COMMENTS ON JACQUES’ “THE DIRECTIONALITY OF THE VOICING ALTERNATION IN TIBETAN”

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Abstract
This response to Jacques’ paper (of this volume, JSEALS 14.1:32-38) suggests a revision of the temporal frame of the morphological processes discussed by Jacques. It agrees on the reconstructed sequence of derivation by means of a transitivising and voicing prefix that was followed by Schiefner’s law but dates both processes to stages in the history of the Trans-Himalayan family that preceded the formation of Proto-Tibetic.

Keywords: Tibetic languages, Old Tibetan, morphology, voicing alternation, Thebo

ISO 639-3 codes: bod, tib, sit

1 Introduction
Jacques’ hypothesis sounds flawless. It not only explains the voicing alternation between transitive and intransitive verbs and its relation to Schiefner’s law, but also allows us to account for some lexical phenomena considered problematic heretofore. Nonetheless, one aspect of the hypothesis raises doubts: the chronology.

My reply to Jacques’ paper consists of two parts. In the first part I point to certain problems regarding the reconstruction put forward by Jacques and suggest a revision of its temporal frame. The second part is devoted to several lexical items that have been used by Jacques and other scholars to support the one or the other view on the discussed problems. The paper ends with a brief discussion of Thebo data referred to by Jacques.¹

2 The lost timeline
The first objective of Jacques’ paper is to demonstrate “the directionality of the voicing alternation (from voiceless to voiced) in the Tibetan verbal system” (p. 32). As far as I understand Jacques’ reconstruction, he proposes the following scenario: Proto-Tibetic (PT) inherited roots with voiceless fricatives and affricates in initial position, among them transitive verbs. The language had a productive prefix X₂-² that allowed derivation of intransitive verbs from transitive ones and led to voicing of voiceless root consonants (K- → X₂+K- → G-). In the cases with voiceless fricatives and affricates this, however, resulted in one voiced consonant for alveolar (ʣ/z) and one for alveolo-palatal (ʥ/ʑ) because PT did not contrast voiced alveolar and alveolo-palatal fricatives and affricates due to Schiefner’s law:

¹ Tibetan transliteration and nomenclature follow Bialek (2020b). A regular font is used for IPA transcription, whereas for transliteration of Old Tibetan (OT) italic type is used.
² In various studies referred to as N- prefix and contrasted with the causative s- prefix (see Handel 2012). The devoicing prefix is dubbed ‘X₁’ by Jacques (p. 35).
The tacit assumption of Jacques’ paper is that in PT the prefix X₂- was productive and Schiefner’s law was an innovation of PT.

2.1 Problem 1: The dating of the prefix X₂-
Jacques’ paper begins with the statement that “[n]early all languages in the Trans-Himalayan family, including Old Chinese, Tibetan, Kiranti, Lolo-Burmese, Jingpo, Bodo-Garo, and other languages, have a voicing alternation correlated with transitivity” (p. 32) according to the pattern: voiceless = transitive, voiced = intransitive. Further languages from the Qiangic branch are added to the list in a forthcoming paper by Gates et al.: Stau, Geshiza, Khroskyabs, Japhug, Minyag, and Tangut (Gates, Honkasalo, and Lai Draft). The same correlation is encountered, for instance, in Kurtöp (Hyslop 2017:198), Bunan (Widmer 2017:388 & 392f.), and Darma (Willis 2019:273).4

The derivation of the alternating stems was not productive in OT as it is not in any modern Tibetic language, or, for that matter, in Kurtöp or Bunan. In fact, for none of the TH languages is the process described as productive. All these languages have inherited pairs of verbs that are related to each other historically, from which the transitive has a voiceless and the intransitive a voiced root consonant. What’s more, none of the languages has preserved the derivational affix that had led to the alternation (see Handel 2012:64 and on Japhug Jacques 2019 Draft:759). All this strongly suggests that the affix was productive in the common ancestor language, i.e. Proto-Trans-Himalayan (PTH)5, and maybe, to a lesser extent, in some daughter languages. It certainly reconstructs to a deep level within TH family. The logical conclusion is that PT, or rather Proto-Bodic, inherited the alternating verb stems but not the productive affix.6

2.2 Problem 2: Schiefner’s law
Certain phonetic regularities in Classical Tibetan (CT) verb conjugations, first observed by Schiefner, were recently dubbed ‘Schiefner’s law’ by Hill (2014:171). Schiefner himself remained vague about the change stating only: “[a]usser den beiden eben genannten Erweichungen von ķ und ȝ zu ź und z kommt auch noch die von ĉ und ĉh zu ś, von c und ch zu s vor.” (1852:365). This observation concerns not only inflected verbs, but also other word classes (ibid., p. 366) and can be schematically presented as:

\[
\begin{align*}
\text{च्छ} & \rightarrow \text{झ} \\
\text{च्छh} & \rightarrow \text{झ} \\
\text{च} & \rightarrow \text{झ} \\
\text{चh} & \rightarrow \text{झ}
\end{align*}
\]

Schiefner remained silent about the conditions under which these changes occurred.

