to mere chance or borrowing. To exclude such possibilities, Indo-European comparative or historical philology, particularly the Neogrammarian school, has set up very strict standards, by which sound changes must be regular (or regularly conditioned) and exceptionless. Exceptions can be accepted, if they are obviously based on analogies or if one has good evidence that the progress of change was interrupted or left unaccomplished at some point. Otherwise, such exceptions or irregularities would rather point to borrowings. Borrowing can be quite substantial and may, as in the extreme case of Brahui, affect more than 80% of the vocabulary. Borrowing is not restricted to lexical items. Morphemes and certain syntactic structures can be borrowed as well. However, the overall morphological system ultimately serves as a kind of genetic fingerprint.

More recently, objections have been raised that the Neogrammarian position is too strict, and that there are sometimes 'spontaneous mutations' of single words. Most of them, however, can be explained according the Neogrammarians' principles based on established socio-linguistic circumstances, such as influences from related varieties. This, however, requires a certain amount of acquaintance with the historical methods and the willingness to leave one's linguistic backyard. If the socio-linguistic circumstances cannot be established then it is safer to exclude the irregular forms from the set of inherited words. One should, in any case, always bear in mind that if any such exceptions grow (too) numerous or even threaten to outnumber the regularities, there is certainly something wrong with the assumption of genetic relatedness.

If the individual irregularities show some regularity, it might further be possible to establish a more sophisticated sound law or to establish a particular phonetic feature, as in the case of the laryngeal theory of early Indo-European, but this sound law should then again apply regularly and exceptionless, and it should not at all have the air of an ad hoc solution for individual words or morphemes in individual languages.

Furthermore, genetic relationship is certainly not the only possible link between two languages, and there is no need to press all known languages into family trees, descending from single proto-languages. Languages of different origin may converge and form what is known as *Sprachbund* or *linguistic area* through areal diffusion of various features in longer periods of relatively undisturbed coexistence, and in such cases, the original genetic relations can become completely blurred and a new language prototype may evolve (Dixon 1997: 15-27, 70f., 95f., and passim). Although Dixon, like most linguists, would preclude the possibility that any given language could naturally have more than one ancestor (p. 11, 72), his scenario includes the possibility that a language of an areal group A drifts towards an areal group B, contributing to the overall features of this second group, which, after some time, may give rise to a new language family (p. 100f. with fig. 7.1). Dixon (p. 92) would also not preclude "that languages from several dif-

ferent families came into the Australian area and have merged their character through tens of millennia of equilibrium contact and diffusion”, which is to say, that the present Australian languages may have had more than one ancestor. A long-term scenario is most probably necessary for the complete merger of grammatical structures, but one could also think of situations of intensive linguistic contact that lead to an almost complete merger of vocabulary items through mutual borrowing in much shorter time spans.

All in all, Indo-European comparative philology and similar approaches in other language families never restricted themselves to the comparison of lexical items. In fact, the earliest theories on the relationship of Indo-European languages were based on the eye-catching similarity of early Indo-European morphology.

By contrast, most of the comparative or reconstructive work for proto-Tibeto-Burman is primarily based on more or less reliable wordlists, most of them without much historical depth, and most of them rather unreliable, as the exact word meanings usually depend on the context, typically not supplied in the lists. Since meaning shifts or extensions are always possible, some comparativists take great licence in comparing items only distantly related, without ever demonstrating, how the meanings developed within each of the languages adduced. The Old Tibetan material has hardly been touched upon, for lack of lexical resources, on the one hand, for lack of philological competence, on the other.

So far, Tibeto-Burman reconstructions have never really met the standards of Indo-European or Semitic comparative philology, not even in a more modest version, which would allow some exceptions, and not even with respect to the lexicon alone. There is little hope that this situation may change. One reason is certainly that Tibeto-Burmanists lack the set of obviously related ancient languages that Indo-Europeanists could draw upon. If the oldest Indo-European languages, Sanskrit, Avestan, Hittite, Ancient Greek, and furthermore Latin, Old Church Slavonic, and Gothic had not been documented or only in a non-phonetic rendering, it would be impossible to demonstrate the genetic relatedness between, say English or French and Nepali or Dakhini Hindi-Urdu.

Another reason for the difficulties in Tibeto-Burman linguistics could be that the languages in question developed and spread in a manner quite different from that of the Indo-European languages. But the main reason could ultimately be that (some of) the languages or branches in questions are not genetically related, but that their apparent similarities are the result of areal convergence.

2. The formal side: not-so-regular sound changes in Tibetan and its ancestors

2.1 Regressive Metathesis

The greater part of Matisoff’s proto-Tibeto-Burman or rather Classical Tibetan complex ‘P₁ Ci G’, namely the Classical Tibetan triple cluster CCr, goes back to an earlier binary complex *Ci G (*Cr), implying metathesis of G. The main exception are causative-factitive verbs derived from intransitive verb roots with the help of an *s*-prefix plus nouns derived from such verbs.

Already Simon (1929, 1949, 1975) established a rule of regressive metathesis by which all Classical Tibetan combinations rC and lC result from an earlier *Cr and *Cl. The claim that the metathesis applied exceptionless might be too strong, but it is quite conspicuous that among the words with nasal initial hardly any cluster Cr is found in Tibetan. The most prominent exceptions are *smra* ‘speak’ and the possibly related *smre*

‘lament’.⁵ Coblin (1974), apparently not aware of Simon's work, gives a similar argument with respect to the cluster *mr > rm. Not all Tibeto-Burmanists would accept this hypothesis. Guillaume Jacques (p.c.), e.g., would hold that all nasal clusters Nr would have necessarily developed into a prenasalised voiced oral cluster NO_r, such as /^hgr/ or /^mbr/, written as mOr or hOr. This would at least corroborate the second sound law to be discussed. It is well possible that quite a few words escaped the accelerated process of metathesis of nasal clusters by first changing into the oral counterpart.

However, one would not be able to explain the existence of the pair *smra* ‘speak’ and *rma* ‘ask, inquire’, both originally used for speech acts of persons of higher or official status, where the semantic relation cannot be disputed, and where the *r* quite obviously changed its position. In this case, there is no direct NO_r equivalent available, such as **hbra* ‘speak, ask’. The closest form would be the noun *bro* ‘oath’, but there are also the voiceless forms *pra-*, *phra-*, *spra-* for other types of speech acts.

Furthermore, in the case of the proto-Tibetan word for ‘snake’, no. (16) below, the expected Tibetan form would be **mbrul* or **hbrul* not *sbrul*, in the case of the word for ‘monkey’ (or ‘human’), no. (14) below, the expected form would be **mbrug* or **hbrug*, and neither *sprug* ‘human offspring’ nor *spra* or *sprehu* ‘monkey’ could be derived. Such words would then have to be omitted from the list of inherited words and included in the list of possibly borrowed words or chance similarities.

One possibility would be to postulate some weird *s-* prefix that infected the Tibetan words, replacing the expected prenasalisation in the case of Jacques’ hypothesis or the expected *r-* pre-radical in the case of Coblin (1974) and Simon (1975: 246). Somewhat in contradiction to this claim, Coblin (1974) also argues that a pre-existing *s-* pre-radical would have prevented the metathesis sCr > *srC. However, if, after metathesis, the resulting pre-radical *r-* can merge with a secondary *s-* pre-radical, then there is no reason why the metathesis should be blocked if the *s-* pre-radical exists already before the metathesis sets in. Any cluster sCr could result in either sC or rC.

For Matisoff the *s-* prefix would be an additional Tibeto-Burman derivative element **sya* with the meaning “animal / flesh / body” which would be “pronounced with an epenthetic schwa vowel before certain stop initials” (HPTB: 102), hence *[səbrul] for ‘snake’ (ibid. p. 151). It is, however, quite strange that an *s-* pre-radical often appears where the reconstructed proto-form has the structure -Cr. Moreover, the *s-* pre-radical also appears with meanings unrelated to body, flesh, or animals, such as (4) *skrag* ‘fear’ (emotion, possibly related to the verb (5) *skrog* ‘stir’), (9) *sgra* ‘sound’ or ‘word’ (abstract concepts), and particularly with verbs, such as (5) *skrog* ‘stir’, (6) *skraŋs* ‘swell’, (8) **sgran*, *bsgrad* ‘fight’, and (17) *smra* ‘speak’ – where it is easily mistaken for a causative prefix.

What Simon, and with him all others, apparently overlook, is that during the process of metathesis, a cluster *Cr often, if not regularly, develops a weak reflex of the alveolar trill on the ‘left’ side of the cluster, hence *Cr > sCr (step 1).

In a few cases, the reflex seems to have taken the form of a velar or uvular fricative [ɣ] or [ʁ] in combination with voiced radicals, [x] or [χ] in combination with voiceless radicals, and additionally of a palatal fricative [ç] with unvoiced radicals in triple clusters. Both cases are represented by a *written d-* pre-radical⁶ (step 1b); cf. *dbre* ‘be im-

⁵ Simon (1975: 246) points to the cluster *snr* in the names of the lunar mansions *snron* (18th) and *snrubs* (19th), and the compound *snrelgži* ‘out of order, slant, oblique’. None of these seem to be common, and the names for the lunar mansions might be rather artificial.

⁶ Unlike all other prefixes, the *d-* prefix does not seem to have any linguistic reality, at least not as a dental fricative or stop. All attested reflexes point to velar or uvular fricatives, additional to a palatal fricative

pure' < *bre as related to *rme* ~ *dme* ~ *sme* 'spot, be impure' < **mre* and example (7) below with CT *dgra*.

In Eastern Tibetan, the development must have involved a palatalisation of the velar cluster after the first step: sCr > sCy (step 1b); due to the palatalisation, the restriction against an *r*- pre-radical did no longer hold, so that in a further step (1c) the cluster takes the form rCy (in the phonetically conservative Amdo dialects, written *rgy* corresponds to /rdz/ or /rj/; *rky*- to /r̥tɕ-/ or in the notation of the CDTD to /ʃtɕ-/; see the examples below). A further development (step 1d) would then yield the cluster dCy (step 1e; in some of the phonetically conservative Amdo dialects, written *dgy* corresponds to /ɣj/ or /ɣdz/, cf. Rkangtsha /ɣji/ 'happy', Rngaba /ɣdzwæ/ 'joy' < CT *dgyes(pa)*, CDTD; the unvoiced cluster *dky* corresponds to /çtɕ-/ or /çc-/; cf. Themchen, Labrang, Rngaba /çtɕei/, Mkharmar, Rkangtsha, Chabcha /çci/ 'centre' < CT *dkyil*, CDTD).

The cluster sCr may then further develop via sC (step 2) to rC (step 3) and the fricative pre-radicals represented by *written* dC (step 3b).

In a final step (4), the secondary prefix may be lost as a natural development in many modern Tibetan varieties. Clear cases are Lhasa Tibetan /pūku/ 'human offspring, child' (14) and Mkharmar /waŋma/, Rmastod /baŋma/ 'fly' (15).

Except for the nasals, the metathesis process did not fully affect the Old or Classical Tibetan words. For reasons unknown to us, but possibly related to fossilisation processes in the written language, the process of metathesis came to a standstill after step 1 in many Classical Tibetan words with oral initial. Nevertheless, the process continued in several modern varieties. Particularly Balti, western Sham (Domkhar), and several Amdo dialects show some of the subsequent steps or traces thereof. Interestingly, while Balti shows a tendency to complete the metathesis of velar clusters, western Sham shows a tendency to complete the metathesis of voiceless triple clusters and even the completion of the metathesis with voiced labial clusters, cf. DOM /rbak/ CT *brag* 'rock', /rbak/ < CT *hbreg* 'shave, cut (hair)', /rbaŋsa/ CT *braŋsa* 'resting place', /rbas/ CT *bras* 'rice', /rbi/ < CT *hbri* 'write', /rbi/ < CT *bri* 'get less', /rbu/ CT *bru* dig, /rbuk/ CT *brug* 'thunder' and 'flow down', /rbe/ CT *bre* 'shy away', /rbes/ CT *bres* 'manger', /rbo/ CT *bro* 'taste of', /Rbokpa/ CT *Brogpa*; DOM, TYA /rbel/ CT *sbrel* 'join', /rbit/ CT *sbrid* 'get numb'.⁷ Metathesis of CT *sbr* > *rb* can be observed also among several Amdo varieties.

Less frequently, the clusters *dpr* and *spr* may undergo metathesis in (Western) Sham, cf. Sham /ɣpalba/ < CT *dpralba* 'forehead' (RN; cf. example (12) above), DOM /ɣpin/ < CT *sprin* 'cloud', and /ɣpuk/ < CT *sprug* 'shake off'. With respect to the cluster *spr*, the Amdo varieties show quite irregular correspondences: in some cases, the reflexes correspond to the stage of final metathesis *rp*- (/ʃp̥-/; /ʃf-/; /rf/, /ʃp̥-/; /çp̥-/; /rp̥/) but in other cases, however, they correspond to the initial stage *pr*- (/p̥tɕ-/; /ftr-/; /wtɕ-/) or a some-

[ç] in voiceless triple clusters. The dialect data so far does not show any difference in the realisation of *dk* and *rk*, both seem to correspond to an unvoiced alveolar or retroflex fricative. One can often observe alternative spellings with a *d*- or *r*- pre-radical, which may reflect dialectal variation. In particular, one might find an Old Tibetan spelling rC where the classical orthography has dC, e.g., in the case *rgu* vs. *dgu* 'nine'. This variation may also be reflected in the dialectal data, without, however, always matching the written forms, that is, in some cases, the dialects show an alveodental [r], [ɹ] and the corresponding voiceless forms where the Old or Classical Tibetan spelling has a *d*- pre-radical. In the case of the spellings *rk* vs. *dk*, e.g., there is no evidence for a motivation of the latter spelling.

⁷ These forms are getting obsolete under the pressure of the Leh dialect, on the one hand, and written forms on the other. There is an interesting gender split: among the younger informants, women tend to use the forms with metathesis consistently, while men seem to prefer forms without metathesis (RN and own observations).

what more developed stage *ps-* (/ʃs-/), note, e.g., Mkharmar /ʃtʃso/ ‘happy’ and Themchen /ʃsoʃsaŋ/ *sprobzaŋ* ‘picnic’ (CDTD). Two more examples from CDTD may suffice (but cf. also examples (14) and (15) below):

- (1) CT *spraŋpo*, *spraŋloŋ*, *spraŋʔrtsuŋ* ‘beggar’, *spraŋmo* ‘female beggar’: Gergye, Gertse /pāŋloŋ/, Western Drokpa /pāŋmo/ ~ /tāŋmo/, Lhasa /pā:ko/, Hor Bachen /pōŋho/, Nangchen /paŋho/, Hor Nakchu, Hor Amdo /pāŋlɔ:/, Rkangtsha /ʃpuŋo/, Mkharmar /ʃʃaŋo/, Rngaba /ʃʃuŋwo/, Sertha /ʃʃaŋo/, Labrang /ʃpaŋo/, Arik /rpaŋpo/, Chabcha /ʃtʃaŋu/, Ndzorge /^htʃaŋwo/ (reading style) ~ /faŋwo/, Rmastod, Mdzorganrabar /paŋwo/
- (2) CT *sbra* ‘(big) tent’: Gergye /npa/, Lhasa /pa/, Gertse, Hor Nakchu, Hor Amdo ba/, Nangchen /ba/, Rngaba /rwæ/, Sertha /rβa/, Ndzorge /^hwæ/ – note also Skardo /rba/

According to Roland Bielmeier (p.c.), many words with an Old or Classical Tibetan cluster labial plus post-radical *-r-* show the ‘loss’ of the post-radical in Lhasa and in the Hor dialects spoken north of Lhasa.⁸ In a few cases, such forms have spread also to western Tibet and to Kham. In such cases, it is not always clear whether the post-radical got simply lost or underwent metathesis. The reflexes of CT (*h*)*phr* > /^(m)ph/ must be interpreted as simple loss (or cases of jotisation?) as long as the aspiration is preserved, cf. Gergye, Hor Bachen /phīŋma/, Nangchen /mp^hiŋma/ (?*(h)*pyiŋma) ~ /nt^hiŋma/ (*hphriŋma*) for CT *phreŋba*, (*h*)*phreŋma* ‘rosary’ (CDTD). In the case of CT *phrug(u)* ‘child’, however, the loss of aspiration, cf. GYS /trūgu/, Tabo, Nako, Namgya /tū:/, Nesang /tūgu/, Southern Mustang, Western Drokpa, and Dingri /tūku/ (plus variant or contracted forms), Ruthok, Gar, Gergye, Purang, Tshochen /tʃūku/, and Sertha /pʃūgu/ (CDTD), can only be explained via an intermediate form /sprugu/ with regular loss of aspiration after *s-* pre-radical.

Generally, only two or three steps of the metathesis process are attested across the Tibetan varieties, and not always the same steps in different words. Only the nouns referring to human beings or monkeys and the verbs for speaking with the nouns referring to speech acts show most of the steps, and in the latter case, all variation is already found within the classical vocabulary.

