The term *svarabhakti* is familiar to Sanskrit scholars, and to students of linguistics in general, as a means of accounting for a ‘vowel fragment’ or vowel glide, a feature of the transition, in Sanskrit, from *l*, and sometimes also *l*, to another consonant, commonly a fricative (or spirant) consonant; following in the footsteps of ‘the earliest phoneticians’ I wish to introduce the complementary term *vyañjanabhakti* to account for a consonant fragment, or consonant glide, as a feature of the transition from a liquid consonant to another consonant, commonly a fricative (or spirant) consonant.

Though it is in origin a Sanskrit phonological term, *svarabhakti* has been applied to comparable phenomena in other languages, as, for example, in the following passage from a grammar of Scots Gaelic: ‘THE PARASITIC OR (IN SANSKRT) THE SVARABHAKTI VOWEL (i.e. The “voice-attachment”, “vowel portion”, or glide vowel).

Svarabhakti is the development in the spoken language of a non-radical or inorganic vowel from the voiced sound of the preceding consonant, resulting in a repetition of the preceding vowel.

*Tulach gorm* m. *Green hill*, is in Scottish C.S. (Common Speech) spoken and written as Tullochgorum (more correctly Tullochgorom).

A close parallel to the Scots-Gaelic pronunciation of *gorm* ‘green’ as though it were ‘gorum’ or ‘gorom’ is provided by the well-known cry of the *ca-vālī* in Hindi ‘*cā---garm---garm cd’*, in which *garm* will in all probability, at least in its first occurrence in this small quotation, be pronounced with a *svarabhakti*, as though it were ‘*garam’*, with two syllables to the ear though only one appears to the eye; for the *svarabhakti* here has not achieved recognition in Hindi spelling.

For *vyañjanabhakti*, on the other hand, English readily provides examples in pronunciation, and, unlike my Hindi examples, even admits them into the spelling. Thus, where some speakers (including myself) pronounce *Hampton* and *Hampstead* with a sequence of two medial consonant sounds [-mt-] and [-ms-] respectively, others pronounce them with a sequence of three consonants, [-mpt-] and [-mps-], the [-p-] being *vyañjanabhakti*, sharing the labial feature with the [-m-] but the voicelessness
feature with the [-t-] or [-s-].

Etymology favours the former type of speaker, and requires such spellings as *Hamton and *Hamstead, compounded from Old English ham 'dwelling' (cf. home) with Old English tun, ‘enclosure’, ‘farm’, ‘town’, and Old English stede ‘place’; but the latter type of speaker has triumphed over the etymology, for the established spelling has clearly given orthographic status to the vyanjanabhakti [-p-]. In this paper I shall suggest that in Tibetan too vyanjanabhakti has triumphed, and that the incorporation of a vyanjanabhakti into the spelling of certain Tibetan verb forms has introduced an unnecessary air of irregularity into their paradigms.

Alternation in the spelling of the initial consonants of a considerable number of Tibetan verbs, especially between the present form and the past form, has long been something of a puzzle, and, probably, also something of an irritant, to students of Tibetan: ‘Verb roots remain constant in most Sino-Tibetan languages. But --- diversity of form reaches the extreme in Old Bodish (classical Tibetan), where no positional phoneme of the verb is necessarily constant—whether consonantal prefix, consonantal initial, medial vowel, “final” consonant, or “suffixed” consonant.’

Shafer takes up this challenge by attempting to provide both the comparative grammarian and ‘the beginning student in Old Bodish’ with ‘something like “conjugations” instead of the apparently endless confusion of verbal forms with which he is confronted in most of the dictionaries and grammars of the language’, in the course of which he refers to an alternation of ‘affricate initials in the present and corresponding sibilant initials in the perfect---: ’shar, shar ‘rise’; ’shi, si ‘die’; ’shor, sor ‘escape’; ’dzig, žig ‘be ruined’; ’dzugs, žugi, im. žugs ‘go in’; ’tshe, sos, im. sos ‘live’; ’dzod, zad ‘be on the decline’; and probably ’dzer, zer ‘say’.’ It is verbs of this type, in which affricate initials alternate with fricative initials (Shafer’s ‘sibilant initials’), that I wish to analyse in terms of vyanjanabhakti; indeed, I have already made a beginning elsewhere, though without using the term vyanjanabhakti, taking as my examples the following four verbs, the upper line comprising the present forms, and the lower line the perfect forms, of the same four verbs, except that according to Jäschke, zug is also an alternative present form:

\[
\begin{align*}
'dzag & \quad \text{drip} & 'dzig & \quad \text{destroy} & 'dzugs & \quad \text{plant} & 'dzug & \quad \text{enter} \\
(g)zags & \quad \text{blig} & \quad \text{zug} & \quad \text{zugs}.
\end{align*}
\]