Hill has narrowed down Schiefner’s law to the voiced pairs, observing that “essentially no Tibetan word begins with ȝ-” (the same applies to the initial ķ-, p. 2014:171) and quoting comparative data that indicates that at least some initial z- in OT come from PTH ʣ- (ibid., p. 169f.). Even more radical was Hill’s statement that “it is tempting to speculate that at one point in Tibetan pre-history no roots began with ȷ- or Œ-” (ibid., p. 172).7 As a consequence, all OT initial ȷ- and Œ- must have resulted from *ʣ- and *ɕ-.8 It is this radical reformulation of Schiefner’s law, and not the law as such, to which I opposed (Bialek 2020a:280, fn. 48). I quoted two verb roots to demonstrate that PT must have had initial ȷ- and Œ-:

\[
\text{ʒ} \rightarrow \text{ʒ} \quad \text{ㄛ} \rightarrow \text{ɕ}
\]

3 ȷ- and Œ- could be replaced by either ʣ- or ɕ- in certain phonetic contexts according to Conrady’s law (Hill 2014:167f.). The distribution of z/ʒ- and ʣ/ɕ- was complementary; see Table 1 in Jacques’ paper.

4 Hyslop and Widmer explain the alternation as a result of the causative s- prefix.

5 This was already recognised by Benedict (1972:124).

6 This is also the sense of my words that “[t]he question of which roots, transitive K or intransitive G, were primary and which derivational cannot be answered on the grounds of Tibetan data only. For this reason, both types of roots should be reconstructed into PT.” (Bialek 2020a:267, fn. 12; the last sentence has been left out by Jacques, pp. 32).

7 This opinion is repeated verbatim in Hill (2019:28) and restated as “The proto-language did not have voiced fricatives” (ibid., p. 45).

8 For the initial ʒ- Hill also quotes other potential sources (2014:171f.).
√ʑig “collapse” ~ √eig “destroy”
√sad “decline” ~ √sad “kill”

These can be juxtaposed with, for instance:
√ʑug (< *ʥug) “enter” ~ √ʨug “put in”
√zugs (< *ʣugs) “go into” ~ √ʦugs “insert”

Given these data I proposed considering the changes ʣ- > z- / s- and ʥ- > ʑ- / s- mergers with the inherited z- and ʑ- respectively (ibid.).

In Jacques’ hypothesis the derivation by means of the prefix X₂- is assumed to be simultaneous with Schiefner’s law, both taking effect in PT. Here we encounter another chronological problem for Jacques passes over in silence Hill’s data on traces of Schiefner’s law in Kurtöp and Monpa (Hill 2014:172; 2019:28). Accepting the data, we have to date Schiefner’s law to Proto-Bodish. Jacques’ conclusion that “there was no contrast between voiced affricates and voiced fricatives in pre-Tibetan” (p. 35) remains valid, assuming that his pre-Tibetan = my Proto-Tibetic.

2.3 Discussion
Jacques dates the X₂-prefixation and Schiefner’s law to PT but arranges them in verb conjugations of a Middle Tibetan language. Already this is more than controversial but Jacques’ dating of both processes is also difficult to reconcile with comparative data that sets back the X₂-prefixation to PTH (or its daughter languages) and the Schiefner’s law to Proto-Bodish. Jacques’ hypothesis could nevertheless be correct for Proto-Bodish if we can prove that the X₂-prefixation was still productive at this stage. But apparently, we cannot.

It is an anachronism of Jacques to discuss the voicing alternation within transitive conjugations as a synchronic stage of PT. It is widely accepted that v1 of these verbs were independently derived from v1 of their intransitive counterparts; e.g., INTR v1 ɣbab > *ɣbab+d > TR v1 ɣbebs, and replaced earlier forms

9 My typological argument that “for a language to have voiced affricates ([ʣ] and [ʥ]) without having voiced fricatives ([z] and [ʑ]) is not a plausible scenario” (Bialek 2020a:280, fn. 48) has of course only secondary value.

