# Reassessment of the "Pyu" face of the Myazedi Inscriptions of Pagan, with comparative notes on Mon, Burmese, and Tibetan palaeography

- A preliminary account – DO NOT CITE -

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#### 1. Introduction

"Pyu" is a label for a number of inscriptions exhibiting fairly similar alphabetical scripts of ancient Indian decent, traditionally thought to represent a single – extinct – language. These "Pyu" inscriptions are associated with archaeological sites of an ancient civilisation situated in central areas of today's Burma/Myanmar (roughly, late  $-1^{st}$  millen-nium C.E. & during the whole  $+1^{st}$  millennium C.E.), also commonly called "Pyu".

The Myazedi or Rajaguma/Rājakumār(a-) inscriptions (dated with an equivalent of 1112 C.E.), found near the Myazedi Pagoda in the Pagan area in today's central Burma/Myanmar, are two virtually identical four-faced inscribed pillars. The texts are inscribed in the languages "Pyu" (?!), Old Burmese, Old Mon, and Pali – one text on each of the four faces in one of the four languages, respectively. As the content of the texts written in these different languages is, by and large, the same, the pillar could be called "The Stone of Pagan" (after "The Stone of Rosetta").

Discovered in 1886/87 C.E., the subsequent decipherment was finally published in 1919 C.E. However, contrary to the inscriptions in the other three languages, the "Pyu" face has, actually, never been thoroughly deciphered – in the narrow sense of "decipherment" – but rather tentatively interpreted through comparison of the lexical items and their occurrences with those in the texts written in the other three languages. C. O. Blagden, who did this pioneering work, summarised this state – that has not been changed afterwards until today – with the following words (Blagden 1917:37):

The study of "Pyu" epigraphy begins with the Fourth text of the Myayedi inscription of Pagan, which was discussed in the Journal of the Royal Asiatic Society for April 1911. From a comparison of that Text with the corresponding Pāli, Burmese and Talaing [i.e. Mon – U.K.] versions, the greater part of the "Pyu" alphabet was ascertained and a number of "Pyu" words were identified, some with certainty, others with more or less probability. From these data and from the syntax of the language, so far as it was exemplified in that one text, the inference was drawn that the language was a Tibeto-Burman one that had been in contact with Talaing. It was therefore provisionally assumed to have been the vernacular of the Prome district in ancient times, and the name "Pyu" was attached to is [sic., read "it" – U.K.] as a convenient label.

This knowledge obtained with this method sufficed to answer the concerning historiographic questions: The content turned out to be, by and large, identical with that of the texts in the other languages. Yet, the interpretation of substantial parts of the writing system and, thus, the phonemic system, and, hence, the lexicon remained unsolved. A paper by R. Shafer (1943) did not provide a solution to these questions, because of what his comparative lexical approach as well as his sketchy grammatical description remained highly speculative. Thus, with respect to the linguistic questions, the "decipherment" has not been satisfactory at all. Than Tun of Rangoon University summarised the previous research on "Pyu" in 1958:

WE COULD ADD NOTHING yet to what C. O. Blagden has to say on Pyu script and vocabulary except in some minor points where U Tha Myat [...] thinks that he could improve on Prof. Blagden." (Than Tun 1958; capital letters as in the original)

Note that Than Tun has not even mentioned Shafer's publication and that he was obviously sceptical concerning Tha Myat's alleged improvements. I agree with the opinion of Than Tun.

If one takes the publication of a glossary of "Pyu" with some comments by C. I. Beckwith in 2002 C.E. (the most recent publication regarding "the Pyu language" known to the presenter) to be representative of the state of the research on "Pyu", it showed that there has not been any (substantial) progress in the decipherment of the "Pyu" face in the meantime, too. Thus, from a linguistic perspective, the interpretation(s) of the "Pyu" face of the two stones provided hitherto remained unsatisfactory. A similar statement seems to hold for the remaining "Pyu" inscriptions, but because of the limited time available the presenter was not able to systematically and thoroughly review them as well as the related literature.

In the talk, I will attempt to show for the first time how the Pyu face of the two pillars had to be read in detail, i.e. how the writing system and, thus, the phonemic system and, in turn, the lexicon and the grammar, respectively, could be interpreted. Based on this, I will explain because of what I think the language of the language of the "Pyu" face had to be classified as belonging to the Burmic branch of Burmese-Yiic (within Tibeto-Burman) – despite the heavy influence of other, genetically and structurally unrelated contemporaneous languages of the area on all aspects of the structure of this archaic Burmic language. (I will extend my claim to at least one of the remaining other "Pyu" inscriptions.)

In addition, during my presentation I will reveal parallels between the "Pyu" writing system and the respective writing systems of the languages Khmer, Mon, Burmese, Tibetan, and Bengali – which all have common roots in the ancient Indian script(s) and share similar principles.

## 2. The Script

Beginning in the 4<sup>th</sup> century C.E., in a process of vernacularisation of writing, the late Brahmi script(s) diversified, at first only in Southern India. There we find the rise of several related local scripts, collectively labeled "Grantha", designed to write several indigenous Dravidian languages, the official languages of, e.g., of the Kadamba or Pallava dynasties. The scripts used in Southeast Asia today are all considered to relate back to these Southern Indian historic scripts.

In Northern India, at the same time, there was still one unified script, the Gupta script. But starting from around the 6<sup>th</sup> century C.E., also here began a process of diversification of the scripts; a major group emerging here is labeled "Siddham". Amongst the varieties of that script we find the ancestors of the Tibetan script, of the Bengali-Assamese script(s), as well as of the Devanagari script. The Siddham script is the script of late Buddhism in India; it was used in India from the 6<sup>th</sup> till the 12<sup>th</sup> century C.E. – and is still used today, e.g., in Tibetan and Japanese Buddhist monasteries for stylistic purposes.