In the article in which I gave these examples limitations of time and space prevented me from illustrating vyanjanabhakti in Tibetan with more examples than those four, which exemplify only the following two out of a total of five types:
a. 'dz- alternating with \((g/b)z\). 

b. 'dz- alternating with \((b)z\).  

c. the three additional types that I have to recognize are: 

d. 'tsh- alternating with \((b)g\). 

e. 'dr- alternating with \(z\). 

In Jaschke’s Dictionary I find nine verbs in which a present form in the initial two-letter group, 'dz- alternates with other forms, past, future, and imperative, in which the initial either is the single letter \(z\) or contains the letter \(z\) in the groups \(g\) and \(b\); e.g. 

- Present: 'dzag dip  

- Other: \((g)zags, ggrag\)  

ii. Present: 'dzad decline, be spent  

Other: zad  

iii. Present: 'dzed put out  

Other: gzed, 'bzed  

iv. Present: 'dzur make way  

Other: 'buzr, gzur, zur  

In the case of one of these verbs the alternation of 'dz- with \(z\)-is in the present form itself: 'dzugs and zug \(\) ‘plant’; this same verb, and two others, alternate with forms in \(b\)- in the perfect: 

- Btsugs, zugs  

- Btsud, zud  

- ‘Put into’  

- Btsum, zum  

- ‘Shut’; and the two last also alternate with \(tsh\)- in the imperative: tshud, tshum \(\) ‘Shut’ . There is, in addition, another form, apparently not a verb, in which 'dz- alternates with \(g\): 'dzings, gzing \(\) ‘Briskly’. 

At the time when the orthography was devised, I take \(\) ‘dzz- to have had the phonetic value of a nasal followed by an affricate, with the nasal having the same tongue position as the affricate \(\); thus, both sounds have in common the feature of complete closure in the mouth by the tongue. I take \(z\)-, on the other hand, whether alone, as \(z\)-, or in the initial groups \(g\)- and \(b\)-, to have had the value of a fricative \(\); and therefore no closure in the mouth. From a comparison of the nasal-and-affricate group \(\) with the fricative \(\) or groups containing the fricative \(\), I conclude
that the non-nasal closure [d] of the [ndz.-] group is a vyañjanabhakti, a glide, sharing the closure feature with the preceding nasal ([n]) and the non-nasality feature with the following fricative ([z]), i.e. [n(d)z-]:

closure non-nasality

\[ n\ldots d\ldots \ldots z \]

Accordingly, I should have preferred to see initial 'dz- \[d\] as, which is a vyañjanabhakti spelling, replaced, at least for the nine verbs with alternating forms in 'dz- and (g/b)z-, by *'z-.\[s\] with the result that, for example, 'dzag and 'dzin (\[a\]\[t\], \[a\]\[t\]) would be spelt *'zag and *'zin (\[a\]\[t\], \[a\]\[t\]) and that their initial letters would cease to alternate. Their forms would then appear as follows:

\[
\begin{align*}
\text{'zag} & \quad (g)zags \quad gzag; \quad \text{**'zin} & \quad (b)zung \quad gzung \quad zung(s) \\
\text{'zan} & \quad (\[a\])\[m\] \quad \[m\]; \quad \text{**'zin} & \quad (\[a\])\[s\] \quad \[s\]; \quad \text{**'zin} & \quad (\[a\])\[t\] \quad \[t]\end{align*}
\]

In my analysis I have attributed a nasal-and-affricate value to the initial group 'dz-.\[d\]; but I am obliged to admit that, whatever the pronunciation may have been at the time when the spelling became established, my Research Assistant Rinzing Wangpo (rig-'dzin dbang-po), a well-educated speaker from Lhasa, regularly pronounced this initial group of letters when spelling and reading not as a sequence of nasal and affricate ([ndz-]) but as a sequence of nasal and fricative ([nz-]), e.g. 'dzin not as \*[ndzin] but as [ndzin], without a vyañjanabhakti. This pronunciation conflicts with the interpretation of the orthography that I gave at the beginning of this paragraph, and is therefore, at first sight, something of an embarrassment to me; but I take it to be an alternative pronunciation without vyañjanabhakti, and therefore as supporting my interpretation of orthographic 'dz-.\[d\] as the vyañjanabhakti form of what is to be regarded structurally as *'z-.\[s\]. For such an interpretation I am obliged to assume that z- \[s\] was pronounced in former times as a voiced consonant ([z-]); but this assumption presents no great difficulty, for the z- of the orthography corresponds to the voiced consonant [z-] of the more conservative Tibetan dialects; e.g. ram-pa 'bridge', zang-s 'copper', Balti [z-]; za 'cat', 'gza' planet', Golok [z-] (in the Lhasa dialect and in the pronunciation used in spelling and reading written Tibetan z- corresponds to the voiceless consonant [s-] in a low-tone syllable).10