10 In Tshangla ʣ is encountered only in loanwords from Dzongkha and CT but even there it is usually pronounced as z (Andvik 2010:12). ʥ (j in Andvik’s orthography), although recognised as native phoneme by Andvik (ibid., p. 11), might have originally been introduced from a Tibetan language, most probably CT:

- rgyags “provision”
- rgyab “back”
- rgyal po “king”
- rgyug “to run”
- rgyon/brgyans/brgyan “to stretch”
- sgug ma “illusion”
- sgugar “to change”
- lian khu “green”
- byin rlabs “blessing”
- šbyun “to occur”
- šbyon “to go”
- sbyon/šbyans/šnya “to practise”

There seem to be very few words in Tshangla for which no Tibetan source word can be identified, notably jang “I” (ibid., p. 11). Andvik’s findings have recently been confirmed for Bjokapakha, a Tshangla dialect (Grollmann 2020). Kurtöp ɟ (often realised as ʥ, Hyslop 2017:32) has likewise other sources and might have originally been introduced from Tibetan. In loanwords from Tibetan languages Kurtöp renders ʣ as z and has no native ʣ (ibid., p. 34).

11 Bunah has clearly not undergone the deaffrication ʣ/ʥ- > z/ʑ- (Widmer 2017).

12 By the way, Jacques uses both terms, pre-Tibetan and proto-Tibetan, with no discernible difference in meaning.

13 The OT verb inflection system seems to have been a Tibetan innovation. It started developing in PT and was still partially productive as late as in LOT (Bialek 2020a). No traces of similar inflectional systems have been reported from other TH languages thus far.
(*phebd in the case of ybebs).\footnote{For a most recent discussion see Bialek (2020a:277, 315, and 339 for \(\text{ṭ}pabh \sim \text{ṭ}bab\)).} EOT inherited intransitive verbs that were identical with verb roots and only later, maybe even as late as in LOT, added the prefix \(\gamma\) to distinguish between v1 and v2. Because the imperfective prefix \(\gamma\)- was still productive in LOT,\footnote{Compare hereto Bialek (2018a:1.315f.) on \(\text{śi} (\text{CT} \text{ḥčh} \text{v2} \text{śi})\) and Bialek (2020a:304f.) on \(\text{źig} (\text{CT} \text{ḥǰ} \text{ig} \text{v2} \text{źig})\).} the derivation of transitive v1 in \(\gamma-d\) from intransitive \(\gamma\)- must have also been productive in LOT. For no reflexes of these v1 forms are found in WAT, we can assume that they first occurred in MOT. Likewise v3 of the ‘mixed’ conjugations\footnote{Type 3a of Bialek (2020a:276ff.).} were recently shown to have been formed from intransitive roots, albeit earlier than v1, most probably in PT (see Bialek 2020a:311ff.). This development can be illustrated with the pair √ʑig ~ √ɕig:

\[
\begin{array}{ccc}
\text{PT} & \text{EOT/MOT} & \text{LOT} \\
\text{INTR \ ̣ʑig} & \text{̣ʑig} & \text{yįg/ʑig} \\
\text{TR \ ̣ɕig} & \text{b+ɕig/*g+ʑig/*ɕig+s} & \text{yįg/bɕig/gʑig/sīgs} \downarrow
\end{array}
\]

Because the X₂-prefixation must have preceded Schiefner’s law and the latter can be dated to Proto-Bodish, it follows that PT must have inherited voiced fricatives \( z- \) and \( ʑ- \). This remains a valid counter-argument to the radical version of Schiefner’s law as formulated by Hill.

I propose a revision to Jacques’ hypothesis exemplified with Kurtöp and Bunan cognates of PT \( \text{̣ʑig} \) and \( \text{̣ɕig} \):

- **Bunan**
  - \( \text{ʤikt} \) “collapse (of walls)”
  - \( \text{ɕik} \) “tear down (walls)”\footnote{Widmer (2017:738a & 753b).}

- **Kurtöp**
  - \( \text{zhik} \) “be hit”\footnote{Hyslop (2017:61).}
  - \( \text{shik} \) “tear down or break apart”\footnote{Hyslop et al. (2016 Draft:216b).}

Bunan data complicates the picture. The language does not have voiced fricatives\footnote{See Widmer (2017:62, Table 17 & p. 74). Here are some correspondences between Bunan and OT:}

1. A loan from OT \( \text{yįg}; \)
2. A result of an earlier merger of \( z \) and \( ʤ \) (*ʑik - > *ʤik-);
3. The original form of the verb from which \( \text{ɕik} - \) (< *ʨik - ) was derived by means of a devoicing transitivising affix.\footnote{The last hypothesis would necessitate the additional deaffrication of the initial *ʨ-, a process otherwise not attested in Bunan.}

\[\text{ʤikt} \] is a monovalent verb formed from *ʤik by means of “the functionally opaque suffix -t” (ibid., p. 384ff.). Compare Chepang jik- [ʤjik] “be sick, injured, hurt, sore” (Caughley 2000:106a).
Presuming that ʣjikt- belongs to the inherited vocabulary of Bunan, the only way to account for the above data seems to be:

### Table 1: Sound changes from PTH to Proto-Bodish

<table>
<thead>
<tr>
<th>Language</th>
<th>Process</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTH</td>
<td>X₂-prefixation</td>
<td>*ṣjig &gt; X₂+jig &gt; *ṣjig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*tsugs &gt; X₂+tsugs &gt; *tugs</td>
</tr>
<tr>
<td>Proto-Bodic</td>
<td>Merger of z with ʣ</td>
<td>*ṣjig &gt; dʒjig (Bunan *ʣjikt−)²³</td>
</tr>
<tr>
<td></td>
<td>Deaffrication</td>
<td>*dʒjig (Bunan ʣjg−)</td>
</tr>
</tbody>
</table>

Deaffrication affected voiced affricates in initial position. The complementary distribution of ʑ/z and ʣ/ʥ in OT resulted from a morphological process specific to PT and OT:

### Table 2: Sound changes in PT

<table>
<thead>
<tr>
<th>Language</th>
<th>Process after m-, y-, and r-</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT/OT</td>
<td>D-epenthesis</td>
<td>ʒig [zig] &gt; yjg [yʣg]</td>
</tr>
</tbody>
</table>

Now, the deaffrication can be identified with Schiefner’s law and the D-epenthesis with Conrady’s law.²⁶

### 3 Are all words what they seem to be?

1. zoṅ. Schiefner quoted zoṅ ~ choṅ “merchandise” as alternating cognates (1852:366). This example was taken over by Hill (2014:169; 2019:26) and Jacques (p. 34) to demonstrate Schiefner’s law: zoṅ < *ʣoṅ. Two arguments speak against this etymology. Firstly, zoṅ has an alternating form zog (J:490a) which is much better attested in modern dialects (see CDTD:7406). Secondly, because √ʦoŋ is a transitive verb “to sell” its alleged counterpart √zoŋ would have to be intransitive. Apart from the fact that an intransitive counterpart of a verb “to sell” is difficult to define semantically, zoṅ with the meaning “merchandise, goods” would have to be derived from the intransitive verb. This is not possible in Tibetic languages because of the patient-oriented meaning of zoṅ.²⁷ Concluding, zoṅ is a secondary variant formed from the original zog most probably under the influence of the verb ʒoŋ with which it frequently co-occurred in discourse. Alternatively, the change might have first occurred in the synonymic compound choṅ zoṅ “merchandise” (J:490a) < *ｃhoṅ zog through progressive assimilation: -g > -ŋ / -o_/; cf. Shi tsʰoŋsəọ, Rka tsʰoŋzoŋ (WT choṅ zog) “commodity” (CDTD:6869), but ArTBL tsʰoŋzoŋ (WT choṅ zoṅ) “goods, merchandise” (CDTD:6870).²⁸

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²³ This merger most probably occurred earlier in the prehistory of the language family; see the comparative data in Hill (2019:27).
²⁴ Palatalisation of dentals and [l] before [j] is the main innovation of Tibetan languages (Tournadre 2014:133ff.; Hill 2019:16ff.); on the phonemic status of palatals in OT, see Hill (2010:118). As it seems, palatalisation of dentals also occurred in Bunan, maybe under the influence of Tibetan languages. Widmer collected only four examples of “dental + [j]” (2017:100ff.; tʃo in tʃo-men “cry-INF” (cognate with tʃad-men “cry.PL-INF”) may be related to CT čho in čho ne (“lamentation”).
²⁵ The lack of -s in zug as compared with yjugs/ḍjugs/zjugs/zugs remains unexplained. In the same way one has to reconstruct PT ʒzug “to enter” ~ ʒuw “to put in” etc., as against Bialek (2020a:280, fn. 48). Bjokapakha tsuk- “to put, to put on, to put in” ~ zug “thorn, spike” (Grollmann 2020:497b & 500b) can be added to the examples.
²⁷ On patient-oriented deverbals in OT see Bialek (2020a:297 & 302ff.)
²⁸ There is no motivation for the reversed change zoṅ > zog. The latter can be cognate with ḳog “to heap together” (J:467a). In addition to zoṅ ~ choṅ, Schiefner also put forward the pair char “ends of threads” ~ zarjyar “tassel” (1852:366). Here the issue is self-evident: char is related to ychar “to be at an end” (J:458b) and zarjyar to yyar “to hang down” (J:464).
2. jo in jo mo and jo bo. Hill explained away jo bo as a variant spelling of rjo bo arguing that the latter (1) is the original spelling for it occurs in Pt 1287, (2) there are no other words in OT beginning with jo, and (3) rjo must be related to rje (2014:171, fn. 7). The first two arguments are misled. OT jo bo is certainly related to jo mo. The latter occurs in ITJ 750:302 which is the oldest attestation of the stem jo. In OTD I explain it as related to the verb yjo “to milk, to nurse” (ɣzo < Proto-Bodish *dzọ). The etymological meaning of jo mo was “nursing she”; jo bo was coined by analogy with jo mo after the latter had been re-functioned as a title of the first consort of a bcan po upon giving birth to the heir to the throne. This etymology sees jo [dzọ] as an archaism retained in PT. The form rjo needs further research but it might have been shaped by analogy with rje with which it appears to share its semantics.

