

**Zeitschrift:** Asiatische Studien : Zeitschrift der Schweizerischen Asiengesellschaft = Études asiatiques : revue de la Société Suisse-Asie

**Herausgeber:** Schweizerische Asiengesellschaft

**Band:** 49 (1995)

**Heft:** 4

**Artikel:** Studies in Tibetan indigenous grammar (2) ; Tibetan phonology and phonetics in the Byis-pa-bde-blag-tu-'jug-pa by Bsod-nams-rtse-mo (1142-1182)

**Autor:** Verhagen, Peter

**DOI:** <https://doi.org/10.5169/seals-147205>

### **Nutzungsbedingungen**

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

### **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

### **Terms of use**

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 09.07.2025

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**

STUDIES IN TIBETAN INDIGENOUS GRAMMAR (2):  
TIBETAN PHONOLOGY AND PHONETICS IN THE *BYIS-PA-BDE-  
BLAG-TU-'JUG-PA* BY BSOD-NAMS-RTSE-MO (1142-1182).<sup>1</sup>

Peter Verhagen, Leiden

1. Introduction.

The *Byis-pa-bde-blag-tu-'jug-pa* (henceforth *Byis-'jug*), 'Easy Access for the Beginners', is a manual on the phonology and pronunciation (touching on articulatory phonetics) of Sanskrit and Tibetan.<sup>2</sup> It is the earliest datable so-called *klog-thabs* manual known to me that has been preserved. It constitutes an eminently important source for early Tibetan phonology and phonetics, not only due to its early date, but certainly also due to its descriptive richness.

The author was Bsod-nams-rtse-mo (1142-1182), the famous Sa-skya-pa hierarch and scholar. The work is included in his collected works forming part of the *Sa-skya-bka'-'bum*. The name of the author is stated in the colophon.<sup>3</sup> Moreover, in one of the concluding verses we find a word-

1 The research of Dr. Verhagen has been made possible by a fellowship of the Royal Netherlands Academy of Arts and Sciences.

2 Full title: *Yi-ge'i-bklog-thabs-byis-pa-bde-blag-tu-'jug-pa-žes-bya-ba*, facs. ed.: Bsod-nams-rgya-mtsho (1968-2: pp. 345-349, i.e. *ŅA* 318r-326r6) referred to in this article under the siglum D (i.e. Derge Sa-skya Bka'-'bum edition). As the number of lines per stanza varies and is often difficult to determine in this text, for reference to specific lines of the text in the present article I have simply numbered the lines consecutively within each section; so e.g. my reference 3.12 refers to line 12 of section 3. I have not included the four-line *maṅgala-śloka* in the numbering, and the introduction of the Sanskrit and Tibetan alphabets at the beginning I have numbered as follows:

1 = *a-ā* / ... *bcu-drug-go* /

2 = *ka-kha-ga-* ... *sa-ha-kṣa* /

3 = *gsal-byed-sum-cu-rtsa-bži-'o* /

4 = *ka-kha-ga-* ... *ha-a* /

5 = *pha-ma-sum-cu-tham-pa-'o* /

3 D 326r5-6: / *yi-ge'i-bklog-thabs-byis-pa-bde-blag-tu-'jug-pa-žes-bya-ba* / *dge-bśñen-bsod-nams-rtse-mos-sbyar-ba'o* //, '[This] manual of the pronunciation of the

play on the constituents of his name, Bsod-nams and Rtse-mo<sup>4</sup>, very similar to the one found in the colophon of the *Chos-la-'jug-pa'i-sgo* by the same author<sup>5</sup>. Finally, Sa-skya-paṇḍita attributes the text explicitly to Bsod-nams-rtse-mo in his commentary on *Byis-'jug* (cf. *infra*), most significantly in a passage that identifies and praises the qualities of the author of the text commented on<sup>6</sup>. On account of these arguments, Bsod-nams-rtse-mo's authorship of *Byis-'jug* can therefore be considered relatively certain.

The colophon also mentions the place(s) and the date of composition, viz. at Rked-slas [?] and Sa-skya<sup>7</sup> in the year of the Pig<sup>8</sup>, i.e. either 1167 (Fire-female-pig) or 1179 (Earth-female-pig). Finally, the colophon states the name of a revisor, *Žaṇ-ston Byar-bu-pa* [or *Gyar-bu-pa* ?]<sup>9</sup>, a figure whom I have not yet been able to identify. This may refer to a revision at a time long after the date of composition, e.g. at the time of the preparation of the printing-blocks for this edition, in this case the Derge edition of the mid-1730s<sup>10</sup>.

phonemes, entitled "Easy Access for the Beginners", was composed by *Dge-bsñen Bsod-nams-rtse-mo*.'

- 4 D 326r3-4: / *brtse-bas-'di-bris-pa-las-dub* [?] *-par-gyur-pa'i-BSOD-NAMS-gaṇ-yod-pa* // *des-ni-'gro-ba-mtha'* - [326r4:] *dag-byaṇ-chub-sems-ldan-spyod-pa-mchog-la-gnas-kyi-bar* // *gaṇ-daṇ-gaṇ-brjod-de-dag-don-gsal-don-la-brjod-pa'i-zur-phyin-rab-tu-mkhas* / *legs-sbyar-rgya-mtsho'i-blo-gros-yaṇs-pa'i-gzuṇs-kyi-RTSE-MO-mchog-ni-thob-par-śog* /.
- 5 D 317r5-6: / *chos-la-'jug-pa'i-sgo-'di-ni* // *bsdebs-las-BSOD-NAMS-gaṇ-thob-pa* / */ de-yis-'gro-ba-'dir-bžugs-* [317r6:] *nas* // *sa-bcu'i-RTSE-MOR-'gyur-bar-śog* /.
- 6 D 236r3-4: / *gaṇ-gis-mdzad-pa'i-byed-po-ni* / *bdag-ñid-chen-po-bsod-nams-rtse-mo'i-žal-sṇa-nas-kyis-te* /, followed by a passage praising the famous scholar, who was Sa-pan's uncle (236r4-5); cf. also the first *maṅgala* stanza, D 235v6: *blo-gsal-dkyil-'khor-spros-pa'i-'od-zer-can* // *phas-rgol-zla-ba'i-gzi-brjid-'joms-byed-ciṇ-* // *slob-ma-padma'i-phreṇ-ba-rgyas-mdzad-pa* // *sgrib-pa'i-sprin* [or *sbrin*?] *-bral-bsod-nams-rtse-mo-rgyal* /, and in the colophon, D 247r4-5: / *bdag-ñid-chen-po-bsod-nams-rtse-mos-mdzad-pa'i-byis-pa-bde-* [247r5:] *blag-tu-'jug-pa'i-rnam-par-bśad-pa* / *byis-pa-la-phan-pa-žes-bya-ba* (...).
- 7 D 326r5: // *rked* [?] *-slas-dam-pa-daṇ-* / *dpal-sa-skya'i-dben-gnas-dam-par-sbyar-ba'o* /, 'It was composed in sacred Rked-slas and in the sacred hermitage of Noble Sa-skya [monastery]'. I have not been able to identify the toponym (?) Rked-slas (?).
- 8 D 326r5: / *phag-lo-rta'i-tshes-bcu-gcig-la-tshar-bar-bgyis-so* /, 'It was completed at the eleventh day of [the month of] the horse [i.e. the third month] in the year of the Pig.'
- 9 D 326r5-6: / *žu-ba-po-žāṇ-ston-byar* [?; *gyar*?] *-bu-pas-bgyis-so* //, 'Žaṇ-ston Byar-bu-pa [?; Gyar-bu-pa] has acted [as] revisor.'
- 10 Cf. JACKSON (1987: 76-77, 232-236).

Adding to the importance of *Byis-'jug* is the circumstance that an early commentary is extant as well. Sa-skyapaṇḍita Kun-dga'-rgyal-mtshan (1182-1251) (henceforth Sa-pan), a nephew of Bsod-nams-rtse-mo, has written a commentary on *Byis-'jug*, entitled *Byis-pa-bde-blag-tu-'jug-pa'i-rnam-par-bśad-pa-byis-pa-la-phan-pa-žes-bya-ba*<sup>11</sup> (henceforth *Rnam-bśad*). In the present study I will include relevant information derived from this source as well. In the collected works of Sa-pan we find another work that bears a relationship with *Byis-'jug*, viz. the *klog-thabs* entitled *Snags-kyi-klog-thabs-'bras-bu-'byun-ba'i-me-tog*<sup>12</sup>. This work, in fact consisting of 113 verse-lines excerpted from *Byis-'jug*, is not relevant to the present investigation as it is devoted solely to Sanskrit phonology and phonetics.

## 2. Survey of contents.

*Byis-'jug* consists of three chapters, followed by an unnumbered concluding section with *maṅgala-śloka*s and a colophon:

1. *yi-ge'i-bye-brag-daṅ-dbye-bsdu-bstan-pa-ste-le'u-daṅ-po* (D 318v1-320v2, 178 lines)  
'First chapter, being the exposé on the divisions / categories and the groupings of the phonemes.'
  2. *yi-ge'i-'byun-gnas-daṅ- / 'byin-thabs-daṅ- / bklag-thabs-bstan-pa'i-le'u-ste-gñis-pa* (D 320v2-323r3, 231 lines)  
'Second chapter, being the exposé on the points of articulation of the phonemes, [on] the method of articulation [?] and the method of pronunciation / recitation [?]'
  3. *rgya-gar-gyi-skad-daṅ-snags-kyi-bklag-thabs-bstan-pa'i-le'u-ste-gsum-pa* (D 323r3-326r2, 273 lines)  
'Third chapter, being the exposé on the method of pronunciation / recitation [?] of the Indian [i.e. Sanskrit] language and *mantras*.'
- *maṅgala-śloka*s and colophon (D 326r2-r6).