The following table summarises the various steps as found in the examples listed below. Reconstructions by Coblin (STLC) are marked by (C), those by Matisoff (HPTB or STEDT – inhomogeneous renderings are kept unchanged) are marked by (M), and those by Simon are marked by (S). All other suggestions for reconstruction are mine. In these suggestions, I follow two general principles, namely that forms with nasal initials or radicals are most probably older than their oral equivalents and that rhotacised forms are most probably older than jotised forms (see also the discussion in § 3.5, p. 26ff. below). Step 4 is not shown in the table for lack of space, but will be specified in the examples below, when the development from step 3 to step 4 is unambiguously attested.

⁸ Tournadre (2005: 30) notes the recent replacement of such forms by a standardised reading style: the Lhasa word for rice, now pronounced as /dʒe:/, had the pronunciation /be:/ still in the 1950s.

Table 2 Overview: different steps of metathesis in Tibetan

	*Cr	rough gloss	step 0 = Cr	step 1 > sCr 1b > sCy 1c > rCy 1d > dCr 1e > dCy	step 2 > sC 2a > sCVr	step 3 > rC 3d > dC
(3)	*kra	‘hair’	—	<i>skra</i>	/ska/	/rka-/
(4)	*krâk (M)	‘fear’	—	<i>skrag</i> 1c: /rteay/	—	
(5)	*krakw (C)	‘stir’	—	<i>skrog</i> 1b: <i>dkrug</i>	—	/rkok/, /rkuk/
(6)	*kraŋ	‘swell’	—	<i>skraŋs</i> 1c: /rteay/	—	/rkaŋs/
(7)	*gra (M)/ *gljay (C)	~‘enemy’	/gra/, /tra/	— 1b: <i>dgra</i> 1d: /ɣja-/	—	/rga/
(8)	*gran	~‘fight’	<i>bgrad</i>	/zgrat/ 1c: /rdzal/	—	—
(9)	*grwas (M)	~‘word’	—	<i>sgra</i> 1b: /ɣdza/	—	—
(10)	*nra (S)	‘ear’	—	—	—	<i>rna</i>
(11)	*m/pray	‘wild, wolf’	—	1a: <i>spyaŋku</i> 1c: /rteay-/	—	—
(12)	*pral	‘forehead’	—	/spralba/ 1b: <i>dpralba</i>	/spalba/	/rpalba/
(13)	*m/prV	‘glue’	—	/sprin/	<i>spyin</i> < * <i>spin</i>	/rpin/
(14)	*m/praw-k	‘of human’	<i>phru(gu)</i>	<i>spru(gu)</i>	—	<i>spu-</i> , <i>Spu-</i> ?
(15)	*bra(ŋ)	‘bee, fly’	—	<i>sbraŋma</i> 1c: /zbjaŋ-/	/zbaŋbu/	/rbaŋma/
(16)	*m/brul	‘snake’	—	<i>sbrul</i>	—	/rbul/ 3b: /ɣbul/
(17)	*mrao	‘speak’	<i>p(h)ra, bro</i>	<i>smra, spra</i> 1a: <i>spyo</i> — 1d: <i>dpyas</i> ?	<i>smo-</i> , <i>sma-</i> 2e: <i>smar</i>	<i>rma</i> — 3b: <i>dmo, dpe</i> ?
(18)	*m(a)ra(k)	‘peacock’	—	—	—	<i>rmabya</i>

(3) pTB *kra ‘hair’

Compare, e.g., Western Himalayish /kra/ or /krà/, Tamangic /kra/ (with variation in the supra-segmental features), /gra²/, /²kja/, or /²kjΛ/ (STEDT; here and in HPTB: 102 the proto-form is given as *s-kra, but the *s-* ‘prefix’ is attested only in Tibetan).

- 1 > sCr CT *skra*, PUR /skra/ ‘hair’ (CDTD)
- 2 > sC BAL /skayar/ ‘white hair’ (CDTD)
- 3 > rC BAL /rkalo/ ‘plait’, /rkazat/ ‘woman whose hair has started to fall out’ (CDTD; with /ɣ-/ for /r/)

10 Combinatory sound alternations in proto- pre- and real Tibetan

- (4) pTB *krok ~ *krâk or *grok ~ *grâk ‘fear, frighten’ (STEDT; the proto-form is given as *khlak in STLC: 77)

1 > sCr CT *skrag* ‘fear (n.)’, ‘be terrified’

1c > rCy AT: Themchen, Shando /r̥teay/, Arik /r̥teak/ ‘be terrified’ (CDTD; with /ʂ-/ for /r̥/) < *rkyag(s) < *skyag(s) < *skrag(s)*

- (5) pTB *krakw ‘stir, rouse’ (STLC: 127); most probably related to the foregoing

1 > sCr CT *skrog* (BRGY) ‘stir’, PUR /skrok/ > LAD /frok/ (CDTD /ʂok/) ‘churn’; PUR /skruk/ > LAD /fruk/ (CDTD /ʂuk/) **skrug* ‘stir’, PUR /skrak/ (CDTD), Shamskat /fraq/ *skrag* ‘knead properly’

1d > dCr CT *dkrog* (JÄK) ‘to stir, churn; rouse, scare up’, AT: Sertha /xtɪɔk/ ‘to stir’; *dkrug* ‘to stir, stir up, agitate; to trouble, disturb, confound’, AT: Themchen, Mkharmar, Rkangtsha, Chabcha, Labrang /çt̚səç/ (CDTD)

3 > rC BAL /r̥kok/ ‘shake (in a bottle)’⁹ (SPR), ‘churn’ (CDTD /ʂkok/); /r̥kak/ ‘knead’ (SPR)

- (6) pTB *kr(w)aŋ ‘swell’

Compare Tamangic: Thakali (Marpha) /hraŋ/, Thakali (Syang) /ç^hjaŋ/, Mikir /kàŋ/, Written Burmese *krwa* ‘rise, arise, swell up’, causative *khwa* ‘cause to rise, swell up’ (STEDT).

1 > sCr CT *skraŋs* ‘swell’, Purik /skraŋs/, LAD /ʂaŋ(s)/ (CDTD)

1c > rCy AT: Themchen, Chabcha /r̥teaŋ/, Arik /r̥teaŋ/ (CDTD; /ʂ-/ for /r̥/) < *rkyaŋs < *skyaŋs < *skraŋs*

3 > rC BAL /r̥kaŋs/ (CDTD; with /ʂ-/ for /r̥/)

- (7) pTB *gra, OC *glijo (HPTB: 173, 591; cf. STLC: 72: pTB *gljaɣ, OC *gljagx > *ljwo:*) ‘stranger’ > ‘guest’ or ‘enemy’

0 Cr **gra* ‘enmity’ > ‘accusation, fine’, PUR /gra/ ‘fine’ (CDTD), GYS /tra/ < *gra* ‘fine, accusation’ (in the expression /tra kal/ ‘fine, impose a penalty, claim compensation, accuse’);¹⁰ perhaps also CT *hgras* ‘hate, bear ill will’ (cf. STLC: 72)

1d > dCr CT *dgra* ‘enemy’, Sham, Leh /drao/ < *dgrabō* ‘enemy’ (CDTD), Sham /dra/ < *dgra* ‘fine, accusation’ (in the expression /dra kal/),¹⁰ AT: Themchen /yɔdza/ ‘enemy’ (CDTD)

1e > dCy AT: Labrang /ɣja-/ (CDTD) < **dgya* < *dgra*

3 > rC BAL /rga/, ‘enemy’ (CDTD)

- (8) pTB *gran ‘push, fight against’ or ‘spread wide apart, open’¹¹

Compare HPTB (p. 516) with *g-ra:l ~ *g-ran ~ *ray ‘war’, ‘strife’.

⁹ This is often done to make butter, hence the meaning is rather ‘churn’.

¹⁰ Voiced CT root consonants, not preceded by any pre-radical tend to become unvoiced in most Ladakhi dialects, while those that were preceded by a pre-radical in classical orthography, typically remain voiced. This is not an exceptionless rule: classical spellings can be based on misinterpretations of linguistic facts at the time of codification, while local forms may be due to a particular local development. Nevertheless, this rule can be used, by and large, to reconstruct alternative pronunciations from alternative spellings.

¹¹ The Ladakhi form /rat/ < *sgrad* conveys the meanings ‘open wide’, in combination with /kampa/ ‘leg’ > ‘sit down squarely, take up too much room, straddle, sprawl’, with /lakpa/ ‘hand, arm’ > ‘push, press, keep sth. against sth.’.

- 0 Cr CT *hgran* ‘vie, contend with, strife’; *bgrad* ‘open wide (eyes, legs)’ (☞ sound alternation 2 for the final) with a possible related form *hgrad* ‘spread, enter’ (JÄK, based on Csoma de Kőrös, TETT, but not listed in BRGY)
- 1 > sCr PUR /zgran/ ‘provoke, fight, mess around’ (CDTD sub **sgran*); CT *bsgrad* ‘spread wide apart, spread apart, open wide (legs); put side-ways’ (TETT), PUR /zgrat/ ‘stem against, lift’
- 1c > rCy AT: Themchen /rdzal/ ‘straddle’ (CDTD) < **rgyad* < **sgyad* < (*b*)*sgrad*
- 3 > rC BAL /rgat/ ‘face an enemy, push (with the body)’ (SPR), ‘stem against, to lean against, resist, fight’ (CDTD)
- (9) pTB **grwas*, OC **g’wad* ‘speak, word’ (HPTB: 437)
- 0 Cr CT *gros* ‘council, advice, speech’ (cf. also HPTB: 437), perhaps also \sqrt{grags} (I: *hgrags*, II: *grags*) ‘sound, cry, shout’
- 1 > sCr CT *sgra* ‘sound, noise, voice, word, language’
- 1d > dCr AT: Themchen, Mkharmar, Rkangtsha, Chabcha, Labrang /ydzæ/, Rngaba, Arik /ydzæ/ ‘sound’ (CDTD) < **dgra*
- (10) pTB **nra* ‘ear’ (Simon 1975: 248), with jotisation **nja* [na] (☞ sound alternation 3)
- Compare Tani: Tangut /nrü(h)/; Padam Mising /nyé-/ or /nyo/, Bengni /ñu-/, Hill Miri /ni-/, Tagin /na-/, Naga: Angami (Khonoma) /nie/, Angami (Kohima) /u/ nyie/. Chokri /u/ nyi³³/; Lepcha /a-nyor/; Tamangic: Manang (Gyaru) /na¹/ or /nya¹-/, Manang (Prakaa) /³nr/ or /²ne/; Bai: /nio³-/; OC **ñjəg* (STEDT) or **njəgx* (STLC: 69). In view of this data, the Classical Tibetan verb *ñan* ‘listen’ might be related, as well. HPTB (p. 134, 162 and passim) assumes a proto-form **g-na* or **r-na*. The pre-radical *r-*, however is attested only in Tibetan and Rgyalrongic. Many Qiangic varieties as well as some Rgyalrongic varieties show retroflex nasals, which could be the trace of either a pre-radical or a post-radical. While Rgyalrongic and Qiangic languages often borrow from Tibetan, this data may perhaps give a hint to the stage and date where the metathesis occurred. Otherwise, the word is mainly attested with a plain dental nasal, in some instances also with a plain velar nasal (which may or may not be the reflex of a velar pre-radical; cf. STEDT).
- 3 > rC CT *rna* ‘ear’
- 4 > C Leh /namfok/ ‘ear’; most Central Tibetan varieties have a high tone form /nā/, which still testifies for a pre-radical
- (11) pTB **mraŋ* ~ **mjaŋ* (☞ sound alternation 3), with oral stop variants (☞ sound alternation 2) **praŋ* ~ **pjaŋ* ‘wild (animal)’ or perhaps ‘howling (animal)’ & **k^wəy* ‘wild dog, wolf’
- Compare for Burmish: Bola /mjaŋ⁵⁵/ ‘howl (wolf)’, /mjaŋ⁵⁵ khi³⁵/, Langsu /mjaŋ³¹ kha³⁵/, Atsi /mjɪŋ⁵¹ khi²¹/, Achang /pju³¹/; Qiangic: Zhaba /piɛ⁵⁵ nkhu⁵⁵/, Queyu (Yajiang) /phra⁵³/; Bodic: Tsangla, Menba /phara/ ‘wolf’, CT *pharba* ‘wild dog’; other: Sak /məliŋ kvu/, ‘wolf’, Tani /pjaŋ/ ‘wild dog’, Kayan /plân/ ‘wild, disorderly, scattered’, perhaps also OC/MC **mjəg*, **mjäu*, **mög*, or **mau* ‘wild cat’ and **b’jə* or **b’ji* ‘animal (wild, possibly some kind of panther or leo)’ (STEDT); cf. also the inverted compound /khipjaŋ/ ‘wild, ferocious dog’ in Ladakhi (< khi+

p-faŋ < -*psʈfaŋ < -*spʈfaŋ < *spyañ*, involving yet another metathesis sp > ps with s + ʈ > ʃ),¹² similarly Jirel /kiptɕaŋ/ ‘fox, jackal’ (CDTD).

1b > sCy CT *spyañku*, °-ki ‘wolf’, BAL /spjaŋku/, LAD /ʃaŋku/ ‘wolf’, /khipʃaŋ/ ‘wild, ferocious dog’

1c > rCy AT: Chabcha /ɽɕaŋkə/, Labrang, Shando /ɽɕaŋkhə/ Mkharmar /ɽɕaŋkhə/, Sertha /rʃaŋ(kə)/ (CDTD; with /ɣ-/ for /ɽ/) < **rpyaŋk(h)u*

(12) proto-Tibeto-Kinnauri *pra(l) ~ *pja(l) ‘forehead’

HPTB (p. 405f.) and STEDT give pTB *d-(p)ral, but the *d-* pre-radical is found only in Tibetan, and apart from the Kinnauri form /phya/ there do not seem to exist obvious cognates.

1 > sCr PUR /spralba/

1d > dCr CT *dpralba*

2 > sC BAL /spalba/

3 > rC Sham, Leh /ɽpalba/ (CDTD; /ɣ/ for /ɽ/)

(13) pTB *mrV ~ *mjV ‘glue (n.)’, with oral stop variant (⇐ sound alternation 2) *prV (V = u?)

Compare Jinuo (Central Loloish) /mru⁴⁴/ or /mṛ⁴⁴/, Hani (Southern Loloish) /mjaŋ³¹/, /mjo³¹/, or /njo^{31/13} ‘glue, paste, stick’, and, if the notation ‘nj’ always corresponds to /ɲ/, Naxi /njɽ³⁵di³⁵/ ‘glue (n)’, /njɽ³⁵/ ‘glue (v)’ (STEDT). The pre-Tibetan form must have been *pru-n or *pri-n (⇐ sound alternation 4) with a nominal derivation suffix -n. The development in Tibetan becomes evident from Purik /sprin/ and the metathesis in Western Sham to /ɽpin/, forms which, otherwise, could not be explained.

1 > sCr PUR /sprin/ ‘glue’ (CDTD)

2 > sC CT *spyin* < **spin*,¹⁴ BAL, Leh /spin/ ‘glue’ (CDTD)

3 > rC Western Sham /ɽpin/ ‘glue’ (cf. CDTD with /ɣ/ for /ɽ/)

4 > C several Central Tibetan varieties /pīn/ ‘glue’

(14) pTB (EIr) *mraw ‘human being’, *mraw-k ‘(belonging to, offspring of) human being’, with semantic extension ‘human-like, monkey’

Compare HPTB: *myok (p. 67) ~ *mru-k (pp. 39, 145) with the meaning ‘monkey’, but see the discussion below in § 3.1 – given WrB *myauk* (HPTB: 80) and the o-

¹² The palatalisation of the clusters labial plus palatal glide and the retroflexivisation of clusters with an alveolar trill, apparently affected first the post-radical alone, changing it into a palatal fricative or a retroflex stop or fricative and leaving the radical unchanged. Only in a second step was the radical lost. The first or intermediate stage can be observed in several Amdo and Kham dialects word-initially, cf. Róna-Tas (1966: 179-182). More recently, this feature has been observed in Sogpho Tibetan with /ɽptɕ/ ‘cloud’ < *sprin*, Sogpho /^ɸtso/, Lhagang /^ɸea/, Rangakha /^ɸtea/ ‘cock’ < *bya(po)* (Suzuki 2011: 63, 68). Elsewhere, this stage can be observed only at the morpheme boundary of compounds, cf. Lhasa Tibetan /tehüptɕ/ ‘water bird’ *chubya*, /tehɕptüu/ ‘baby chicken’ *byaphrug* (Shefts & Chang 1967: 519 no. 7, 521 no. 26) and LAD /ribɕa/ ~ /ribza/ *ribya* ‘mountain fowl’, LAD Shamskat /turo zgopʃhuks/, LAD Kenhat /tundro gopʃuk/ *dudgro sgophyugs* ‘domestic cattle’, LAD Kenhat /zobdraŋ/, ~ /zoptraŋ/ *žohbraŋ* ~ *žopbraŋ* (CT *žohbreŋ*) ‘leather or silk strap for churning the curd’.

¹³ For the assimilation of /mj/ to /ɲ/, cf. also CT *my-*, which generally corresponds to /ɲ-/ in the modern varieties.

¹⁴ The palatal glide is most probably triggered by the palatal vowel *i* and not an instance of jotisation.

forms in Intha: /mrok/ ~ /mlok/, Lahu: /mɔʔ/, Bahing: /moro/ (HPTB: 67, 145), and the a- form in CT *spra* ‘monkey’, one should possibly reconstruct a diphthong: *au, *ao, or *aw.

