



Studies in Pyu Epigraphy, I

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Studies in Pyu Epigraphy, I

State of the Field, Edition and Analysis of the Kan Wet Khaung Mound Inscription, and Inventory of the Corpus

Arlo GRIFFITHS, Bob HUDSON, Marc MIYAKE & Julian K. WHEATLEY

Résumé

Au premier millénaire de notre ère, avant l'arrivée de l'ethnie birmane, le centre de la Birmanie abrita un important système urbain. Les chercheurs comme le grand public connaissent sa culture sous le nom « Pyu ». Les traces écrites des Pyus prennent la forme d'inscriptions sur pierre ou d'autres supports, rédigées en trois langues, chacune dotée de son propre type de graphie indienne. Le pyu, langue vernaculaire de la famille sino-tibétaine, domine ; mais le sanskrit et le pali, langues cosmopolitaines, sont également représentées. Cette étude présente le contexte archéologique du corpus épigraphique ainsi que l'histoire des recherches antérieures sur la langue pyu ; elle établit la méthode et la notation dont les recherches à venir pourront se servir pour analyser et représenter les données épigraphiques en pyu ; et elle résume ce que nos recherches nous ont permis jusqu'ici de mieux comprendre en matière de graphie et de langue pyu. Les connaissances dans ce domaine sont enrichies par le biais d'une édition avec analyse linguistique de l'inscription bilingue sanskrit-pyu du tertre de Kan Wet Khaung. Enfin, l'inventaire des inscriptions relevant de la culture pyu fixe un identifiant stable pour chaque entrée, en lien avec les données pertinentes (lieux de conservation, documentation visuelle, références, etc.).

Mots-clés : pyu ; inscriptions ; sino-tibétain ; sanskrit ; pali ; Birmanie ; Sriksetra ; graphies brāhmī ; bouddhisme.

Abstract

An urban system flourished in central Burma in the first millennium CE, before the ascendancy of the Burmese. Its culture is known to scholars and the public as 'Pyu'. The written traces of the Pyus take the form of inscriptions on stone and other materials, composed in three languages each written in its own type of Indic script. Pyu, the vernacular of Sino-Tibetan stock, predominates; but the cosmopolitan Sanskrit and Pali languages are also represented. This study sketches the archeological context of the epigraphic corpus and provides a history of prior research on the Pyu language. It establishes a methodology and notation for analyzing and representing Pyu inscriptional materials that can be applied to future research, and summarizes what we have been able to ascertain so far about the Pyu script and

language. It advances knowledge in this field by an edition and linguistic analysis of the important bilingual Sanskrit-Pyu Kan Wet Khaung Mound inscription. It concludes with an inventory of known inscriptions associated with the Pyu culture that establishes stable reference numbers for each item, in association with pertinent data (location, available reproductions, references, etc.).

Keywords: Pyu; inscriptions; Sino-Tibetan; Sanskrit; Pali; Burma; Sriksetra; Brāhmī scripts; Buddhism.

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State of the Field, Edition and Analysis of the Kan Wet Khaung Mound Inscription, and Inventory of the Corpus

Arlo GRIFFITHS, Bob HUDSON, Marc MIYAKE & Julian K. WHEATLEY*

1. Introduction

In this article we lay the groundwork for the further study of an important epigraphic corpus of early Southeast Asia that has so far received rather limited scholarly attention, mainly because of the challenges involved in deciphering the dominant language in this corpus, known in scholarship as Pyu. After describing the archaeological context in which this corpus must be situated, we present our methodology toward deciphering the Pyu language, before turning to a bilingual Sanskrit-Pyu inscription which promises to offer some keys to a better understanding of that language. An inventory of our epigraphical corpus concludes this article. Three-digit numbers (prefixed with the letters PYU or also without such prefixation) refer to the numbers assigned to individual inscriptions in this inventory. We use the following general conventions in discussing ancient language data:

| | |
|-------|----------------------------|
| <...> | graphemic transliteration |
| /.../ | phonological transcription |
| [...] | phonetic transcription |
| C | consonant |
| V | vowel |

Morphological tags in small caps follow the Leipzig Glossing Rules (Comrie *et al.* 2015). Tags that are not in the rules are AOR (aorist), EMPH (emphatic), HON (honorific), and RLS (realis). We cite languages using the following abbreviations, conventions, and sources:

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It is a pleasure to put on record here our gratitude to authorities in Myanmar, notably the Director General of Archaeology, U Kyaw Oo Lwin, for repeatedly granting us permission to do research in their country. Our research has benefited at almost every step from the unrelenting support of Nathan W. Hill and D. Christian Lammerts.

| | |
|-----|---|
| MC | Middle Chinese in Baxter's (1992) notation as published in Baxter and Sagart (2014). |
| MSC | Modern Standard Chinese |
| OB | Old Burmese in modified Indological transliteration as applied also to Pyu, and explained below (§1.5.2). |
| OC | Old Chinese in Baxter and Sagart's (2014) reconstruction. |
| OM | Old Mon in modified Indological transliteration (§1.5.2). |
| OT | Old Tibetan in the Indological system recommended by Hahn (1996). |
| Ta. | Tangut in Gong Hwang-cherng's reconstruction as printed in Lǐ (2008). The Tangut font used here is copyright of Prof. Jing Yongshi. |
| WB | Written Burmese in the simplified Indological system described here: http://rci.rutgers.edu/~dcl96/dcl.transliteration.pdf (accessed 06/07/2016). |
| WT | Written Tibetan in the Indological system recommended by Hahn (1996). |