3. khu ljo. I reconstructed OT khu ljo as *khul gyi yjo khug, lit. “a bag (khug) [made] of wool (khul) [and used] for nursing (yjo)” (2018a:337f.), arguing that the CT spelling khul zo resulted from folk etymologisation of the second syllable by analogy with zo “milk” (ibid., p. 337–8, fn. 3): khu ljo > *khul jo (reanalysis of syllable boundaries) > khul zo (folk etymology). Hill recognised khu ljo as an earlier spelling and postulated that the change of the second syllable from -ljo to -zo is another example of Schiefner’s law (2014:171; 2019:27). In this case, the change would have to be dated very late, i.e. to a Middle Tibetic language.

4. žal. Hill followed Dotson in relating žal- in žal če to the OT verb yjal/bčal/gžal/chol (< ĝžal ~ ĝkal) “to weigh, to measure” (Dotson 2007:35, fn. 39; Hill 2014:171; 2019:26f.). There are three problems with Dotson’s etymology: 1. the meaning of žal has not been defined; 2. the second syllable of the compound is left unexplained; and 3. it is biased or even modelled on the notion of judging as prevailing in the European and Mediterranean cultural area where judging is conceived of a weighing (~ yjal) of arguments – a conception unfamiliar to OT legal texts. Against this etymology I argued that the OT meaning of žal če (< *žal lče “speech”) was “statement; sentence” and that there are analogous formations like OT kha mču “dispute” and žal mču “HON of kha mču” that support the identification of žal- with žal “face” and -lče/-če with lče “tongue; speech” (2018a:2.434ff).

Hill and Jacques made use of the above examples to demonstrate that: 1. OT had no lexemes with etymological voiced affricates in onset (jo), and 2. lexemes with voiced fricative onset resulted from Schiefner’s law in PT (zőn, khu ljo, žal če). The above critical evaluation of the proposed etymologies undermines both these assumptions with respect to the examined lexemes.

4 Conclusions
The paper critically evaluates Jacques’ hypothesis but agrees with its fundamental assumptions: the directionality of voicing from voiceless transitive to voiced intransitive and the validity of Schiefner’s law. The revision concerns only the timeline of the processes that, in my opinion, stretched over several stages in the development of the whole language family and were not restricted to the history of Tibetic languages. Jacques’ attempt “to show direct evidence for the directionality of the voicing alternation” (p. 32; emphasis added) has not, to my mind, been successfully completed; instead of the “direct evidence” the reader obtains a reasoning based on economy of two alternative approaches: one (*X₂) vs three (*X₁, *x, *z) additional elements in the phonemic inventory of PT (p. 36). This is an argument, but not “direct evidence” and it has to be dated back to at least Proto-Bodic. Another argument comes from the examination of the causative prefix -e- in Tibetic languages (see Jacques 2020a). The latter remained productive in OT with no traces of

29 A recurring argument in discussions on Schiefner’s law is the virtual absence of lexical words in dz- and d- in CT.
Although basically true, we notice that OT had a few more such lexemes: jiiči “what”, ju in ju tig “divination by threads” (etymology unknown), je ba “title of a young woman”, jo mo “title of the first consort of a bcan po”, jo bo “lord”.
30 OTA (Pt 1288 & ITJ 750) is the only OT text known to have been composed before LOT. In many cases it has preserved EOT orthography; see Bialek (2018b).
31 Cognates of the verb yjo known from other TH languages unanimously point to an affricate initial; see data on STEDT #5539 (https://stedt.berkeley.edu/~stedt-cgi/rootcanal.pl/etymon/5539; accessed 10.10.2020). Hill’s equation of OT zo with Japhug tr-lu “milk” (2014:171; 2019:14) seems therefore incorrect.
32 Alternatively, rje might have been derived from rjo: rjo > *rjeyu (regular diminutiv derivation) > rje, although the following equation can also be made: jo : rjo ~ je (in je ba) : rje.