2 > sC *sma-d* ‘child(en)’, with vowel alternation (☞ sound alternation 4) *smi-n* ‘sibling’

3/b> r/dC *rma-ŋs, dma-ŋs* ‘people, commoner’¹⁵

With oral stop variants (☞ sound alternation 2) *praw, *praw-k

Compare Bhamu /pəyuk/ (HPTB: 67) < *pyaw, *pyaw-k (☞ sound alternation 3).

0 Cr CT *phru-g* ~ *phru-gu*, DOM /phrugu/, TYA /trhugu/ ‘child, human offspring’

1 > sCr CT *spru-g* (~ *spru-gu*), GYS /trugu/ ‘child, human offspring’ (the non-aspirated form indicates an original pre-radical), *spra, sprehu* ‘monkey’

2 > sC *spa-d* ‘child(ren)’, *spu-n* ‘child(ren), sibling(s)’, (OT Spu, Spu-g, Spu-ŋ: clan names), Nurla, Leh /spiu/ ‘monkey’ (CDTD) < *spehu

3 > rC AT: Mkharmar, Rngaba /ʂfi/, Chabcha /ʂpi/, Labrang /çfi/, Sertha /ʂfi/ ~ /rfi/, Arik /rpi/ (CDTD)

4 > C Lhasa, Hor Nakchu, Hor Amdo /pūkū/ ‘child’ (CDTD; note the modern spellings *pugu* and *spugu*), similarly Gertse, Lhasa /pīu:/, Hor Nakchu /pīu/, Hor Amdo /pī:/, Ndzorge /fi/ (CDTD) < *pi(hu) < *rpe(hu) < *spehu

(15) pTB *bra(ŋ) ~ *bya(ŋ) ~ *b(r)(y)wa(ŋ) ‘bee, fly, insect’

Compare Lepcha /sum-bryon/ ‘fly’; HPTB (pp. 68, 641) and STEDT give the proto-form as *bya ~ *bra ‘bee’, ‘bird’, HPTB (p. 302) on the base of the Tibetan word also as *s-braŋ, but the *s-* pre-radical is restricted to Tibetan. An alternative, possibly related form is pTB *plyum ‘bee, wasp’ with Thulung /plium/, Nusu /pɿɛ⁵³/, Proto-Karen *prium^{A1} > Pa-o /phròm/, Kayah Li /plū/, Kayaw /phrý/, Blimaw /phlú/, Pho /phlàn/, Sgaw /phlís/, OC *p’iung, MC *p’iung (HPTB: 530), CT *buŋba* ‘bee’, *boŋnag* ‘dung-beetle’.

1 > sCr CT *sbraŋ* ‘honey’, *sbraŋma* ‘bee’, *sbraŋbu* ‘fly, bee, honey’

1b > sCy PUR /zbraŋ(z)bu/ ‘bee’, BAL /zbraŋtsher/ ~ /bjaŋtsher/ ~ /bjaŋser/ ‘sting-fly, bee’, /bjaŋbu/ ‘fly, flying insect, bee’, Dzongkha /bdzəŋ/ ‘honey’, /bdzə:m/ ‘flying insects, bee’ (CDTD) < (s)byaŋ(ma)

2 > sC LAD Shamskat /zbraŋbu/ ‘fly, flying insect’

3 > rC AT: Chabcha /rbraŋma/, Labrang /rwaŋma/, Rngaba /rwaŋmæ/ ‘fly’ (CDTD)

4 > C AT: Mkharmar /waŋma/, Rmastod /baŋma/ ‘fly’ (CDTD)

(16) pTB *mrul, with oral stop variant (☞ sound alternation 2) *brul

Compare pLB *m-rəy¹ or *m-r-wey¹ (HPTB: 43, 83), WrB *mrwe* (Simon 1975: 250, HPTB: 80, 83), possibly OC *mljaj or *mlyar (HPTB: 81); HPTB (43 and

¹⁵ In this case, one could argue for different etymological relations, such as with pTB *rma ‘much, many’ (HPTB: 80, 169, STEDT) or with pTB *mrang > OC *mraŋ > *meng* ‘population, people’ (STLC: 116), but in both cases, the Tibetan word would be the result of a metathesis.

passim), gives the proto-form as *s-b-ru:l, but the *s-* pre-radical is attested only in Tibetan, and most other cognates have a nasal initial.

1 > sCr OT/CT *sbrul*, PUR /zbrul/ (CDTD)

3 > rC AT: Mkharmar, Arik /rbu/, Labrang /rwu/, Sertha /rβi:/ ~ /rvi:/ (CDTD); DOM /rbul/

3b > dC BAL /ybul/ ‘snake’ (CDTD) < **dbul*

(17) Elr *mrao-* ‘speak, command’

The pTB root is given as **smray* by (Simon 1929) and as **br(w)ak* ~ *(*s*)*br(w)aŋ* by Matisoff (HPTB: 523, 585), but the initial sibilant would only be corroborated by the Tibetan forms; ultimately, the word seems to be of Eastern Iranian origin, see also further below.

0 Cr Archaic Tibetan *-mra* (as attested in the mountain name Rmachen Spom.ra < Spo.mra;¹⁶ and several non-canonical spellings of tribal or personal names)

1 > sCr OT/CT *smra* ‘speak’, *smraŋ* ‘speech, recitation’, *smre* ‘lament’¹⁷

2 > sC CT *sme* (~ *rme*) ‘ask’, *smo* ‘say, name’, *smonlam* ‘prayer’; √*smad* (I/IV: *smod*, II/III: *smad*) ‘slander, blame, abuse, curse, etc.’; PUR /smaŋ/ (~ /ṛmaŋ/) (CDTD; /ṣ/ for /ṛ/) < *smāŋ* ‘lawsuit’, modern Tibetan /mā/ ‘speak’

2a > sCVr CT *smar* ‘talk’, cf. PUR /kha smar/ (CDTD), GYS /kha mār/ ‘talk rude, talk too much, cry, shout a lot’ (the high-tone realisation testifies a pre-radical)

3 > rC OT/CT *rma* ‘inquire, ask’, CT *rme* (~ *sme*) ‘ask’; BAL /ṛmaŋsa/, PUR /ṛmaŋ/ (~ /smaŋ/) (CDTD; /ṣ/ for /ṛ/) < *rmaŋ* ‘lawsuit’

4 > C CT *mo* ‘oracle’; Leh /kha mar/ ‘talk rude, talk too much, cry, shout a lot’ (CDTD)

With oral stop variant (☞ sound alternation 2) **p(h)ra*, bra with alternation of glide (☞ sound alternation 3) **p(h)ya*, **bya*

¹⁶ One of the most important mountain ranges in Tibet, the most important one in Amdo. *spo* and *mra* could have been tribal designations, but both of them or at least the second one could also have had the meaning ‘speaker, human’ or ‘commander, king’. The compound would possibly yield a ‘ruler of the Spo’, a ‘ruler of the people’, an ‘overlord’ or a ‘king of kings, emperor’. The original meaning of *rma-chen* would be ‘great commander’ or ‘great king, emperor’, possibly as a translation or interpretation of the second part of the name, when its components became obsolete. In the case of the modern spelling *Spom.ra*, we most probably deal with an instance of consonant migration in compounds. In such cases, an earlier pre-radical of the following syllable gets relocated to the coda position of an open first syllable, where it may survive the process of cluster reduction, cf. the case of *rdo*, modern Tibetan /⁽ⁿ⁾do/ (or /to/) ‘stone’ plus *rje*, modern Tibetan /⁽ⁿ⁾dʒe/ (or /tʃe/) ‘lord’ > *rdorje*, modern Tibetan /⁽ⁿ⁾dor.dʒe/ (or /to.r.tʃe/) ‘thunderbolt, vajra’, cf. also the case of the numerals, where, e.g., *bcu*, modern Tibetan /teū/ ‘10’ and *bzi*, modern Tibetan /ʃi/ ‘4’ may yield the pronunciations /teūpʃi/ ‘14’ and /ʃipteū/ ‘40’ respectively. P.M. Miller (1951) seems to have been the first western scholar to discuss this feature as a linguistic problem, although it is often mentioned *en passant* in earlier descriptions of Tibetan, e.g. Csoma de Kőrös (1834: 7-8 and 10) and Schmidt (1839: 16f. and 19f.), more recently Shirai (1999) and Zeisler (2009, with examples from Ladakhi).

¹⁷ Alternatively, the word might perhaps be related to *rme* ~ *dme* ~ *sme* ‘spot, speck, defilement, uncleanness’, if the death of a family member leads to ritual pollution, like in Ladakh.

- 0 Cr CT: *pra(-mo)* ‘ritual, prognostic’, *prachal* (~ *sprachal*) ‘joke, jest’,
phrama ‘calumny, slander’, *phramen* ‘sorcery, witchcraft’, *bro* ‘oath’
 Cy OT *phyā(v)* ‘speaker, oracle, lot’, *bya* ‘speak’
 1 > sCr *sprachal* (~ *prachal*) ‘joke, jest’
 1b > sCy CT *spyo* ‘blame, scold’
 1e > dCy CT *dpyas* ‘offence, fault, blame’ (?)
 2 > sC LAD /spera/ (~ /fera/ ~ /pera/) ‘speech, language’ (typically analysed or
 written as *dpesgra*) (?; see below)
 3b > dC CT *dpe* ‘example’ (?)¹⁸
 4 > C CT √*bo* (I: *hbod*, II/IV: *bos*) ‘call invite’, OT *bonpo* ‘reciter, invoker’ (?)

(18) Austroasiatic *m(a)ra(k) > pre-Tibetan *mra

Laufer (1916: 464, no. 66) relates the word to Sanskrit *mayūra*. This would likewise imply a metathesis from a contracted form *mra. The Sanskrit word itself is a loan either of Dravidian or, perhaps more probably, Austroasiatic, where we find, among others, Santali /marak’/, Čam /amrak/, Črau /brak/, Mon /mrā/, etc., Przulski 1929: 131). The Austroasiatic word seems to refer to the call of the bird (ibid.), and it could well be possible that the element *bya* in the Tibetan compound was originally not so much used in the sense ‘bird’ as an explanation for the foreign name, but as a *verbum dicendi* in the sense of ‘(the one who) cries “mra”’ (see § 3.4 below).

- 3 > rC OT/CT *rmabya* ‘peacock’
 4 > C Kenhat /mabza/ *mabya* ‘peacock’ (the low-tone realisation testifies a plain nasal)

As particularly example (14) with the Classical Tibetan variant *sprug* for *phrug* demonstrates, there is, at least in the case of an original cluster Cr, no need for an ad-hoc s-prefix or a derivative element *sya for almost everything as postulated by Matisoff (see p. 6 above). Some kind of metathesis seems to apply also across Tibeto-Burman languages, at least in the case of velars. As stated in STEDT,¹⁹

there are some proposed cognates in which PTB prefixal *r- before velars appears to correspond to medial *-r- in OC, for example PTB *r-kang ‘shin’: OC 脰 *grangs ‘shinbone’ [...]. Whether this indicates that metathesis has taken place in one or both languages, or that additional variants of the root existed, is not clear.

This remark is found in connection with the words for ‘leather’, ‘skin’, ‘bark’, and ‘rind’. According to STEDT, the proto-form for CT *rkoba* ‘leather’ and *skogpa* ‘bark’ would be *s/r-kok or *(r-)kwak. More probably, the proto-form is without any prefix (cf. also STLC: 134 with *khwak and HPTB: 378 with *kok as proto-form, while the corresponding note c states that several attested forms point to an original *kwak). The Old Chinese counterpart 革 is reconstructed by Karlgren as *kək, by Li as *krək, and by Baxter as *krək ‘hide, skin’ > Mandarin *gé* ‘leather’ (STEDT ibid.); cf. also pTB/pLB

¹⁸ Note the compound CT *dpecha* ‘book’ and the usage as ‘example, saying’ in Kyirong, Western Drokpa, and South Mustang and as ‘story, tale, model’ in Ndzorge (CDTD). However, the meaning of ‘example’ might have been derived from a meaning ‘distinguishing mark’, so that the word would be ultimately related to the forms *rme* ~ *dme* ~ *sme* for ‘mark, mole’ and ‘impurity’ via sound alternation 2.

¹⁹ <http://stedt.berkeley.edu/~stedt-cgi/rootcanal.pl/etymon/586#586>, accessed 15.01.2012, 23:09.

*m-k-rəy¹ ‘skin, outer covering’ (HPTB: 189). One could, therefore, think of a development *krwa-k ~ *kro-k > *skro-k > *sko-g* > *rko-* for the Tibetan words.

A further candidate might be pTB *druŋ with OC *drung(h) > *đāng (STLC: 41) or OC *trjuk (STEDT, citing W. Baxter 1992: 250²⁰) and Tibetan *rduŋ* (step 3), where STCL and HPTB (309 with OC *d’uŋ), however, opt for a proto-form *rdung or *r-duŋ.

With the insertion of an epenthetic consonant, metathesis occurred also in the clusters OT/CT *sl-* > */ls-/ > BAL and western Sham /l̥ts-/ , AT /r̥ts-/ ~ /xts-/ and OT/CT *zl-* > */lz-/ > BAL and western Sham /ldz-/ , > eastern Sham and Leh /ld-/ > CtrT /ⁿd-/; AT /rdz-/ > /dz-/ (cf. Denwood 1996 and CDTD; the former with a more complex derivation). See also Sedlaček (1964: 183, n. 13 with further references) for the metathesis of an original *tlj and *dlj > *ltj and *ldj > *lc* and *lj*.

There are also cases of progressive metathesis, where a cluster CrV turns into CVr, and this may happen also after the first step sketched above, so that CrV > sCrV > sCVr (step 2a) > rCVr (step 3a) > CVr (step 4a), cf. Elr *mrao > OT/CT *smra* > *smar* ‘speak’ (17) and pTB *pr(j)aw ‘claw’ with Old and Middle Chinese *b’jæg* and *b’i-*, Jinuo /pɦiɔ⁴⁴ sɿ⁴⁴/, Northern Gyalrong /pri ndzuru/ ‘claw’, Dimasa /džə brau/ ‘maul, claw, scratch’ (STEDT), pre-Tibetan *spra- > CT *sparba*, *sparmo* ‘grasping hand, paw, claw’, PUR /sparba/, Panamik (Nubra), Leh /spara/ ‘handful’ (taking with a single hand: Ciktan, Leh, or with both hands together: Panamik; CDTD), GYS /para/ ‘handful (single handed)’ vs. /bara/ ‘handful (double handed)’.

2.2 Homorganic alternation between nasals and oral stops

The second sound alternation was likewise first mentioned by Simon (1929: 195-197, 1949: 14 n. 2, 1975). According to him (1929: 187, 195), the change was triggered in the case of clusters by a homorganic intrusive oral consonant and a subsequent loss of the nasal, but this does not explain the alternation of plain radicals or of the finals.

In Old and Classical Tibetan, homorganic alternation between nasals and oral stops can be observed particularly in the finals, where it might partly be due to assimilation processes to following morphemes, such as *-po* vs. *-mo*. It is much less frequent with initials, so that most Tibetologists are not aware of it. In extremely rare cases, the alternation could affect both the initial and the final consonant, as shown in example (19). Initial alternation, however, is quite common across Tibeto-Burman languages, and Matisoff (HPTB, STEDT) gives many proto-forms accordingly with alternative forms. For final alternations, cf. also HPTB (pp. 516-526).

(19) CT *ŋaŋ-* ~ *gag-*, cf. the various designations for water birds, such as ducks or water fowls, *ŋaŋpa*, *gagtse*, *byagag*. The latter bird (a swan, according to the definition of BDGM) takes the place of the bird element in the Tibetan calendar in some Old Tibetan documents (Pt 1084, Pt 1096, Pt 1288, ITJ 750, Or 8212.187).

(20) CT *Smra*, epithet of *Žaŋžuŋ* in Western Tibet (cf. Ladvags Rgyalrabs, ed. Francke 1926) vs. *Spra* or *Sbra*, epithet of *Žaŋžuŋ* in Eastern Tibet (cf. Stein 1961: 27, 28, 51, 54).

(21) CT *(ma)-sma-d* ‘(mother with) child(ren)’ vs. *(pha)-spa-d* ‘(father with) child(ren)’.

(22) CT *smi-n* vs. *spu-n* (with vowel change ⇄ sound alternation 4) ‘sibling’.²¹

(23) pTB *mrul ‘snake’, (see above no. (16)) > *brul > OT/CT *sbrul*.

²⁰ *A handbook of Old Chinese phonology*. Berlin, New York: Mouton de Gruyter.

²¹ Most probably, the forms *smad* and *smi-n* and correspondingly *spad* and *spu-n*, each denoting a collective of offspring, are related as well. Final *-n* and *-d* seem to be mere variants of one and the same collective suffix.

- (24) pTB *mraw ‘human (or simian)’, *mraw-k ‘human (or simian) offspring’ >
 *praw-k (see above no. (14)) > CT *phrug(u)* ~ *sprug(u)* ‘child, human offspring’,
 with vowel change (☞ sound alternation 4) > OT/CT *spra*, *sprehu* ‘monkey’.