1.1 The archaeological context of our corpus

1.1.1 The urban system in first-millennium Burma

The territory of Burma is situated east of the Indian subcontinent, south of China, and west of Thailand (fig. 1). Upper Burma, the focal area of our study, consists of a river valley system bounded by jungle-clad hills. The alluvial lowlands of the Irrawaddy Valley provided resources that enabled the development of socially stratified urban centers and polities founded on wet-rice agrarian economy. Carnelian beads from Pakistan, exploitable tree crops from Island Southeast Asia, legumes from India, and information about metallurgy, architecture, community management and agriculture had been moving around the land and sea trade routes of Southeast Asia since the Neolithic period.¹ There was sufficient space in Burma for population groups from burgeoning Iron Age centers such as the Samon Valley to experiment with urbanism without much conflict with each other.² The archaeological record attests to considerable hydraulic engineering skills for irrigation.³

The archaeological landscape of Upper Burma in the first millennium CE is marked by sites which share distinctive features. These include the use of large bricks (*ca.* 45 cm long, 10 cm thick), sometimes bearing fingermarks, incisions or stamps, to construct walls, palaces, and religious buildings; enclosure walls with corridor entry gates; burial practices involving urns with bones and ash; terracotta pottery; silver and gold coins; beads; gold objects; Buddha images and other Buddhist objects in silver, gold and bronze; and – most significantly in the context of this study – the use of writing.⁴ These features distinguish early urban sites from pre-urban and

1. Bellina 2003; Moore 2007; Higham 2014; Fuller *et al.* 2015; Castillo *et al.* 2016.

2. Hudson 2005b, 2014.

3. Moore *et al.* 2016.

4. Nyunt Han *et al.* 2007; Moore 2009.

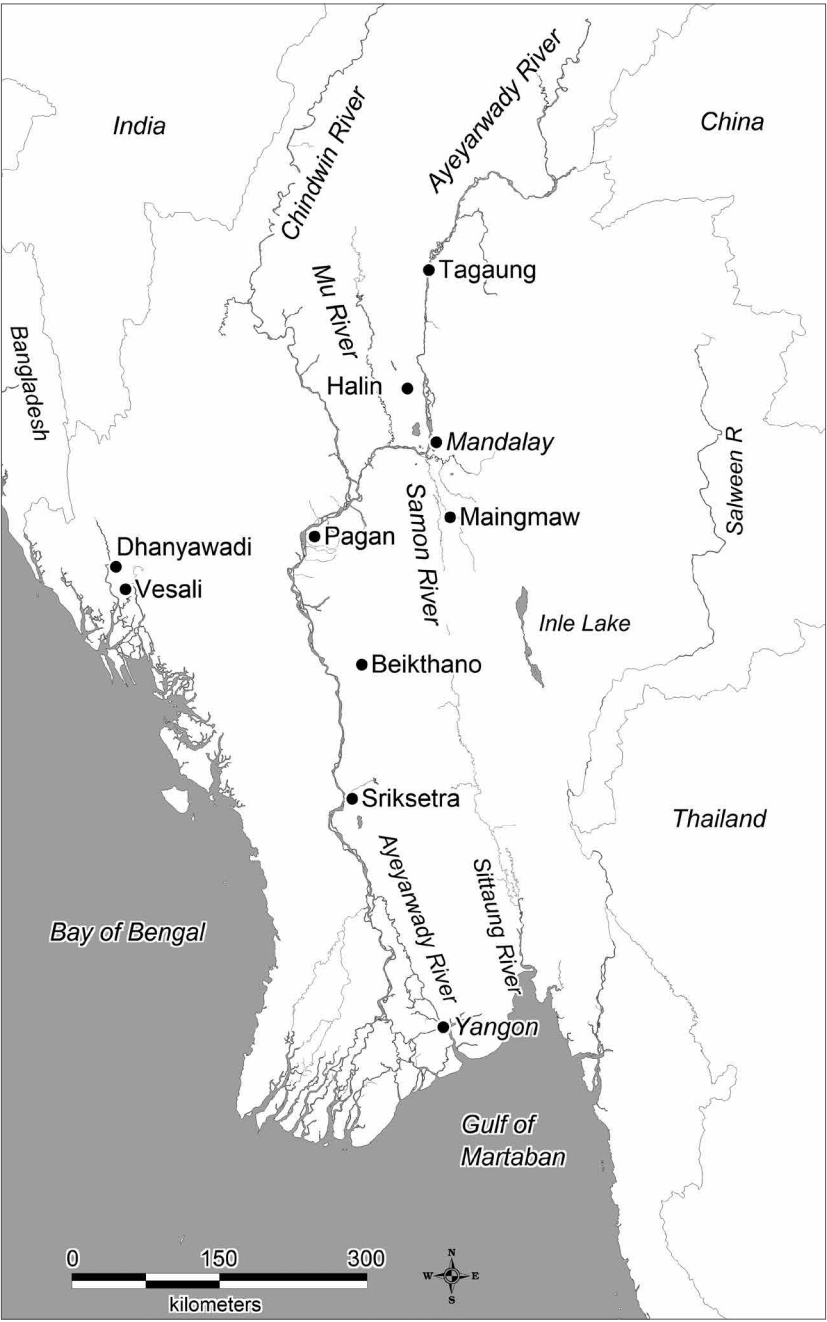


Fig. 1 — Important cities and sites. Map Bob Hudson.