It has often been maintained that "the Pyu" script was directly related to the Grantha script (either to its Pallava or Kadamba varieties). But, in fact, this is not so clear. (i) The same claim has also been made with respect to the other early scripts in Southeast Asia. Those scripts seem, indeed, to be closely related with each other and with Grantha – considerably closer than to the "Pyu" script(s). (ii) There are different regional and temporal varieties of the "Pyu" script(s). Taking the script of the Myazedi inscription as a reference point, the varieties found in Arakhan / Rakhain (cf. San Tha Aung 1975) are probably best characterized as being midway between this Myazedi "Pyu" script and the Siddham script. The script of the urn

inscriptions from Sri Ksetra as well as that from Halin, are, in turn, halfway between the Arakhan (Rakhine) inscriptions and the Myazedi "Pyu" script. In other words, all those varieties other than the Myazedi "Pyu" script – that precede the latter a few centuries – show, apart from their Grantha characteristics, also more or less strong affinities with the Siddham script. On the other hand, the Myazedi "Pyu" script, still clearly being a distinct script, reproduces the style found in the inscriptions written in the languages Old Mon, Old Burmese, and Pali that is typical for Pagan. (By the way, regarding the latter cases, the ink inscriptions of these languages are, to my opinion, more similar to the Grantha derivates found in other parts of Southeast Asia than the lithic inscriptions do. – The latter seem still to show a slight stylistic Siddham influence.)

According to a suggestion by Blagden, which is based on the evidence for the "Pyu" language from the urn inscriptions, the writing of that language started about the 7<sup>th</sup> or 8<sup>th</sup> century (Blagden 1917:43) – not earlier, as it has sometimes been maintained elsewhere, e.g., by Tha Myat (1963:22). To my knowledge, until today, no evidence has been revealed to suggest an earlier date than the one proposed by Blagden (ibid.).

However, judging from the archaeological evidence, the "Pyu" script – i.e. the script found within the archaeological "Pyu" culture – had already been used several centuries prior to the writing of the "Pyu" language, for writing Pali (and Sanskrit in Arakhan/ Rakhain; cf. San Tha Aung 1975), with a probable starting time around the 2<sup>nd</sup> or 3<sup>rd</sup> centuries C.E. (Aung Thaw 1968:61 and Stargardt 1990:291ff.).

As the Myazedi inscription is probably the latest existing attestation of the "Pyu" language and as all languages change in the cause of time, it is of outmost importance to be aware of the time differences of several centuries between (i) the creation of the script, (ii) the application of that script to the "Old Pyu" language and (iii) the preparation of the Myazedi inscription written in the "Late Pyu" language.

# 3. The phonemic system $(s)^1$

In the following account, I will deal exclusively with the symbols found in the (Late) Pyu face of the Myazedi inscription. The conventional letters represent Old Pyu phonemic values and the bold letters represent the phonemic values of Late Pyu. Italic letters represent the transliteration (to the left of the graphs). Symbols in brackets indicate that there is no evidence for the concerning letters; "Ø" indicates that there is no evidence for the concerning phoneme(s).

Chart of the consonants occurring in the onset:

k kh 'n gh  $k^{\rm h} > {f k^h}$ g > k  $g^{fi}? > k^h$ k > kch (c) j ( jh )  $(\tilde{n})$  $s^h > s^h$ z? > s Ø Ø

<sup>1</sup> Following Shafer (1943), I will use "Old Pyu" to label the "Pyu" script and/or language of the urn inscriptions and "Late Pyu" to label the language and/or script of the "Pyu" face of the Myazedi inscription. "\*Proto-Pyu" refers to a non-attested reconstructed stage preceding Old Pyu.

(t) th d dh (n)

$$\emptyset \qquad t^{h} > t^{h} \qquad d > t \qquad d^{h}? > t^{h} \qquad \emptyset$$

$$t \qquad th \qquad d \qquad dh \qquad n$$

$$t > t \qquad t^{h} > t^{h} \qquad d > t \qquad d^{h}? > t^{h} \qquad n > n$$

$$p \qquad ph \qquad b \qquad bh \qquad m$$

$$p > p \qquad p^{h} > p^{h} \qquad b > p \qquad b^{h}? > p^{h} \qquad m > m$$

$$y \qquad r \qquad (1) \qquad v \qquad b$$

$$j > j \qquad J > J \qquad \emptyset \qquad w > w / \qquad b > b$$

$$J^{w?} > J^{w} \qquad J^{w?} > J^{w}$$

$$s \qquad h \qquad l \qquad ? \qquad A$$

$$s > s \qquad h > h \qquad l > l \qquad ? \qquad ? \qquad ? = [+voice]$$

$$\Rightarrow \text{ an additional diacritic symbol (Tibetan: 'a-chung): ' ? > [+voice]$$

The chart shows that the voiced obstruents of Old Pyu became devoiced in Late Pyu<sup>2</sup>, a feature found especially among Mon-Khmer languages of the area (but not in Modern Standard Burmese). Cf., e.g.:

d-th-g-d datha'gada \*/ta.tha.ga.ta/, 'the Tathāgata, i.e. the historical Buddha' cp. *Pali: tathāgata/o*, from which it is apparently a direct loan in Late Pyu.

The writer of Late Pyu used obviously the sound values of Late Pyu for his transcription of that lexeme, including the voicing of g that was, in the unmarked case, devoiced. The voicing is indicated by the additional diacritic symbol ' [+voice], that seems to have had a similar function like the (Old) Tibetan 'a-chung . In contrast to (Old) Tibetan, the Pyu diacritic symbol seems to have been applied – apart from few exceptions – only to the voiced obstruents of Old Pyu / the devoiced obstruents of Late Pyu. Considering the correspondences between Late Pyu and Pali, there are irregularities regarding the usage of this diacritic symbol. It had never been never applied to the item:

 $^{2}$  For the sake of convenience, from now on I will omit the citation marks of "Pyu" etc.