Rinzing Wangpo's pronunciation of initial 'dz-.\[d\] not as [ndz-] but as [nz-] in reading and spelling written Tibetan does not
go un-supported: the Lhasa dialect has [-nz-] corresponding to the 'dz- of the spelling, though only in certain types of syllable junction within the word, e.g. sla-'dzin ‘eclipse’, zai-'dzum ‘smile’, skas- 'dzeg ‘ladder’ ( ), so too does Golok, but with the difference that in Golok the [nz] features are not confined to a medial position but occur initially in such words as mdzub-mo (or dzub-mo) 'finger', dzom 'assemble', and (') dzam-gling 'world'.

Consistently with this nasal-and-fricative pronunciation corresponding to 'dz- in Golok has a nasal-and-fricative pronunciation [nz-], not nasal-and-affricate ([mdz-]), corresponding to the initial group mdz- of the spelling; e.g. [nz-] mdzo े ‘yak’ (hybrid).

It may be that syllables spelt with 'dz- ('dz-) fluctuate in pronunciation from [nz-] to [ndz-] (and [nz-] to [mdz-]) from speaker to speaker, and have done so since the early days of the orthography, in something like the way in which English words ending in -nch such as lunch, branch, and finch fluctuate between a vyahjanabhakti pronunciation with nasal and affricate ([nts]) and a pronunciation with nasal and fricative ([n]), as though spelt *lunsh, *bransh, etc.

Whatever the likelihood of a fluctuation in the pronunciation of 'dz- ('dz-) between nasal and affricate and nasal and fricative, it is evident that adopting an alphabetic scheme of the Sanskrit type, the varna samām'ya, for Tibetan has had the effect of widely separating the affricate [dz] from the fricative [z]; for dza े in that scheme is grouped with tsa and tsha ( đ, ), and separated from za े, which is grouped with ḥa, a, and ya ( a, a, ). As I hope I have been able to show, the morphology of the verbs considered in this section (a) requires them at least to be closely associated, or, preferably, unified through the representation of 'dz- े as े as...

The same sort of symbolization could be extended to forms currently written with initial groups mdz- े and rdz- े, e.g. mdzad 'do', mdza े 'love', rdzi 'press', rdzogs 'be finished' ( े, ḥ, े, े, े, े, ) which would then be spelt *mdad, mza, rzi, and rzogs (*sas, sas, k, k, k). I am not, however, able to advocate this change of symbolization on the same grounds as for 'dz- and (g/b)z-, because verbs with initial mdz- and rdz- do not show any alternation in form as between mdz- or rdz- and (g/b) z; on the contrary, verbs with initial mdz- or rdz- in one form are spelt with that same initial group in all forms. The only reasons, then, for making a parallel change from mdz- and rdz- to *mdz-
and *rz- respectively are those of consistency with the proposed change from *dz- to *rz-, and economy; for it would then be very nearly possible to dispense with the letter *dz- altogether: words spelt with the single initial letter *dz- number, in Jäischke’s Dictionary, only nineteen. They alone would remain.

Although the initial group *rdz- occurs in Tibetan orthography, and is by no means rare, and although both *rdz- and *ldz- (±, ±) occur (section (b)), e.g. *rdz̃ed ‘forget’, *ldz̃ong ‘valley’, ‘region’ (e.g., e.g.), there is no such initial group of letters as *ldz-. A corresponding initial sound group to this non-existent group of letters, [ldz-], does, however, occur in the Balti dialect; it corresponds to the existing initial group of letters *ldz-. *lz-; e.g. [ldza:] *ldza- ‘month’, [ldzoq] zlog ‘cause to return’. This Balti initial sound group I should analyse exactly as for *[ndz-], in terms of vyanjanabhakti, the closure [d] being related to the partial closure of the preceding [l]. The appropriate spelling for this sound group would, therefore, be not the vyanjanabhakti spelling *ldz-. but *ldz-. The above two Balti examples would, accordingly, be spelt *ldza- *[b]- (better, perhaps, *[b]- and *[b]-).