pre-literate Bronze and Iron Age sites which are broadly characterized by inhumation burials rather than cremations, and an absence of brick structures.⁵

5. Hudson 2009, 2010; Moore 2007; Pautreau 2007; Pautreau *et al.* 2010.

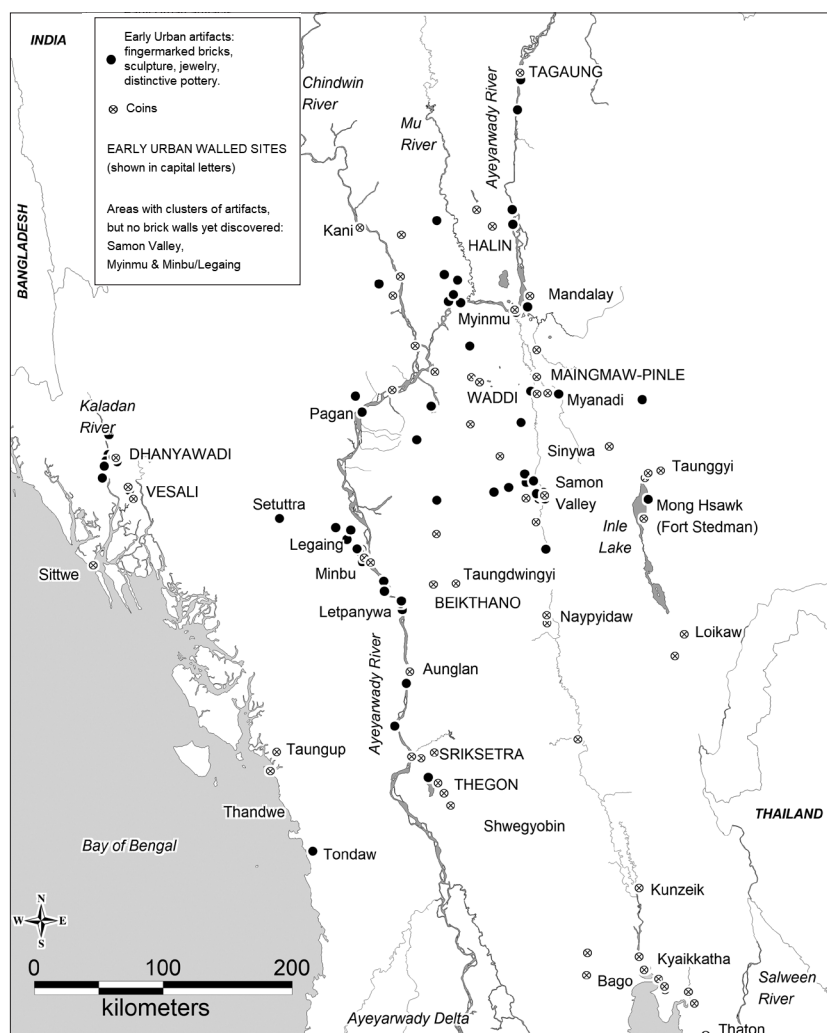


Fig. 2 — The urban system in first-millennium Burma. Map Bob Hudson.

Some of the sites sharing the characteristics listed above are low-density cities: clusters of villages and their farmlands located around an elite center, all surrounded by brick walls. Nine walled sites are known so far: Tagaung, Halin, Waddi, Maingmaw-Pinle, Beikthano, Sriksetra (the most extensive one at 12 km²) and Thegon in Upper Burma, besides Dhanyawadi and Vesali in Arakan on the west coast (fig. 2). The walled cities are entered by inward-facing brick corridors, some of which show the remains of wooden gates. Archaeology has revealed the remains of gatehouses that had been built over the gates, and rooms attached to the gates which putatively served some kind of administrative function.⁶ In several cases, stone sculptures have been found in these sites, or stones bearing inscriptions. The terracotta pottery and beads mentioned among the features listed above have an ancestry before the urban centers, and careful

6. Hudson 2014.

analysis is required to confirm that they do not come from the pre-urban period. However, we can be confident when we discover jewelry, intaglios, or stamped pottery with Indic symbols, such as the mythical water monster (*makara*), or images suggesting an interest in astrology, such as the twin fish of Pisces (Aung Thaw 1968a: 138), that these are artifacts of the early urban culture.