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bv-d<sup>fi</sup> bvadha \*/pou.t<sup>h</sup>a/ 'Buddha',

cp. Pali: *buddha/o*, not attested for Old Burmese of the Myazedi inscription in which another form is used to refer to the Buddha, *Modern Standard Burmese*: *buddha*/bou[?].dá/(MLC 1993) or rather /bóu.dá/(U.K.)

I think this is not too surprising – at least if one assumes that this original loan from Pali had already been indigenised in Late Pyu.

The chart also shows that (Late) Pyu did apparently not possess an obstruent series with the features [PLACE: palatal]. Cf. e.g.:

pdv-sg p'dva-s'gu \*/pa.'dlwo.s[ə].'ga/ 'words, speech; sermon';

cp. *Modern Spoken Burmese*: pud/póu[?]/ 'word, stop; classifier for pieces of writing' and pada 'word' (MLC 1993), MLC relate both to *Pali*: pada – which might be a Pali form that is/was only used in the Burma region – I could only find *Pali*: vaco 'voice, word';

The Pyu ligature dv was apparently intended to synthesise the Pali phoneme sequence c/(that Pyu did not possess); the u in pud can easily be explained as progressive rounding of the preceding (bi-)labial p/;

The 2. part of the compound relates to  $OB+: cak\bar{a}$  'language' (cp.  $SB: cak\bar{a}h$  /z[ə].gâ/), the graph u apparently symbolises the schwa of the first syllable, in a somewhat deviant arrangement.

Late Pyu did possibly possess a series of (pre-)aspirated nasal phonemes<sup>3</sup> and, possibly, also (pre-)aspirated rhotic approximant phonemes. Those alleged phonemes would be those sounds represented in the Pyu script as clusters of a preceding h or s plus a following letter representing the corresponding unaspirated phoneme. I conclude from this that Old Pyu, i.e. the language for which the Pyu script was designed, still possessed the concerning phonemic clusters. That indeed such a process of fusion of spirants and plain obstruents to aspirated obstruents between Old and Late Pyu happened is attested – at least regarding s – by the following two examples:

?-sn: asniḥ \*/?ə.hnî/ 'year',

cp. \*Proto-Loloish: \*/s-nik H/ 'year' (Bradley 1979), Old

Burmese (Myayedi): anhac 'year', and Modern Standard Burmese: nhac /hni[?]/ 'year' (MLC 1993);

Compared to the proposed form \*/?ə.hnî/, a form with the prosodic structure ???\*/?ə.sə.nî/ seems, at least from an areal-genetic perspective, to be highly unlikely.

 $?-s^{au}t$  astau \* $\textit{Proto-Pyu: */setup~setuw/} > *\textit{Old Pyu: */[?e]}t^{h}ow/ > *\textit{Late Pyu: */?et^{h}ou/}$  'stūpa';

cp. Old Burmese (Myazedi): athot 'spire' but more likely is: 'stūpa' - U.K., Mo-

<sup>&</sup>lt;sup>3</sup> Such nasals, that are also found in modern Burmese, have often erroneously been called "devoiced".

dern Standard Burmese: athū /[?ə]thû/ 'special, extraordinary, [super – U.K.]' (MLC 1993);

With respect to this item, similarly as in the case above, a prosodic structure like ???\*/?ə.səthou/ seems highly unlikely, too;

Compare the etymology with a similar one in *SW Dajic*: e.g. *Standard Thai*: ywad /joɔt/ means 'tip, top, summit, peak; (quint)essence; picked, crack; excellent, outstanding; perfect, faultless' (Iamwaramedh 1997), but in *Lanna Tai* ywad /joɔt/ can apparently also mean 'spire' (apart from meanings like 'top, treetop, adornment on top of some-thing'), as attested in the name of Buddhist temples văt cĕd ywat /wat cet joɔt/ 'temple-seven-spire' (possibly derived from an earlier văt cedīy ywat 'temple-cedi-spire'). However, this etymological change is obviously not restricted to the region; cp. e.g. *German*: *Spitze* 'spire, top; point; super, best'.

Given (i) there is no question about the aspiration of  $/t^h/$  in the last example and (ii) that both processes are basically identical, it is clear – at least for the concerning s in Pyu – that the concerning nasals in Late Pyu have to be considered as being (pre-)aspirated, not as being just voiceless.

As indicated in the chart above,  $/\cancel{l}$  and  $/\cancel{l}^w$ / are probably two different phonemes and, as already pointed out, there might have existed also a phoneme  $/^h\cancel{l}$  / in Late Pyu.  $/\cancel{l}$  and  $/\cancel{l}^w$ /, together with  $/\emph{j}$ /, /w/, and /l/, are the only five phonemes that could appear in second position within a syllable onset cluster in Late Pyu, similar to Old Burmese. However, due to the limited material available and to the preliminary stage of the investigation, regarding  $/\cancel{l}$ /,  $/\cancel{l}^w$ /, and /w/, it is not (yet) always clear how to identify them. This is, basically, because of two factors:

- (i) These three supposed phonemes (in second position of clusters) seem to have been represented by v./w/ is distinguished from the other by putting a diacritic dot underneath v, but this apparently was not done consistently. This dot and its placement is, at least formally, identical with the [+voice] symbolising diacritic dot that I introduced above in relation with the Tibetan script. However, even more striking is the case of the Bengali script another derivate of the Siddham script and, in addition, the immediate neighbour of the Arakan/Rakhain variety of the Pyu script. If one puts such a diacritic dot underneath the letter b, one gets the letter v; but if one puts there, instead, a short dash, one gets the letter v.
- (ii) In Late Pyu, the consonant phoneme /w/ in second position in an onset cluster (as well as  $[^w]$  of  $/\xi^w$ /) seem to be in the process to become a parts of the following (nuclear) vowels. But this process is apparently not complete at the Myazedi stage of Pyu.