Since, however, the corresponding spelling to this Balti initial sound group is not *lz- but *lz-, the Balti sound group has generally been treated as an example of metathesis, a reversal of what is taken, on the basis of the spelling order, to have been earlier *[zl-]. The spelling order *zl- is itself, though, anomalous, and hardly a satisfactory basis for the postulated metathesis: while there is indeed an initial group *zl-, which therefore contrasts with *zl-, nowhere else in Tibetan orthography is there a corresponding contrast. The letter is comprised in the initial groups *sp-, *sb-, *st-, *sn-, *sr-, etc. (±, ±, ±, ±, ±, ±), e.g. *spun, *sbom, *stsol, *sman, *sna, *sras, *l-duration, *l-duration, *l-duration, *l-duration etc. but there are no corresponding, and contrasting, initial groups *zl-, *zb-, *zt-, *zm-, *zn- *zr-, *zl-, *zl-, *zl-, *zl- The initial group *zl- is, clearly, without parallel in Tibetan orthography; it is not, therefore, surprising that in none of the spoken dialects there is a corresponding pronunciation *[zl-] (or, with vyanjanabhakti, *[zd]-). The word-initial features corresponding to *zl- in the Balti, Golok, and Lhasa dialects, and in the reading and spelling styles of pronouncing written Tibetan are:

<table>
<thead>
<tr>
<th>Baltic</th>
<th>Golok</th>
<th>Lhasa</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ldz-]</td>
<td>rdz-</td>
<td>d- (low tone)</td>
</tr>
</tbody>
</table>

Reading-style

nd- (low tone) |
There are two explanations that occur to me for what is, orthographically speaking, a freak. They are (i) that "zl-" might have been adopted as a digraph to symbolize some such initial sound group as [lḍz-], as in the corresponding forms in Balti, a remarkably conservative dialect, and that, accordingly, "zl-" was regarded as a single pronunciation unit, like the Greek letters ζετα (for [dз-] or [zd-]) and ψι (for [ps-]), and not as a succession of the two units z and l in that order; or (ii) that "zl-" represents an early compromise symbolization of widely different pronunciation features from different dialects, as in the current phonetic diversity of the Balti and other forms given above, and was therefore intended at the outset to symbolize more than one pronunciation, in much the same way as the Oxford English Dictionary uses a special phonetic symbol to indicate that such words as grass, path, and castle are pronounced by North-country speakers with a short vowel, the same vowel as in lass, but by other speakers with a long vowel, the same vowel as in guard.

The same explanation might also stand for the corresponding voiceless Balti initial group [hltś-] ([hl] is here used as a digraph for a single sound, a voiceless lateral), as including a vyājjanabhakti [t], where this sound group corresponds to the spelling sl-ṣ- (cf. zl-ṣ-), e.g. slb/slabs [sľa/sļan]: 'teach', slang [sľi]: 'raise', slb [sļ̃]: 'reach'. I should then wish to treat these and other examples of sl-ṣ- as better spelt with *ls-*ṣ-, e.g. *lsab, *lsang, *lsēb (সাধ্য, সাদাঙ, সাদে). Although at first sight *ls- *ṣ- might seem a more appropriate symbolization of such forms as these, especially since lts-ṣ- occurs in the orthography as an initial group, e.g. ltsags [sļag]: 'iron', for which the corresponding Balti initial is [hltś-], a close parallel to [hlts-], the proposed initial group *ls- *ṣ- avoids symbolizing the vyājjanabhakti [t] and therefore seems to me to be preferable (cf. the corresponding analysis of 'tsh- অ্য- as s- স্তঃ- in section (d) ).

b. 'dž- alternating with ž-, gz-, and bz-

A detailed account of the relations of 'dž- and rdž- ( ড়- , ঢ-) (and a potential *ldż-?) with z-, gz-, and bz- ( ঝ-, ঞ-, ঝ- ) has been given in order that it shall serve as a model for corresponding alternations in sections (b)-(e); these sections are, in consequence, somewhat less detailed.