It remains unclear which direction the development takes, and whether the alternation is unidirectional or reversible. Matisoff apparently prefers a development from oral to nasal, mostly, but not always, based on the Tibetan form. By contrast, Simon seems to suppose a unidirectional development from nasals to oral stops from Tibeto-Burman to Classical Tibetan for the alternation of initials. However, dialectal variants, re-borrowings, hyper-correct forms, intentional archaisms, word plays (cf. also the above *masmad* vs. *phaspad*), or later reinterpretations may lead to apparent anachronisms like OT *dbuh-ḥbreṅ* vs. CT *dmu-thag*, the magical cord or thread of the Dmu attached to the head (*dbu*), by which the defunct king ascends to heaven. – It is certainly also possible that in some or even many cases, the Old Tibetan documents show a more advanced form than the classical texts, depending on the dialect of the respective writers.

One can further well observe that in some cases, the Tibetan word has an oral stop in contrast to other Tibeto-Burman languages, e.g., the word for ‘snake’ CT *sbrul* vs. pLB *m-rəy¹ or *m-r-wey¹ (HPTB: 43, 83), WrB *mrwe* (Simon 1975: 250, HPTB: 80, 83), etc., while in other cases, Tibetan has a nasal where other Tibeto-Burman languages may have an oral stop, e.g. the verb ‘speak, say’ CT *smra* < *mra(o), WrB *mrwak* ~ *prwak* (HPTB: 523), Pattani /prəi/ or /prài/, Hani /pe³³/ ~ /mi³¹/ (STEDT), etc.. In this particular case, both an oral and a nasal reconstruction have been suggested, due to the individual preferences:

- (25) pTB *smray (Simon 1929); *br(w)ak ~ *(s)br(w)aŋ (HPTB: 523, 585) ‘speak’:

*mra > OT/CT *smra* ‘speak’, *rma* ‘ask, inquire’ (☞ sound alternation 1)
 *pr(h)a > CT *pra(-mo)* ‘ritual, prognostic’, (s)*prachal* ‘joke, jest’, *phrama* ‘calumny, slander’, *phramen* ‘sorcery, witchcraft’, (h)*phrin* ‘message’
 *br(w)a > CT *bro* ‘oath’

From the perspective of Tibetan, the oral forms are secondary nominal derivations. Another reason is that most of the oral forms are voiceless, and hence unlikely the starting point for the alternation. Apart from this, there is also at least one voiced form (*bro*; for other cognates of the voiced type, see §§ 3.3 and 3.4 below). The alternation between voiceless and voiced forms makes it even more unlikely that the oral forms should have led to a nasal realisation. However, if the nasal forms are the older ones, then the relation to Eastern Iranian is more than obvious:

- (26) pIE *mleuH, pII *mlauH ‘speak’, Avestan *mrao-*, Sanskrit *brav-* (*brao), Khotan-Saka *mrav or *mru ‘declare, order’, cf. *mura* ‘speech, word’; *mrautar > *mrautā > Saka *murta* ‘lord ruler’; *mravaka > Khotan-Saka *rūkyā* ‘commander, lord’; *mravant > Sanskrit *Saka-muruṇḍa* ‘Saka kings, royal Saka’, Khotan-Saka *rrund* ‘possessing power, lord, king’ (EWA, IAIL, KhS, Bailey 1985, Harmatta 1994: 9)

One would generally expect that nasals alternate only with their homorganic voiced counterpart as in the case of the word for snake (*mrul vs. *brul > *sbrul*). However, the words for ‘monkey’, ‘human being’, or ‘offspring, child’ show an alternation between nasal and voiceless stop (*mraw-k vs. *phrug* > *sprug*, *spra*). Words related to the semantic field of ‘speaking’ show both types of oral onsets. It does not seem possible to indicate which type, the voiced or the unvoiced, is more original in Tibetan, nor is it possible to define the conditioning factors.

2.3 Jotisation or alternation of post-initial glides

Alternations among the post-initial glides (y [j], r, l, w, and \emptyset – or a corresponding vowel i, e for j and u, o for w) seem to be common, but unpredictable across Tibeto-Burman languages, cf., e.g., the word for ‘measure (for grain)’: Jingpho /byē/, Tangut /biej/; Kinnauri /brē/, CT *bre*, BAL: Skardo /ble/²² (CDTD), Khapalu /bre/ (SPR), PUR, Sham /bre/ (CDTD), DOM /rbe/; Bwe /ble/; CT *bo*, Tshona, Bokar /bo⁽³⁵⁾/, Jingpho, Hani, Karen /bo³¹/; in Bwe the meaning has changed to ‘span’, in Tangut the word is used as classifier and general measure word (STEDT). See also Matisoff (1978: 344f) for the [j] ~ [r] alternation in Lolo-Burmese and Simon (1929: 209f.) for Chinese-Tibetan pairings.

A regular alternation $r > j$ can be observed in Tibetan, but only in the case of the Classical Tibetan clusters velar plus alveolar trill and their palatal realisation in Amdo Tibetan (cf., e.g., Roerich 1958: 21-23), going back to a cluster of velar plus palatal glide. The latter is occasionally attested in Old Tibetan: *ralgyi* for CT *ralgri* ‘sword’, the names *Šakhyi* and *Ñakhyi* for CT *Šakhri* and *Ñakhri*. In a few cases, these forms are also attested in the western-most dialects, cf. BAL and LAD /rai/ or /rayi/ for *ra(l)gri* ‘sword’, BAL /khit/ < *(h)khyid for *ħkhrīd* ‘lead along’, and PUR /skjajar/ for *skradkar* ‘white hair’ (CDTD).

Exceptionally, the alternation is also attested in Tibetan with a preceding labial, cf. CT *sbran-* ‘bee’, ‘honey’, BAL /-(z)bjan-/; PUR /zbjan-/; Dzongkha /bdzjan-/;²³ see example (15) above. In §§ 3.3 and 3.4, I shall give evidence for Archaic Tibetan *bya* ‘human’ and CT *bya* ‘say, name’, as derived from *bra- or *mra-, while § 3.2 will discuss the jotised variant *phya(v)* of the word root *p(h)ra, related to speech acts, examples (17) and (25) above.

One could expect, therefore, also an alternation between dental & r and dental & j among the Tibeto-Burman languages. The combination with palatal glides would have developed into palatal stops in Tibetan (this might be one of the reasons why the clusters *tr* and *thr* are not found in Tibetan, except in loans).

2.4 Vowel alternations that are not morphologically conditioned

Old and Classical Tibetan show certain morphologically conditioned vowel alternations, such as the notorious verbal *ablaut* patterns (only partially preserved in the eastern varieties) or the change of final *-a* & diminutive suffix *ħu* > *-eħu* (generally preserved in the modern varieties). Apart from these, one can find in Tibetan written texts as well as in the spoken languages a few word pairs (or triplets) of identical meaning that differ only with respect to the vowels (y)i, u, (and a). The ‘instability’ of these vowels may reflect various processes of phonetic change being productive in different dialects or the adaptation to a totally differing vowel system in a donor language, such as, e.g., the Turkic or Mongolian type with centralised vowels.

In some cases, the interchange of (y)i, u (and a) appears to be triggered by a preceding labial (a feature that may perhaps have a Turkic or Mongolian background). In other cases, the alternation seems to be related to a preceding alveolar trill, which might point to an original semi-vocalic character of the *r*. Other instances might be due to a centralised character of the original vowels ([i], [u]) and/ or to an early neutralisation process, as the one attested in Amdo Tibetan (cf. Haller 2004: 46, 48 for Themchen).

Examples with a preceding labial are found in the verb *ħbig(s)* ~ *ħbug(s)* ‘pierce’ and in the nouns *dbyigpa* ~ *dbyugpa* ‘stick’ and *byiru* ~ *byuru* ‘coral’, examples for a preceding alveolar trill are found in the tribal names Rma and Rmu and the older reconstruc-

²² /br/ > /bl/ is a secondary development in several western Balti dialects.

²³ See note 12, p. 12 above.

table forms for ‘man’ *rmi*, *rme* and *rma*²⁴ (here the *r*- element combines with a labial). An example for an apparently unconditioned vowel alternation is the verb CT *lus* ~ *las* ‘remain behind, be left behind’ (JÄK), with dialectal attestations in Southern Mustang, Western Drokpa, Dingri, Shigatse, and Lhasa for the less common form *las* (CDTD).

Examples from the Ladakhi dialects show that the vowel of a following syllable may also play a role, leading either to assimilation (*i-u/o* > *u-u/o*) or to dissimilation (*u-u/o* > *i-u/o*): DOM /*rugu*/ for LAD /*rigu*/ ‘kid’, CT *rigu* (here, the Shamskat form might have been motivated as an echo form to /*lugu*/ ‘lamb’); Shamskat /*puksmo*/, Kenhat /*pik(s)-mo*/ ‘knee’, CT *pusmo*; LAD /*dzugu*/ ~ /*dziyu*/ ‘finger’, CT *mdzugmo*; LAD /*zurmo*/ ~ /*zi(r)mo*/ ‘pain, illness’, CT *gzug*, *gzer*. These alternations could be due to a genuine Tibetan vowel assimilation (or dissimilation) process, which might have been unidirectional in principle, but affected different words in different varieties at different times.

Alternations between vowels *e* and *o* appear to be less common, but are attested as spelling variants in OT *rjobo* for CT *rjebo* ‘lord’ and *roro* for CT *rere* ‘each’. Similarly one can find a few dialectal variations, such as DOM /*chopo*/ vs. Leh /*chenmo*/ ‘big’. The reason for this alternation is not obvious.

Variation between *a*, *u*, and *o*, as we see in the case of *spru-g* ‘(human) offspring’ vs. *spra* ‘monkey’ and many words related to speaking (*smra*, *rma* vs. *smo-*, *dmo-*), is most probably due to an underlying original diphthong **au/*ao/*aw* or **ua/*oa/*wa*.

Vowel alternations may also be observed between words with different, but related meanings, cf. 1. CT *sgrig* (<**g-rik* or perhaps **rik* plus prefixes **g-* and **b-*) ‘put in order, arrange, etc.’, LAD: /*rik*/ ‘arrange, pay for’, GYS /-(b)-*rik*/ ‘x rows (of turquoise)’; 2. CT *sgrug* (<**g-ruk* or perhaps **ruk* plus prefixes **g-* and **b-*), LAD /*ruk*/ ‘collect, gather (nuts, wood)’, GYS, DOM /-(b)-*ruk*/ ‘little pieces of’; 3. CT *sbrag* (<**b-rak* or perhaps **rak* plus prefixes **g-* and **b-*) ‘lay, put one thing above another’, DOM /*rak*/ ~ /*rbak*/ (~ /*brak*/), TYA /*rak*/ ~ /*lbak*/, GYS /*rak*/ ‘join together, attach, add’, GYS /-(b)-*rak*/, DOM /-*rbak*/ ~ /-*brak*/ ‘x-fold lining’ (Zeisler 2011a: 266f.), where the two ‘radicals’ *g-* and *b-* might be secondary developments, and the alternation may be triggered by the alveolar trill.

Simon (1949: 7-10), under the keyword ‘vowel gradation’, gives quite a few examples for alternations between, as he thinks, semantically related words, such as *lcugpa* ‘flexible, pliant, thin’, *lcugma* ‘osier stake, rod, thin branch’, and *lcag* ‘rod, switch, stick, whip’, where the semantic relation is quite obvious, or cases such as \sqrt{bub} ‘get turned over’ with \sqrt{bab} ‘descend, fall down’ or *grabs* ‘preparation, arrangement’ and \sqrt{grub} ‘get accomplished’, where the relation is not so obvious and would need some corroboration from other Tibeto-Burman languages. Simon does not mention any conditioning factor, but in the last two cases, we would again have an example for a preceding labial and an alveolar trill.

Vowel alternations can also be found across the Tibeto-Burman languages. Matisoff (2008: xxxvii) mentions the following common variations: *u* ~ *i*, *ya* ~ *i*, and *wa* ~ *u*, all occurring in closed syllables. Among the etymons, he discusses, the variations may, in extreme cases, comprise almost all possible vowels, cf.

²⁴ In connection with the tribal names of eastern Tibet and the neighbouring areas, taking the form *rmV* or simply *mV*, Stein (1951: 253, n. 6) speaks of an ‘imprecise’ vowel, the Tibetan transcriptions of which would alternate between *e* and *i* and *o* and *u* respectively. An example are the Miñag, rendered alternatively as *Meñag* and *Moñag* in Tibetan documents. Stein further mentions the alternations /*mu*/ (*r*)*mu* and /*pi*/ (*r*)*mi* for CT *mi* ‘man’ in certain Amdo dialects. In the *Rgyalpo bkahi thanyig*, the Dgañldan edition has *Rma*, where the Sdedge edition has *Rme* for what should have been *Rmu* (ibid). Another interesting spelling alternation for obviously one and the same ethnical group is *Smaza* for *Muzu* or *Muzi* (ibid, p. 254 with n. 5).

- *s-riŋ ~ *s-r(y)aŋ ‘live, alive, give birth, green, raw’:
i, ī, ɣ, u, ʊ, a, ɐ, ɒ, ɑ, æ, e, ə, ɛ, o, “ö” (ø or œ) (Matisoff 2008: 52-55).
- *m/s-la(:)y ‘navel, centre, self’:
a, ai, aī, ay, əi, iə, iɛ, ɛ, e, i, wi, u, uo, o, ɐ, ɣi (p. 58-61).

Similarly, Simon (1949: 9f.) adduces a Tibetan word family around the notions ‘round, circular’ and ‘bend’, implying, besides an alternation in articulation manner, four or even all five vowels, with, among others, *gar* ‘dance’ (in a round?), *sgar* ‘camp (enclosure)’, *mkhar* ‘castle’ (likewise an enclosure), *gormo* ‘round’, *khor-* ‘circle’, *skor* ‘encircle’, *kyirkyir* ‘round’, *hkhyir* ‘turn around, rotate’, less convincingly *dgurba* ‘bent, twisted’, and *sgur* ‘bend, bow (head)’, and finally *hkhyer* ‘carry away’, which he relates to *hkhur* ‘carry’, implying that this is necessarily done by bending one’s back.

In any case, such variability makes comparison rather difficult if not arbitrary. So far, it does not seem possible to establish a general direction for any of these alternations, not to speak of conditioning factors. Even at the lowest levels, such as the Tibetan languages, it is often not possible to establish regular and exceptionless sound laws. In a few cases, we have, fortunately enough, some historical evidence that allows explaining features such as the sporadic change of Cr to Cy in Balti as being due to borrowings from Eastern Tibetan. For the time being, however, we do not have any explanation for the fact that the sound change is only sporadic in the case of labial clusters, while completely regular in Eastern Tibetan in the case of velar clusters.²⁵ The further we go back in time or the broader the assumed genealogical relation becomes, the less it seems possible to establish regular sound changes. Tibeto-Burman comparative linguistics simply does not meet the philological standards mentioned above. That this field is still in an initial stage, is not really an excuse, as the standards have been set up (and followed) in the very early beginnings of Indo-European studies:

I beg leave, as a philologer, to enter my protest [...] against the licentiousness of etymologists in transposing and inserting letters, in substituting, at pleasure, any consonant for another of the same order, and in totally disregarding the vowels [...] I contend, that almost any word or nation, might be derived from any other, if such licenses as I am opposing, were permitted in etymological histories (Jones 1799: 431).

3. The semantic side: the word family *mra(o) ‘speak’, ‘speaker’, ‘human’, ‘lord’

3.1 Human simians, simian humans

Monkeys seem to have been substitutes for human sacrifices; at least, we know that monkeys were offered by Tibetans as well as by the inhabitants of the so-called Women’s Dominion, located in the border areas of the Pamirs and in parts of the Changthang (see Zeisler 2010: 404-415). Monkeys have played an essential role as a kind of ancestral deities among the recent Qiang (Stein 1957: 7-9). According to the Chinese annals, some Qiang tribes called themselves ‘monkey’ (ibid. p. 5) and similarly, the Tibetans claim to be simian offspring *mihu* (often translated as ‘little men’ or ‘dwarfs’), having a monkey as father (a *Bodhisattva* in disguise). Yet, according to some other Qiang legends, the etymologically related self-designation *Rma* ~ *Rme* ~ *Rmi* signifies, among other faculties, the being able to speak, in contrast to a just conquered ‘primitive’ tribe (Stein 1957: 4). This should be enough to show the ambivalent relation between humans

²⁵ There is a small number of words with a retroflex realisation of the former cluster velar plus alveolar trill, but these are most probably later borrowings from Central Tibetan as they are related to religious notions or to notions of similar high prestige.

and simians, at least, among Tibeto-Burman people. The Tibetan word *phrug(u)* ‘(human) offspring’ is certainly the closest equivalent to the alleged proto-Tibeto-Burman word for ‘monkey’ **mraw-k* (**myok* ~ **mruk*).

The Tibetan expressions for ‘monkey’, however, form the smallest part of the derivations under discussion, and it seems that, at least in Tibetan, this meaning is a secondary extension from a more basic meaning ‘human being’. One knows from other cultures that the concept of humanity may be extended to animals able to rise on the hind legs and to walk a few steps, such as bears, apes, and monkeys, cf. e.g., the Orang Utan, which is, literally, a *forest man*. An opposite extension would be rather unlikely.