Chapter 1 is described in Sa-pan's commentary as dealing with general phonology (i.e. presumably common to both Sanskrit and Tibetan)<sup>13</sup>. In

11 Facs. ed. Bsod-nams-rgya-mtsho (1968-5: [title no. 9] pp. 117-1-5 to 122-4-5 i.e. *THA* 235v5-247r5). Cf. INABA (1961), MILLER (1964) = (1976: 57-69), (1965: 328-329) = (1976: 72-73), (1966: 143-144) = (1976: 51-52), Tshe-tan-žabs-druṅ (1981: 43). The attribution to Sa-pan can be considered authentic, cf. JACKSON (1987: 59, 61-62).

12 Cf. VERHAGEN (1993: 329-330), (forthcoming: 1.2.2.4).

13 236v2-3: *thun-moṅ-la-dgos-pa'i-yi-ge'i-sbyor-ba*, as opposed to *bod-la-mkho-ba-sgra'i-'byin-thabs* and *rgya-gar-la-mkho-ba'i-sgra'i-bklag-thabs* for chapters 2 and 3.



fact, it deals for the greatest part with Tibetan phonology. The text begins with an enumeration of the vowels and consonants of Sanskrit. Elsewhere in the chapter we find two references – more or less in passing – to Sanskrit<sup>14</sup>. The remainder of this chapter, however, is devoted to Tibetan phonology. Chapter 2 deals exclusively with matters of Tibetan phonology, while chapter 3 describes Sanskrit phonology. In the present contribution I will limit myself to an investigation of the description of Tibetan phonology in *Byis-'jug*, i.e. chapters 1 and 2.<sup>15</sup>

As mentioned above, the text begins with an enumeration of the Sanskrit phonemes. This is followed by a similar enumeration for Tibetan. First the consonants (including vowel *a*) are listed: [1.4:] / *ka-kha-ga-ña- / ca-cha-ja-ña / ta-tha-da-na / pa-pha-ba-ma / tsa-tsha-dza-wa / za-za-'a-ya / ra-la-śa-sa / ha-a* / [1.5:] *pha-ma-sum-cu-tham-pa'o* | [D 318v2-3], 'K, kh, g [and] ñ; c, ch, j [and] ñ; t, th, d [and] n; p, ph, b [and] m; ts, tsh, dz [and] w; ź, z, ' [and] y; r, l, ś [and] s; h [and] a; [these] are the thirty 'father' [and] 'mother'[elements].'

Then the vowels, or rather the four vowel-graphs (the *i*-graph called *gi-gu*, the *u*-graph *zabs-kyu*, the *e*-graph *'greñ-bu* and the *o*-graph *na-ro*) are listed together with – presumably – three orthographical signs. Two of these are clear, viz. the vertical stroke (*śad*) and the ornamental marker used for the beginning of a text [or the recto side of a folio] (termed *dbu* or *mgo-yig* [?])<sup>16</sup>. The third sign is harder to identify. Following Sa-pan's *Rnam-bśad*, the third sign seems to be the intersyllabic dot (*tsheg*). The problem is that *Byis-'jug* doesn't name the signs, but writes them out, as a kind of *śloka*-line consisting of seven signs. There is no separate *tsheg* discernible in this line in the Tōyō Bunko reprint; it could of course very easily have dropped out at some stage in the printing process. The line opens with a *śad*, which could be either the *śad* marking the beginning of a verse-line, or it could itself form part of the list of signs. In the latter case the other *śad* in the list, could perhaps be the ornate vertical stroke (*rgyan-śad*). But, particularly in

14 1.16-17, stating the total number of Sanskrit phonemes, and 1.57-58, on the possibility of combining all phonemes in ligatures [?] in Sanskrit.

15 For a study of the treatment of Sanskrit phonology in this text see VERHAGEN (forthcoming: 1.2.2.1).

16 Cf. *Tshig-mdzod-chen-mo*: *rkyen-gyi-yi-ge* = *legs-sbyar-gyi-ā-ga-ma-dañ- / bod-yig-dbu-dañ-śad-kyi-yi-ge*, SIMONSSON (1957: 17).

view of the comments by Sa-paṇ (cf. *infra*), I find the assumption of the intersyllabic dot being one of the three orthographical signs, more plausible.

These seven signs are termed *srog-rkyen-yan-lag-gi-yi-ge* (1.7), to be analysed as *srog-gi-yi-ge*, *rkyen-gyi-yi-ge* and *yan-lag-gi-yi-ge*. If I understand Sa-paṇ's comments here correctly, *srog-gi-yi-ge* (lit. 'sign of life') is the term for the intersyllabic dot, "occurring in between bound word-forms"<sup>17</sup>, "indicating the interval [between syllables] in the Tibetan script"<sup>18</sup>. The second category, *rkyen-yi-yi-ge* (lit. 'sign of mark/cause?'), stands for the ornamental opening marker and the vertical stroke (*śad*). *Byis 'jug* and subsequently Sa-paṇ use the rare term *dañ-kyog* for the opening marker, lit. 'bent (*kyog*) [sign] at the beginning (*dañ* = *dañ-por*)'<sup>19</sup>: "The *dañ-kyog* is the *rkyen-gyi-yi-ge* occurring at the beginning, [and] the *śad* is the *rkyen-gyi-yi-ge* occurring at the end."<sup>20</sup>. In a second passage on these signs, Sa-paṇ seems to liken the graphic form of the opening marker to an elephant's trunk<sup>21</sup>, a nice, apt comparison. Finally, the four vowel graphs are termed *yan-lag-gi-yi-ge*, lit. 'limb-signs', as opposed to the *lus-kyi-yi-ge* 'body-signs' i.e. the consonant graphs<sup>22</sup>.

After a brief didactic episode on the motivations for and importance of the study of pronunciation (1.8-15) and a statement on the total number of letters in Sanskrit (fifty) and Tibetan (thirty-seven; counting graphs rather than phonemes) (1.16-19), the text continues with a fascinating yet extremely difficult section introducing and elaborating on a number of phonological categories and relevant technical terms or labels (1.20-56). A fragment of this section has been investigated earlier by MILLER (1965). I will return to this phonological terminology *infra*.

17 Sa-paṇ *Rnam-bśad* f. 238r1: *tshig-gi-bar-du-'jug-pa-srog-gi-yi-ge'o*

18 Sa-paṇ *Rnam-bśad* f. 240r1: / *tsheg-de-ñid- (...) bod-kyi-yi-ge-bar-du-gsal-bar-byas-so*.

19 *Byis-'jug* 1.37.

20 Sa-paṇ *Rnam-bśad* f. 238r1: / *dañ-kyog-ni-thog-mar-'jug-pa-rkyen-gyi-yi-ge'o* / / *śad-ni-tha-mar-'jug-pa-rkyen-gyi-yi-ge'o* /; cf. also *ibidem* f. 240r1-2: *dañ-por-'jug-pa'i-dañ-kyog-dañ-tha-mar-'jug-pa'i-śad-gñis*.

21 Sa-paṇ *Rnam-bśad* D f. 240r2: *dañ-kyog-ni-glañ-po'i-sna-lta-bu'i-a-yin-la*.

22 Sa-paṇ *Rnam-bśad* f. 238r2: *gu-gu-dañ-žabs-kyu-dañ-'greñ-bu-dañ-na-ro-ni-lus-la-'jug-pa-yan-lag-gi-yi-ge'o* /, '[The vowel graphs] *gu-gu* [for *i*], *žabs-kyu* [for *u*], *'greñ-bu* [for *e*] [and] *na-ro* [for *o*] occur as elements added to the body, [therefore they are] the 'limb-signs'.' and *ibid.* f. 240r3-4: / *i-u-e-o-ni* / *ka-la-sogs-pa'i-lus-rnams-la-yan-lag-tu-'gyur-ba'i-phyir* / *yan-lag-gi-a-žes-tha-sñad-du-bya'o* / (cf. *infra*).

Section 1 further contains descriptions (mainly consisting of enumerations) of the various types of morphological constituents of the Tibetan syllable:

- 1.63-85 “clusters of two” ((g)*ñis-brtsegs*), i.e. combinations of radical + subscript, as well as superscript + radical.<sup>23</sup>
- 1.85-90 “clusters of three” ((g)*sum-brtsegs*), i.e. the combinations of superscript + radical + subscript.<sup>24</sup>
- 1.91-98 total numbers ‘clusters of two’ [58] and ‘clusters of three’ [14] and additional remarks ad superscript and subscript combinations.<sup>25</sup>
- 1.99-124 prescript + simple radical combinations.<sup>26</sup>
- 1.125-144 prescript + consonant cluster combinations, i.e. three possible combinations:<sup>27</sup>

23 Cf. Sa-pan *Rnam-bśad* D 240v2-3: *ka-la-ya-ra-la-gsum-gdags-žes-bya-ba-nas-tshigs-su-bcad-pa-lña-dañ-rkañ-pa-gsum-gyis-gñis-brtsegs-pa’i-yi-ge-ston-to* /, ‘From “*ka-la-ya-ra-la-gsum-gdags*” [= 1.63] onwards five *śloka*s and 3 *pāda*s give an exposé of the “clusters of two” (*gñis-brtsegs-pa’i-yi-ge*).’

24 Cf. Sa-pan *Rnam-bśad* D 240v3: / *de-nas-rkañ-pa-lña-pa-dañ-tshigs-bcad-gcig-gis-yi-ge-gsum-brtsegs-pa-ston-to* /, ‘Then one *śloka* with a fifth *pāda* give an exposé of the “clusters of three” (*gsum-brtsegs-pa*).’

25 Cf. Sa-pan *Rnam-bśad* D 240v3-4: / *de-nas-tshigs-bcad-gñis-kyis-brtsegs-pa’i-graṅs-dañ- / brtsegs-pa-mi-’jug-pa’i-dmigs-bsal-ston-to* /, ‘Then two *śloka*s give an exposé of the total number of the clusters [of two and three] and exceptions on clusters that do not occur.’