Jäschke gives fourteen verbs as showing an alternation in spelling between a present form in 'dż- ড়- and some other form, past,
future, or imperative, with initial \( \ddot{z} \)- or containing \( \ddot{z} \) in an initial group \( g\dddot{z} \)- or \( b\dddot{z} \) (\( \dddot{z} \)-); e.g.

i. present: \( \ddot{d}zog \) establish
   other: \( \ddot{z}gs \)

ii. present: \( \ddot{d}lo \) (imp. \( \ddot{d}los \)) \( \dddot{z}l \) (\( \dddot{z}l\)\) milk
   other: \( \ddot{b}z \)

iii. present: \( \ddot{d}zal \) (imp. \( \ddot{d}zol \)) \( \dddot{z}gh \) (\( \dddot{z}g\)\) weigh, etc.
   other: \( \ddot{g}zol \)

iv. present: \( \ddot{d}zig \) destroy
   other: \( \ddot{b}zig, \ddot{g}zig \)

v. present: \( \ddot{d}zor \) put
   other: \( \ddot{b}zor, \ddot{g}zor, \ddot{z}or \)

For some of their forms others of the fourteen verbs go outside the four types of initial considered here, \( \ddot{d}z-, \ddot{z}-, \ddot{b}z-, \) and \( \ddot{g}z- \), and have forms in \( b\ddot{t}l-, \ddot{t}l-, \) and \( (b)\ddot{t}l- \) (\( \ddot{t}l\)\), \( \ddot{t}l\)\). Six have a perfect form in \( b\ddot{t}l- \), three have imperatives in \( \ddot{t}l- \), and one has an imperative in \( (b)\ddot{t}l- \). All of these spellings except \( (b)\ddot{t}l- \) suggest affricate initials for these ten forms, either as simple sounds or as part of a group; but I shall restrict myself here to the spelling alternations exemplified at (i) - (v) above, and their phonetic implications. I might add to them a noun that shows the same type of alternation: \( \ddot{d}zor/\ddot{g}zor \) \( \ddot{z}\ddot{r}k \) \( \ddot{z}\ddot{r}k \). ‘hoe’.

I take \( \ddot{d}z- \) to represent a homorganic nasal-and-affricate group, just as I did in the case of \( \ddot{d}z- \); but I am on firmer phonetic ground here, for that is the invariable pronunciation of this initial group in the current spelling-style and reading-style pronunciations; e.g. \( \ddot{d}z\ddot{am} \) \( \ddot{d}z\ddot{am} \) \( \ddot{z}\ddot{am} \) \( \ddot{z}\ddot{am} \) ‘soft’. I have never observed an alternative sequence comprising homorganic nasal and fricative (\( *\ddot{f}z- \)) for initial \( \ddot{d}z- \) (but compare section (a), \( \ddot{d}z- \)), though such a sequence would not be un-welcome.

Initial \( \ddot{z}-. \) I interpret as fricative, whether single or grouped, in \( b\ddot{z} \) and \( g\ddot{z} \) (\( \ddot{z} \)-, \( \ddot{z} \)-); and, as in the case of \( \ddot{z}-. \) in section (a), I take it to have been formerly voiced. Whether simple or prefixed its current pronunciation in spelling and in reading is with voicelessness (\( {\ddot{z}}- \)), in low-tone syllables; but voicing (\( \ddot{z}-. \)), in former times, is supported by \( \ddot{z}. \) in the Skardu dialect of Balti in such words as \( \ddot{z} \) ‘request’,
'ling' 'field', and 'jon' 'mount', and by Sikkimese too, though only where the corresponding spelling is a group, 'gz-' or 'bz-' (\( \text{ tü-} \text{ tš-} \)).

I analyse the 'dz-' initials as containing a 'vyāñjanabhakti'. My grounds for doing so are the same as they were for the 'dz-' initial group of section (a): the 'vyāñjanabhakti' [-d-] of the initial group [fdz-] shares a lingual, or tongue, closure feature with the preceding nasal sound ([\( \text{n-} \)]) and non-nasality with the following fricative ([\( \text{-z-} \)]).

It seems to me unlikely, therefore, that I could have been Thonmi Sambhota in a previous incarnation; for, if I had had his opportunity of pioneering the Tibetan spelling, I should have wanted to spell the initials of the present forms of the verb shown at the beginning of this section not as 'dz-' but as \( \ast \) 'z-. The verbs shown there at (i) and (iv), for example, would then be regularized in spelling, as far as initial consonant symbols are concerned, though not the vowel symbols of the second example, as:

\[
\ast \text{zog;} \quad \text{zogs} \quad \ast \text{yog} \quad \text{bźag} \quad \text{gźag} \quad \text{źog}
\]

If, then, I had been Thonmi Sambhota, I should certainly have considered instituting the spellings that I have illustrated in these two examples for all the fourteen similar verbs given by Jäschke, and might well have applied it generally to all syllables, whether noun, verb, adjective, or particle, that are at present spelt with 'dz-'. In that case 'dz-' would never, of course, have appeared in Tibetan writing at all; for all syllables now spelt with this initial group of letters would have been spelt \( \text{dz-} \) from the outset.