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accompanying devoicing of the root consonant. These two arguments work to the advantage of the voiceless > voiced hypothesis.

**A note on Thebo.** Jacques’ statement that “[P]ast b- actually causes progressive voicing of the initial consonant in Thebo” (p. 35) requires a qualification. Data presented by Lin indeed suggests such a conclusion but only for some verbs.

1. Verbs with voiced initials in reflexes of OT v2 with voiceless root consonant:

<table>
<thead>
<tr>
<th>v1</th>
<th>v2</th>
<th>v3</th>
<th>v4</th>
<th>Thebo meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ykhud [shiʔ]</td>
<td>bkru [dzi]</td>
<td>bkru</td>
<td>khrus [shi:]</td>
<td>wash</td>
</tr>
<tr>
<td>ygebs [k^oʔ]</td>
<td>bkab [goʔ]</td>
<td>dgab</td>
<td>khob [k^oʔ]</td>
<td>conceal</td>
</tr>
<tr>
<td>yges [ga]</td>
<td>bkas [ge:]</td>
<td>dgas</td>
<td>khas [kʰe]</td>
<td>crack</td>
</tr>
<tr>
<td>ygyog [Daʔ]</td>
<td>bkyags [Daʔ]</td>
<td>bkvyag</td>
<td>khyog [sʰuʔ]</td>
<td>lift; raise</td>
</tr>
<tr>
<td>ygrol [shi]/[iшу.]</td>
<td>bkrol [dzi]/[dzi]</td>
<td>dgrol</td>
<td>khrol [shi:]</td>
<td>untie</td>
</tr>
</tbody>
</table>

The set of data is quoted after Jacques (2020b; accessed 07.10.2020). The meaning and the written conjugation are taken from OT.

In the earliest historically attested stage of the language, EOT, the prefix s- assimilated to the voicing of the following root consonant yielding results contrary to Shefts-Chang’s hypothesis (1971): s+-l- > zl-; sl-/; s+r- > zr-/sr/-; s++-/ > sl-; s+l- > sr-; s+r- > sr- /sp- (Bialek 2018b).

This statement is based on a recent study by Sangsrgyas Tshering (2020), which, however does not consider all the data provided in Lin (2014; see also fn. 53 below).

If not otherwise stated, all data comes from Lin (2014).

Further v2 stems with voiced onset are quoted by Sangsrgyas Tshering (2020:11ff.). Whenever two forms are quoted divided by a slash, the first one represents the G.yi-ba and the second one the Cho-ru variety of Thebo (see Lin 2014:247).

This is not a regular outcome of OT ygebs.

Hereto Lin gives also [sɔʔi?] (2014:260b) that has been generalised and is used for v1 and v2 likewise. [sɔʔi?] apparently disagrees with the established pattern.

This set of data is quoted after Jacques (2020b; accessed 07.10.2020). The meaning and the written conjugation are OT.

[pʰuʔ] might be the original v2 that was generalised for v1 and has been preserved in this position while the original v2 has been replaced by [boʔ].

This set of data is quoted after Jacques (2020b; accessed 07.10.2020). The meaning is taken from OT.

This set of data is quoted after Jacques (2020b; accessed 07.10.2020). The meaning and the written conjugation are OT.
However, there exist important exceptions not addressed to in Sangsrgyas Tshering's study (2020).

2. Verbs with a superscript in OT:

<table>
<thead>
<tr>
<th>Table 4: Thebo reflexes of an OT superscript</th>
</tr>
</thead>
<tbody>
<tr>
<td>rko [kʰ]</td>
</tr>
<tr>
<td>rkyon [sʰ]</td>
</tr>
<tr>
<td>skom [kʰ]</td>
</tr>
<tr>
<td>ston [tʰ]</td>
</tr>
<tr>
<td>spo [pʰ]</td>
</tr>
<tr>
<td>rcig [sʰ]</td>
</tr>
<tr>
<td>rced [sʰ]</td>
</tr>
<tr>
<td>slo [sʰ]</td>
</tr>
</tbody>
</table>

3. Verbs with a voiceless fricative as root consonant in OT:43

<table>
<thead>
<tr>
<th>Table 5: Thebo reflexes of OT voiceless fricatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>ychad [ʃʰ]/[xeʰ]</td>
</tr>
<tr>
<td>šu [xʰ]</td>
</tr>
<tr>
<td>gšog</td>
</tr>
<tr>
<td>bšal [ʃʰ]/[xʰ]</td>
</tr>
<tr>
<td>sems</td>
</tr>
<tr>
<td>sel [sʰ]/[xʰ]</td>
</tr>
<tr>
<td>gsod [ʃʰ]</td>
</tr>
</tbody>
</table>