1.1.2 Radiocarbon dates

Radiocarbon dates exist for three of the walled sites of the early urban system:⁷ Halin (burnt timber from several city gates), Beikthano (a cremation and burial structure), and Sriksetra (iron extraction). The date ranges show that Halin was operational by the period 120–250 CE, Beikthano by 60–220 CE, and Sriksetra by 50–220 CE.⁸ An alternative date of 190 BCE for the beginning of the early urban system came with the successful bid made in 2014 for the serial inscription of the three cities on the UNESCO World Heritage list.⁹ However, to reach this specific date one needs to accept a voluntary misinterpretation of radiocarbon dating, by considering only the earliest limit of a date range that actually spanned several centuries. The radiocarbon date from Beikthano by which this erroneous proposition found its way into the UNESCO application, I-434 1950 ± 90 BP (Aung Thaw 1968a: 62; Bronson 1969: 142), calibrates at 95.4% probability to a *range* between 190 BCE and 260 CE.¹⁰ According to the currently available radiocarbon evidence, the three centers for which absolute dates exist were operational by the mid-1st to mid-3rd century CE period. We need not be surprised if artifacts or inscriptions from Halin, Beikthano, or Sriksetra turn out to be datable during or after this period. We would be surprised, though delighted, should they date earlier.

1.1.3 Early artifacts from Sriksetra

Informal finds by villagers at Sriksetra, generally digging at the behest of local antiquarians, hint at trade connections as far as Rome. Dice similar to those of imperial-period Rome have been found.¹¹ In fig. 3, note the second die from the left, in which the numbers 5 and 2 are on adjacent sides. This suggests local manufacture, copying the original while unaware that the rule is that all opposite sides should add up to seven. From the same period comes one of many intaglios found at Sriksetra (fig. 4), this example appearing to reference the Roman ‘Cupid on a hippocampus’ of *ca.* 200 CE (see Henig 1974: figs. 127–128). These small, portable, exotic items suggest participation in international trade in that same period, the early centuries CE, in which radiocarbon dates demonstrate that at least three of the walled cities were operational.

7. There is also a radiocarbon date for Tagaung, but much later than the period we are dealing with here: OZH 969, 1200 ± 30, which calibrates to a range of 710 to 940 CE, dates a group of burial urns at Tagaung to just before the Bagan period. Further evidence would be needed to place Tagaung earlier than this.

8. Hudson 2014, 2018.

9. UNESCO 2014.

10. We use the OxCal program (<https://c14.arch.ox.ac.uk/oxcal.html>) with reference to the data set published by Reimer *et al.* 2013.

11. See type specimens online in the British Museum (London), catalogue number 1923,0401.1198, and the Metropolitan Museum of Art (New York), catalogue numbers 97.4.122 to 97.4.129.



Fig. 3 — Dice from Sriksetra. Photo Bob Hudson.



Fig. 4 — Intaglio (impression on left, original on right) from Sriksetra, showing a design very similar to Roman 'Cupid on a hippocampus'. Photo Bob Hudson.

1.1.4 Early coins

Thousands of silver coins (and occasional gold ones) stamped with symbols designated in the archaeological literature as the *śrīvatsa* (a good-fortune symbol related to the Indian goddess Śrī/Lakṣmī), the *bhadrapiṭha* (throne or fire altar), the *śaṅkha* (conch), the rising sun (characteristic of coins from Halin), and the reclining bull (characteristic of coins from Vesali) have been found in Burma and attributed to the first millennium CE.¹² The most recent survey (Mahlo 2012) reaffirms the idea expressed by previous scholars that Burma is the home of the earliest Southeast Asian coinage; there are seventy types, some represented by thousands of specimens, some by only one or two. Size is based on Indian (Kuṣāṇa) and Roman models, and coins appear around the 4th century CE in Arakan, in Lower Burma at Pegu (Bago), as well as at Sriksetra and Halin. As in South Asian coinage of the period, coins in Arakan often bear names of kings. By contrast, not a single coin from Upper or Lower Burma bears any legend with date or reign name of an issuing ruler.¹³

1.1.5 A shared urban culture in transition

While the walled sites have led archaeologists and historians to assume that they form the central places of an urban system, there are many other sites with no known walls, but with assemblages that include large sundried or low-fired bricks, jewelry, coins, pottery, or beads with Indic symbols, or inscribed artifacts. There are three major clusters of sites with many finds of early urban materials, but no city walls: Myinmu, Minmu-Legaing, and the Samon Valley. Eight of the eleven sites where early inscriptions have been found are not associated with walled cities (fig. 2). This supports our hypothesis that the construction of the walled cities was a phase in the early urban culture, and that other settlement clusters functioned comfortably without the need to commit resources to wall construction. We are inclined to think that there was not a centrally administered polity covering all or even a majority of these sites. Rather, we imagine a widespread system of small polities sharing

12. Gutman 1978; Cribb 1986; Than Htun (Dedaye) 2007; Mahlo 2012.

13. One coin from our inventory (PYU026) seems to contain the name of a king, but its provenance is unclear.

some or all of the archaeological features mentioned above – and in this sense constituting a culture.¹⁴