26 Cf. Sa-pan *Rnam-bśad* D 240v4: / *da-ni-’phul-ba-brjod-par-bya-ste-žes-bya-ba-nas-tshigs-bcad-gñis-kyis-’phul-byed-kyi-yi-ge-spyir-ston-to* /, ‘From “*da-ni-’phul-ba-brjod-par-bya* (-ste ?)” [= 1.99] onwards two *śloka*s give a general exposé of the combinations with prescripts (*’phul-byed-kyi-yi-ge*).’ [i.e. 1.99-106] and ibid. D 240v5-6: / *de-la-yi-ge-gas-’phul-ba-žes-bya-ba-nas-tshigs-bcad-gsum-dañ- / rkañ-pa-gsum-gyis-’phul-ba’i-tshul-bstan-nas / mthar-tshig-bcad-gcig-gis-’phul-ba-la-brten-dgos-pa-dañ-mi-dgos-pa’i-dbye-ba-dañ- / ’phul-byed-kyi-yi-ge’i-graṅs-kyis-dbye-ba-ston-to* /, ‘From *de-la-yi-ge-gas-’phul-ba* [1.107] onwards three *śloka*s and three *pāda*s give an exposé of the occurrence of the combinations with prescripts [i.e. 1.107-120 (?)], and at the end one *śloka* gives an exposé on optionality [?] of prescripts and the number of [possible] prescript [combinations] [i.e. 1.121-124].’

27 Cf. Sa-pan *Rnam-bśad* D 240v6: / *da-ni-brtsegs-pa’i-’phul-ba-brjod-ces-pa-nas-brgya-rtsa-drug-yin-ces-pa’i-bar-tshigs-bcad-lñas-brtsegs-’phul-gyi-yi-ge-ston-to* /, ‘From “*da-ni-brtsegs-pa’i-’phul-ba-brjod*” [1.125] through “*brgya-rtsa-drug-yin* (...)” [1.144], five *śloka*s give an exposé on the combinations of prescripts (*phul*) and initial consonant clusters (*brtsegs*).’

- a. prescript + [radical + subscript]
- b. prescript + [superscript + radical]
- c. prescript + [superscript + radical + subscript]

Finally the two types of post-vocalic, final consonants are briefly introduced, i.e. the nine simple or 'first' final consonants (*mtha'-rten*) (1.149-151, on the unusual number, cf. *infra*), and the two 'second' final consonants (*mtha'-rten-gñis-pa*), the *yañ-'jug s* and *d* (or *da-drag*) (1.153-154, 1.156-157). These final two constituents of the Tibetan syllable are actually dealt with in a longer passage which consists of a computation of the total number of possible different syllables in Tibetan, on the basis of the inventory of the consonant combinations given thus far (1.145-168). It arrives at a grand total of 18.745 theoretically possible syllables. The computation goes along the following lines:

Radicals (1.5, 1.55):	30	
Clusters of two (1.91):	58	
Clusters of three (1.92):	14	
Prescript combinations (1.142-144):	106	
	<hr/>	+
Total initial consonant combinations (1.145-146):	208	

*Re* the prescript combinations: the prescript + radical combinations total 48 (cf. 1.123-124), and the combinations of prescript + cluster number 60 (cf. 1.141). This yields a theoretical total of 108. However, the combinations *bgla* and *mdra* being rare, this is reduced to 106 (cf. 1.142-144).

To every one of the 208 possible initial consonant combinations, any one of the five Tibetan vowels can be added, resulting in 1040 combinations (1.147-148). These 1040 possible combinations of initial consonant constellations and vowels, can be combined with one of nine (cf. *infra*) final single consonants or one of eight final consonant clusters, yielding a total of 17.680 possible combinations:

9 final (single) consonants (1.149-152): 9 x 1040 =	9360	
5 comb. of 1st + 2nd final cons. <i>s</i> (1.153-155): 5 x 1040 =	5200	
3 comb. of 1st + 2nd final cons. <i>d</i> (1.156-158): 3 x 1040 =	3120	
	<hr/>	+
Total:	17680	

*Re* the single final consonants: most remarkable is the fact that only nine final consonants (*mtha'-rten*, or in *SCP* terms *rjes-'jug*) are listed here, as opposed to the traditional ten<sup>28</sup>. In the Derge blockprint the text is evidently corrupt here: the consonant *l* occurs twice in the list, so, taking into consideration the alphabetical listing here, the first *l* in the list must be emended. However, the question remains which should be the corrected reading. Of the traditional *rjes-'jug* consonants the *m* and ' are missing from the list, and both would occur at this spot in the list, namely between *b* and *r*, so both could be emended to here. I propose to emend to *m*; the cases of syllables with final ' seem to be covered by the *mtha'-rten-med-pa*, 'forms lacking final consonant' dealt with *infra* (1.161). As regards the final consonant clusters, it is noteworthy that the combinations with second final consonant *d* (in this position generally known as *da-drag*) are included. The actual occurrence of *da-drag* being commonly restricted to early, pre-classical orthography (although apparently persevering in certain, especially non-Central-Tibetan, areas until later periods), one is tempted to wonder if Bsod-nams-rtse-mo knew this as a contemporaneous form, or if it was already an archaic form to him.

At this point the computation becomes somewhat obscure to me. To the total of 17.680 possible combinations another 1.065 combinations are added. 1.040 of these are accounted for by the possibility of any of the initial combinations in a syllable ending in vowel (*mtha'-rten-med-pa*), which would amount to syllables ending in vowel or in *rjes-'jug* '. Finally fifteen combinations with subscript *w*, seven *a-yig* [= ?] and three forms amongst which *bgla* and *bdron* (?), are added, resulting in the grand total of 18.745 possible syllables (1.161-168).

After reaching this impressive total number, the author goes on to set our minds at ease, asserting that not all these theoretically possible combinations do actually occur in Tibetan. The author gives an estimate of eight-thousand combinations being in actual usage in the language (1.169-174).

Towards the end of this section Sa-paṇ refers to a classification of morphophonemes (of Tibetan) by Chos-kyi-rje Grags-pa-rgyal-mtshan

28 149-151: / *ga-ṇa-da-na-ba-la-ra* // *la-sa-ṣes-bya'i-yi-ge-dgu* // *mtha'-rtan* [emend: *rten*] -*kun-la-rab-'jug-pas* /. Cf. *SCP* 4 introducing the ten *rjes-'jug*, and the citation of Rñog-lo-tsā-ba Blo-ldan-ṣes-rab (1059-1109) in the *Sum-rtags* commentary *No-mtshar-'phrul-gyi-lde-mig* by Gser-tog Blo-bzañ-tshul-khrims (1845-1915), MILLER (1965: 328, = 1976: 72), enumerating ten *mtha'-rten*.



entitled (?) *Yi-ge'i-rnam-dbye* (241r3-4) [i.e. probably the classification into 208 *lus-kyi-yi-ge* (possible initial consonant combinations), 4 *yan-lag-gi-yi-ge* (vowels other than *a*) and the final consonant(-combination)s within the Tibetan syllable, as commented on in 239v6-241r3]. It seems most likely that this refers to a work by Rje-btsun Grags-pa-rgyal-mtshan (1147-1216), brother of Bsod-nams-rtse-mo (1142-1182) and Dpal-chen-'od-po (father of Sa-pan), all three being sons of Sa-chen Kun-dga'-sñin-po (1092-1158)<sup>29</sup>. Bsod-nams-rtse-mo himself ends this first section with the statement that he based this exposé on Tibetan morphophonemics on [work by] an “earlier Bodhisattva”<sup>30</sup>. It seems improbable that he would refer to his younger brother as an “earlier Bodhisattva”, but it cannot be categorically excluded. An alternative identification of this “Bodhisattva” has not yet presented itself.

The title of section 2 is ‘Chapter of the exposé on the points of articulation of the phonemes, [on] the method of articulation [?] and the method of pronunciation / recitation [?]’ (*yi-ge'i-'byun-gnas-dañ- / 'byin-thabs-dañ- / bklag-thabs-bstan-pa'i-le'u*, D 323r2-3). The section indeed commences with a description of the points of articulation (*'byun-gnas*) of the Tibetan phonemes, based on the Indic system of phonological description of *sthāna* (2.5-38)<sup>31</sup>. Here, appropriately, we find a reference to a *Varṇa-sūtra* (2.37-38), as these phonological treatises were undoubtedly the source of the *sthāna* description. Parenthetically, another reference to a *Varṇa-sūtra* is found in 3.54. The precise interpretation of and the distinction between the two terms *'byin-thabs* and *bklag-thabs* is rather problematic. There is no explicit marking of a separate segment as *bklag-thabs* in the text itself, nor in Sa-pan's *Rnam-bśad*. Therefore, I hesitate to relate the labels *'byin-thabs* and *bklag-thabs* categorically to specific segments of the chapter. Suffice it, at least for the time being, to briefly sketch the contents of section 2.

After an introductory verse, lines 2.5-8 introduce seven (or eight?) points of articulation: *khog-pa-mgrin-pa* ‘belly/interior [and] throat’<sup>32</sup>, *rkan*

29 Cf. JACKSON (1987: 24).

30 D 320v1-2: *sñon-gyi-byañ-chub-sems-dpa'-yis /*.

31 Cf. MILLER (1962, = 1976: 19-31).

32 I take *khog-pa-mgrin-pa* as a combined term for a single point of articulation, cf. 2.13-14 attributing this point of articulation to the phonemes *'*, *h* and *a*, which are generally described in *Sum-rtags* as having *mgrin*, ‘throat’, as point of articulation (*skye-gnas*). Sa-pan's *Rnam-bśad* deals with this passage very summarily, and does

‘palate’, *lce* ‘tongue’, *sna* ‘nose’, *spyi-bo* ‘top [of the palate ?]’<sup>33</sup>, *so* ‘teeth’ and *mchu* ‘lips’.<sup>34</sup> Then follows a passage stating the point(s) of articulation for the individual Tibetan phonemes (2.13-36). The author seems not, or only parenthetically, to deal with the second major aspect of phonological description in the Indic traditions, *prayatna* ‘effort’ i.e. the process of articulation. The author then briefly speaks of defects in pronunciation related to the points of articulation (2.39-44).