4. Verbs with a liquid as root consonant in OT:

<table>
<thead>
<tr>
<th>Table 6: Thebo reflexes of OT liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td>ybri</td>
</tr>
<tr>
<td>ydri [dʒə]</td>
</tr>
<tr>
<td>ybreg [dʒə]</td>
</tr>
<tr>
<td>len</td>
</tr>
<tr>
<td>lē</td>
</tr>
</tbody>
</table>

---

43 Sangsrgyas Tshering quotes bsil (v1 gsil) [zi:] “to chop (firewood)” (2020:14), but Lin cites two homonyms with a voiceless onset: bsil [sʰ] “(V) cool” (falsely glossed as “cold”; p. 250b); bsil mo [sʰ]-mo “cool” (p. 251a).

44 Generalised v2.

45 For this verb in OT, see Hill (2005).
5. Others:

Table 7: Other deviations from the main conjugational pattern

<table>
<thead>
<tr>
<th>ybud[^\textit{biʔ}]</th>
<th>phus [\textit{pi}:]</th>
<th>dbu</th>
<th>phus [\textit{pi}:]</th>
<th>blow^{46}</th>
</tr>
</thead>
<tbody>
<tr>
<td>ye[p]ebs</td>
<td>phab [pʰ\textit{ʔ}]</td>
<td>dbab</td>
<td>phobs</td>
<td>bring down</td>
</tr>
<tr>
<td>b\textit{cay} [tsa:]</td>
<td>bcas [tse:]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On the other hand, there are lexemes spelled with the prescript \textit{b}- in OT (distinct from the inflectional \textit{b}-), in which the following consonant has also undergone voicing in Thebo:

\textit{b\textit{c}u} [d\textit{ʒ}a] “ten”  
\textit{b\textit{c}a}n [d\textit{ʒ}ʰ] “severe”^{47}  
\textit{b\textit{c}a}y [d\textit{ʒ}a] “rust”  
\textit{b\textit{c}on khaṅ} [d\textit{ʒ}e-kh\textit{ʒ}] “prison”^{48}

Because verbs grouped in 2–4 all have contrastive tone, which is lacking in verbs from group 1, it seems more probable that the voicing in v2 of the latter is a temporary (?) outcome of ongoing tonogenetic processes. A side-effect of the voicing is the merger of ‘\textit{b}+voiceless plosive’ with ‘\textit{b}+voiced plosive’ in v2:

Table 8: Thebo reflexes of OT v2 with a voiced root consonant

<table>
<thead>
<tr>
<th>y\textit{ded} [d\textit{ʒeʔ}]</th>
<th>b\textit{das} [d\textit{ʒ}:]</th>
<th>b\textit{da}y [d\textit{ʒ}:]^{49}</th>
<th>d\textit{o}s (?) [d\textit{ʒ}:]</th>
<th>chase</th>
</tr>
</thead>
<tbody>
<tr>
<td>dra [d\textit{ʒa}]^{50}</td>
<td>*b\textit{dras}^{51} [d\textit{ʒi}:]^{52}</td>
<td></td>
<td>d\textit{ros} [t\textit{s}:]</td>
<td>cut out</td>
</tr>
</tbody>
</table>

And with onsets in which pre-consonantal \textit{b}- belonged to the root:

Table 9: Thebo reflexes of the onset clusters \textit{bg}- and \textit{bgr}-

<table>
<thead>
<tr>
<th>b\textit{god}</th>
<th>b\textit{gos} [ge:]</th>
<th>b\textit{go}</th>
<th>b\textit{gos}</th>
<th>distribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>b\textit{gro}</td>
<td>b\textit{gros} [d\textit{ʒe}:]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The merger of ‘\textit{b}+voiceless plosive’ with ‘\textit{b}+voiced plosive’ in v2 must have obviously postdated the formation of OT verb conjugation patterns.