3.2 Human speakers, speaking rulers (and priests): the Phiao (*Phya/v*)

Except for metathesis, all sound changes described above are attested across Tibeto-Burman languages, particularly also for the two words for ‘speaking’ and ‘human being’. As ‘speaking’ is the activity that discriminates humans from animals, and since speaking the same language is an important factor for establishing ethnical identity (and thus for the self-assurance as ‘human’ and the disqualification of others as ‘non-human’), I would argue that the formally quite similar words for speaking and humanity are actually related, the latter being derived from the former. In the following, I shall give a few examples from STEDT for the meaning *speak* and for the meaning *man, human*, the most relevant forms for the following discussion are underlined:

- ‘speak’: WrB: *mrwak* ~ *prwak* or *pro* ~ *prô* (/prɔ̃³/), Rangoon /pjo⁵⁵/, Jinuo /pja⁴²/ or /pje³¹/, Lotha Naga /phyo/, Sunwar /bwa:k-/, Lushai /biak/, Pattani /prəi/ or /prài/, Saker (Luish) /pri/, Tiddim /pa:u²/, Lisu /bá³/, Chokri (Naga) /po/ or /po³⁵/, Angami, Mikir, Shixing /pu/, Athpare /pik-/, Simi /pi/, Gurung /biq-m/, Lalo /biq/, Lakher /bi/, Lalo, Yi /bī³³/, Hani /mi³¹/, Sani, Ahi, Yi /be³³/ or /be⁴⁴/
- ‘man, human’: Darang /mowa:/, Dimasa /miya/, Tangsa (Moshang) /miva/, Tamang (Risiangku) /⁴pjon/ ‘male (human)’, Darang /myai/, Old and Mid Chinese /piwo/ or /piu/, Thakali /pyung/, Pa-O /pā khò/, Kayan (Pekon) /prà-/ ‘man’, Northern Lisu /mɿ²¹/ ‘female (human)’, Guiqiong /mũ³⁵/ Luxi (Langsu, Lequi) /pju³¹/, Apatani /mju/ < /mi-ju/ ‘human being’

One may further add the Karen classifier for human beings: Pa-O /phra⁵³/ or /phra³³/, Kayan /phra³³/, E. Kayah /phre¹¹/ < proto-Karen *bra^A ‘human being’ (Theraphan Luangthongkum 2011: 12; according to the author, p.c., the medial glide /-r-/ changes to /-j-/ or /-l-/ in some modern languages), Manchāti or Pattani /myo/ or /mio/ ‘daughter niece’ and /prəi/ ‘speak’ (Sharma 1982: 71, 220 and 70, 219), and perhaps also Raji of Astok in Uttarakhand, according to Sharma (1990: 171, 173f.) a Munda variety, but with many Tibeto-Burman loans, with /pəau/ [pəyau] ~ /pəyo/ ‘son, boy’ (pp. 178f., 195, 203). A form closer to Tibetan is found in Jyarung *tə-rmi* (Stein 1951: 253, n. 6 with further reference).

Note, in this connection, the tribal names Pyu/ Piao and Miao. It would appear that these people considered themselves as speakers and/ or human beings (or even as ‘nobles’, that is, ‘commanders’). Apart from the ethnical designations Rme ~ Me, Rmi ~ Mi, etc. in the eastern border area of Tibet, there are many other Tibeto-Burman tribal names that could equally be associated with this word root and these notions. Here, I restrict myself to these two forms, because they appear as ethnical names in Old Tibetan sources.

In the case of the Mya/v (𑄎), usually transcribed as *Myva* or *Myava*), it is quite apparent that the Old Tibetan documents refer to the Nanzhao kingdom, and thus to the peo-

ple commonly known as Miao. The *Phya/v* (ཕྱ་, usually transcribed as *Phyva* or *Phyava*)²⁶ should thus correspond to the *Pyu/ Piao* of Myanmar, but the *Phiao* of the Old Tibetan documents are located on the upper course of the Brahmaputra in Rtsaŋ (Western Central Tibet; cf. Pt 0126, Pt 0216: Lower Rtsaŋ, Pt 1060: Upper Rtsaŋ, ITJ 0734).

In Pt 1286, the ruler of Rtsaŋ is described as *rje Rtsaŋrjeŋi Thod.kar* ‘the lord, (a) Tocharian of/ among/ for the Rtsaŋ lords’. The association of the Rtsaŋ lord(s) with a Tocharian affiliation might indicate that the particular *Phiao* tribe or clan was actually of Indo-European (Yuezhi or Kušāṇa, and that means, Eastern Iranian or Scythian) origin (note that the Tocharians were most probably not speaking the so-called “Tocharian” language!).

Like other ancestral tribes, the *Phiao* became deified and the Tibetan emperors seem to have attempted to style themselves as descendants of the *Phiao*.

The Old Tibetan document Pt 1038, treating the descent of the Tibetan kings, refers to the legendary first king as a ‘ruler over all [three] existential spheres’ (*sridpa kunla mjaḥ mdzadpaḥ*) and as a *phya/vhi yaŋ phyav*. In the given context, the latter phrase cannot simply mean “the *Phyva* of the *Phyva* gods” (Samten Gyaltzen Karmay 1998: 286) or “a *Phyva* ancestor of the *Phyva*” (Macdonald 1971: 216) as the previous translations have it, neglecting the focus marker *yaŋ/ kyaŋ* ‘even’. The only meaningful interpretation, accounting also for the use of the focus marker, is ‘commander even of the commanders’ or ‘ruler even of rulers’, an adaptation of the prestigious Persian title *xšāyaθiya xšāyaθiyānām* or *šāhān šāh*, a suitable title for one who pretends to control the whole universe or all the worlds (Zeisler, to appear, § 4.2.6.4). This title would also correspond well to the already mentioned Khotan-Saka word for ‘commander, ruler, king’: *murta* from the root **mrav* or **mru* ‘declare, order’. The development in Tibetan (and Tibeto-Burman) could have been as follows:

- **mrava-ka* ‘commander, lord’ > **mrao-k* ~ **mrau-k* ~ **mru-k* >
 - via ⇄ sound alternation 3 & ⇄ sound alternation 2
 - or via ⇄ sound alternation 2 & ⇄ sound alternation 3
 - > **myao-(k)* / > **phrao-(k)* > *phyav* ‘speaker, commander, lord’

The word *phyav* or simply *phyav* and the (diminutive?) derivations with vowel *i* may also refer to more ordinary human beings: OT *phyi*, CT *phyimo* or *aphyi* refers to an ‘ancestral lady’ or simply ‘grandmother’, cf. pTB **pyid* (STLC: 88) or **-pəy* (HPTB: 191) ‘grandmother’. In Ņaŋral Ņima Ḥodzer’s *Metog sñiŋpo*, a *Phyis.mi* or *Phyiḥi rgadpo*, an ‘old *Phyi* man’, and a *Phyaḥi rganmo*, an ‘old *Phya* woman’, invoke the deities so that they may send a suitable ruler to the earth. Apparently, some of the *Phiao* functioned as priests and/ or as media for the communication between the deities and ordinary human beings. This role qualifies them as ‘speakers’ or ‘invokers’. In this context, cf. also OC **mjaŋ* > *mju* ‘magician, sorcerer, shaman’ (STLC: 107, with a proto-form **mjay*).

In a related development, the word *phyav* is also commonly used in the sense of ‘oracle’ or ‘lot’. Such prognostics are, of course, announced by a ‘speaker’. Cf. also the words *pra(-mo)* ‘ritual, prognostic’, *phramen* ‘sorcery, witchcraft’, and (*h*)*phrin* ‘message’, which likewise refer to a more abstract concept of the speech act. The forms in

²⁶ My transcription reflects the assumption that the vowel sequence was in fact intended to be /-iao/ or /-yaw/ according to the sequence in the attested names, but that the final labial semivowel was written merely conventionally below the palatal semivowel, possibly to save space or for some phonological reasons. I do not think that my argument gets invalid if the Tibetans should have intended to represent an inverted order /-ioa/ or /-iwa/.

p(h)ra- or *phri-* and those in *phya-* or *phyi-* are semantically and formally related. The former belong to an earlier stage of the development, the latter underwent jotisation (☞ sound alternation 3).

3.3 Men, women, children: *bya*, *byi*

The first chapter of the Old Tibetan Chronicle shows some applications of the word *bya* that do not really fit the Classical Tibetan meaning ‘bird’, but it seems that at the time of the redaction of this chronicle the original meaning ‘human being’ had already become obsolete, and in later times, a whole mythology was created about bird-like rulers and deities (cf. Zeisler 2011b: 145, 150f., 185; Haarh 1969: 17f. accordingly speaks of a bird totem).

There is, however, one Old Tibetan document that clearly testifies the meaning ‘human being’, if only as ‘woman’. The diminutive *byehu* is used in the sense of ‘child’. In another document the word *bya* has likewise a somewhat negative connotation, namely as ‘meek man’. The first document, Pt 1052, a *mo* divination text, contains an extremely negative forecast in ll. r131-134:

thor gcig ni mkhardaṅ pral | gyurbu ni skamla bton | byabaṅ ni thaṅla las byehuchuṅ ni nudaṅ bral || bu gcig ni dvaru lu[s] mo ḥdi jila btabgyaṅ ṅan rabbo ||

‘For an individual: he will be separated (forcefully) from his castle. For the whole [clan]:²⁷ they will be expelled into the desert (lit: dry land). The fearful²⁸ women will be left scattered.²⁹ The small children will be separated from the[ir mother’s] breast. A sole son will be left as orphan. This *mo*, thrown for which purpose ever, is extremely bad.’ (Zeisler, to appear, § 4.2.6.4)

The second document, OTC ll. 440-443 with a parallel passage, ll. 272 (given here in brackets), refers to a request for an oath of allegiance between the ruler and the Mgar clan. The phrase concerning the fearful woman *byabaṅ* is apparently copied from another document, and the copyist clearly misread the word *las* as *thas* (a meaningless form). This shows that certain expressions had become commonplace and were recycled rather mechanically wherever they might have fit. The CT meaning of *byabaṅ* (~*byawaṅ*) ‘nighthawk’, ‘raven’, or ‘flight of bird’ does not make sense in either document. Similarly, several other difficult words in the OTC passage cannot be understood by their later classical meanings.

rjeḥis ni bkaḥ stsalpa gžahpyi ni yunkyī srid | (/ rjeḥis ni bkaḥ stsalna gžahma ni yunkyī srid ||) byaḥis ni žu pubpa | lapyi ni gdaṅsu dro || (/ byaḥis ni žu pubna lapyi ni gdaṅssu dro ||) ... rjeḥis ni ḥbaṅs magtaṅ || rjeḥis ni ḥbaṅs btaṅna | byabaṅ ni thaṅla thas (recte: las) | ...

‘The lord having given an order, the trustworthy (*gžah*) word (*pyi*) (/ the confidence, *gžahma*) will last. The (meek) man having posed a request, the answer/word of gratitude (? *lapyi*) will be like the sun (lit. will be warm) on the forehead. ... May the lord never abandon (his) subject(s). If the lord abandoned (his) subject(s), the fearful women (or effeminate men) would be left scattered. ...’ (Zeisler, to appear, § 4.2.6.4)

²⁷ BDGM: *gyurbu* = *matshaṅba medpar* ‘not being the case that it is not complete’.

²⁸ For *baṅ* cf. *bag* ‘be afraid’, *bagmed* ‘careless, unscrupulous’ (JÄK, TETT), hence *baṅ-* ‘fear’ as an alternative form of *bag-* (☞ sound alternation 2).

²⁹ BRGY: *thaṅla* = *bkram* ‘scattered’; *las* is an alternative form for *lus* ‘be left’.

Traces of this obsolete Old Tibetan word are preserved in CT *bya-n-po* ‘married man’ (JÄK, TETT), with pejorative usage also ‘divorced man’ (JÄK), CT *bya-n-mo* ‘married woman’ (JÄK, BRGY, TETT), with pejorative usage also ‘divorced woman’ (JÄK, TETT), ‘whore’ (JÄK), and further in CT *byispa* ‘child’, which can be analysed as *byi* plus collective suffix *-s* (see Denwood 1986 and Uebach & Zeisler 2008) plus individuating *-pa*. The form *byi* might either be a development from *byehu* ‘child’ or it might be due to vowel alternation (possibly triggered by the initial labial or by the palatal or by both). The alternation *bya* ~ *byi* mirrors that of *phya(v)* ~ *phyi*.

A further reflex of *bya* ~ *byi* is found in BAL /balbis/ ‘child’ and PUR /bazbis/ ‘wife’ (CDTD sub *byis*). I would think that at least the second element can be explained as being due to a metathesis from an original *bri-s³⁰ as the older (rhoticised) counterpart of *byi-s*. The first element /ba-/ might likewise be etymologically related: it could have developed from *bra or *bya with loss of the post-radical.³¹ In that case, the first element /ba/ might have designated humanity as a more general or abstract concept.

Finally, another reflex might be found in LAD Kenhat /abi/ < *abyi vs. Shamskat /api/ < *aphyi* ‘old woman grandmother’. Note that in other family terms, an intervocalic unvoiced consonant does not get voiced in any of the Ladakhi dialects, hence LAD /atfo/ < CT *ajo* ‘elder brother’, LAD Kenhat /atfe/ ~ /atfi/, Shamskat /atfhe/ ~ /atfe/ < CT *ac(h)e* ‘elder sister’. For possible cognates, cf. also pTB *bwar > OC *bar > buâ ‘old woman’, pLB *bwa ‘grandmother’ (STLC: 114), and pTB *p^wa ~ *b^wa ‘grandmother’ > OC *b^wâ ‘old woman grandmother’ (HPTB: 174).

It seems that the forms with *i* were by preference used for females and/ or children, the forms with *a* by preference for males. This is certainly not a strict rule, but would corroborate a diminutive derivation. Cf. also HPTB (pp. 38, 187) pTB *mi > pLB *mi^{2/3} ‘female, girl’, with Lahu /yâ-mî/ ‘girl, daughter’, /mî-yâ/ ‘wife and children’, Maru /mji³⁵/ ‘wife’, /mji³⁵ ye³⁵/ ‘daughter, and Bisu /bi/.³² Nevertheless, if one looks at all the forms across Tibeto-Burman, it also seems that these words were originally gender-neutral – something that could be expected if the word referred to a specific human faculty (that is, the faculty of speaking) –, but were either filling gender-specific gaps when borrowed or got gender specific negative values when new, more prestigious items were introduced for the higher-ranking gender, and then eventually got obsolete. Interestingly enough, in Tibetan the newly introduced forms, such as *mi* for ‘man’ and possibly *mo* for ‘woman’ are taken from the pool of etymologically related words and constitute further developments of the original word.

The pejorative connotations that words denoting women as the politically less important or even despised part of the society may acquire yielded also a group of words centring around the word *byi* ‘promiscuity, adultery, rape’, cf. also ITJ 0734 *The age of decline* 1r28f., where among other bad deeds that will be performed in the future it is prophesied that *myi pha logpoḥi chuṅmala byiba byas* ‘the having performed adultery/

³⁰ /lb-/ for /rb-/ is occasionally attested in the Shamskat dialects, cf. TYA /lbak/ vs. DOM /rbak/ for CT *sbrag* ‘arrange’ and Purik, Sham /lbos/ vs. Leh, Nubri /rbos/, Balti /ybos/ ‘swell’ (CDTD). Note also the regular change of /br-/ > /bl-/ in Skardu Balti (Read 1934: 3).

³¹ Sprigg (2002: 25) suggests to analyse the Balti word as being a translational compound based on Urdu *bāl* ‘child’ and Tibetan *byis*. This analysis would not account for the quite similar Purik word, where the alleged final takes quite a different shape and where we no longer deal with mere children.

³² Perhaps also *pwi(y) ‘female’ with OC *bⁱæn ~ *bⁱær ‘female of animals’ and Lushai /-pui/ ‘feminine affix’ (HPTB 197, 201, 448). HPTB (p. 449 note n) indicates that the usage is most probably ‘general, regardless of species; femaledom’ and the index entries on pp. 608 and 650 indicate usage for both humans and animals. It is quite possible that a word for female human beings becomes applied also to animals due to bleaching of the original meaning (this happened also with the affix *-mo* in Tibetan) or when the original meaning acquires some negative connotation.

rape with/ to the wife of [another] fatherly man'.³³ Finally, one may perhaps also add *byipo*, which, apart from a 'lecher', also refers to the 'bosom' (JÄK, TETT), perhaps basically of female beings?

3.4 CT *bya* 'to be called', *byas* 'said'

The CT verb root \sqrt{bya} (I: *byed*, II: *byas*, III: *bya*, IV: *byos*) has the basic meaning 'do, make, perform'. Stem II and III, however, are often used in the sense 'said' (stem II) or 'to be called' (stem III). One could possibly derive this meaning from the basic notion 'do'. Felix Haller (p.c.), however, suggests, that we might actually deal with two different verbs. This would again show a direct relation between speaking and humanity.