Chart of the vowels of Late Pyu

$$/i_{1}/\ ,/i_{2}/\ /u_{1}/\ ,/u_{2}/\ /e_{1}/\ ,/e_{2}/\ /[\mathfrak{p}]/\ /o_{1}/\ ,/o_{2}/\ /a_{1}/\$$

The  $/x_1/$  phonemes apparently present the vowel system of Old Pyu, i.e these are the vowels represented by specific adscript (vowel) letters, except ai. The  $/x_2/$  vowels have developed

from merger with preceding v /w/ or [w] (from /tw/) and/or with n /N/ in coda position. (Final /N/ must have had a status in Old Pyu comparable to /N/ in Modern Standard Burmese of today (cf. Dubach Green 2005:7ff.). Final n seems to have symbolised a prosodic aspect within the rhyme or the syllable: glottal and/or pitch-related.)

Since the whole situation of the development of the rhyme/ the vocalic nuclei is too complex to be covered in this handout in detail, let me just sketch the main idea. (I will describe this situation in the presentation in further detail.) The emerging  $/x_2$ / vowels entered – at least parts – of the vocalic domains of each of the corresponding  $/x_1/$  vowels. For some lexical items the emerging  $/x_2$ / vowels seem to have merged with the  $/x_1$ /, but in most cases they apparently became distinct. This could happen, as far as I can see, with respect to four basic alternative aspects (or the combinations of these four basic alternatives): vowel quantity, vowel quality, phonation type (remember the devoicing of the Old Pyu voiced obstruents), as well as pitch. I think, at this point of the investigation, I can rule out the vowel quantity option. Therefore I think the most likely solution is a combination of the differentiation of the concerning vowels with respect to vowel quality (probably including dipthongisation), phonation type and pitch. This combination looks much like a classical Mon-Khmer register complex. Anyway, at the moment I cannot give a theoretical answer to this question. Such a complex situation demands a thorough investigation, including comparison with areally/structurally and/or genetically related languages with respect to all three aspects. As such an investigation had not been possible hitherto, in the transliteration/ transcription below, I have impressionistically tried to make the phonemes and the vowel letters amongst the lexical items fit with each other, at best what I could do. (But there was no time left to systematically investigated the question of phonation types and pitch. – Pitch does by far not always correspond to pitch/tone in Standard Burmese.) Of course

## 4. Evidence for contact with Dajic and Mon-Khmer languages

Borrowings from Dajic:

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b: banh 'thousand', cp. *Proto-Daj: */b(an) A2/ (cf. Luo 1997)
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b: binh 'to complete, finish; AUX: to be, become, happen', cp. \**Proto-Daj*: \*/ben A1/ 'to be' (Li1977), *Classical Shan*: *pin* 'to be, exist, have existence, become' (Cushing 1914);

 $\dot{d}$  din  $\sim$   $\dot{t}$  tin 'place, earth, country'

cp. \**Proto-Daj*: \*/din A1/ 'soil, earth' (Luo 1997), Shan/Dehong /lin<sup>6</sup>/ (ibid.); \**Proto-Tibeto-Burman*: \*/m-ləj ~ m-lej/ 'earth, ground, soil, mud, country' (Matisoff 2003), Matisoff cites only Meithei and Burmese varieties, i.e. languages from an area where Dajic languages (in particular Shan) were once/are still spoken.

s: sanh 'to order', cp. \**Proto-(SW+C?)Daj*: \*/san B1/ 'to bid, order', evidence from Northern Dajic languages possibly indicates an earlier \*/tr(an) B1/, (cf. Li 1977)

A loan into Dajic:

b: banh 'to give', there is an unquestionable \**Tibeto-Burman* etymon that Matisoff reconstructed as \*/(s-)bəj-(n)/ 'to give' – next his \*/(s-)ter/ 'give, (causative)') – (Matisoff 2003), that might even indicate a \**Sino-Tibetan* etymon (cf. ibid.:200) cp. *Classical Shan*: pan 'to give' (Cushing 1914)

Apart from lexical evidence for contact with Dajic languages there is also lexical evidence for contact with Mon-Khmer languages, in particular with Old Mon, as expected. (I will show the details in the glossary that is still in progress.)

Regarding the syntax, the contact situation is even more pronounced, for contacts with Dajic as well as for those with Mon-Khmer, in particular Old Mon. By and large, it can be said that Late Pyu deviates from mainstream Tibeto-Burman patterns at least as much as, e.g., the Karenic languages do. (I have not looked systemically for concerning contacts [regarding the interpretation presented here] yet.) Word order is very fluid on the clause/sentence level; it is more fluid than in Modern Standard Burmese – Pyu seems to be neither strictly VO nor OV. To some degree, this word order fluidity expands also into the phrase structure. I attribute this "fluidity" directly to the contact influence mentioned above. On sentence level, the OV character seems to be triggered by loans like – to give an example –  $b\dot{:}$  binh 'to complete, finish; AUX: to be, become, happen' (see above); this item seem also to have been important for the word order on phrase level. To give an example for a loan from Mon-Khmer, m ma, a marker for relative constructions, is a loan from Old Mon; it seems to trigger certain calque phrase structure patterns.

### 5. Literature used<sup>4</sup>

Aung Thaw (1968): *Report on the excavations at Beikthano*, Rangoon: Ministry of Union Culture / Revolutionary Government of the Union of Burma;

Benedict, Paul K. (1972): *Sino-Tibetan. A Conspectus*, contr. ed. James A. Matisoff, London: Cambridge University Press;

Blagden, C. O. (1917[1913/14]): *The "Pyu" inscriptions*, in [Journal of the Burma Research Society 7 / 1 (1917), repr. from Epigraphia Indica 12 (1913/14)], pp. 37-44;

\_\_(1972[1919]): *The Pyu face of the Myazedi inscription at Pagan*, in: [Taw Sein Ko & Duroiselle, eds., (1972)], pp. 59-68;

Bradley, David (1979): *Proto-Loloish*, (Scandinavian Institute of Asian Studies Monograph Series 39), London & Malmö: Curzon Press;