Around the middle of the first millennium CE, the walled city, as a physical representation of the power of political leaders, seems to have been replaced as a focal point for society by religious monuments. Buddhism had made strong inroads. A cultural change is indicated by new modes of expression of political dominance through royal sponsorship of religious buildings built in or near the walled cities. At Sriksetra, buildings containing cremation urns, and a habitation site, functioned outside the city walls by the 5th–6th century period.¹⁵ A king Śrī Prabhuvārman, with his queen Prabhudevī deposited an inscription in a pagoda whose relic chamber survived into the 20th century when it was rediscovered at a site that has become famous as the Khin Ba mound.¹⁶ It seems indeed to be after the middle of the first millennium that an epigraphic habit takes root in the culture of the early urban sites.¹⁷ Among these, the majority are in a language which scholarship has come to refer to as ‘Pyu’. This name has been applied since the early 20th century to a presumed ethno-linguistic group which is considered to have migrated from elsewhere to occupy the sites defined by the characteristics discussed earlier, and to the culture represented thereby.¹⁸

1.1.6 Geographical coverage

Our study of the inscriptions of the first-millennium Upper Burma urban system covers the area in which inscriptions are known (fig. 5), or in which a range of artifacts, including brick-walled cities, helps to define the early urban system as such. So, as our map (fig. 2) indicates, we are looking at the area from Tagaung, in the north, to Kunzeik, where an early inscription was discovered, in the south.

Our map also shows the two early urban sites sharing the major architectural feature of brick walls and corridor gates in Arakan on the Bay of Bengal coast. One is Vesali, the other Dhanyawadi, home of the Mahamuni shrine, an important pilgrimage site for Buddhists certainly from the Pagan period onwards.¹⁹ The historical record begins in this area with a number of inscriptions, almost all in the Sanskrit language and engraved in a Northeastern Indian script that appears to date to the second half of the first millennium CE.²⁰ Besides epigraphy, art history and numismatic studies have also contributed to the notion that these cities were operational between the 5th and 10th centuries CE.²¹ Despite several points of archaeological comparability with

14. Hudson 2014.

15. Hudson 2014, 2018; Stargardt *et al.* 2015; Stargardt 2016.

16. Duroiselle in *ASI* 1926–1927, pp. 173–181; Thein Lwin *et al.* 2014.

17. On the notion of epigraphic habit, see MacMullen 1982, Hedrick 1999, and Salomon 2009.

18. Luce 1937; Stargardt 1990; Moore 2009; Krech 2012b; Thein Lwin *et al.* 2014.

19. Forchhammer 1891.

20. Johnston 1944; Gutman 1976; Griffiths 2015.

21. Gutman 2001. In our view, however, the construction of the oval brick walls with inward-turning corridor gates should be considered separately from these other archaeological remains. Comparison with the early Upper Burma sites suggests that the walls at Dhanyawadi and Vesali might date to the early centuries of the first millennium CE. This suggestion of an early date for the beginning of construction at these two walled sites remains to be validated by radiocarbon dates. Cf. Hudson 2005a, 2014.

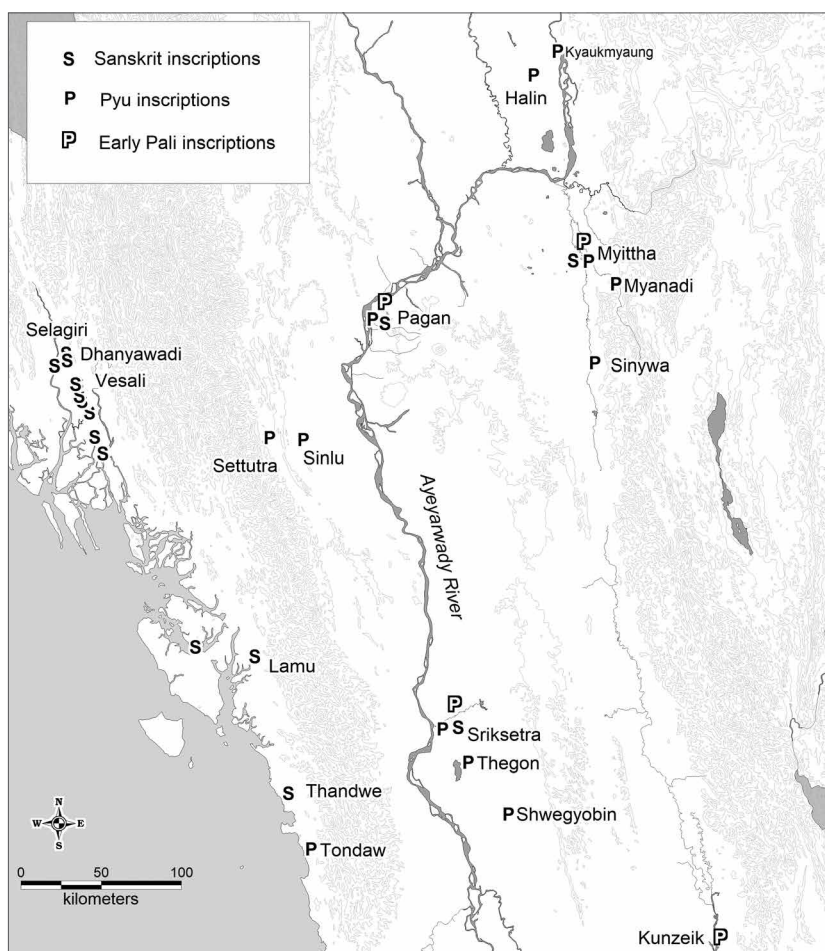


Fig. 5 — Inscriptions relevant to the present study, mainly from sites of the first-millennium urban system. Map Bob Hudson.