However, this analysis faces one major problem: the verb *byed* has a synonym CT I: *bgyid*, II: *bgyis*, III: *bgyi*, IV: *gyis* (OT also with infix *-r-*, e.g., Pt 1038 *brgyi* and *brgyis*), which has exactly the same meaning 'do, perform' and, with stems II and III, 'said' and 'to be called'. In this case, we do not have any evidence that there were two independent verbs $\sqrt{(r)gyi}$ of different meaning.

Nevertheless, there might be one explanation. A given synonym S of a word A, when becoming more dominant, may also replace a semantically unrelated homophone B of A. The Romance languages provide a nice example: Latin *asinus* 'donkey' (A) and *acinus* 'berry' (B) became homophonous *aze* (A, B) in the dialect of La Canourgue in southern France. When the word for 'donkey' (A) was replaced by *saymo* 'beast of burden' (S), the replacement affected also the word for 'berry' (B) (Maiden 2008: 319f).

Similarly, the synonym $\sqrt{(r)gyi}$ of \sqrt{bya}_1 'do' might have been transferred to \sqrt{bya}_2 'speak', without, however, replacing any of the two forms. This could have happened rather easily if the notion of 'speaking' had already become obsolete.

3.5 The full set of words that are possibly related

In the following, I shall list the words related to (1) speaking, (2) humanity, (3) clan and tribal names, and (4) monkeys that were arguably derived from the root **mra(o)* through any of the above described sound alternations and any combination thereof, see again Table 1, which is repeated as Table 3 below for convenience.

Note that final *-d* (alternating with *-s* after non-dental and non-alveolar consonants) is a derivational suffix for verb stem I, which typically leads to vowel change *a > e*; final *-s* (alternating with *-d* after dental and alveolar consonants) is a derivational suffix for verb stem II. Both suffixes may get lexicalised. Final *-n*, alternating with *-d*, is a common deverbalising derivational suffix, it often has a collectivising meaning, like the nominal *-s* suffix. Similarly, final *-ŋ*, alternating with *-g*, is an old nominal derivative suffix, possibly with the meaning 'belonging to' (see also further below). The *a-* prefix of family terms has an individualising function, like the suffixes *-po/-pa* and *-mo/-ma*. Furthermore, as stated above, the written Tibetan *d-* pre-radical does not represent a dental or alveodental consonant, but possibly a voiced velar or uvular fricative and an unvoiced retroflex or a palatal fricative. For a better understanding, all derivational or compositional elements that do not belong to the word root in question will be separated from the root by hyphens.

³³ The meaning of *logpo* is unclear, according to BRGY it may imply 'something extra' or a 'selector'. In the first case, the term may perhaps refer to the father's younger brothers, who, in an polyandrous marriage system, are considered to be 'younger fathers' of the children, even if they have a wife of their own.

Table 3 Overview: combined sound changes for the root *mra(o)

		Vowel alternations (not morphologically triggered)				
		(<i>mye-</i>)	–	<i>Mya/v</i> (3)	(<i>myi</i>)	–
Alteration of homorganic nasals and oral stops	nasal base form metathesis← →jotisation	↑		↑	↑	
		*mre	*mro	† <i>Mra</i> (3)	*mri-	*mru
		↓		↓	↓	↓
		<i>smre</i> (1)	*smro	<i>smra</i> (1/2)	*smri	*smru
		<i>sme-</i> (1)	<i>smo</i> (1)	<i>Sma</i> (3)	<i>smi-</i> (2)	<i>Smu</i> (3)
		<i>rme-</i> (1)	<i>rmo-</i> (1/2)	<i>rma-</i> (1/2/3)	<i>rmi</i> (2)	<i>Rmu</i> (3)
		*dme	<i>dmo</i> (1)	<i>dma-</i> (2)	<i>dmi-</i> (2)	<i>Dmu</i> (3)
		<i>m(y)e-</i> (2)	<i>mo</i> (1/2)	<i>ma</i> (2/3)	<i>m(y)i-</i> (2/4)	<i>Mu</i> (3)
		secondary voiced metathesis← →jotisation		–	(†) <i>bya</i> (?1/2)	† <i>byi</i> (2)
				↑	↑	
	<i>bro</i> (1)			<i>Bra</i> ? (3)	*bri-	
	↓			↓	↓	
	*sbro			<i>Sbra</i> ? (3)	*sbri	
	*sbo			*sba	/-zbi-/ (2)	
	*rbo			*rba	*rbi>/-lbi-/ (2)	
	<i>dbo-</i>			<i>Dbra</i> ? (3)	–	
	secondary unvoiced metathesis← →jotisation		<i>spyo</i> (1)	<i>dpyas</i> ? (1)		
		–	–	√ <i>p(h)ya-</i> (1/2/3)	√ <i>-phyi</i> (2)	–
		↑	↑	↑	↑	
		*p(h)re-	*p(h)ro	√ <i>p(h)ra-</i> (1)	√ <i>p(h)ri-</i> (1)	<i>phru-</i> (2)
		↓	↓	↓	↓	↓
		*spre	*spro	√ <i>spra-</i> (4)	√ *spri	<i>spru-</i> (2)
		/spe-/ ? (1)	<i>spo-</i> (2/?3)	<i>Spa</i> ? (3)	<i>Sp(y)i</i> ?? (3)	<i>spu-</i> (2/?3)
		*rpe	*rpo	*rpa	–	*rpu-
<i>dpe</i> ? (1)		<i>dpo-</i> ? (2)	<i>dpa-</i> ? (1/2)	–	–	
–	<i>p(h)o</i> (2)	–	–	/pū-/ (2)		

1. Verba dicendi and words related to speech acts:

- *smr* (step 1): OT/CT *smra* ‘speak’, *smra-ŋ* ‘speech, recitation’; *smre* ‘lament’
- *smVr* (step 1a): CT *smar* ‘speak’, PUR /kha smar/, Leh /kha mar/ (CDTD), GYS /kha mār/ < *kha smar* ‘talk rude, too much, shout, cry a lot’
- *sm* (step 2): OT/CT *smo* ‘say, name’, *smo-n-lam* ‘prayer’; √*sma-d* (I/IV: *smo-d*, II/III: *sma-d*) ‘slander, blame, abuse, curse, etc.’
- *rm* (step 3): OT/CT √*rme* ~ *sme* (I: *rme-d* ~ *sme-d*, II: *rme-s*) ‘ask’; *rma* ‘inquire, ask’, BAL /šma-ŋ-sa/, PUR /šma-ŋ/ ~ /sma-ŋ/ (CDTD) ‘lawsuit’; CT *rmo-d-sŋags* ‘charms for causing mischief to others’ (TETT)
- *dm* (step 3b): CT *dmo-d* ‘swear, curse’
- *m* (step 4): OT/CT *mo* ‘oracle’
- *br* (☞ sound alternation 2): OT/CT *bro* ‘oath’

- *by* (☞ sound alternation 3): OT/CT \sqrt{bya} ‘speak’
- *b* (☞ sound alternation 3): OT/CT \sqrt{bo} (I: *h-bo-d*, II/IV: *bo-s*) ‘call invite’, OT *bo-n-po* ‘reciter, invoker’ (?)
- *pr* (☞ sound alternation 2, unvoiced): OT/CT *pra-(mo)* ‘ritual, prognostic’, CT *pra-chal* (~ *spra-chal*) ‘joke, jest’, OT/CT *phra-ma* ‘calumny, slander’, CT *phra-men* ‘sorcery, witchcraft’; OT/CT (*h*)-*phri-n* ‘news, tidings’
- *py* (☞ sound alternation 3): OT *phya/v* ‘invoker, commander’, OT/CT *phya(/v)* ‘lot, prognostics’, *h-phya* ‘blame, censure, chide, deride’
- *spr* (step 1): CT *spra-chal* (~ *pra-chal*) ‘joke, jest’
- *spy* (step 1a): OT/CT *spyo* ‘blame scold’
- *sp* (step 2): LAD /spera/ ~ /fera/ ~ /pera/ ‘speech, language’ ?< *dpesgra* (?)
- *dp* (step 3b): perhaps OT/CT *dpa-η-po* ‘witness (act or person)’ (?); *dpe* ‘example’ (?; cf. n. 18, p. 14)
- *dpy* (step 3b): OT/CT *dpya-s* ‘offence, fault, blame’ (?)

2. Person related words:

- *smr* (step 1): OT *smra* a term used in older texts for proto-human, priestly, or even divine beings, on a par with the *gšen* (a class of priests) and the *lha* ‘deities’
- *sm* (step 2): OT/CT *smi-n* ‘sibling’ (cf. *smi-n-drug* ‘Six Sisters’, the Pleiades and *smi-n-bdun* ‘Seven Brothers’, the Great Bear)
- *rm* (step 3): Dzongkha /mī/, Kardze /mō/ < *rmi* (*dmih*), Batang /mē/ < *rme*, Derge /jē/ < **rmye*, Lithang, Cone /jō/ < **rmyi* ‘man’ (CDTD and Jacques 2011: 9f. for Cone),³⁴ CT *rmo-mo* > CtrT /mō:/, ‘old woman’, Southern Mustang /mōmo/ ‘(maternal) aunt’, Western Drokpa /mōŋ/ ‘grandmother’ (CDTD),³⁵ OT *rma-η-s* (~ OT/CT *dma-η-s*) ‘people, commoner’
- *dm* (step 3b): OT/CT *dma-η-s* (~ OT *rma-η-s*) ‘people, commoner’, *dma-g* ‘soldier(s), army’, LAD Kenhat /mākpa/, Cone /mæ¹qqæ¹/36 (Jacques 2011: 9f.) < *dma-g-pa* ‘son-in-law’ (for possible alternative cognates, cf. OC **mjagx* > *mju* ‘martial, warlike, military’ > pLB **mak*, WrB *mak*, Lahu /màʔ/, Lisu /má/, STLC: 108; pTB **d-mak* HPTB: 317; and **mrang* > OC **mraŋ* > *meng* ‘population, people’, STLC: 116)
- *my* (☞ sound alternation 3 or step 4):³⁷ OT *mye-s-po*, AT /aŋe/ < *a-mye-s*, ‘old man, grandfather, ancestor’; OT *myi*, AT /ji/ ‘man, person’
- *m* (step 4): OT/CT *mi* ‘man, person’, OT/CT *mo* feminine gender marker, dialectal *mo* ‘woman’; CT *me-s-po*, LAD /meme/ ‘old man, grandfather, ancestor’
- *br* (☞ sound alternation 2): —

³⁴ The written Tibetan spellings *Rmi*, *Dmih*, and *Rme* are, in fact, found for ethnical designations of Eastern Tibet (see below).

³⁵ With nasal, high tone indicates a former pre-radical.

³⁶ In Jacques’ notation ‘x¹’ indicates high tone. In the tonal varieties of Tibetan, all plain nasals are low tone by nature, but have a high tone realisation if these had been preceded by any kind of pre-radical.

³⁷ As mentioned initially (s. note 3, p. 2), the palatal glide may be either the result of the sound alternation 3 (Cr > Cy) or the result of an Old and Eastern Tibetan development where labials became palatalised before palatal vowels.

- *db* (step 3b): OT/CT *dbo-n* ‘nephew, grandson’³⁸
- *by* (⇨ sound alternation 2 plus ⇨ sound alternation 3): OT †*bya* ‘man, woman’, †*byehu* (= *bya+hu*) ‘child’, †*byi* ‘woman, child’, cf. LAD Kenhat /abi/ < *a-byi* ‘grandmother’, OT *byi-s-ba*, CT *byi-s-pa*, PUR /bazbis/, BAL /balbis/ < **ba-rbi-s* ‘child’, Purang /piṭṣiŋ/ ‘son’ < *byis-sriŋ* (CDTD), cf. also CT *bya-n-po* ‘married man’ (JÄK, TETT), with pejorative usage also ‘divorced man’ (JÄK), CT *bya-n-mo* ‘married woman’ (JÄK, BRGY, TETT), with pejorative usage also ‘divorced woman’ (JÄK, TETT), ‘whore’ (JÄK), perhaps also OT/CT *naŋ-bya-n* ‘servant’ (lit. ‘person for internal affairs’³⁹); pejorative usage is found especially with CT *byi* ‘adultery’ (TETT), cf. *byi byas* ‘commit adultery (a man with another man’s wife)’ (BRGY), *byi byed* ‘commit adultery (man to woman), rape’ (JÄK), *byipo*, *byibo* ‘lewd man, adulterer’ (BRGY, TETT), *byimo* ‘lewd woman, adulteress’ and ‘bald woman’⁴⁰ (BRGY, TETT), cf. also Tabo /pimō/ ‘woman with bad character’ (CDTD), CT *byiphrug* ‘illegitimate child, bastard’
- *phr* (⇨ sound alternation 2, unvoiced): CT *phru-g(u)* ‘child’
- *spr* (step 1): CT *spru-g(u)* ‘child, offspring’
- *sp* (step 2): OT/CT *spu-n* ‘brothers’; Cone /æ²pō¹/ *a-?spo* ‘baby’ (?; Jacques 2011: 58)
- *rp/dp* (step 3/3b): OT/CT *dpo-n-po*, Shamskat /ṛponbo/ ‘master, overseer, lord’ (?); *dpah-bo*, Shamskat /ṛpao/ ‘hero, watchmen’ (?)⁴¹
- *p(h)* (step 4): Lhasa /pūkū/ ‘(human) child, offspring’; OT/CT *pho* ‘man’, dialectal *a-p(h)o* ‘grandfather’, *po-po* ~ *po-bo* ~ *spo-bo*, CtrT /pōpō/ or contracted /pō:/ ‘old man’ (cf. CDTD)
- *phy* (⇨ sound alternation 3): OT *phyi*, CT *a-phyi*, *phyi-mo* ‘old woman, grandmother, ancestress’, cf. LAD Shamskat /api/

³⁸ From an anthropological perspective, grandchildren and nephews and nieces share the property of being ‘offspring’ with a distance of two steps from ‘ego’, the reference person. In the case of grandchildren the two steps lead directly vertically along the genealogical line, in the case of nephew/niece, the first step is horizontal to the sibling and then again vertically to his/her offspring. Hence, one often finds the same designation or obviously related forms for both groups. The proto-form is given in STEDT as **b-liy*, **b-ləy*, or **b/m-ləy*, and one finds forms such as Kayan /pʰōdō/ ‘niece, nephew [lit. child-big]’, which shows the relation to the words for ‘(human)offspring’, and Northern Hpun /ām̄yi/ ‘nephew, niece; grandchild’, Tangut /mo/ ‘nephew, mother’, which show the relation to words for women or mothers or more generally to humanity. Cf. also Taodeng /pʰji tē-mdu/ ‘nephew, niece (maternal)’, WrB *mrè* ‘grandchild’, Rangoon /mje⁵⁵ (mji⁵⁵)/ Achang /mi³¹/ or /mi³¹ tso³¹/ ‘grandson’, Nusu /bia³³ za⁵⁵/ ‘grandson’, /bia³¹ za⁵⁵ mi³¹ a³¹/ ‘granddaughter’ (STEDT).

³⁹ The parallelism with *naŋblon* ‘minister of internal affairs’ and *phyiblon* ‘minister of external affairs’ (with *blo-n-po* ultimately related to *blo* ‘mind, reasoning’) is obvious, but I do not want to preclude that the element *bya* refers to the faculty of doing rather than to that of speaking, even though I would have expected a form such as **naŋbyed* for the ‘actor’ meaning.

⁴⁰ *ngoḥi skra medpa’i budmed*. Perhaps a woman that has been shaved as punishment for adultery?

⁴¹ In the *Rṅogchos* section of the *Bkahgdams glegs bam* (compiled 1302), a *dpahbo* (as a model for those who meditate) is described not so much as a fighter, but as one who ‘acts as a guard, watchman, sentry, or spy’ (Herrmann 1983, fol. 265r.5). It is thus possible that the word is related to another Iranian word, referring to the army, soldiers, and watchmen: Pahlavi *spah* ‘army’ (MacKenzie 1971), Parthian *spāda* > Gāndhārī *śpala*, Khotan-Saka *spātā* ‘army’ (possibly < **spāda-pati*); Saka *spasa* ‘observer, servant’ (as appearing in several compounds), cf. Harmatta (1994: 410-412), and Niya Prakrit *spāsa* ‘sentry, watch’ (Burrow 1934: 512).

3. Clan, tribal, and ethnically related place names:

- Mya/v (Miao); Phya/v (Phiao)
- Sma-za (~ Mu-za ~ Mu-zi, cf. Stein 1951: 254 with n. 5), Smu ~ Rmu ~ Dmu ~ Mu; Rmi ~ Dmiḥ ~ Mi, Rme ~ Me, Mo (these designations are used for Qiang tribes in Eastern Tibet, particularly for the Mi- ~ Me- ~ Mo-ñag, cf. Stein 1951: 253, n. 6, 1957: 5), Rma ~ Ma, Rme-ru (= *rma+ru*; the vowel *e* seems to be conditioned by the second syllable, like in the case of the diminutive suffix; cf. also Mīru < Rmeru, a place in Ladakh with further vertical vowel assimilation), Amyes Rma-chen a.k.a. Rma-chen or Rma-rgyal Spom.ra (= *spo+mra*)
- Bra ~ Spra ~ Sbra ~ Dbra (?)
- Spa, Spu (Spu-s, Spu-rgyal), Spu-g ~ Spu-ŋ (?); Spo-bo, Spo-(ŋ)-roŋ (?); perhaps also Spyi-ti (??)