Cushing, J. N. (1971[1914]): *A Shan and English dictionary*, repr. of [2<sup>nd</sup> ed. (1914) of 1<sup>st</sup> ed. (1881), Rangoon: American Baptist Mission Press / F. D. Phinney, Supt.], Westmead / Farnborough: Gregg International Publishers;

Dani, Ahmad Hassan (1963): Indian Paleography, Oxford: OUP;

Dubach Green, Antony (2005): *Word, foot, and syllable structure in Burmese*, in [Watkins, Justin, ed. (2005): Studies in Burmese linguistics, (Pacific Linguistics 570, ed. by Stephen A. Wurm et al.), Canberra: Pacific Linguistics / Research School of Pacific and Asian Studies/ The Australian National University], pp. 1-25;

Hahn Michael (1996): *Lehrbuch der klassischen tibetischen Schriftsprache* ('Coursebook of the Classical Tibetan written language', in German), 7<sup>th</sup>, corr. ed., (Indica et Tibetica. Monographien zu den Sprachen und Literaturen des indo-tibetischen Kulturraumes,

<sup>&</sup>lt;sup>4</sup> This list includes sources that I have used for the Pyu glossary (in progress, not attached here).

- ed. by Michael Hahn et al., Vol. 10), Swisttal-Odendorf: Indica et Tibetica Verlag; Ishii, Yoneo et al. (1989): *A Glossarial Index of the Sukhothai Inscriptions*, Bangkok: Amarin Publications;
- Karlgren, Bernhard (1996[1957]): *Grammata serica recensa*, repr. of 1<sup>st</sup> ed. (1957), Taipei: SMC Publishing;
- Li, Fang Kuei (1977): A handbook of comparative Tai, (Manoa): The University Press of Hawaii:
- Luce, G.H. (1985): Phases of Pre-Pagán Burma. Languages and History, 2 vol., Oxford etc.: Oxford University Press;
- Luo, Yongxian (1997): *The subgroup structure of the Tai languages: A historical-comparative Study*, Journal of Chinese Linguistics Monograph Series 12;
- Matisoff, James A. (2003): *Handbook of Proto-Tibeto-Burman: System and Philosophy of Sino-Tibetan Reconstruction*, (University of California Publications in Linguistics 135, ed. by Leanne Hinton et al.), Berkeley etc.: University of California Press;
- (MLC) Myanmar Language Commission (1993):  $mr[a]n-m\bar{a}-ang[a]lip$  abhidh $\bar{a}n$  /Myanmar-English Dictionary, r[a]n-kun-mrui<sup>a</sup> (Yangon): Department of the Myanmar Language Commission / Ministry of Education / Union of Myanmar
- Okell, John & Allott, Anna (2001): *Burmese / Myanmar Dictionary of Grammatical Forms*, Richmond: Curzon Press;
- San Tha Aung, U. (1975): ān[a]nd[a] c[a]ndr[a] (rh[a]c rācu r[a]khuiṅ vesālī m[a]ṅḥ) (Ānanda Candra (8 centuries of Arakan Kings at Vesali), in Burmese), Yangon: Biman Literature;
- Seam, Long (2000):  $v[a]c[a]n\bar{a}nukr[o]m\ khm\bar{e}r\ pur\bar{a}n$ . ( $t\bar{a}m\ sil\bar{a}c\bar{a}r\ddot{u}k\ pure\ a\eta k[a]r\ s[a]-t[a]v[a]ts\ d\bar{\imath}\ 6-8)$  / Dictionaire du khmer ancien. (D'après les inscriptions du Cambodge du VIe. VIIIe. siècles), Phnom Penh: Fondation Toyota du Japon;
- Shafer, Robert (1943): Further Analysis of the "Pyu" Inscriptions, in [Harvard Journal of Asiatic Studies 7 / 4 (1942-43)], pp. 313-366;
- Shorto, H. L. (1971): A Dictionary of the Mon inscriptions. from the sixth to the sixteenth centuries, incorp. mater. collect. by The Late C. O. Blagden, (London Oriental Series 24), London etc.: Oxford University Press;
- Shorto, Harry (2006): *A Mon-Khmer Comparative Dictionary*, ed. by Paul Sidwell et al., (Pacific Linguistics 579, ed. by Stephen A. Wurm et al.) Canberra: Pacific Linguistics / Research School of Pacific and Asian Studies/ The Australian National University;
- (SLD) Staff of Linguistics Department (2000):  $b[a]c[a]n\bar{a}nukr[a]m\ l\bar{a}v$ -daiy-ăṅkṛt ( $ch[a]păp\ ch[a]liem\ br[a]h\ kierti)$  / Lao-Thai-English Dictionary [enhanced edition U.K.], Bangkok: Faculty of Humanities / Kasetsart University;
- Stargardt, Janice (1990): *The Ancient Pyu of Burma. Volume one Early Pyu cities in a man-made landscape*, Cambridge & Singapore: PACSEA / The Martin Center / University of Cambridge & The Institute of Southeast Asian Studies, respectively;
- Taw Sein Ko & Duroiselle, Chas., eds. (1919/1972): *Epigraphia Birmanica. being lithic and other inscriptions of Burma*, Vol. I/ Part I, Reprint (1972) of the 1<sup>st</sup> ed. (1919), Rangoon: Archaeological Survey of Burma / Government Printing;
- Tha Myat, U, transl. & ed. (1951):  $mr[a]cet\bar{\imath}\ py\bar{\imath}\ kyok-s\bar{a}$  ('Myazedi Pyu inscription', in Burmese, apart from two pages in English), Rangoon: Democracy Publishing;
- \_\_(1963): pyū ph[a]t-cā pyū akkharā s[a]muinḥ/Pyu reader. A history of Pyu alphabeth, Rangoon: U Hla Din / The National Printing Works;
- Than Tun (1958): (no title), unpubl. ms., (Rangoon): Department of History & Political Science / Rangoon University;
- Ulving, Tor (1997): Dictionary of Old and Middle Chinese. Bernhard Karlgren's