Evidently 2.45-46 marks the beginning of the *’byin-thabs* section<sup>35</sup>. This segment of the text, following Sa-pan’s commentary [*Rnam-bśad* 242r2-242r6] running from 2.45 through 2.96 (and beyond?), seems to focus on the didactics of phonology, presenting an extremely tersely formulated description of a course in Tibetan pronunciation, starting from the simple consonants, through the various forms of initial consonant clusters, the various vowels, and the final consonants. This segment contains another

not specify the total number of points of articulation; it does mention the terms *khog-pa-mgrin-pa* in combination twice (f. 241v1, -2), which seems to suggest they form a unity. However, other sources analyse it as a group of eight, cf. the fifteenth-century *Bśad-mdzod-yid-bžin-nor-bu* compendium by Don-dam-smra-ba’i-señ-ge, that relies heavily on *Byis-’jug*, if we disregard the atrocious spelling of the edition, ed. CHANDRA (1969, f. 493.3-4): // *de-nas-sgra’i-gnas-rgyad* [em.: *brgyad*] -ni / *khog-pa-’grin* [em.: *mgrin*] -pa-kan [em.: *rkan*] -dañ-ces [em.: *lce*] / *sna-dañ-spyi-bo-’chu* [em.: *mchu*] -dañ-so / / *sgra-rnams-’byuñ-ba’i-gnas-yin-no* //, and the translation of a commentary on the Cāndra *Varṇa-sūtra* by Skyogs-ston Rin-chen-bkra-śis (ca. 1495-after 1577), Peking *Bstan-’gyur* vol. *po* f. 289r7: / *gnas-gžan-rnams-ni-brgyad-de* / *khog-pa* / *mgrin-pa* / *spyi-bo* / *lce-rtsa* / *so* / *sna* / *mchu* / *skan-rnams-te* / *de-skad-du’añ-yi-ge’i-gnas-ni-brgyad-yin-te* /.

- 33 It is not wholly clear to me what the author means with this term. In the context of Sanskrit phonology *spyi-bo* usually translates *mūrdhan*, ‘top of the palate’, the point of articulation associated with the retroflex phonemes. In 2.33-34 it is associated with *drag*. Is *drag* short for *da-drag*? Does this line say that the second final consonant *d* is articulated “slightly on the top” scil. of the palate (*spyi-bo’i-cha-cuñ-zad-yod*) [perhaps suggesting a somewhat retroflex realization]? Or does *drag* refer to the term *drag-pa*, ‘strong’, either describing tone or segmental pronunciation of the prescript consonants (cf. MILLER 1993: 4.25)?
- 34 Compare this to the usual Sanskrit *vyākaraṇa* distinction of six *sthānas* ‘points of articulation’: *kaṇṭha* ‘throat’, *tālu* ‘palate’, *mūrdhan* ‘top of the palate’, *danta* ‘teeth’, *oṣṭha* ‘lips’ and *nāsikā* ‘nose’, cf. e.g. commentaries on Pāṇ. 1.1.9.
- 35 1.45-46: / *de-ltar-’byuñ-gnas-śes-byas-nas* / / *da-ni-sgra-yi-’byin-thabs-brjod* /, cf. also Sa-pan *Rnam-bśad* D 242r2: / *de-ltar-’byuñ-gnas-śes-par-byas-la* / *de-nas-sgra’i-’byin-thabs-brjod-par-bya’o* /.



passage studied earlier by MILLER, scil. 2.59-78. Particularly Sa-pan's comments seem to suggest that not only pronunciation, but also the methods of spelling out syllables are taught here (cf. *infra*).

Then lines 2.97-102 announce the next segment, dealing with various aspects of errors in pronunciation, viz. 2.103-167 [?]. This episode contains also what appear to be pronunciation exercises [?] (viz. 2.127-153, 2.158-167). Note also that 2.123-171 is described as a unity in Sa-pan's *Rnam-bśad* (D 243r1-2). Is perhaps 2.122-123 the marking of the beginning of *bklag-thabs*? Finally, in this segment we find two passages describing errors related to dialectal variation (cf. *infra*).

The remainder of chapter 2 (2.172-231) seems mainly to consist of general didactical verses on the correct procedures as well as the importance and utility of the instruction in and the use of correct, standard pronunciation.<sup>36</sup> In the comments on this latter part of section 2, in an excursus on modes of (musical?) intonation [*'dren-pa'i-tshul*, D 243v2-6] Sa-pan refers to a *Rol-mo'i-bstan-bcos* written by himself<sup>37</sup>.

### 3. Items of interest.

It is certainly impossible to cover all aspects of this important text, relatively brief as it may be, within this one article. Numerous passages have thus far defied precise and definitive interpretation, and many problems of textual structure remain. Let me, therefore, limit this investigation to a selection from the many items of interest to be found in *Byis-'jug*.

Firstly, it would seem that we now have in *Byis-'jug* the earliest datable attestations of a whole range of Tibetan phonological and related terms of common usage in indigenous linguistics, e.g.:

- *rkyan(-pa)* 'radical'<sup>38</sup>
- the terms for the vowel signs *gu-gu* (variant for *gi-gu*), *žabs-kyu*, *'greñ-bu* and *na-ro*<sup>39</sup>

36 Cf. Sa-pan *Rnam-bśad* ad 2.172-173 & seqq.(?), D 243r2-3: *klog-de-dag-slob-pa'i-go-rims-bstan-pa'i-phyir-bśad-pa*.

37 Sa-pan *Rnam-bśad* D 243v6: / *dbyañs-kyi-'dren-pa-'di-mkhas-par-śes-par-'dod-na / kho-bos-byas-pa'i-rol-mo'i-bstan-bcos-su-blta-bar-bya'o /*.

38 1.48, 1.56, 1.106, 1.121, 1.123, 2.106, 2.155, 2.173, 2.183, 2.230, 3.139.

39 1.52-54.

- *gug-kyed* (in D *passim* misspelt *gug-skyed*), the collective term for the vowel graphs<sup>40</sup>, *gug* ‘crooked’ / ‘bent’ for the *i* and *u* graphs<sup>41</sup>, and *kyed* ‘bent back’ / ‘reclining’ for the *e* and *o* graphs<sup>42</sup>
- *mgo* ‘superscript’<sup>43</sup>
- *btags(-pa)* ‘provided with subscript’<sup>44</sup>
- *sta* ‘provided with subscript’<sup>45</sup>
- *mtha’-rten* ‘bringing up the rear’, ‘following’, ‘end’, the collective term for the post-vocalic consonant (*rjes-’jug*) and second post-vocalic consonant (*yañ-’jug*) in the Tibetan syllable<sup>46</sup>
- *gdags(-pa)* ‘provided with subscript’<sup>47</sup>
- *’phul(-ba)* / *phul(-pa)* ‘provided with prescript’<sup>48</sup>
- *brtsegs* ‘provided with superscript’<sup>49</sup>
- *tsheg* ‘intersyllabic dot’<sup>50</sup>
- *śad* ‘vertical stroke’<sup>51</sup>

40 1.52, 1.82, 1.122, 2.51, 2.82, 2.86, 2.90, 2.133, 2.141, 2.144, 2.156, 2.157, 2.159, 2.166; N.B. also in section on Sanskrit: 3.10, 3.53, 3.147, 3.182-183, 3.208, 3.231, 3.255; *Tshig-mdzod-chen-mo*: *gug-kyed* = *gug-ni-gi-gu-’zabs-kyu-gñis-dañ-* / *kyed-ni-’greñ-bu-na-ro-gñis* / *gi-gu-’zabs-kyu* / *’greñ-bu-na-ro* /.

41 *Tshig-mdzod-chen-mo*: *gug* = *gig-gu-dañ-’zabs-kyu-gñis-kyi-miñ-* / *gi-gu* / *’zabs-kyu* /.

42 *Tshig-mdzod-chen-mo*: *kyed* = *’greñ-bu-dañ-* / *na-ro-gñis-mtshon-byed-kyi-rtags* /.

43 2.61-63, 2.105, 2.109, 2.154.

44 1.48, 1.49, 1.81, 1.86, 1.162, 2.58, 3.92, 3.95, 3.118, 3.126, 3.129, 3.206.

45 2.106-107, 3.206 [*ya-sta-btags*], 3.210.

46 1.52, 1.154, 1.161, 2.121, 2.122, 2.141, 2.144, 2.156, 2.157, 2.159, 2.167, 2.187, 2.188, 2.190. This term is already attested for an earlier author, viz. *Rñog-lo-tsā-ba Blo-ldan-śes-rab* (1059-1109), cf. MILLER (1965: 328, = 1976: 72).

47 1.63-64, 1.66, 1.72, 1.74, 1.77-79, 1.185, 1.89.

48 1.48, 1.49, *passim* in 1.99-144, 2.69-72, 2.74-75, 2.83, 2.108, 2.110, 2.154-155, 2.163-164.

49 1.85, 1.91-92, 1.95-96, 1.98, 1.106, 1.125-126, 1.136, 1.141, 2.75, 2.83, 3.164, 3.166, 3.168, 3.176, 3.191, 3.199, 3.204.

50 2.84, cf. 1.31 and 1.148?

51 1.37.

None of the above terms occur in *SCP* or *TKJ* proper, only in later *Sum-rtags* commentaries, or in linguistic literature in general, such as lexicographical materials<sup>52</sup>.

A most important item in the terminology of *SCP* occurring also in *Byis-'jug* is worth noting here. I mean the pair *āli-kāli* for 'vowel' and 'consonant', which occurs three times in our text (3.10, 3.231, 3.252)<sup>53</sup>, adding a mid-twelfth century attestation to the very few early non-*SCP* attestations for these terms in a (para)grammatical context<sup>54</sup>. It is significant that the terms here appear to designate the Sanskrit phonemes, not the Tibetan.