Again assuming that I were Thonmi Sambhota, with a free hand to follow my feeling for the pronunciation and grammar of Tibetan wherever it might lead me, I might have gone further, and symbolized all words that at present have initial mdz-, rdz-, or ldz-(\( \text{m-} \text{, r-} \text{, l-} \)) as \( \text{m-} \), \( \text{r-} \), or \( \text{l-} \) respectively (\( \text{m-} \text{, r-} \text{, l-} \)), though here again, as I stated for mdz- and rdz- (\( \text{m-} \text{, r-} \)) in section (a) above, there are no grammatical grounds that require this. That is to say, there is no alternation of symbols in grammatically different forms of the same verb in their case; and the only argument for treating them in this way is that of identifying the [-d-] features of the initial groups \( \ast \) [mdz-], [rdz], and [ldz-] as 'vyāñjanabhakti', and symbolizing such syllables as, for example, mdzal 'meet', rdzé 'barter', and ldzid 'weight'.
If I had taken this course, there would no longer be any syllables spelt with the initial groups *mdz-, *dz-, *rdz-, and *ldz-, but only those now spelt with the single initial letter *dz-; e.g. *dz-a 'tea', *dz-o-bo 'elder brother', *dzag-pa 'robber'.

c. *tsh- alternating with *s-, *gs-, and *(b)s-

Jäschke gives only two verbs as alternating an initial group *tsh-a- for the present form with the single initial *s-, or the groups *bs- and *gs- (*s-, *gs-) that contain it, in other forms:

i. present: *tshab
   other: tshabs/bsabs, bsab
   repay

ii. present: *tsho
   other: *sos
   live

iii. present: *tsho
   other: *(b)sos, gso
   nourish

I take *tsh-a- to represent a sound group comprising homorganic nasal and affricate of the same type as *dz-a- considered in section (a), except that where *dz- symbolized voice and non-aspiration *tsh- symbolized voicelessness and aspiration. My only support for this assumption comes from the second syllable of *Golok [hrta-tsho] 'horses', corresponding to *rta-tsho, though a spelling *tsho would, in my opinion, be more appropriate than tsho; nasality ([n]) is an initial feature of this syllable not only in Golok but also, medially, in such a different dialect as the Lhasa; e.g. [-nzu] in n9a-tsho 'we' *brug-pa-tsho 'the Bhutanese'. The pronunciation of *s- as [s-] is not controversial; the spelling-style pronunciation of *sa- as [sa], and that of *gsa as [sga] (Balti., and Golok [xsum]). The reader, by now familiar with my vyājanabhakti approach to alternation in the initial groups of symbols in the verb, will not be surprised to find that I analyse the initial *tsh-a-as including a vyājanabhakti [-t-], whence the t of the initial group of symbols *tsh-, which I should therefore interpret as *s- *st-.

The aspiration feature ([h]) of the initial sound group [ntsh-], symbolized by the h component of the group of symbols tsh-, co-occurs with the nasality, and is therefore in a close relationship with it; being
automatic, it presents no difficulty to my analysis: if nasality, then also aspiration (the converse does not quite hold, because of the alternative form tshabs at (i) ). This related nasality is, in the case of tsh-, homorganic (cf. also sections (a) and (b) ); but it is worth remarking in passing that an initial group mtsh.- also occurs, and that the nasality in such groups is non-homorganic and labial ([mtsh-]). Such a pronunciation is supported by the Golok [mtsho] ‘lake’ mtsho ści. The case for analysing the initial group mtsh- as incorporating a vyāhārābhaṅkti [-t-], and therefore for treating it as *ms- *ś-; is precisely the same as the case presented in sections (a) and (b) for treating mde.- and mde-. (and rdz-, rdz-, and ldz-; े-, े-, े-) as vyāhārābhaṅkti variants of *ms- and *mś- (*ś- *ś-), except that in their case it is not aspiration but non-aspiration that automatically accompanies the nasality.