Grammata Serica Recensa Alphabetically Arranged, (Orientalia Gothoburgensia 11), Göteborg: Acta Universitatis Gothoburgensis;

## Appendix: The transliterated text and the close translation

#### DRAFT - NOT FOR CITATION

- rr siri rr datha'gada ba 'do banh binh pa'dva + sgu 'dah ba tva<sup>5</sup> thva sāvu pa do pé pî pad<sub>u</sub>w + səga dá pa t<sub>u</sub>w z t<sup>h</sup><sub>u</sub>w z sawu tat<sup>h</sup>agata siji The Buddha HON HON give AUX sermon I M VI C prosperity
- 2.  $t^h hr ? \dot{s}n : - \dot{b} : - \dot{t}v : - t^h d (||)^6 \dot{v} \dot{t} : \dot{p}r : - \dot{r} m d^h n bv ? \dot{m} - \dot{b} : - \dot{s} ||$ tha hran asnih binh t'vanh tha dan (||) yan tin prih rimadhanabva a+mi binh si || t<sup>h</sup>a <sup>h</sup>ıé ?ə<sup>h</sup>nî pî twé  $t^{h} \vartheta + d\varepsilon$ je ti + p.jî . jimat<sup>h</sup>anap. j<sup>w</sup>o ?ə + mi pî si this country Arimaddanapur<sup>7</sup> 3.P<sup>8</sup> + name AUX N & VIII year AUX leave EMPH
- 3.  $\dot{s}r \dot{t}r \dot{b}\dot{f} v n \dot{d}\dot{f} tv d^{\hat{h}} m r i ? \dot{m} \dot{b}\dot{f} \dot{s} \| ? \dot{d}\dot{f} \dot{f} \dot{b}\dot{f} ? \dot{f} ? \dot{f}$ sri tribhu'vanadintyadhamaraja ami binh si || a'doh le banh avoh ma trip<sup>h</sup>uwonatitjat<sup>h</sup>amarasa ?əmi pî si ?ədó le pé ?əwó sri Tribhuvanādityadhammarāj name AUX N that and HON lord king wife
- yah triloga'vadasaga'de'vi binh si ami dhau asah rajaguma binh já tji]skawotasakadewi pî si ?əmi thou ?əsá jasakuma pî (wife) Trilokāvatamsikādevī AUX N name that son Rājakumār AUX
- 5.  $\dot{s}$ -?- $\dot{m}$ -||-?- $\dot{v}$ --tr:- $\dot{k}$ r--- $\dot{h}$ :-- $\dot{p}$ :-- $\dot{p}$ :-- $\dot{t}$ :--||-- $\dot{d}$ \*-- $\dot{b}$ :-- $\dot{m}$ -v:-- $\dot{b}$ :-- $\dot{h}$ ---t-10-d--(||)11 si ami || avan trah kra hoh binh panh toh || dhau banh mayah binh hi ta'dan (||) ? awo tjá kj<sup>w</sup>o hó pî pé tó thou pé mojá pî hi to+de si ?əmi lord royal village III AUX give LOC that HON wife AUX die EMPH si name

<sup>8</sup> 'third person, possessive'

<sup>&</sup>lt;sup>5</sup> Blagden transcribes v following another consonant letter in a ligature in most cases as  $\bar{u}$  (Blagden 1919:62ff.).

<sup>&</sup>lt;sup>6</sup> Face B omits this stop // .

<sup>&</sup>lt;sup>7</sup> Following Blagden (ibid), I render toponyms and personal names as they appear in Old Burmese.

<sup>&</sup>lt;sup>9</sup> Originally, Face A appears to have had  $2-\dot{v}$ : The markings that symbolise the vowel sign o are apparently added at a later time. Face B seems to have had ?-v: right from the start. The visarga indicates tone sandhi of the morpheme with the meaning 'lord' that is elsewhere consistently written  $7-\dot{v}$ .

<sup>&</sup>lt;sup>10</sup> Face A seems to show t, which doesn't make sense to me because of what I preliminarily assume that the "subscript dot" was caused by damage; Face B shows the expected form t.

<sup>&</sup>lt;sup>11</sup> Face A omits the stop // .

- 6.  $(b:)^{12}$ --m-y:--?-d/tr- $^{13}$ --tr:--kr-- $^{h:}$ -- $^{h:}$ --
- 7.  $d^{n}$  -- b:---td:--b:---tsv---b:---t-d--- $\|(o\|)^{14}$ -b:--
- 8.  $\mathring{r}:-\parallel-\mathring{d}^{H}--\mathring{b}:--m-y:--?-s:--r-j-\mathring{g}-m---\mathring{b}:---\mathring{s}--?-\mathring{m}--\parallel--?-\mathring{d}^{H}--\mathring{b}:--\mathring{d}^{H}--\mathring{b}:--\mathring{d}^{H}--\mathring{b}:--\mathring{d}^{H}--\mathring{b}:--\mathring{d}^{H}--\mathring{d}^{$
- 10. bv-d<sup>ĥ</sup>--?-c<sup>h</sup>:--B--br-d̄-m--t<sup>h</sup>--tv--b̄:---s̄---ky:-- $\|$ --d̄̄---b̄:---bv-d̄---b̄:---t̄: bvadha achaḥ bo bradima tha tva binḥ se kyaḥ  $\|$  dhau banḥ bvadha binḥ tuḥ pout<sup>h</sup>a [?əs<sup>h</sup>á+po]+pratima t<sup>h</sup>a tou pî se kjá t<sup>h</sup>ou pɛ́ pout<sup>h</sup>a pî tú Buddha [image+form]+image gold LOC AUX order EMPH that HON Buddha AUX LOC
- 11.  $t^h m v$ :-- $t^h : --t^h : --t^h$

<sup>13</sup> Face A shows d, Face B shows t.