This early text-material moreover presents important specimens of less generally used, or even elsewhere unknown grammatical terminology. Arguably the most significant instances of this are found in the 'father'/'mother'/'son', and 'body'/'limb' terminologies. Some terms of minor importance occurring in *Byis-'jug* that are relatively rare in later Tibetan linguistics have already been noted above, notably the triad *srog-*, *rkyen-* and *yan-lag-gi-yi-ge*, and the term *dan-kyog* for the ornamental opening marker.

We find a subdivision of the Tibetan phonemes (or alphabet) employing at least two types of labelling:

- a. 'father' and 'mother' (and 'son') elements
- b. 'body' and 'limb' elements.

Let us have a closer look at these categorizations. The 'father'-'mother' terminology is first introduced in the listing of the Tibetan consonant phonemes (1.5), where the thirty phonemes listed (in fact twenty-nine

52 A considerable number of the above terms also have a relatively early locus in non-technical literature in the fourteenth-century *Rgyal-rabs-gsal-ba'i-me-loñ*, cf. VOGEL (1981: 14-16, 28-29), MILLER (1973, = 1976: 89-93), BUTZENBERGER (1988: 50, 53-54, 60-61).

53 Cf. Sa-pan's *Rnam-bśad*: f. 237v6, 245r3, 246r2.

54 The earliest known being the phrase / *mtshan-bzañ-po-cum-cu-rtsa-gñis-ni* / *a-li-kali* / *ma-ha-yo-ga'i-rtsa-ba-'di-yin-no* //, line 166 of the ninth-century (?) Dunhuang ms. Pelliot tibétain 849, commonly known as the "Formulaire Hackin", where it evidently refers to the Sanskrit phonemes; facs. ed. MACDONALD & IMAEDA (1978: Pl. 232-239), cf. MILLER (1966: 141-144) (= 1976: 49-52), RONA-TAS (1985: 349-353), VERHAGEN (1994: 13-14). Slightly later than *Byis-'jug* is the occurrence in Sa-skya Paṇḍita's *Yi-ge'i-sbyor-ba* 11. 14-16, which deals with Tibetan phonology and which is actually identical to *SCP* 1, cf. MILLER (1988: 266, 275) = (1993: 6.14, 6.53).

consonants and the vowel *a*) are termed *pha-ma* ‘father [and] mother’. Note that the terms *dbyaṅs* ‘vowel’ and *gsal-byed* ‘consonant’ (for Sanskrit *svara* and *vyañjana* resp.) are here applied only to the Sanskrit phonemes (1.1-3, 1.16-17), not to the Tibetan. The ‘father [and] mother’ designation reappears in the stanza stating the total number of Tibetan phonemes (c.q. graphs, 1.18-20), the thirty ‘father [and] mother’ elements and the seven *srog-*, *rkyen-* and *yan-lag-gi-yi-ge* together making the grand total of thirty-seven.

- 1.18 / *bod-kyi-yi-ge-sum-cu-bdun* /  
 1.19 / *sgra-yi-pha-ma-sum-cur-’dus* /  
 1.20 / *srog-rkyen-yan-lag-yi-ge-bdun* /  
 1.21 / *de-dag-ā-yi-khoṅs-su-’du* / [D 318v5]

- 1.18 The 37 Tibetan *yi-ge* [are]:  
 1.19 the ‘father’ [and] ‘mother’ of words [?], 30 altogether,  
 1.20 [and] the *srog*[-*gi-yi-ge*], *rkyen*[-*gyi-yi-ge*] and *yan-lag*[-*gi*]-*yi-ge*, 7 [in number].  
 1.21 The latter [i.e. *yan-lag-gi-yi-ge*] are combined [?] in *a*<sup>55</sup>.

In the next section the text elaborates on the *pha-ma* categories, and relates them with the ‘body’-‘limb’ categories. First the passage 1.22-27, which is described in Sa-paṅ’s *Rnam-bśad* as a “definition of [the categories] ‘father’-‘mother’ and ‘body’-‘limb’”<sup>56</sup>:

- 1.22 / *a-ñid-ma-yi-yi-ger-brjod* /  
 1.23 / *lhag-ma-rnams-ni-pha-yin-no* / [D 318v5]

- 1.22 Only / precisely [phoneme] *a* is called ‘mother’ *yi-ge*,  
 1.23 [and] the remaining [phonemes] are ‘father’ [*yi-ge*]s.

- 1.24 / *pha-ni-lus-žes-brjod-pa-ste* /  
 1.25 / *ma-ni-yan-lag-tu-yañ-’gyur* /  
 1.26 / *de-bas-yi-ge-ma-lus-pa* /  
 1.27 / *pha-ma-gñis-las-’byuñ-bar-brjod* / [D 318v5-6]

- 1.24 It is said that the ‘father’ [phonemes] are [represented by] the ‘body’ [graphs],  
 1.25 [and] the ‘mother’ [phonemes] are represented as ‘limb’ [graphs].  
 1.26 Therefore all *yi-ge* [?; syllables ? / word-forms ? / graphic forms ?]  
 1.27 are said to arise from the two [scil.] ‘father’ [and] ‘mother’ [phonemes].

55 Emend *ā* to *a* on account of Sa-paṅ *Rnam-bśad* D 239v5 *de-dag-a’i-khoṅs-su-bdu’o*.

56 Sa-paṅ *Rnam-bśad* 239v5-6: *lhag-ma-rkañ-pa-drug-gis-pha-ma-dañ-lus-dañ-yan-lag-gi-ñes-tshig-ston-ta* [= *te* ?] *śes-par-sla’o*.

Apparently the ‘father-mother’ and ‘body-limb’ terminologies apply to the Tibetan alphabet at different levels. The ‘father-mother’ terminology seems primarily to apply to a phonemic categorization, while the latter ‘body-limb’ labelling appears to be graphemic, or rather orthographical in nature. As becomes apparent in passages later in the text (1.47-50, 1.145-146) the ‘body’ of the Tibetan syllable is the initial consonant structure, maximally consisting of prescript, superscript, radical and subscript. The ‘limb’ consists of the vowel graph, which is indeed graphically speaking a kind of limb attached above or under the initial consonant (cluster) graph.

Finally, continuative of the ‘father-mother’ categories, the term ‘son’ is introduced in 1.51-54 as designating the whole syllable, consisting of (1) the ‘father-mother’ configuration of the initial consonant (cluster), (2) the vowel, and (3) the final consonant (cluster):

- 1.51 / *de-ltar-pha-ma'i-yi-ge-la* /  
 1.52 / *gug-skyed-bcas-dañ-mtha'-rten-bcas* /  
 1.53 / *de-las-byuñ-ba'i-yi-ge-ste* /  
 1.54 / *de-las-skyes-pas-bu-žes-bya* / [D 319r3-4]

- 1.51 Thus, to the ‘father’ [and] ‘mother’ *yi-ge* [phonemes / graphs],  
 1.52 the vowel graph is added, and the final consonant(s) is (or are) added;  
 1.53 the resulting *yi-ge* [?; syllable ? / word-form ? / graphic form ?],  
 1.54 which is [as it were] born from these, is therefore termed the “son”.

Coincidentally the text introduces what appears to be a synonym of ‘mother’-phoneme here<sup>57</sup>, namely *phyi-mo* ‘grandmother’ or ‘late(r)’, ‘further’ etc.<sup>58</sup> The term had been pointed out by MILLER (1966: 145, = 1976: 53), who interprets *phyi-mo* in a passus from *Dpag-bsam-ljon-bzañ* by Sum-pa-mkhan-po (1704-1788), as “[the thirty] bases (*phyi-mo*)” i.e. the consonants (*gsal-byed*)<sup>59</sup>. However, *Byis-'jug* 1.28-29, when read in combination with the identification of vowel *a* as ‘mother’ in 1.22, seems to say that *phyi-mo* is equivalent to ‘mother’, in other words is a term for the vowel *a* (and possibly vowel in general). It is clear, at any rate, that similar terms in Tibetan

57 1.28-29: / *de-la-thog-mar-a-bśad-de* / / *ma-dañ-phyi-mo-yin-phyir-dañ-* /.

58 *Tshig-mdzod-chen-mo*: *phyi-mo* = 1. *pha-ma-gñis-kyi-a-ma*, 2. *ka-kha-lta-bu-yi-ge'i-rtsa-ba-dañ-gži-ma*, *ka-kha*, 3. *yi-ge'i-ma-dpe* (...), 4. *bzo-pa'i-dge-rgan* (...), 5. *btsun*.

59 This interpretation is corroborated by *Tshig-mdzod-chen-mo*: *phyi-mo* (...) 2. *ka-kha-lta-bu-yi-ge'i-rtsa-ba-dañ-gži-ma*, *ka-kha*.

scholastic literature from different periods may – and quite frequently did – assume significantly divergent meanings and functions. Note for instance also the evident discrepancy between the meaning of the terms ‘mother’ and ‘son’ in our present text, and the use of the same terms in the sense of ‘upper graph [in a consonant cluster]’ and ‘lower graph [in a consonant cluster]’ respectively, in sources such as *Rgyal-rabs-gsal-ba’i-me-loṅ*<sup>60</sup>.

It is tempting to consider a possible relation between the ‘masculine-feminine’ labels found elsewhere in Tibetan and Indo-Tibetan phonology, and the present ‘father-mother’ dichotomy. Compare, for instance, the complementarity of the *dbyaṅs/gsal-byed* and the *pho/mo* dichotomies, occurring in *SCP* and *TKJ* respectively<sup>61</sup>, and the same complementary distribution of the *dbyaṅs/gsal-byed* and *pha/ma* pairs in the sections on Sanskrit and Tibetan phonology in the present text. Sure enough, not all of the phonological ‘gender’ labels in *TKJ* can be related to (and explained by) the ‘father-mother’ system [notably the progressing subdivision in *TKJ* into three-, four- and five-fold classifications]. Nevertheless, the correspondence between the primary distinction of *pho-yi-yi-ge* (‘masculine phonemes’ i.e. consonants) and *mo-yi-yi-ge* (‘feminine phonemes’ i.e. vowels) in *TKJ* (1 and 33) on the one hand, and the classes of ‘father phonemes’ (consonants) and ‘mother phoneme’ (basically vowel *a* out of which the four remaining vowels evolve) in *Byis-’jug* on the other, is evident, and the possibility of a structural relationship cannot be dismissed.