To sum up, the data, although doubtlessly highly interesting, requires a thorough examination before any far-reaching conclusions can be drawn.\(^{53}\) Jacques’ remark “Thebo is more archaic than Old Tibetan at least in this respect” (p. 35, fn. 8) is therefore premature. Apart from the complicated character of the above data, two arguments speak against the presumed archaic character of Thebo: 1. its conjugational system lacks reflexes of OT v3-stems (a feature shared with all modern Tibetic dialects); and 2. its reflexes of EOT onsets \textit{sl}-, \textit{zl}-, and \textit{sr}- parallel those of some HT and AT dialects (with strong influence from central dialects).\(^{54}\)

---

^{46}\ Lin gives \textit{bus} as v2 and v4. WT conjugations provided by lexicographical sources most probably result from mixing up of two conjugations: the transitive (v1 \textit{ybub}, v2 *\textit{phu}, v3 \textit{dbu}, v4 \textit{phus}) and the intransitive (v1 *\textit{ybub}, v2 \textit{bus}). Thebo [\textit{pi}:] is a reflex of \textit{bus}.

^{47}\ After Sangsrgyas Tshering (2020:14).

^{48}\ Ibid., p. 13.

^{49}\ As v1 of independent verb \textit{bday} “to drive away” in \textit{ri dwags bday} “to hunt” (Lin 2014:256a).

^{50}\ This form suggests the underlying *\textit{ydra}, a less frequently attested v1 of the verb.

^{51}\ See Bialek (2020a:274, fn. 26).

^{52}\ Lin gives also the alternative form [t\textit{s}:e:], WT \textit{dras}, with the meaning “to snip”.

^{53}\ Apart from \textit{bsil} (see fn. 43), verbs of groups 2–5 have not been considered by Sangsrgyas Tshering, but, in my view, they challenge his hypothesis and require an explanation. As the voicing phenomenon is not attested in all Thebo varieties (Sangsrgyas Tshering 2020:19), it is worth considering an areal feature or influence from a substrate language.

^{54}\ Data from HT and AT is quoted after Bialek (2018b:48, Appendix B).
Table 10: Thebo reflexes of OT sl-, zl-, and sr-

<table>
<thead>
<tr>
<th></th>
<th>sl-</th>
<th>zl-</th>
<th>sr-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thebo</td>
<td>тs-H/l-</td>
<td>dz-</td>
<td>fH/l-H/ (G)</td>
</tr>
<tr>
<td>Ger</td>
<td>тs ~ lā</td>
<td>dz ~ nā</td>
<td>тš ~ ʂ ~ ʂ</td>
</tr>
<tr>
<td>Am</td>
<td>тš</td>
<td>dz ~ d</td>
<td>тš ~ ʂ ~ ʂ</td>
</tr>
<tr>
<td>Hor</td>
<td>тsᵃ ~ tš ~ lā</td>
<td>dz ~ d</td>
<td>тš ~ ʂ ~ ʂ</td>
</tr>
<tr>
<td>Nak/Bach</td>
<td>тš</td>
<td></td>
<td>ʂ</td>
</tr>
</tbody>
</table>

HT  
AT

After all, we shall not forget that our OT sources come from the period of Late Old Tibetan or even from Early Middle Tibetan. We have only limited access to Early Old Tibetan data, usually through toponyms or archaisms.

Abbreviations

√ reconstructed verb root  
* reconstructed form  
Ar Arik  
AT Amdo Tibetan  
CDTD Bielmeier et al. (see References)  
CT Classical Tibetan  
D dental stop  
EOT Early Old Tibetan  
G voiced obstruent  
HT Northern Kham Tibetan  
INF infinitive  
INTR intransitive  
ITJ IOL Tib J  
J Jäschke, 1881 (see References)  
K voiceless obstruent  
LOT Late Old Tibetan  
MOT Middle Old Tibetan  
OTA Old Tibetan Annals  
OTD Old Tibetan Dictionary (see Internet sources)  
OT Old Tibetan  
PL plural  
Pt Pelliot tibétain  
PT Proto-Tibetic  
PTH Proto-Trans-Himalayan  
Rka Rkangtsha  
Shi Shigatse  
STEDT Sino-Tibetan Etymological Dictionary and Thesaurus (see Internet sources)  
TH Trans-Himalayan  
v1, v2, v3, v4 verb stems  
WAT Western Archaic Tibetan  
WT written Tibetan

(G) marks the Thebo variation from G.yi-ba, (T) the one from Choṅ-ru. Lin sometimes omits the tone marker. Moreover, in two cases reflexes of OT sr- are marked with low tone: sre [ʂeː] “dilute”, sriṅ mo [ʃeː-wu] “younger sister”, without any comment.
References


Bielmeier, Roland, Felix Haller, Katrin Häsler, Brigitte Huber, and Marianne Volkart, eds. 2013 (draft). *Comparative Dictionary of Tibetan Dialects*.


**Internet sources**


Sino-Tibetan Etymological Dictionary and Thesaurus: [https://stedt.berkeley.edu/](https://stedt.berkeley.edu/)