11

<sup>&</sup>lt;sup>12</sup> Face A omits b:.

<sup>&</sup>lt;sup>14</sup> Face A has ||o||, occurring at the end of the line; Face B omits o||.

<sup>&</sup>lt;sup>15</sup> Face A has f, which might indicate sandhi; Face B exhibits the expected form f.

<sup>&</sup>lt;sup>16</sup> Face B omits this b:.

- 15. m(-)h-th-18-|--tr:-b:--mv-g-t-bv-d-d-s--th-19-|---tr:-b:--su-m-d-b-d-20 m(a)hathe | traḥbaṅḥ mva'galubvadadiṅsa the | traḥbaṅḥ saumedha ba'diṅ m(ə)hathe tựá + pé mougalupoutatisa + the tựá + pé soumetha + padi Mahāther HON Muggaliputtatissatther HON Sumedha + Paṇḍit
- 16. |--tr:-b:--vr-hm-b--|--tr:-b:--vr-hm-ḍ-ŷ:-<sup>21</sup>-|--tr:-b:---sv--|--tr:-b: | traḥpaṅḥ vrahmaba | traḥbaṅḥ vrahmadeyo: | traḥbaṅḥ sva | traḥbaṅḥ tựá + pế wựahmapa tựá + pế wựahmadejó tựá + pế sou tựá + pế HON Brahmadepāl HON Brahmadiv HON Son HON
- 17.  $s-g-\dot{s}-\dot{v}-r--b-\dot{d}-\|-a^{h}--tr:-\dot{b}:--\dot{s}-g^{h}-^{22}-tv--?-\dot{h}\eta-^{23}-\dot{d}---\dot{d}v--t\dot{q}:$  sagasi'vara ba'din  $\|$  dhau traḥ-banḥ sangha tvo ahnu din 'dva t'da: sagasiwa.qa + pədi thou t.qa + pé sekha to ?əhnu ti dou tədá

<sup>&</sup>lt;sup>17</sup> Face B omits this pr.

<sup>&</sup>lt;sup>18</sup> Face B has mh-<sup>c</sup>

<sup>&</sup>lt;sup>19</sup> Face A has *mv-g-\frac{4}{1}-bv-d-\d{d}-s-\frac{c}{4}^t* 

<sup>&</sup>lt;sup>20</sup> Face A has [sv]-m<sup>c</sup>- d<sup>fi</sup>-b-d<sup>f</sup>.

<sup>&</sup>lt;sup>21</sup> Face A has *vr-d-v*:

<sup>&</sup>lt;sup>22</sup> Face B appears to exhibit  $\overset{c}{S}$ - $g^{f}$ .

<sup>&</sup>lt;sup>23</sup> This is a doubtful reading.

Sangasenavara Pandit that HON monk PL front? place LOC lord

- 18.  ${}^{t}_{t---}b:---\dot{b}:---c^{h}_{---}c$
- 19.  $\mathring{g}$ -m--  $\mathring{b}$ :-- $\mathring{s}$ -- $\mathring{b}$ :-- $\mathring{b}$ :-- $\mathring{b}$ :--st-b-n--bv-d $^{f_0}$ --- $\mathring{b}$ :-- $\mathring{b}$ :--- $\mathring{b}$ :---- $\mathring{b}$ :---- $\mathring{b}$ :--- $\mathring{b}$ :---- $\mathring{b}$ :----- $\mathring{b}$ :---- $\mathring{b}$ :----- $\mathring{b}$
- 20.  $t-\dot{q}--\parallel-\dot{q}^{m}--\dot{g}--?-\dot{h}^{u}$   $1-\dot{b}$ :  $--\dot{s}$ :  $-\dot{r}$ :  $-\parallel-s-m-n-\dot{f}$   $-kr--\dot{t}-\parallel-^{27}-r-\dot{b}^{i}$   $-kr--\dot{t}-\parallel-\dot{j}$ :  $-^{28}$  ta'dań  $\parallel$  dhau 'go ahḷau piṅḥ saṅḥ ro  $\parallel$  samanaḷoṅ kra taṅ  $\parallel$  rabai kra taṅ  $\parallel$  jiṅ təde  $t^{h}$ ou go ?əhḷəu pî sé ro samənaḷo kạwo te rəpe kạwo te kại EMPH that temple donation AUX order time Sakmunalon village one Rapāy village one Hen-
- 22.  $r-j-\ddot{g}-m-\dot{y}--\ddot{g}-bv-d^{h}--?-\dot{v}--t\dot{q}v--\dot{b}:--\ddot{c}^{h}--t-\dot{q}--\|-\dot{y}-r-^{29}--\dot{b}:-\dot{q}^{i}--\ddot{c}^{h}--\|-^{30}-\dot{y}-^{31}$  rajaguma yan 'go bvadha avan t'dva binh chai ta'dan  $\|$  yan ra binh 'din cho  $\|$  yan rasakuma je go poutha '?əwo tədou pî she təde je la pî di+sho je Rājakumār this temple Buddha/ lord BEN AUX order EMPH this pray AUX EMPH this

<sup>&</sup>lt;sup>24</sup> Blagden notes a blur instead of // in Face A (Blagden 1919:63, fn.1).

<sup>&</sup>lt;sup>25</sup> Face A has just  $b^i$ ; the diacritic symbols have probably been omitted because of lack of space.

<sup>&</sup>lt;sup>26</sup> Blagden transcribes gūdha but adds in fn. 3 "For *Būdha*" (Blagden ibid.).

<sup>&</sup>lt;sup>27</sup> Face B has //

<sup>&</sup>lt;sup>28</sup> Face A has been retouched; I read the concerning graph in Face B as  $\int_{1}^{L} f^{(1)}$ , in line with Blagden (ibid:63).

<sup>&</sup>lt;sup>29</sup> Face A clearly had originally r (the n being a later correction), but

<sup>&</sup>lt;sup>30</sup> Face A is blurred at this place, possibly because of damage.