Another interesting, although to a degree opaque, passage in this section is concerned with the actual visual form of specific graphs, in casu the four vowel graphs. Much of this passage was studied earlier by Roy Andrew MILLER<sup>62</sup>, his first exploration based on the quotation of this locus in the *Sum-rtags* commentary by Gser-tog V Blo-bzaṅ-tshul-khrims.

60 Cf. MILLER (1973, = 1976: 89-93), lines (18-26), BUTZENBERGER (1988: 50, 53-54, 60-61).

61 Cf. MILLER (1993: 4.06).

62 1.40-46: MILLER (1965: 328-330) = (1976: 72-74); 1.43-45b: MILLER (1966: 143-144) = (1976: 51-52), (1980: 162) = (1993: 7.67).



- 1.39 / *a-ni-rañ-ñid-brjod-run-ste* /  
 1.40 / *señ-ge-lta-bu'i-a-žes-bya* / [D 319r2]

Sa-pan *Rnam-bśad* ad 1.39-40 (D 240r2-3): / *yoñs-su-grags-pa'i-a-ni-rañ-ñid-kyis-brjod-bya-rjod-byed-du-run-bas-gžan-gyi-grogs-mi-dgos-pa'i-phyir-señ-ge-lta-bu'i-a-ste* / *ji-skad-du-sa-steñ-'di-na-señ-ge-dañ-* / / *'khor-los-sgyur-la-grogs-mi-dgos* / / *žes-gsuñs-pa-lta-bu'o* /

- 1.39 As the [form] *a* by itself is fit to express [a meaning],  
 1.40 it is called the lion-like *a*.

Sa-pan: 'As the commonly known [vowel] *a* is by itself fit to express an intended meaning<sup>63</sup>, and therefore does not require the accompaniment of other [phonemes], [the text says]: "*a* is like a lion", in keeping with the [general] maxim "The lion and the Cakravartin do not require company".'

- 1.41 / *i-u-e-o-yan-lag-phyir* /  
 1.42 / *yan-lag-gi-ni-a-žes-bya* / [D 319r2]

Sa-pan *Rnam-bśad* ad 1.41-42 (D 240r3-4): / *i-u-e-o-ni* / *ka-la-sogs-pa'i-lus-rnams-la-yan-lag-tu-'gyur-ba'i-phyir* / *yan-lag-gi-a-žes-tha-sñad-du-bya'o* /

- 1.41 [*a*] underlies the 'limb' [phonemes/graphs ?] *i*, *u*, *e* and *o*,  
 1.42 [therefore] it is called "*a* of the limbs".

Sa-pan: 'As *i*, *u*, *e* and *o* function as 'limbs' to the body of [the consonant graphemes] *k* etc., [*a*] has the [technical] appellation "*a* of the limbs".'<sup>64</sup>

- 1.43 / *señ-ge-'dra-dañ-brgya-byin-mig* /  
 1.44 / *glañ-sna-'od-ma-bsgreñ-'dra-dañ-* /  
 1.45 / *thañ-gug-dpe-lñas-bstan-pas-na* /  
 1.46 / *ston-chen-yi-ge-lña-žes-gsuñs* / [D 319r2-3]

- 1.43 Lion-like and [similar to] the eye of Śatakratu [= Indra],  
 1.44 [similar to] the elephant's trunk and similar to stretched out (*bsgreñ*) bamboo ('*od-ma*) and  
 1.45 bent down flat: as [the vowels] are indicated by means of the [above] five [graphic] forms  
 1.46 they are termed the five *ston-chen-gyi-yi-ge*.

63 I.e. is fit to occur as a speech-act.

64 It has been stated earlier in the text that the 'mother' phoneme *a* somehow evolves or develops into the vowel graphs, the 'limbs' [i.e./or (?) into the vowels, and consequently is related to the 'limb' graphs (?)] (viz. 1.20-21, 1.25). Hence, if my interpretation is correct, the designation "*a* of the limbs".



The term ‘elephant’s trunk’ for the *u*-graph is reminiscent of Sa-pan’s statement on the graphic form of the opening marker being similar to an elephant’s trunk (cf. *supra*). Indeed, the two graphs of vowel *u* and the opening marker are very similar. In the designation ‘similar to stretched out (*bsgreñ*) bamboo (‘*od-ma*)’ for the *e*-graph, the element *bsgreñ* seems most likely related to the later common term for this graph, viz. ‘*greñ-bu*’<sup>65</sup>. The designations are very aptly chosen: the *i* graph indeed resembles an eye (or eye-brow) and the *u* graph an elephant’s trunk curving up- and backward. The stretched out bamboo stick we recognize in the *e* graph sticking out straight, or slightly curved, to the top left. And the righthand stroke of the *o* graph is indeed bent down flat, i.e. after starting with an upward curve it ends in a horizontal line.

A matter I have not been able to resolve is the interpretation of the term *ston-chen* (-*yi-ge*) here. MILLER (1965: 329, = 1976: 73) translates “the completely clear letters [i.e. vowels]”, explaining *ston-chen* as “great[ly i.e. completely] clear” and noting the absence of this term elsewhere in Tibetan linguistics<sup>66</sup>. Regrettably Sa-pan does not give any further explication of the term either<sup>67</sup>.

Note also that the term *gug*, in addition to its occurrence here in the term *than-gug*, appears elsewhere in the text in designations of vowel (signs), but in connection with other vowels than *o*. Firstly in the composite term *gug-kyed* (cf. *supra*) where, in all probability, it refers to two vowel graphs, *i* and *u*, and secondly in line 2.130 *gug-’greñ-ya-dan-gnas-gcig-*

65 As pointed out by MILLER (1965: 329, = 1976: 73); he translates this designation as ‘like a light (‘*od*) not (*ma*) erect (*bsgreñ*)’.

66 I hesitate to accept MILLER’s assumption of semantic equivalence of this term with *gsal-byed* ‘making clear’. Firstly, as he himself notes, *gsal-byed* usually translates *vyañjana*, ‘consonant’, and we are here dealing with vowels. Secondly, if a relation with the curious use of *gsal-byed* in *SCP* 1b *ā-li-gsal-byed-i-sogs-bži*, where indeed reference is made to vowels, is intended, I see an important discrepancy between the two loci: *SCP* refers to the four vowel-graphs, while *Byis-’jug* speaks of five vowels, presumably intending phonemes rather than graphs.

67 Sa-pan *Rnam-bśad* ad 1.43-46 (D 240r4): / *yi-ge-de-dag-gi-dpe-dan-* / *a’i-gtso-bo-lnar-’gyur-ba’i-’thad-pa-ni* / *señ-ge-žes-pa-dan-* / *ston-chen-žes-pas-ston-to* /, ‘The graphic forms of these phonemes and the correctness [?] of a developing [?] into the five above [??] are taught by [the passage beginning with] “*señ-ge*” [i.e. 1.43] and [ending with] “*ston-chen*” [i.e. 1.46].’

*phyir*, referring to the homogeneity qua point of articulation of vowels *i* and *e* and semi-vowel *y*, where I consider *gug* to be short for *gug-gu* (or *gu-gu* or *gi-gu*)<sup>68</sup> i.e. the *i*-graph, and *'greñ* = *'greñ-bu* i.e. the *e*-graph<sup>69</sup>.

Another passage in *Byis-'jug* that has been the object of investigation by MILLER is 2.59-78 (1964; = 1976: 57-69)<sup>70</sup>. MILLER based his reading on quotations of this passus in *Sum-rtags* commentaries by Si-tu-pan-chen (edition Das 1915) and Gser-tog Blo-bzañ-tshul-khrims, and a secondary quotation in SCHIEFNER (1851). To these should now be added, for a proper constitution of the text, first of all the *Sa-skya Bka'-'bum* edition of *Byis-'jug* itself, but also the now available editions of Si-tu much superior to the editio princeps of DAS. On the basis of the *Byis-'jug* basic text I would suggest two emendations in MILLER's readings. First of all, in his line (10) [2.68] read *sgra-la-sga-ra* (instead of *dgra-la-da-gra*) as here the *brtsegs-pa* consonant clusters [consisting of radical + superscript and/or subscript] are dealt with. The description of the *'phul-pa* clusters [involving prescripts], of which *dgra* is an example, begins only at the following line (2.70). Secondly, in MILLER's line (20) *Byis-'jug* reads *mkhra-la-mkha'-ra*. Coincidentally, both readings are supported by Blo-bzañ-tshul-khrims' citation.

Unfortunately Sa-pan deals very succinctly with the whole segment 2.47-96 [D 242r2-6]. In his comments he does mention two example-forms that are found in 2.67-68, and he refers to the segment commencing with 2.69, so it is evidently useful for the interpretation of 2.59-78 to have a look at his comments:

Sa-pan comm. D 242r2-5: *de'añ-go-rims-bzin-bya-ba-nas-bar-du-la-žes-bya-ba-gzug-ces-pa'i-bar-tshigs-su-bcad* [?] - [242r3:] *pa-bcu-gñis-dañ- / rkañ-pa-gñis-kyi-don-bsdu-na-'di-dag-ste / thog-mar-slob-pa-na / ka-la-sogs-pa-rkyañ-pa-rnams / 'byuñ-gnas-blo-la-žen-par-byas-šiñ-bslab-bo /*

The twelve *śloka*s starting from "*de'añ-go-rims-bzin*" [i.e. 2.47 *de-yañ-yi-ge'i-go-rims-bzin* /] through "*bar-du-la-žes-bya-ba-gzug*" [2.96] [deal with] the following: When studying [pronunciation] first one should learn [or exercise] the simple consonants *k* etc., after having imprinted their points of articulation on one's mind.

68 *Tshig-mdzod-chen-mo*: *gug* = *gi-gu'i-miñ*.