Upper Burma sites, and basic chronological overlap, there are decisive criteria for considering that the first-millennium inscriptions of Arakan constitute an epigraphical corpus distinct from the inscriptions of Upper Burma that are the focus of our study. The only marginal exception is our inclusion of an inscription in far Southern Arakan at the Tondaw monastery. This is an outlier among early urban ‘Pyu’ inscriptions, but in recent memory according to the local people Tondaw is linked, through a cattle trading trail across the hills, to the central plain. We include the Pali inscription from Kunzeik near Bago, even though there are no Pyu-language inscriptions in Lower Burma, because there is no other epigraphical culture to connect it to in the first millennium. It is only at a significantly later period than that to which we assign this and the majority of our inscriptions that this area would become home to a tradition of Old Mon epigraphy.²²

²² Stadtner 2011: 28.

1.1.7 From diffused early urban centers to the Pagan Empire

Because the early urban sites functioned independently, each followed its own geopolitical trajectory. Halin was attacked by unknown assailants, at some time in the first millennium that we can only say was after its gates were built in the 2nd–3rd centuries, and while the original gate timbers, from which we have dated the construction period, were still functioning structurally. The attack put the entire entry control system of the city permanently out of action, and the fact that nobody bothered to repair the gates suggests a significant political change.²³ However, Halin was still a functioning agricultural area during the 11th–13th centuries, attractive and economically viable enough to be incorporated into the Pagan empire, as inscription stones of the Pagan period attest.²⁴

Sriksetra is better served with radiocarbon dates, though the number of dates is still low compared to major sites from the same period in other parts of the world. However, with the available absolute dates, we can detect a village population living within the walls between the 7th and 9th centuries, and a funerary site, with a new style of burial urn, built between the 8th and 10th centuries on top of an earlier burial platform.²⁵ At Pagan, seat of the empire whose inscriptions attest to a hegemony that extended nearly to the boundaries of contemporary Burma,²⁶ radiocarbon dating indicates that Otein Taung, an earthenware production site in a central part of what became the city area, was becoming operational between the 8th and 10th centuries.²⁷ On the basis of these data, we can suggest that Sriksetra and Pagan overlapped in time. As time progressed, the presence of buildings in the Pagan style such as the East Zegu pagoda at Sriksetra,²⁸ records of a king visiting and restoring the Bawbawgyi pagoda at Sriksetra, and the appearance of bisque-fired Pagan bricks in and around Sriksetra to outmode the larger and softer early urban bricks, all suggest that the early urban site was absorbed by Pagan.²⁹ It is this absorption of formerly Pyu sites into the Pagan empire that probably explains why the Pyu-language epigraphic tradition was continued well into the Pagan period.

1.2 The designation ‘Pyu’

1.2.1 The beginning of a scholarly convention

As stated, most of the inscriptions that have been discovered at sites in the early urban system described above are written in an unknown language that scholars, from the very outset of studies in this field, have – not without

23. Hudson 2014, 2018.

24. See inscriptions 30, 35, and 375 from the main list of inscriptions (Burmese, Pali) in Duroiselle 1921 and *IB* IV, pl. CDXLIX and CDLX b; *IB* V, pl. CDLXXXVIII a.

25. Hudson & Lustig 2008; Hudson 2014, 2018.

26. Aung-Thwin 1985; Fräsch 1996.

27. Hudson *et al.* 2001.

28. Pichard, in Leider & Pichard 2006.

29. Hudson & Lustig 2008.

occasional reluctance – labelled as ‘Pyu’, after the name of the people presumed to have carried the culture in question. Though the label ‘Pyu’ has gained general acceptance, it is not found in any inscriptions now associated with the name. This is not necessarily surprising, since the need to name one’s own group generally only arises under special circumstances of contrast or enumeration.

The name was used by such early scholars as Pelliot (1904: 165 and *passim*) and de Beylié (1907a: 8), and in the annual reports of the Archeological Survey of Burma (*AWB* 1903–1904, p. 5; 1904–1905, p. 7). It was known from legends about this people recorded in the Burmese chronicles, where this name designates inhabitants of “Sarekhetarā”, a location identified since the 19th century with the ruins near Pyay, that have since become known as Sriksetra.³⁰ As Taw Sein Ko, an archeologist responsible for many of the earliest excavations of Pyu artifacts, noted, “The Burmans have a saying: ပြည်စစ်ချွန် ။ ပြည် ။ [*praññ·cac·lhyañ· || prū ||*], *i.e.*, ‘If a person is a native of Prome, he is of Pyu descent’” (*ASB* 1916, p. 20). The fact that Pyay (formerly anglicized as Prome) means ‘capital’ may reflect its earlier importance as a major political center during the Pyu period of Burmese history.