<sup>&</sup>lt;sup>31</sup> Face A is blurred at this place, possibly because of damage.

<sup>&</sup>lt;sup>32</sup> Face B has  $\mathcal{E}^h$ , possibly because of damage.

plete order

24a. 
$$\dot{y}$$
---tr:- $^{33}$ - $\dot{t}$ --mtv---kn:--- $\dot{q}$ --- $\dot{g}$ --s:-- $^{4}$ -- $^{34}$ -|-- $\dot{g}$ --- $\dot{p}$ t--- $^{4}$ --(|) $^{35}$ - $\dot{g}$ -- $^{3}$ r:-- $^{4}$ --(|) $^{36}$  yan tran tin mtva knan dva gi sah le | gi pli le (|) gi srūh le (|) je tlá tî mətou kən dou ki sa: le ki pli le ki srú le this vassal (place) BEN people PL my son/ or my grand- or my kins- or child son/child man

- 25. bv-d<sup>h</sup>---?-v--ġ:---h't:--t:---m--ḍ'--|--g--hn'--ch-g--br---pḍ---m--t:--ŋv:--bv:--||
  bvadha avan ganh hḷinh toh ma 'din ga hnin chiga bro p'da ma tah nvah bvah ||
  poutha ?əwo ké hḷi tó ma di ka hni shika pṭwo pəda ma tá ŋóu bóu
  Buddha lord I ? BEN REL put if ? harm violence do EMPH? REL PL? BEN
- 26.  $\dot{y}$ --- $\dot{b}$ :--- $\dot{b}$ v-d $^{\dot{h}}$ --A $^{\dot{i}}$ r- $\ddot{m}$ -d $^{\dot{e}}$ -y--- $\dot{q}$ -b:- $\dot{q}$ - $\dot{c}^{\dot{h}}$ :---- $\dot{t}$ ----tmv--m--- $\dot{p}$ :--- $\dot{c}^{\dot{h}}$ - $\dot{c}^{\dot{h}}$ :---r-r-z- $^{39}$  yań baṅḥ bvadha arimede'ya 'daṅ-baḥ'dichiṅḥ tiṅ tmva ma paṅḥ che + cho: r r jɛ bɛ́ poutha 'arimeteja dɛ + pá + di + sî ti təmou ma pé she + shó this HON Buddha Arimittiyā Tavatimsa? (place) present not give? EMPH

#### Close translation:

1-2a: Prosperity! 1628 years have elapsed after The Venerable Buddha gave (his last) sermon.

2b: This country, named Arimaddanapur,

 $^{33}$  It is hard to decide if the graph on Face A is tr: or kr:, but Face B clearly shows tr: at this position.

<sup>&</sup>lt;sup>34</sup> (The photo of the rubbing of) Face A exhibits a dot to the right of I, in an aberrant position; as Face B does not show this dot, I assume that it is the manifestation of damage, not of the writing system.

<sup>35</sup> Face A omits this stop.

The short horizontal curved line  $\widehat{\phantom{a}}$  above f appears only in Face A. It might be interpreted as an equivalent to the standard symbol for a stop f, possibly added after the completion of the inscription; a similar curved line appears above the final stop f in line 26 of Face A. Face B has the regular stop f.

<sup>&</sup>lt;sup>37</sup> The the reading of the subscript letters I and u is doubtful.

<sup>&</sup>lt;sup>38</sup> Judging from the general Pyu writing conventions as well as from comparison with the inscriptions in the other three languages, I would have expected a stop here but neither Face A nor Face B seems to show it.

<sup>&</sup>lt;sup>39</sup> Probably because of lack of space, face A has just  $\widehat{I}$ , instead of r-r-z.

- 3a: has a king Tribhuvanādityadhammarāj is the name.
- 3b-4a: And that is the noble lord's wife Trilokāvatamsikādevī is the name.
- 4b-5a: That son Rājakumār is the name.
- 5b-5c: As the noble wife, who had been given three vassal villages by the king, died,
- 6: the lord gave the vassals of the three vassal villages of the noble wife to the noble wife's son.
- 7-8a: At the time (when) that lord, (who) had been king for 28 years, was very ill, having not yet died,
- 8b: that noble wife's son with the name Rājakumār,
- 8c-9a: remembering that that lord had nourished (him) and done favours,
- 9b-10a: ordered/made that noble Buddha image of pure gold for (him).
- 10b-11a: When (lit. "the time") (he) presented that [noble] Buddha to (him), (he) thus spoke to (him):
- 11b-12a: "This golden Buddha, I / the lord's son have ordered/made (I) give to you / the noble lord.
- 12b-13b: These three villages of vassals that (I) was given (I) give to this golden Buddha as (their) lord."
- 13b-14a: (At) that time the great lord exclaimed: "Well done, well done!"
- 14a-18a: In front of those venerable (Buddhist) monks, the venerable chief monk, the venerable Muggaliputtatissather, the venerable Sumedha Paṇḍit, the venerable Brahmadepāl, the venerable Brahmadiv, the venerable Son, (and) the venerable Sangasenavara Paṇḍit, the lord poured (lit. "gave") water onto the image.
- 18b-20a: That being finished, the wife's son, who is called Rājakumār, enshrined the golden Buddha (in a temple) and ordered/made the golden stupa of the temple.
- 20b-22a: When (lit. "time") this temple donation was ordered/made, this noble wife's son, Rājakumār, put the three villages Sakmunalon, Rapāy, and Henvuiv (to) this temple pagoda [or: temple and pagoda] (he) had ordered/made for the lord,
- 22b-23: and prayed thus: "Be this what I did the cause of giving to (me) omniscience and complete wisdom!
- 24-26: On behalf of these vassals (who) I put (to) this Buddha that I dedicated to the lord, if people my sons, my grandsons, my kinsmen, or other persons do harm or violence to (them), (they) should not be given the presence of this noble Buddha Arimittiyā.