69 Supporting the assumption of vowels *i* and *e* being intended is not only the close relation qua point of articulation, all three *i*, *e* and *y* being classed as palatals, but also the forms listed immediately before, 2.127-129: */ ke-kye-khe-khye-ge-gye-dañ- / / ñe-ñe-ki-kyi-khi-khyi-dañ- / / gi-gyi-ñi-ñi-dge-dgye-nor /*.

70 Cf. also RÓNA-TAS (1985: 249-252).

/ *de-nas-gug-skyed-slob-pa-ni* / *ka'i-gu-gu-ki* / *ka'i-žabs-kyu-ku* / *ka'i-'greñ-bu-ke* / *ka'i-na-ro-* [242r4:] *ko* / *žes-bya-ba-la-sogs-pa-sbyar-žin-bslab-bo* /

Then the learning [or exercising] of the vowels: one should learn [or exercise these], combining [them] as follows: *k* with *i*-graph = *ki*, *k* with *u*-graph = *ku*, *k* with *e*-graph = *ke*, *k* with *o*-graph = *ko*.

/ *brtsegs-pa-slob-pa-na* / *sa-la-ka-sta-ska* / *ra-la-tsa-sta-rtsa* / *la-la-ta-sta-lta* / *žes-bya-ba-la-sogs-pa-sbyar-žin-bslab-bo* /

Then the learning [or exercising] of the initial consonant clusters: one should learn [or exercise these], combining [them] as follows: *k* [as radical] with [superscript] *s* = *sk(a)*, *ts* [as radical] with [superscript] *r* = *rts(a)*, *t* [as radical] with [superscript] *l* = *lt(a)*.

/ *de'i-dus-su-lce-mi-bde-ba-dag-gis-bklag-dka'-ba-dag-ma-šes-na-phral-žin-bklag-ste* / [242r5:] *dper-na-kra* [or *gra* ?] -*la-ka* [or *ga* ?] -*ra'am* / *sgra-la-sga-ra-la-sogs-par-phral-žin-bslab-bo* /

If, at that time one does not know [i.e. has not mastered] [the pronunciation of] the [combinations that are] difficult to pronounce on account of the fact that [the combination of elements] is “not easy on the tongue” [i.e. difficult to articulate], one may pronounce [these] separating [the constituents]; for instance, one may learn [or exercise] [the forms] separating [the constituents] in cases such as *kra* [or *gra* ?] [which one may pronounce as] *ka-ra* [or *ga-ra* ?], or *sgra* [which one may pronounce as] *sga-ra*.<sup>71</sup>

/ *de-nas-phul-ba* [?] *bslab-par-bya-ste* / *ga-'og-da-la-'a-gda'-lta-bu'am* / *gyu-la-ra-bžag-da-bžag-gyurd-lta-bu'am* / *gyu-la-ra-da-gyurd-ces-pa-rañ-gi-lce-la-gañ-bder-sbyar-ro* /

Then the [combinations] with prescript [etc., i.e. final consonants] should be learnt [or exercised]<sup>72</sup> as follows: *d* [as radical] preceded by [prescript] *g* with [final] *'* = *gda'*, *gyu* [as initial cluster] with [final] *r* added [and second final] *d* added = *gyurd*, or [more briefly] *gyu* [as initial cluster] with [final] *r* [and second final] *d* [added] = *gyurd*. Thus one may combine [the constituents] in whatever manner is “easy on the own tongue” [i.e. easy to articulate].

MILLER takes the described (phonetic) realization of the consonant clusters to be a description of the actual realization of these clusters in Tibetan at the time of composition of *Byis-'jug* (second half of the twelfth century), and,

71 The examples *kra* [or *gra*] > *ka-ra* [or *ga-ra*] and *sgra* > *sga-ra* are found in the basic text 2.67-68 (MILLER lines 9-10).

72 Or is *de-nas-phul-ba-bslab-par-bya* simply the citation of line 2.69 from the basic text? In any case it is evident that this particular part of the *Rnam-bśad* comments on 2.69 and following.

more specifically, in the dialect of Gtsaṅ province. Without doubt this passage – as does the text in general – contains important evidence for the reconstruction of Central Tibetan phonetics of that period<sup>73</sup>. But, in *Byis-'jug* itself<sup>74</sup>, as well as in Sa-paṅ's commentary (cf. *supra*), I find indications that seem to suggest that at least part of the manners of pronunciation described are optional variants in case of clusters containing elements that are difficult to pronounce in combination; I think here specifically of the cases where *'phral-ziṅ-bklag*, 'pronunciation separating [each phoneme]' is mentioned. Maybe they are even types of "schoolbench" pronunciation, systems of pronunciation that bring out the spelling more clearly, intended for pupils learning how to read and write<sup>75</sup>. Whatever the case may be, it is clear that these are highly significant materials in need of more extensive investigation.

From the viewpoint of historical linguistics another particularly interesting feature of *Byis-'jug* is its description of regional (or dialectal) variations in pronunciation, distinguishing the dialects of the provinces Dbus (2.105-107, 2.155-156) and Gtsaṅ (2.108-110, 2.154), and elsewhere juxtaposing the central Tibetan dialects of Dbus and Gtsaṅ (2.119). In addition to the value of this text as documenting the characteristics of the pronunciation of Tibetan in a specific geographical region (the author being a native of Gtsaṅ and mostly active in the vicinity of Sa-skyā monastery)<sup>76</sup>, we find that the text provides us with valuable phonological data on the dialects of both Dbus and Gtsaṅ of the twelfth century. In the elaborate sections on errors in pronunciation, the following statements on errors common in the dialects of Central Tibet are given:

- 2.105 / *dbus-pas-ra-yi-mgo-can-daṅ-* /
- 2.106 / *rkyan-par-'dra-ziṅ-ya-sta-daṅ-* /
- 2.107 / *ra-sta-yan-ni-nor-ba-yod* /
- 2.108 / *gtsaṅ-pas-mas-'phul-'as-'phul-du* /
- 2.109 / *nor-ciṅ-ra-yi-mgo-can-daṅ-* /

73 Cf. MILLER (1964: 80-83, = 1976: 65-68).

74 Notably in the lines immediately following this passage, 1.79-80: / *sbyor-daṅ-phral-ziṅ-nan-tan-bskyed* / / *de-yi-phyi-nas-śin-tu-sla* /, 'If one puts effort in [exercising the pronunciation of these clusters] in combination and in separation, from then on [it will be] very easy.'

75 Cf. also RÓNA-TAS (1985: 251-252).

76 Cf. MILLER (1964: 75) = (1976: 60).

2.110 / *gas-'phul-das-'phul-nor-ba-yod* / [D 321v4-5]

2.105-107: Speakers from Dbus tend to confuse (forms with) superscript *r* with (forms with) non-composite radicals, and they tend to confuse (forms with) subscript *y* with (forms with) subscript *r*.<sup>77</sup>

2.108-110: Speakers from Gtsaṅ tend to confuse (forms with) prescript *m* with (forms with) prescript *'*, and they tend to confuse (forms with) superscript *r* and (forms with) prescript *g* with (forms with) prescript *d*.<sup>78</sup>

2.119 / *dbus-gtsaṅ-gñis-ka'i-yul-mthil-gyi* /

2.120 / *tha-mal-pa-yi-skad-rnams-la* /

2.121 / *mtha'-rten-rdzogs-par-rab-tu-ñuñ-* / [D 321v6]

2.119-121: In the colloquial language of the two regions Dbus and Gtsaṅ the perfection [i.e. realization ?] (*rdzogs-pa*) of the syllable-final consonants (*mtha'-rten*) is very short [i.e. light | indistinct ?].

Sa-pan's commentary on lines 2.119-121 reads (242v6-243r1): *dper-na-gaṅ-na-'khod-la-ga-la-'khod-dam* / *bsgrub-pa-la-sgyub-pa'am* / *dbaṅ-phyug-la-dba'-phyug-lta-bu-ste* / *bod-kyi-mtha'-'khob-rnams-na-de-lta-bu-med-kyañ-yul-gyi-dbus-mthil-rnams-na-yod-pas* / *yul-gyi-mthil-gyi-byis-pa-rnams-kyis-slob-pa-na* / *de-bas-na-sdud-tshe-mtha'-rten-la-gzab-la-nan-tan-bskyed-par-bya'o* /

For instance, [errors] such as *ga-la-'khod* for *gaṅ-na-'khod*, *sgyub-pa* [?] for *bsgrub-pa*, and *dba'-phyug* for *dbaṅ-phyug*, such [errors | confusions] do not occur in [the language of] the border-regions of Tibet, but they do occur in the central provinces of the country. Therefore, when beginners from the central provinces are studying [pronunciation], they should put effort in/emphasize/exert themselves for a clear [realization] of the syllable-final consonants when [syllables] are combined.

2.154 / *gtsaṅ-pas-das-'phul-ra-mgo-rnams-su-nor* /

2.155 / *dbus-pas* [or *bas* ?] -' *phul-daṅ-ra-sa* [or *ras* ?] -*rkyañ-ba-ni* /

2.156 / *nor-gyur-gug-skyed-mtha'-rten-bcas-daṅ-'dra* /

2.157 / *de-bas-gug-skyed-mtha'-rten-bcas-pa-bslabs* / [D 322r4-5]

2.154: Speakers from Gtsaṅ tend to confuse (forms with) prescript *d* with (forms with) superscript *r*.

77 Examples in Sa-pan's commentary (242v1): *rta* & *sta*, *stag* & *tag*; *'gro-ba* & *'gyo-ba*, *phra* [?] -*ba* [?] & *phya-ba*.

78 Examples in Sa-pan's commentary (242v2): *mgo-bo* & *'go-bo*, *mkha'* & *'kha'*; *gtoṅ-ba* & *rtoṅ-pa*; *dga'-ba* & *rga-ba*.