Given the vyāhārābhaṅkti type of analysis, then, verbs (i) and (iii) of this section, for example, could be regularized as:

* 'sab tshabs/bsabs bsab; *sō (b)sōs gś,

* &ś- /&śv- (aś- &ś-;), &ś- (aś-)

d. 'tsh- alternating with ś- and bś-

 ś- ‘d-  ś- ‘d-

Jāschke gives five verbs in which a present form in 'tsh- alternates with forms in ś- and bś-( ś-, ś- ); e.g.

i. 'present: 'tshar āś x rise

other: śar āś

ii. present: 'tshad āśāx explain

other: bsad, sōd &śc , śc

There is also a verb in which 'tsh- alternates not with ś- (and bś- ) but with bś- and gś- ( ś-, śc- ), though Jāschke queries the latter:

present: 'tshol āśāx entrust

other: bśol, gśol '(?) āśāx, āśāx.

I have no wish to repeat ad nauseam the details of my approach to this problem of variation in the initial letter groups of different forms of verbs, and will content myself here with stating that the 'tsh- and (b)s- alternation ( āś-, (a)Ś- ) is parallel to that of tsh- and s- (section (c)), even to the alternation of aspiration (tsh-ś- ) in the present form with non-aspiration ((b)s-(a)Ś- ) in the other forms, the aspiration feature being bound to nasality here too. I therefore take
'ṭh- to be a vyāñjanaḥbhakti initial group, and treat it as *śa-tan. This again enables me to regularize examples (i) and (ii) of Jāischke's five verbs of this type as:

\[ *śa-ta-ta, *śa-tad, bsa-tad \]

Grounds for analysing msh.-mā.- too as a vyāñjanaḥbhakti variant of *ma.-mā.- are precisely the same as those stated for msh.-mā.- in section (c).

e. 'dr- alternating with r- and (b)sr-

Jāischke gives only one verb as having a present form in 'dr-Ś-:

alternating with other forms in r-Ś-:

i. present: drul ŚŚr

other: drul, ruļ; ŚŚr, ŚŚr;

he states that ruļ is the form in general use.

The spelling-style and reading style pronunciations of 'dr-Ś- are alike [ndr-], the place of articulation being not the teeth but the alveolar ridge, further back in the mouth; the corresponding pronunciation of r-, [r-], is also alveolar, and with much friction. Analyzed on the same basis as the variant verb forms in sections (a) - (d) 'drul ŚŚr is treated as incorporating a vyāñjanaḥbhakti [-d-], symbolized as -d-; I should therefore wish to regularize this verb as with present*ruļ ŚŚr and past form ruļ ŚŚr (also drul ŚŚr). It must be admitted, though, that this one example is a very slender basis on which to apply the vyāñjanaḥbhakti concept; it has, however, some support from an association of 'dr-Ś- with r-Ś- of a rather different type from that used in sections (a) - (d).

In those four earlier sections present forms in 'dz-, 'dz-, 'ṭh-, and 'ṭh- (ŚŚ, ŚŚ, ŚŚ, ŚŚ), and in this section a present form in 'dr-, ŚŚ, were associated with some other form, past, future, or imperative, spelt with either a single initial z-, z-, s-, or ś-, and, in this section, r-, (ŚŚ, ŚŚ, ŚŚ, ŚŚ; ŚŚ), or an initial group of letters containing one or other of these five; but such an association of 'dr- with r- can be supported by more than the single example shown at (i) above only if one associates not different grammatical forms of a single verb but the same grammatical forms of two relatable but independent verbs, one transitive and the other intransitive:
present perfect  present perfect

ii. 'dral  dral  འབའ་  ཤེར་  tear  trans.  
    ral  ཤེར་  be torn  intrans.

iii. 'dre  'dres  འབའ་  རྭར་  be mixed intrans.  
     bsres  རྭར་  mix  trans.

Such other words, apart from pairs of verbs, as 'dril འབའ་ 'roll' (intrans.) and ril-ba རྭར་ 'round', also support a relationship between 'dr- and r-, ( འབོ་, ར བ ེ ས བ ེ). 

If this small list of forms in section (e) seems sufficient to warrant it, initial 'dr- འབའ, when associative with r- ར, could again be treated as incorporating a vyāmjanabhakti, and therefore structurally equivalent to* 'r.- ར མ ས བ ེ; the verb forms in (ii) and (iii) above would then appear as:

ii. trans.  *'ral འབའ་; intrans.  ral ཤེར་  

iii. intrans.  *'re(s) རྭར་(ོ); trans.  (b)sre(s) རོ་(ོ)  

and 'dril would appear as *'ril ( རྭར་, * རྭར་). 

These examples complete the exercise in which I have usurped the role of Thonmi Sambhota, and considered how greater attention to grammar, balanced by less attention to phonetic features, might have removed at least some irregularities from the thirty-three Tibetan verbs studied here.