4. Monkeys:

CT *spra*, OT/CT *spreḥu* (= *spra+ḥu*) ‘monkey’, (CT origin myth: *mi-ḥu* originally ‘simian offspring’, but reinterpreted as ‘little man, dwarf’).

4. Repercussions for the reconstruction of proto-Tibeto-Burman

First of all, the attested instances of metathesis with an intermediate *s-* or *d-* pre-radical pose a challenge for previous reconstructions with triple clusters or ‘prefixes’, which were apparently biased towards the Tibetan form. The process of metathesis continued into some of the western-most dialects. From the historical background, it is rather evident that Balti, Purik, or Western Sham cannot represent the oldest stratum of Tibetan, as the western areas were originally inhabited by people speaking Indo-Aryan, perhaps also Iranian languages or even Burushaski. These areas were conquered in the mid 7th century CE, but that does not mean that the people changed their language immediately. Most probably, the shift from Tibetan as a foreign language to Tibetan as the mother tongue took place much later, perhaps only from the 11th century onwards (see also Zeisler to appear § 2). The triple cluster sCr, some instances of the cluster sCy, and many of the binary clusters sC, rC, dC are clearly the result of a secondary development. Old or Classical Tibetan words with these clusters, therefore, cannot be taken as a witness, neither for a complex syllable structure in proto-Tibeto-Burman nor for certain derivative morphemes, such as the alleged ‘body-part’ *cum* ‘animal’ prefix *sya (cf. p. 6 above).

As can be observed from the examples in § 2.1, previous reconstructions were not fully consistent in assigning either a nasal or an oral initial. In one case, HPTB/ STEDT provide an oral form, apparently based on the Tibetan attestation (the case of ‘snake’, example (16)), in the other case, a nasal form is given, possibly because the corresponding Tibetan form was not recognised (the case of ‘monkey’, example (14)), and yet in another case, an oral form is given, despite the fact that the corresponding word in Tibetan has a nasal and the Written Burmese form shows both a nasal and an oral variant (the case of the verb ‘speak’, example (17)). We definitely need to establish some general sound laws, describing the direction of the development.

With respect to the initials, either the oral or the nasal variants should represent the earlier form. If we look at Tibetan and the fact that nasal initials may correspond to voiced as well as to unvoiced oral stops, it seems to be more logical to assume that in Tibetan the development was from nasal to oral and not the other way round. One could possibly argue that the voiced and the unvoiced forms were transmitted by different pre-

Tibetan varieties or borrowed via different channels. Since the nasal variants are also found in other branches, particularly among the Burmish languages, it is highly probable that the shift from nasals to oral stops was an innovation that affected some branches but not others, and in some branches, some words but not others. The last alternative, however, would point to mutual influences or borrowings.

On the other hand, the Tibetan finals do not show a clear pattern. Alternative endings are comparatively frequent, but just because of this, it is impossible to postulate generally which one is the older form. There might be several reasons for this situation: different dialects might have contributed different forms or the development could have become reverted in some cases under the influence of a more prestigious dialect. Finally, if at least some dialects showed a regular assimilation to a following morpheme with an oral or nasal initial, this could have contributed to a certain instability of the finals in general.

In the case of the alternations among the glides *w*, *y* [j], and *r*, it seems to be more likely that an alveolar and labial glide merged with a palatal glide, than that a palatal glide became sometimes a labial and sometimes an alveolar glide. Particularly the development *Cy* > *Cr* seems to be somewhat less likely than the opposite process.

The variability of the word forms in individual word families within Tibetan and across Tibeto-Burman languages poses a great problem for the reconstruction of the assumed proto-language. Even more annoying is the fact that in most cases, we are unable to indicate a direction of change. As a result, one may find different reconstructed etyma for quite obviously related words, as in the case of 1. **bwar* or **p^wa* ~ **b^wa* > OC **bar* > *buâ* or **b^wâ* ‘old woman, grandmother’ (STLC: 114, HPTB: 174), corresponding to OT †*b^wya* ~ †*b^wi*, Kenhat /*abi*/, BAL /*balbis*/, PUR /*bazbis*/ vs. 2. **pyid* or **-pəy* ‘grandmother’ (STLC: 88, HPTB: 191), corresponding to OT *phyi*, CT *phyimo* or *aphyi*, Shamskat /*api*/. A similar case might be the above-mentioned derivation **mra-* > *rma* ‘man’ > *rmaŋ* ~ *dmaŋ* ‘commoner’, *dmag* ‘soldier(s), army’ and the supposed roots OC **mraŋ* < **mraŋ* for the former and OC **mjaŋx* for the latter.

Unfortunately, it is not always clear how old an Old Chinese word actually is. The available comparative lists do not specify the first (or last) attestation of any given word. The term Old Chinese is used for the language of the earliest oracle bone inscriptions (12th c. BCE), the Western Zhou bronze inscriptions (around 1000), and the pre-classical texts (until the late 3rd c. BCE).⁴² By the time of the oracle bone inscriptions, nomadic Indo-European tribes had already been settling in Eastern Turkestan. Archaeological evidence points to an arrival in Gansu around in the early 2nd millennium BCE. It is an open question who these tribes were and what kind of language they actually spoke. Benjamin (2007: 1-36 and 43f.) who gives a fairly good overview on the early history of the Yuezhi, like most scholars outside the field of Indo-European historical linguistics, favours the ‘Tocharian’ hypothesis, while the majority of Indo-Europeanists favour the Eastern Iranian (Scythian) hypothesis. In any case, there must have been enough opportunities for the Chinese to interact and trade with these Indo-European nomads and with this interaction, words could be borrowed in either direction.

In the case of the word **mraŋ*, I have been told (Thomas Preiswerk p.c.) that it appears already in the Book of Songs (or Book of Odes, *Shijing*), which is dated to the 10th to 7th century BCE. Its final reduction, however, was made by Confucius (551–478 BCE).⁴³ With the given time frame, one cannot preclude any instance of borrowing. Unfortunately, I am not in a position to find out in which context the word **mraŋ* appears,

⁴² http://en.wikipedia.org/wiki/Old_Chinese#History, accessed 05.03.2012.

⁴³ [http://en.wikipedia.org/wiki/Book_of_Songs_\(Chinese\)](http://en.wikipedia.org/wiki/Book_of_Songs_(Chinese)), accessed 29.02.2012.

whether it could be associated with the Central Asian nomadic tribes or not, or whether a borrowing could be motivated for other reasons or rather not.

I do not want to preclude, that some originally independent words might have got fused in Tibeto-Burman or more particularly in Tibetan, as it happened in the case of the verbs $\sqrt{bya_1}$ ‘do’ and $\sqrt{bya_2}$ ‘speak’ or as it happened in the early period with the nouns OT bya_3 ‘human being’ and OT/CT bya_4 ‘bird’. But the assumption that all the 40 odd combinations, which lead to an even greater number of semantically related words, are merely the result of accidental convergence, requires a bit too much of coincidence. From the perspective of Tibetan, all forms can be derived from a single verb root.

All the words discussed here with a labial initial or root consonant and the meanings ‘speak’, ‘human being’, or ‘monkey’ seem to be deeply rooted in the Tibeto-Burman languages and are particularly associated with many tribal names. One would not generally expect such core vocabulary items to be borrowed, even less could one expect the borrowing of a core verb as verb. However, there are instances where family terms have been borrowed from another, more prestigious language, cf. Urdu *valid* ‘father’, *validah* ‘mother’, *validen* ‘parents’, borrowed via Persian from Arabic, or the omni-present *mom* and *dad*, borrowed into Ladakhi (via Hindi, Urdu, or Panjabi) and into many other languages of the world. There are also infrequent instances where verbs have been directly borrowed as verbs.⁴⁴ A rather obvious case of verb stem borrowing into Tibetan is CT *ḥgrul* ‘walk’, which, despite its spelling, is nowhere attested with a velar cluster, particularly not in Balti or Purik, where the velar is typically preserved. The orthography is thus artificial and the word most probably borrowed from an Indian language, cf. Hindi *ḍalnā* or *ḍolnā* ‘move, wander about’ and Kumaoni *ḍulṇo* ‘wander’ (Bielmeier 1985: 171).

The Tibetan verbs *smra* ‘speak’, *rma* ‘inquire’, $\sqrt{sma-d}$ (I/IV: *smod*, II/III: *smad*) ‘slander, blame, abuse, curse, etc.’, *dmo-d* ‘swear curse’, and the element *smo-n* in the word for ‘prayer’ belong to a high register (the negative notions, such as ‘blame’ or even ‘curse’ can be easily associated with the utterances of high ranking persons or of ritual specialists). With their reconstructable forms **mra-* or **mro-*, they have a very close equivalent, in the Eastern Iranian verb *mrao-*. The vowel alternation in the attested forms points to an original diphthong, and two of the related words even show the Avestan diphthong: *Phya/v* (Phiao) and *Mya/v* (Miao). What is more, even within Indo-Iranian, the word shows similar sound changes and even a similar derivative morphology: the for Indo-Iranian languages rather uncommon shift from nasal to oral stop (**brao* in Indo-Aryan), the proto-Indo-Iranian shift of medial glide, here *l > r* (cf. again pIE **mleuH*, pII **mlauH* ‘speak’, Avestan *mrao-*), plus the progressive metathesis in the Saka dialects (cf. **mrautar* > **mrautā* > *murta* and **mrvant* > *murunḍa* ‘lord’), variation in the vowels, particularly reduction of diphthong *ao* to *u*, and the presence of a velar derivational suffix, which, incidentally, has almost the same semantics as one of the Tibetan or Tibeto-Burman suffixes commonly found with this root.

That is to say, some of the words discussed above show a final nasal or oral velar in some of the Tibeto-Burman varieties but not in the others. The question is then whether this final originally belongs to the word root, as suggested in many reconstructions, or whether it might not simply be a derivational suffix. E.g., in the case of the verb

⁴⁴ Verbs can be borrowed, not only as nominalised forms in combination with light verbs, but also indirectly (with derivational affixes) or directly as verbs (cf. Wohlgemuth 2009: 88-101). In the latter case, it is quite common, but not really necessary that an infinitive or any other kind of nominal form is borrowed. In our case, it would also be possible, that a verb was borrowed with its nominal morpheme, but that the latter got contracted or lost in the course of time.

‘speak’, Simon proposes the form *smray, Matisoff the form *br(w)ak or *(s)br(w)añ, whereas Tibetan has only *smra*.

It seems odd to postulate that Tibetan lost the final velar, since velar finals are quite common in Tibetan. Simon (1929: 162) assumes, that the ‘lost’ finals in Tibetan were originally voiceless or fricatives. But this is not very convincing. The voice opposition is neutralised in the final position of Tibetan words, where the consonant may appear as unreleased or delayed stop (cf. Biemeier 1985: 66 for Balti). We have no means to establish the original voiced or voiceless character of the finals. Final nasals are generally assumed to have been voiced. Thus, where the final is reconstructed as a nasal, there is absolutely no evidence for a phonetic condition that could trigger its loss in some cases, but not in others.

Moreover, verbal morphology apart, in most, if not all, cases where we have alternations between finals and open syllables in Tibetan, the open syllable corresponds to a verb root, less frequently also to a noun, while the form with a final always corresponds to a nominal derivation. Deverbal derivations are mainly found with the *-d/-n* suffix (cf. CT I: *rga*, II: *rga-s* ‘get old’, *rga-d-po* ‘old man’, *rga-n-mo* ‘old woman’; CT I: *lta*, II: *b-lta-s*, III: *b-lta*, IV: *lto-s* ‘look at, observe’, *lta-d-mo* or *lta-n-mo* ‘spectacle, show’).

The *-g/-ŋ* suffix appears for deverbal and denominal formations. Deverbal usage is found in the case of *smra* ‘speak, say’ and *smra-ŋ* ‘ritual narrative, proclamation’ or perhaps simply ‘speech’. Denominal usage is commonly found with tribal and geographical names, such as *Spu* and *Spu-ŋ*, *Spu-g*, or *Spu-gu*; *Rma* and *Rma-ŋ*. The suffix may also have a connotation of family relations, cf. *mi* ‘man’ > *mi-ŋ-bo* ‘brother’, **sri* ‘woman’ (cf. *sru* ‘aunt’) > *sri-ŋ-mo* ‘sister’.

The suffix seems to express the notion of a ‘collective, belonging to X’. Therefore, the geographical and ethnical designations *Bya* and *Bya-ŋ* appear to be related, as well. There are quite a few place names with *Bya*, *Byañ*, and related forms in Tibet. It is rather evident that *byañ* cannot always have meant ‘north’, particularly when it refers to places in the *south*. A meaning such as ‘belonging to the *Bya*-tribe’ or ‘*Bya*-clan’ would be more likely. In the case of the *Byañthan*, the Changthang of Ladakh and northern Tibet, and particularly in the case of the *southern* place of the same name at lake Phuma, south of the *Yarḥbrog*, this could mean a ‘plain of those who belong to the humans’, or ‘the plain of our folk’. In so far as the word *bya* had acquired the connotations of ‘female human beings’, this could have given rise to the notion of a Women’s Dominion in parts of, or all over, the *Byañthan*, without there ever being such an extraordinary political entity.

The Indo-Iranian *-ka* suffix that we meet in the word **mrava-ka* and in the corresponding Saka form *rau-k* ‘speaker, lord’ has the following functions in Sanskrit:

- a) derivation of diminutives,
- b) formation of adjectives of nouns that express the relation to a place,
- c) the possession of an item,
- d) the occupation with something,
- e) the consistence or value,
- f) infrequently also a relation with another person, possibly a relation of descent (Wackernagel & Debrunner 1954: 519-529).

The *-ka* suffix is likewise used in Iranian languages, where, due to its high frequency, it became semantically quite bleached (ibid. p. 539).

Function a) is expressed in Tibetan typically by the suffixes *-bu* and *-gu/ -ŋu/ -ḥu* (with assimilating forms), which seem to have a different origin, but apparently merge

with the velar suffix in non-syllabic forms. Functions b), c) and f), however, seem to correspond largely to the function of the velar suffix in Tibetan, and one might possibly also identify function d) in Old Tibetan derivations. The functional and formal similarity is possibly not just accidental, and it would appear that the Tibetan non-syllabic velar suffix *-g/-ŋ*, and perhaps also the syllabic suffix *-ka* of a similar function had been borrowed from Indo-Iranian.⁴⁵ A direct borrowing would be precluded, if a unidirectional development from nasal to oral finals in pre-Tibetan could be established. Yet, even in that case, there could still have been a merger of the Indo-Iranian suffix with an existing pre-Tibetan nasal velar suffix due to the identical articulation position.

All in all, the similarities between the Eastern Iranian *verbum dicendi* and its derivatives, on the one hand, and the various Tibetan words related to speaking and humanity, on the other, is at least as strong as the similarity of the corresponding words across the Tibeto-Burman languages. What Tibetan shares with Khotan Saka, but not with Tibeto-Burman, is the notion of royalty associated with the faculty of speaking, that is, in this case, commanding. This is perhaps the strongest indicator that the word family *speaking, speaker, human, lord* has been borrowed from Eastern Iranian into Tibetan. However, if that had been the case, the apparently cognate forms for ‘speak’ and ‘human’, ‘(old) man’, ‘(old) woman’, or particular kinship terms, such as ‘child’, ‘nephew’, etc. in the diverse Tibeto-Burman languages must have come from the same source.

The elitist connotation of royalty or at least noble status may well be the reason why an apparent item of core vocabulary, namely the self-designation as ‘speaker’, could be borrowed from one tribe to another, ending up with the Miao far in the south.

Or should it be the case, that most, if not all of the present Tibeto-Burman tribes and nations originally came from an area that was dominated by ‘royal’ *speakers*, namely the Royal Scythians (*Sakaraukai, Saraucae, Sakamurunda*) or the equally powerful and equally Eastern Iranian (Scythian) Yuezhi, that is, did they all come from or via the Ordos region?

And is Tibeto-Burman thus perhaps rather a warrior’s pidgin?

5. Additional remarks

The action of calling or convoking people ... is characteristic of someone endowed with authority over others: a teacher, head of the house, king, prince, Buddha as head of the community, etc. (Pinault 2002: 266; here for the relation between Tocharian A *kāk-* ‘invoke’ and *kākmārtik* ‘ruler, chief, master’ and the corresponding Tocharian B forms).

More modestly, one could argue that a person who is well-versed in rhetoric as much as in poetry may naturally become, or may be selected as, a spokesman of the community. One may think of song and riddle competitions, an important component of Tibetan culture, still preserved in traditional marriage customs.

Rhetorical competence was an important factor at the court of the early Tibetan empire or its initial stages. This is attested at several points in the Old Tibetan Chronicle. The most remarkable passage is found in ll. 221-229, where one of the vassals, Khyuŋ-

⁴⁵ As an example for morpheme borrowing within and across language families, I would like to point to the instrumental-ablative morpheme *sV that was borrowed into Tibetan, possibly via a Tamangic language, to combine with the relational marker {*kyi*} to form an ergative marker {*kyis*} and with the locational markers *na* and *la* to form the ablative markers *nas* and *las*. The syllabic form, which is preserved in some Western Tibetan varieties was further borrowed into several Dardic languages as an ergative marker in present tense constructions where there was a functional gap (as is well known, the modern Indo-Aryan languages typically display split-ergativity), see also Zeisler (2011a: 281-290).

po Spunṣad Zutse actually challenged the ruler Gnamri Slonmtshan (the father of the first emperor) with a song, asking for the royal insignia. Gnamri Slonmtshan remained speechless, and so did his closest vassals. It is only a more distant vassal, who turned down Zutse's claim with his song – and, no wonder, became the emperor's favourite (cf. Zeisler 2011b: 119).