- 2.155: Speakers from Dbus tend to confuse the [various ?] prescript morphonemes [with one another ?], and they tend to confuse (forms with) (superscript [?]) *r* and [?] *s* [?] with (forms with) non-composite radicals.
- 2.156: When these errors/confusions occur, they will be similar to [the errors occurring] when vowels and syllable-final consonants are added [i.e. these same errors will occur in the pronunciation of whole syllables where vowels and syllable-final consonants are added].
- 2.157: Therefore, these [combinations of consonants] should be learnt [i.e. exercised] in combination with the [various] vowels and syllable-final consonants.

The irregularity typical for the Gtsañ dialect, mentioned in 2.154, namely confusing or rather non-distinction of the pronunciation of prescript *d* and superscript *r*, corresponds to one of the three stated above, in 2.109-110. The anomalies in the Dbus pronunciation listed in 2.155 are more difficult to interpret. The lack of comments by Sa-paṅ on this passage adds to this difficulty. It seems likely that the phrase *ra-sa* [or *ras* ?] -*rkyañ-ba* refers to the first typical Dbus error listed above at 2.105-106, i.e. the confusion of superscript *r* with simple radicals. If we read *ras* (which would make this a hypometrical eight-syllable line), and interpret this as elliptical e.g. for \**ra-mgos* or \**ra-mgo-can-gyi-sgras*, the correspondence with 2.105-106 is complete. However, if we accept the reading *ra-sa*, yielding a regular nine-syllable line, it might be taken as referring to *ra-mgo* and *sa-mgo* forms. My interpretation of the remainder of 2.155 and of 2.156 should be considered tentative as well. It is interesting to note that the nine-syllable lines of verse 2.154-157 stand out among the rest of the text as one of the very few instances where the author deviates from the standard seven-syllable line; this might be an indication that this is a didactic verse derived from a different source.

This first, preliminary investigation of *Byis-'jug*, which was necessarily restricted to an outline of some salient features of the text, has already proved the eminent importance of this phonological treatise. Due to its reliable early date, and the extent as well as the variety of the information contained in it, *Byis-'jug* can enhance our understanding of the early history of Tibetan indigenous grammar significantly.

Interestingly no mention of, or direct reference to the *Sum-rtags* tradition is found in *Byis-'jug*. It evidently represents a tradition of Tibetan linguistic scholastics (or at least didactics) which appears to have been quite separate and independent from *SCP* and *TKJ*. At least, no significant traces of the *SCP* or *TKJ* models of description are evident in *Byis-'jug*.

Our above observations, e.g. on the phonological and orthographical categorizations reflected in the 'father-mother' and 'body-limb' terminologies, and the information of phonetical (rather than the more common phonemical) nature related to specific Central Tibetan dialects serve merely as first glimpses at the wealth of materials contained in this text and its commentary by Sa-skyapaṇḍita.

### Bibliography:

- BSOD-NAMS-RGYA-MTSHO (ed.) (1968), *Sa-skyapa'i-bka'-'bum. The complete works of the great masters of the Sa skya sect of the Tibetan Buddhism*, 15 vols, Tokyo. (= Bibliotheca Tibetica I, 1-15).
- BUTZENBERGER, K. (1988), "Ein orthographisch-grammatischer Text im rGyal-rabs gsal-ba'i me-lon", *Zentralasiatische Studien* 21: 48-61.
- CHANDRA, L. (ed.) (1969), *A 15th Century Tibetan Compendium of Knowledge. The Bśad mdzod yid bzin nor bu by Don-dam-smra-ba'i-señ-ge*, with an introduction by E. Gene Smith, New Delhi. (= Śāta-Piṭaka Series 78).
- DAS, S.C. (1915), *An Introduction to the Grammar of the Tibetan Language with the texts of Situ Sum-tag, Dag-je Sal-wai Melong and Situi Shal lung*, Darjeeling.
- INABA, S. (1961), "Sakya pandeita no gyōseki ni okeru bumpōgaku kenkyū no ichimen", *Ōtani shigaku* 8, p. 1-14.
- JACKSON, D.P. (1987), *The Entrance Gate for the Wise (Section III). Sa-skyapaṇḍita on Indian and Tibetan Traditions for Pramāṇa and Philosophical Debate*, 2 vols., Wien. (= Wiener Studien zur Tibetologie und Buddhismuskunde 17).
- MILLER, R.A. (1962), "The Si-tu Mahāpaṇḍita on Tibetan Phonology", in: *To Dr. Hachiro Yuasa: A Collection of Papers commemorating his Seventieth Anniversary*, Tokyo, 921-933. (repr. with addenda et corrigenda MILLER 1976: 19-31).
- MILLER, R.A. (1964), "A Twelfth Century Tibetan Grammatical Fragment", *T'oung Pao* 51, 72-84. (repr. with addenda et corrigenda MILLER 1976: 57-70).
- MILLER, R.A. (1965), "Some Minor Tibetan Grammatical Fragments", *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 115: 327-340; (repr. MILLER 1976: 71-84).
- MILLER, R.A. (1966), "Buddhist Hybrid Sanskrit *āli*, *kāli* as Grammatical Terms in Tibet", *Harvard Journal of Asiatic Studies* 26: 125-147. (repr. with addenda et corrigenda MILLER 1976: 33-56).
- MILLER, R.A. (1973), "Once more, on Thon-mi Sambhoṭa and his Grammatical Treatises", *Tōid Orientalista Alalt* 2: 2: 439-460. (revised repr. MILLER 1976: 85-101).
- MILLER, R.A. (1976), *Studies in the Grammatical Tradition in Tibet*, Amsterdam. (= Amsterdam Studies in the Theory and History of Linguistic Science III, 6).



- MILLER, R.A. (1980), "Phone, phoneme and graph in the old Tibetan grammarians", *Acta Orientalia Hungarica* 34: 153-162.
- MILLER, R.A. (1988), "The First Two Tibetan Grammatical Treatises as Known to the Sa skya Paṇḍita" in: Uebach, H. & Panglung, J.L. (eds.) (1988). *Tibetan Studies. Proceedings of the 4th Seminar of the International Association for Tibetan Studies, Schloss Hohenkammer, Munich 1985*, München 1988, (= *Studia Tibetica. Quellen und Studien zur tibetischen Lexikographie II*): 263-278.
- MILLER, R.A. (1993), *Prolegomena to the first two Tibetan grammatical treatises*, Wien (= *Wiener Studien zur Tibetologie und Buddhismuskunde* 30).
- RÓNA-TAS, A. (1985), *Wiener Vorlesungen zur Sprach- und Kulturgeschichte Tibets*, Wien (= *Wiener Studien zur Tibetologie und Buddhismuskunde* 13).
- SCHIEFNER, A. (1851), "Tibetische Studien, Einleitung. I. Über die stummen Buchstaben", *Bulletin de la classe historico-philologique de l'Académie Impériale des Sciences de Saint-Pétersbourg*, t. viii, no.14.
- SIMONSSON, N. (1957), *Indo-tibetische Studien I. Die methoden der tibetischen Übersetzer, untersucht im Hinblick auf die Bedeutung ihrer Übersetzungen für die Sanskritphilologie*, Uppsala.
- Tshe-tan-zabs-druñ (1981), *Gaṅs-can-bod-kyi-brda-sprod-pa'i-bstan-bcos-sum-cu-pa-dañ-rtags-'jug-gi-rnam-gzag-rgya-cher-bśad-pa Thon-mi'i-žal-luñ*, Lanzhou. (Gansu renmin chubanshe, Kan-su'u-mi-dmañs-dpe-skrun-khañ).
- VERHAGEN, P.C. (1993), "Mantras and Grammar. Observations on the study of the linguistical aspects of Buddhist 'esoteric formulas' in Tibet", in: K.N. MISHRA (ed.), *Aspects of Buddhist Sanskrit. (Proceedings of the International Symposium on the Language of Sanskrit Buddhist Texts, Oct. 1-5, 1991)*, Sarnath: Central Institute of Higher Tibetan Studies (= *Samyag-Vāk Series VI*), 320-346.
- VERHAGEN, P.C. (1994), *A History of Sanskrit Grammatical Literature in Tibet. Volume 1: Transmission of the Canonical Literature*, Leiden – New York – Köln: E.J. Brill (= *Handbuch der Orientalistik Abt. 2 Bd. 8*).
- VERHAGEN, P.C. (forthcoming), *A History of Sanskrit Grammatical Literature in Tibet. Volume 2: Assimilation in Indigenous Scholarship*, Leiden – New York – Köln: E.J. Brill (= *Handbuch der Orientalistik Abt. 2 Bd. ?*).
- VOGEL, C. (1981), *Thon-mi Sambhota's Mission to India and Sroñ-btsan sgam-po's Legislation. Being the tenth chapter of bSod-nams rgyal-mthsan's rGyal-rabs gsal-bai me-loñ, critically edited and rendered into English*, Göttingen. (= *Nachrichten der Akademie der Wissenschaften in Göttingen, I. Philologisch-historische Klasse*, 1981, nr. 1).
- ZHANG Yisun (ed.) (1985), *Bod-rgya-tshig-mdzod-chen-mo (Zhang Han da cidian)*, Beijing: Renmin chubanshe.

## Abbreviations:

<i>Byis-'jug</i>	<i>Yi-ge'i-bklag-thabs-byis-pa-bde-blag-tu-'jug-pa-zes-bya-ba</i> , by Bsod-nams-rtse-mo (1142-1182).
D	Derge edition of <i>Sa-skya Bka'-'bum</i> , facs. ed. Bsod-nams-rgya-mtsho (1968).
<i>Rnam-bśad</i>	<i>Byis-pa-bde-blag-tu-'jug-pa'i-rnam-par-bśad-pa-byis-pa-la-phan-pa-zes-bya-ba</i> , by Sa-skya Paṇḍita.
Sa-pan	Sa-skya Paṇḍita Kun-dga'-rgyal-mtshan (1182-1251).
SCP	<i>Sum-cu-pa</i> .
TKJ	<i>Rtags-kyi-'jug-pa</i> .
<i>Tshig-mdzod-chen-mo</i>	ZHANG Yisun (ed.) (1985).