1.2.2 Burmese sources

The Old Burmese epigraphical corpus, whose oldest entries may date to the 11th century,³¹ contains some mentions of the word Pyu. These were documented in a 1932 article by G.H. Luce. In some cases, it clearly has ethnic reference, *e.g.*, *kantū pyū kun mli* meaning ‘Kadu and Pyu upland’, the Kadu being an ethnic group which has, unlike the Pyu, survived to the present day (Luce 1932: 1; 1985, I: 66).

The Glass Palace Chronicle of the Kings of Burma, which was compiled in the 19th century but makes reference to chronicles composed as early as the 15th century, tells the story of the founding of Sriksetra and the rise and fall of the Pyu as part of the etiological myth of Pagan. *The Glass Palace Chronicle* begins the history of Pagan (then called Arimaddana) with King Pyū So Thīḥ (who later changed his name to Pyū Mañḥ Thīḥ). According to the story, he got his name because he was raised by two Pyu villagers (Pe Maung Tin & Luce 1960: 40). In the chronicle, Pyū So Thīḥ’s reign is cast back into the early first millennium, but the story is set in the Pagan region and is likely to be a much later concoction. The Pyu were also an established member of the “101 peoples (of the known world)”, a notion with earlier Indian antecedents adapted by the Burmese to local circumstances and so repopulated with representative peoples (U Tin 2001: 131–137).³² One version lists the seven Burmese peoples – a subcategory of the 101 – as: the Mranma proper, the Pyu, the Sak, the Tavoyans, the Danu, the Taungthu

30. For further details on the historically attested names of the site now generally known as Sriksetra, see Griffiths & Lammerts 2015: 996.

31. See Duiroselle (1921: v–vi) and Aung-Thwin (2005: 179–86).

32. The notion seems to be first attested in Burma in Ānandacandra’s pillar inscription from Mrauk U (Johnston 1944: 380).

and the Taungla.³³ By this time, the spelling <prū> had gained currency, and even though the official modern spelling is <pyū>, the spelling with <r> also persisted into modern times.³⁴

There have also been attempts to read the name Pyu into the syllable *pu* occurring in *pugam*, the Old Burmese name for Pagan (Taw Sein Ko 1913: 20) and in the phrase *pu ta sin mañ* that appears in a donative inscription from Bodhgayā in India, written in Burmese and dating from the late 13th century (Luce 1976: 40–41; Gongkatsang & Willis 2013). The latter has been interpreted as meaning the ‘king’ (*min*) of the ‘one hundred thousand’ (*ta sin*) ‘Pyu’ (*pu*) (ASB 1916, p. 22), but, as Luce notes, this interpretation is quite unlikely, and the sequence *pu ta sin* is more likely to be a name (Luce 1976: 41 n. 40 and 1985, I: 68). Gongkatsang & Willis translate the whole phrase simply as ‘Prince Buddhasena’.

1.2.3 Chinese sources

The Old Burmese records postdate by several centuries the decay of the urban system described in §1.1. Evidence that is more directly contemporary with the ascendancy of that system around the middle of the first millennium comes from Chinese sources. Paul Pelliot (1904: 165, 168, 172) noted that the characters 驃 and 剿 “*p’iao*” were used to refer to a people along what is now the Sino-Burmese frontier, and argued that the name was in all likelihood cognate to the name Pyu, which had been passed down through Burmese tradition (see also Luce 1932: 1 and P. Wheatley 1983: 167). The Chinese characters in question both contain the phonetic element 票, pronounced *pjiew*, *phjiew*, or *bjiewH* in Middle Chinese, but *piào* in Modern Standard Chinese. The character 驃 is MC *pjiewH*, *phjiewH*, or *bjiewH* (MSC *piào* or *biào*) and 剿 is MC *pjiew*, *pjiewX*, *phjiew*, *phjiewH*, *bjiew*, or *bjiewH* (MSC *piào*). We will hereafter use Piao as a cover term for these names.

Aung-Thwin (2005: 15), letting the Cantonese pronunciation of the characters 驃 and 剿 (that is, [pʰi:w]) stand in for MC, argues that the evidence linking the Chinese to the Old Burmese name Pyū is insufficient: “The connection between the two, in short, is based on modern assumptions of what the ancient pronunciations of both the Cantonese and Old Burmese words might have been.” It is true that the Cantonese pronunciation reflects an innovation (MC *jie* > Cantonese [i:], cf. Norman 1988: 217) postdating the first millennium and therefore does not reflect how the characters for Piao were pronounced when those Chinese sources were originally written. Moreover, it is also true that the MC readings for Piao contain a sequence *-ie-* that seems not to parallel anything in Old Burmese *pyū*. However, there is no guarantee that the Old Burmese name is closer to the unknown original than MC readings of the *pjiew* type; and even if the Burmese name is closer, the Chinese would have been inclined to transcribe a Pyu-like name with

33. *The Royal Orders of Burma*, ed. Than Tun 1983–1990, II: 218–219.

34. On the correspondence <r>/<y> in Old Burmese and Written Burmese, see the paper “Medials in Burmese” in Nishi 1999: 1–10.