Another important function of speech that may lead to an association with rulership is psychological warfare. Challenging the enemies with abusive language in order to dishearten them and to encourage or incite one's own troops, possibly also with the function to talk oneself into a rage, was certainly an important element before the fight (cf. also Bailey 1985: 136). It is thus not very surprising that *verba dicendi* or verbs relating to auditory perception appear in Old Tibetan nicknames or appellations of honour, such as 'Voice of X' (X-*sgra*) or 'Fame, Glory of X' (X-*sñan*, -*gzigs*), 'Speaker, Spokesman, Leader, or Commander of X' (X-(*r*)*ma*; cf. Richardson 1998 [1967]).

Abbreviations:

1. Languages and dialects

AT	Amdo Tibetan	PUR	Purik (LAD, Shamskat)
BAL	Balti (Shamskat)	TYA	Tya (LAD, Shamskat)
CT	Classical Tibetan	OC	Old Chinese
CtrT	Central Tibetan	OT	Old Tibetan
DOM	Domkhar (LAD, Shamskat)	pIE	proto-Indo-European
EIr	Eastern Iranian	pII	proto-Indo-Iranian
GYS	Gya-Sasoma (LAD, Kenhat)	pLB	proto-Lolo-Burmese
LAD	Ladakhi	pTB	proto-Tibeto-Burman
MC	Middle Chinese	WrB	Written Burmese

2. Dictionaries and texts

BDGM	<i>Brdadkrol gsergyi meloṅ</i> , Btsanlha Ḍagdbaṅ Tshulkhriṃs (1997)
BRGY	<i>Bod-Rgya tshigmdzod chenmo</i> , Zhang et al. (1993)
CDTD	<i>Comparative Dictionary of Tibetan Dialects</i> , Bielmeier (in preparation)
EWA	<i>Etymologisches Wörterbuch des Altindoarischen</i> , Mayrhofer 1996
HPTB	<i>Handbook of Proto-Tibeto-Burman</i> , Matisoff (2003)
IAIL	<i>Indo-Aryan inherited lexicon</i> (in progress), Lubotsky & Beekes
ITJ	(IOL Tib J) manuscripts of the Indian Office Library, now British Museum, London
JÄK	<i>A Tibetan-English dictionary</i> , Jäschke 1881
KhS	<i>Dictionary of Khotan Saka</i> , Bailey 1979
OTC	<i>The Old Tibetan Chronicle</i> , Pt 1287, Imaeda et al. (2007)
Pt	manuscripts of the Fonds Pelliot tibétain, Bibliothèque Nationale, Paris
RN	<i>A dictionary of the language spoken by Ladakhis</i> , Norman (2009)
SPR	<i>Balti-English English-Balti dictionary</i> , Sprigg 2002
STEDT	<i>Sino-Tibetan Etymological Dictionary and Thesaurus</i> , Matisoff (2011)
STLC	<i>A Sinologist's handlist of Sino-Tibetan lexical comparisons</i> , Coblin (1986)
TETT	<i>Tibetan to English Translation Tool</i> , Pellegrini, 2006-2009

References

- Bailey, H.W. 1979. *Dictionary of Khotan Saka*. Cambridge: Cambridge University Press.
- . 1985. *Indo-Scythian studies: being Khotanese texts*. Volume VII. Cambridge: Cambridge University Press.
- Benjamin, C.G.R. 2007. *The Yuezhi. Origin, migration and the conquest of northern Bactria*. Turnhout: Brepols.
- Bielmeier, R. 1985. *Das Märchen vom Prinzen Čobzañ. Eine tibetische Erzählung aus Baltistan. Text, Übersetzung, Grammatik und westtibetisch vergleichendes Glossar*. St. Augustin: VGH Wissenschaftsverlag.
- . In preparation. *Comparative dictionary of Tibetan dialects*. (Preprint No. I, 1997/pdf-version 02/2008.)
- Btsanlha Dagdbaŋ Tshulkhriṃs. 1997. *Brdadkrol gsergyi meloŋ* [The golden mirror, unravelling meaning]. Pecin: Mirigs dpekrunkhang [Beijing: Nationalities publishing house].
- Burrow, Th. 1934. Iranian Words in the Kharoṣṭhi Documents from Chinese Turkestan. *Bulletin of the School of Oriental Studies* 7.3: 509-516.
- Coblin, W.S. 1974. An early Tibetan word for 'horse'. *Journal of the American Oriental Society* 94.1: 124-125.
- . 1986. *A Sinologist's handlist of Sino-Tibetan lexical comparisons*. Nettetal: Steyler.
- Csoma de Kőrös, A. 1834. *A Grammar of the Tibetan language in English*. Prepared under the patronage of the government and the auspices of the Asiatic Society of Bengal. Calcutta: Baptist Mission Press. Reprint 1984. Budapest: Akadémiai Kiadó.
- Denwood, P. 1986. The Tibetan noun final -s. *LTBA* 9.1: 97-101.
- . 1996. Initial zl- and sl- in Tibetan. *The Tibet Journal* 21.4: 23–29.
- Dixon, R.M.W. 1997. *The rise and fall of languages*. Cambridge etc.: Cambridge Univ. Press.
- Francke, A.H. 1926. *Antiquities of Indian Tibet. Vol. II. The chronicles of Ladakh and minor chronicles. Text and translations, with notes and maps*. Calcutta: Superintendent Government Printing. Reprint 1992. New Delhi, Madras: Asian Educational Services.
- Grice, H.P. 1975. Logic and conversation. In: P. Cole & J. Morgan, eds., *Syntax and Semantics, 3: Speech Acts*. New York: Academic Press
- Haarh, E. 1969. *The Yar-luñ dynasty. A study with particular regard to the contribution by myths and legends to the history of Ancient Tibet and the origin and nature of its kings*. København: Gad.
- Haller, F. 2004. *Dialekt und Erzählungen von Themchen*. Bonn: VGH Wissenschaftsverlag.
- Harmatta, J. 1994. Languages and scripts in Graeco-Bactria and the Saka kingdoms. In: J. Harmatta (ed.), *History of civilisations of Central Asia. Vol. II: The development of sedentary and nomadic civilisations: 700 B.C. to A.D. 250*. Paris: UNESCO Publishing, 397-416.
- Herrmann, S. 1983. *Die tibetische Version des Papageienbuches*. St. Augustin: VGH-Wissenschaftsverlag.
- Imaeda, Y. & al. 2007. *Tibetan Documents from Dunhuang kept at the Bibliothèque Nationale de France and the British Library*. Tokyo: Research Institute for Languages and Cultures of Asia and Africa Tokyo University of Foreign Studies. <http://otdo.aa.tufs.ac.jp>.
- Jäschke, H.A. 1881. *A Tibetan-English dictionary. With special reference to prevailing dialects*. London. 4th reprint 1992, Delhi: Motilal Banarsidass.
- Jacques, G. 2011. A phonological profile of Cone. Draft version.
- Jones, Sir W. 1799. Ninth anniversary discourse: On the origin and families of nations. *Asiatick Researches* 3: 418-435.
- Laufer, B. 1916. Loan-words in Tibetan. *T'oung Pao* 17: 403-552.
- Lubotsky, A. and R. Beekes. N.d. *Indo-Aryan inherited lexicon (in progress)*. Originally retrieved from: <http://www.indo-european.nl/index2.html> (last accessed II/2008 – the link has been taken from the net some time before X/2011, but the published version is not yet available).
- Macdonald, A. 1971. Une lecture des Pelliot tibétain 1286, 1287, 1038, 1047, et 1290. Essai sur la formation et l'emploi des mythes politiques dans la religion royale de Sroñ-bcan Sgam-po. Dans: A. Macdonald (éd.), *Études tibétaines dédiées à la mémoire de Marcelle Lalou*. Paris: Maisonneuve, 190-391.
- MacKenzie, D. N. 1971. *A concise Pahlavi dictionary*. London: Oxford University Press.
- Maiden, M. 2008. Lexical nonsense and morphological sense. On the real importance of "folk etymology" and related phenomena for historical linguists. In: Eythórsson, Thórhallur (ed.), *Grammatical Change and Linguistic Theory. The Rosendal Papers*. Amsterdam and Philadelphia: Benjamins, 307-328.
- Matisoff, J.A. 1978. *Variational semantics in Tibeto-Burman. The organic approach to linguistic comparison*. Philadelphia: Institute for the Study of Human Issues.
- . 2003. *Handbook of Proto-Tibeto-Burman: System and philosophy of Sino-Tibetan reconstruction*. Berkeley etc.: Univ. of California Press. Retrieved from: <http://escholarship.org/uc/item/19d79619>.

- . 2008. *The Tibeto-Burman reproductive system: toward an etymological thesaurus*. Berkeley etc.: University of California Press. Retrieved from: <http://escholarship.org/uc/item/3c40r8jv>.
- . 2011. *Sino-Tibetan Etymological Dictionary and Thesaurus*. <http://stedt.berkeley.edu/search>.
- Mayrhofer, M. 1996. *Etymologisches Wörterbuch des Altindoarischen*. II. Band. Heidelberg: C. Winter.
- Miller, P.M. 1951. "The phonemes of Tibetan (U-Tsang dialect) with a practical romanized orthography for Tibetan-speaking readers". *Journal of the Asiatic Society. Letters* 17: 191-216.
- Norman, Rebecca. 2009. *A dictionary of the language spoken by Ladakhis*. Unpublished draft version.
- Pellegrini, A.M. 2006-2009. *Tibetan to English Translation Tool*. Version 3.3.0 compiled on 4-May-2011 02:01 PM. <http://www.thlib.org/reference/translation-tool>.
- Pinault, G.-J. 2002. Tocharian and Indo-Iranian: relations between two linguistic areas. In: N. Sims-Williams (ed.), *Indo-Iranian languages and peoples*. Oxford: Oxford University Press: 243-284.
- Przyluski, J. 1929. Further notes on non-Aryan loans in Indo-Aryan. In: S. Levi, J. Bloch, and J. Przyluski, *Pre-Aryan and Pre-Dravidian in India*. Translated by P.C. Bagchi. Calcutta: Calcutta University Press, 127-178.
- Read, A.F.C. 1934. *Balti grammar*. London: The Royal Asiatic Society.
- Richardson, H.E. 1998. Names and titles in early Tibetan records. In: Hugh Richardson, *High peaks, pure earth. Collected Writings on Tibetan History and Culture*. Ed. with an introduction by Michael Aris. London: Serindia Publications, 12-23.
- Roerich, G. de. 1958. *Le parler de l'Amdo. Étude d'un dialecte archaïque du Tibet*. Roma: Istituto Italiano per il Medio ed Estremo Oriente.
- Róna-Tas, A. 1966. *Tibeto-Mongolica. The Tibetan loanwords of Monguor and the development of the archaic Tibetan dialects*. The Hague etc.: Mouton.
- Samten Gyaltzen Karmay. 1998. The origin myth of the first king of Tibet as revealed in the *Can lnga*. In Samten Gyaltzen Karmay, *The arrow and the spindle. Studies in history, myths, rituals and beliefs in Tibet*. Kathmandu: Mandala Book Point: 282-389.
- Schmidt, I.J. 1839. *Grammatik der tibetischen Sprache*. St. Petersburg: W. Gräf, Leipzig: Leopold Voss.
- Sedláček, Kamil. 1962. Zum Instrumentalsuffix *Hnang* im Barmanischen und *Dang* im Tibetischen. *ZDMG* 112: 159-169.
- Sharma, D.D. 1982. *Studies in Tibeto-Himalayan linguistics. A descriptive analysis of Patṭani (a dialect of Lahul)*. Hoshiapur: Panjab University.
- . 1990. *Tibeto-Himalayan languages of Uttarakhand*. Part II. New Delhi: Mittal.
- Shefts, B. and K. Chang. 1967. "Spoken Tibetan morphophonemics: p". *Language* 43: 512-525.
- Shirai, S. 1999. Chibettogo gendai Rasa hogenno 2 onsetsukanni arawareru -b- nitsuite [On the inter-syllabic -b- in Modern Lhasa Tibetan]. *Gengogaku Kenkyu [Linguistic Research]* 17-18: 59-72.
- Simon, W. 1929. Tibetisch-chinesische Wortgleichungen. *Sonderabdruck aus den Mitteilungen des Seminars für Orientalische Sprachen* Bd. XXXII, Abteilung I (157-228).
- . 1949. The range of sound alternations in Tibetan word families. *Asia Major*, New Series 1: 3-15.
- . 1975. Tibetan initial clusters of nasals and r. *Asia Major*, New Series 19.2: 246-51.
- Sprigg, R.K. 2002. *Balti-English English-Balti dictionary*. London, NY: RoutledgeCurzon.
- Stein R.A. 1951. Mi-ñag et Si-hia. *Bulletin de l'École Française d'Extrême-Orient* 44.1: 223-265.
- . 1957. Les K'iang des marches sino-tibétaines, exemple de continuité de la tradition. *L'Annuaire 1957-1958 de l'École Pratique des Hautes Études*: 3-15.
- . 1961. *Les tribus anciennes des marches sino-tibétaines. Légendes, classifications et histoire*. (Bibliothèque de l'Institut des Hautes Études Chinoises, 15.) Paris: Presses Universitaires de France.
- Suzuki, H. 2011. Dialectal Particularities of Sogpho Tibetan – An Introduction to the "Twenty-four villages' patois". In: M. Turin and B. Zeisler (eds.), *Himalayan languages and linguistics: studies in phonology, semantics, morphology and syntax*. (Brill's Tibetan Studies Library, Languages of the Greater Himalayan Region, 5/12.) Leiden etc.: Brill: 55-73.
- Theraphan Luangthongkum. 2011. Numerals and classifiers in modern Karenic languages and Proto-Karen. Paper presented at the 44th International Conference on Sino-Tibetan Languages and Linguistics, Central Institute of Indian Languages, Mysore, October 7-9, 2011.
- Tournadre, Nicholas. 2005. L'aire linguistique tibétaine et ses divers dialectes. *Lalies* 25: 7-56.
- Uebach, H. and B. Zeisler. 2008. *rJe blas, pha los* and other compounds with suffix -s in Old Tibetan texts. In: Brigitte Huber, Marianne Volkart und Paul Widmer (Hrsg.) *Chomolangma, Demawend und Kasbek. Festschrift für Roland Bielmeier zu seinem 65. Geburtstag, Band I: Chomolangma*. Halle: International Institute for Tibetan and Buddhist Studies: 309-334.
- Wackernagel, J. und A. Debrunner. 1954. *Altindische Grammatik. Bd. II, 2 Die Nominalsuffixe*. Göttingen: Vandenhoeck & Ruprecht.

- Wohlgemuth, J. 2009. *A typology of verbal borrowings*. (Trends in Linguistics, Studies and Monographs, 211.) Berlin, New York: Mouton de Gruyter.
- Zeisler, B. 2009. *Skaddi hgyurcanaŋ rdobaŋi mentogtsogsla luskanni sŋonhjug baŋi rdzessiskorla* – Language change and the fossilization of the Old Tibetan *b-* prefix in Ladakhi and Balti. In M. Ahmed and J. Bray (eds.), *Recent Research on Ladakh 2009. Papers from the 12th colloquium of the International Association for Ladakh Studies, Kargil*. Kargil & Leh: International Association of Ladakh Studies, 81-96.
- . 2010. East of the moon and west of the sun? Approaches to a land with many names, north of ancient India and south of Khotan. In: Roberto Vitali (ed.), *The Earth Ox Papers. Proceedings of the International Seminar on Tibetan and Himalayan Studies, Held at the Library of Tibetan Works and Archives, September 2009 on the Occasion of the 'Thankyou India' Year*. The Tibet Journal 34.3-4/35.1-2, Special Issue: 371-463.
- . 2011a. Kenhat, the dialects of Upper Ladakh and Zaskar. In: M. Turin and B. Zeisler (eds.), *Himalayan languages and linguistics: studies in phonology, semantics, morphology and syntax*. (Brill's Tibetan Studies Library, Languages of the Greater Himalayan Region, 5/12.) Leiden etc.: Brill: 235-301.
- . 2011b. For love of the word: a new translation of Pt 1287, the Old Tibetan Chronicle, chapter I. In: Y. Imaeda, M.T. Kapstein, and T. Takeuchi, eds., *New studies of the Old Tibetan Documents: philology, history and religion*. Tokyo: Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies, 97-213.
- . To appear. *Ethnic diversity, language contact, and the Old Tibetan lingua franca: early Tibetan history and the development of the modern Tibetan languages*.
- Zhang, Y. et. al. (eds.) 1993. *Bod-Rgya tshigmdzod chenmo* [The large Tibetan-Chinese dictionary]. Vol. 1-2. Pecin: Mirigs Dpeskrunkhaŋ [Beijing: Nationalities Press].