Notes

1. W.S.Allen cites four different accounts of svorabhakti from Sanskrit sources (Phonetics in ancient India, a guide to the appreciation of the earliest phoneticians, Oxford University Press, 1953, pp. 73-4, 80.  

2. George Calder, A Gaelic grammar, Glasgow, 1923, p. 70.  

3. Symbols in square brackets are in the International Phonetic Alphabet, but with certain modifications that make for easier printing: these modifications are:

[ts]: voiceless alveolo-palatal affricate  
[ʃ]: " " " fricative  
[dz]: voiced " " " affricate  
[hl]: voiceless alveolar " lateral  
[ŋ]: " rolled  

(voice) palatal nasal  

(in the English examples [ts] and [ʃ] have not alveolo-palatal but palato-alveolar values).  

5. Shafer, *id.*, pp. 702, 704. I have re-Romanized Shafer’s Tibetan examples in the following respects in order to have a uniform system of Romanization throughout this article: *tsʰ*- to *tʰ*-, *tʰ*- to *tʰ*-, *tsh*- to *tʰ*- respectively (*k<sup>–</sup>*, *ś<sup>–</sup>*, *ç<sup>–</sup>*).


7. R.K. Sprigg, ‘A tibeti mászalhangzókapcsolatok fonetikai problémái’, *Magyar Tudományos Akadémia I. Oszt. Közl.*, 25, 1968, pp. 161-7 (trans. A. Rona-Tas), the text of a paper read before the Hungarian Academy of Sciences in Budapest in May, 1967, on which occasion I learnt that the analysis I have proposed in the present article had also occurred to, and had the support of, G. Uray, author of ‘Kelet-Tibet nyelvjárássainak osztályozása’, *Dissertationes Sodalium Institutii Asiae Interioris* 4, Budapest, 1949.

For the reason given in note 5, uniformity of symbolization, and also to emphasize the relationship between certain Tibetan initial letters that is essential to my argument, I have here re-Romanized the examples given there out of the Hungarian system of Romanization as follows: for Hungarian *j*-,, *f*-, and *z*- respectively, *dz*-,, *df*-, and *l*- (*ń<sup>–</sup>, *ś<sup>–</sup>, *ç<sup>–</sup>*).

8. Such an interpretation is supported, as far as the homorganic nasal is concerned, by the Golok and the Lhasa dialects of spoken Tibetan (R.K. Sprigg, ‘The role of R in the development of the modern spoken Tibetan dialects’, *Acta Orientalia Hungarica*, XXI, 3 (1968), pp. 310-11) as well as that of the spelling-style pronunciation of written Tibetan, examples of which are given later in this section.

9. Such an interpretation has the support of the Balti, Sikkimese, and Golok dialects: e.g. *za* ‘eat’, Balti and Golok [z-]; *bzang-ba* ‘good’, Balti [bz-]; *spyan-ras g zig* ‘Avalokiteśvara’, Golok [(g)z-] Sikkimese [z-].

10. In this respect the Sikkimese dialect forms something of a bridge between the more conservative Balti and Golok dialects and the less conservative Lhasa dialect: it has both [z-] and [s-] in low-tone syllables, the former corresponding to the initial groups *g* and *bz-,* and the latter to the single initial letter *z-*; e.g. [z-] in *gzi:n* ‘sleep’, *bzo* ‘make’; [s-] in *zam-pa* ‘bridge’, *zangs* ‘copper’, *za* ‘eat’.

11. See also ‘The role of R’, p. 311. My research assistant for Golok, Dodrup Rimpöche, of the Namgyal Institute of Tibetology, preferred the spelling ’dzub-mo to Jäschke’s *mdzub-mo*;
and his pronunciation of this word, with initial [nz-] rather than [mz-], which occurs in Golok (cf. \textit{mdzo} later in this paragraph), supports his preference.

12. Shafer, \textit{op. cit.}, p. 711: ‘the common Balti inversion of spirants and affricates in combination with 1’


14. For examples from the spoken dialects Golok and Lhasa that support this conjecture see ‘The role of R’, p. 311


16. I have asterisked [md?-] as being conjectural only, this is because, in spite of the occurrence of \textit{md} in spelling, I have never in fact observed an initial sound group such as this in any dialect; the only relevant example in my Golok material is \textit{mdzal} ‘meet’, pronounced not with labial nasality ([*md?-]) but with homorganic nasality ([md?-]). The other two examples here, though, are supported by Golok [\textit{rdz}e:] and Balti [\textit{ldz}t], in each of which I take the [-d-] to be \textit{vyanjanabhakti}. 

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