-*jiew* despite its -*e*- since syllables of the type labial + -*jw* were rare in MC (and MC lacked the syllable *phjw*). Although the Chinese script contains thousands of characters, it is far from a perfect syllabary covering all possible consonant and vowel combinations, and its users worked around gaps when transcribing foreign words.

The Piao sent missions to the Chinese court in 800 and 801–802, the latter including thirty-five musicians who sang songs whose titles are recorded in the Chinese *Xīn Táng Shū* (新唐書, *New History of the Tang*).³⁵ Luce, observing the frequency of syllable-final consonants in these transliterated song titles, and being under the false impression that Pyu had only open syllables, wondered if the songs were perhaps Mon rather than Pyu (Luce 1985, I: 73). We now know differently: as will be shown below (§1.5.3.15), Pyu, like Old Mon, had an extensive set of final consonants, while open syllables were relatively rare, at least in the orthography of the language. One of the song titles is transcribed in *juàn* 222 *xià*, p. 6314, as 沒馱彌 (MC *mwot-da-mjie*; MSC *mòtuómí*) and glossed as 佛印 (MC *bjut 'jinH*; MSC *fó yìn*) which means ‘Buddha’s seal’. For the characters 沒馱彌, Luce gives the MC reconstruction **muət-d’â-myie*. He proposes that the syllables *muət-d’â* here represent a Pyu word *budha* but leaves *myie* unexplained (1985, I: 64). We agree with him on the interpretation of the characters 沒馱, and can now suggest that the whole song title is, despite the gloss, likely to represent the Pyu phrase *budha ḥay-mḥ* meaning ‘Lord Buddha’,³⁶ because of the possibility that what is *m* in Luce’s reconstruction was pronounced /mb/,³⁷ which is a possible phonetic interpretation of Pyu <ḥ> (§3.4.3). If this hypothesis is true, it would provide an unambiguous link between the Piao of Chinese annals and the Pyu of Burmese tradition.

The presence of syllable-final consonants in Pyu bears on another proposal. Pelliot (1904: 174) and later Luce (1932: 1 and 1985, I: 46–47) remarked that in the Chinese *Jiù Táng Shū* (舊唐書, *Old History of the Tang*, *juàn* 197, p. 5285)³⁸ and the *New History of the Tang* (*juàn* 222 *xià*, p. 6306), the Piao are said to call themselves by names transcribed in Chinese as 突羅成 (MC *dwot-la-dzyeng*; MSC *tūluóchéng*) and 突羅朱 (MC *dwot-la-tsyu*; MSC *tūluózhū*) and are said to have exonyms in Java transcribed in Chinese as 徒里拙 (MC *du-liX-tsywet*; MSC *túlǐzhuō*) and 徒里掘 (MC *du-liX-gjut*;

35. This text was compiled by a team lead by Ōuyáng Xiū and Sòng Qí in 1060 CE. We use the edition by Zhōnghuá shūjú (1975).

36. Attested in the spellings *būdha ḥay-mḥ* (020.4) and *ḥut-dha ḥay-mḥ* (020.9). The word for Buddha is spelled *budha* in 008.11 and 074.5, but the most commonly attested spelling is *budha*.

37. This possibility is suggested by Coblin’s reconstructions (1994) of the mid-Táng capital dialect readings for the characters: **mor-da-mi*. Reconstructed **m* was phonetically [ʰmb] if it was followed by a non-nasal rhyme (Coblin 1994: 58). **m* [ʰmb] could represent foreign *b*: e.g., Amoghavajra (705–774), who worked in the Táng capital area, used 沒 **mor* [ʰmbor] to transcribe Indic *bud-* and *br-* as well as *mar-*. The Sino-Japanese Kan-on readings for those characters, borrowed from an earlier stage of that prestige dialect, are *botsu-ta-bi* from **mbot-ta-mbi* in the Old Japanese reconstruction proposed by Miyake (2003).

38. This text was compiled by Liú Xù and others in 945 CE. We use the edition by Zhōnghuá shūjú (1975).

MSC *túlǐjué*).³⁹ These names in MC pronunciation all contain a syllable-final *-t* that often corresponded to foreign *-r* (e.g., in 突厥 [MC *dwot-kjwot*; MSC *tūjué*] for *türküt, an early Chinese name for the Turks roughly contemporaneous with Piao and also containing the character 突) and was pronounced [r] in the mid- and late Tang capital dialect (Coblin 1994: 55).⁴⁰ Moreover, in an Old Mon inscription from the 11th century, describing ceremonies in connection with the building of Kyanzittha's palace in Pagan, three sets of singers are mentioned: the *mirmā*, the *rmeñ*, and the *tircul*.⁴¹ The first are, presumably, the Burmese and the second, the Mon. The third, in Luce's reasoning, is likely to be the name used by the Pyu themselves, and Luce continued to use it to designate the language and the script used for writing it. Tircul is not a likely name for a people whose language has no syllable-final consonants; but given what we now know, that the language has both syllable-final <r> and <l>, Luce's proposal looks much more feasible. The difference of connotation between the terms Tircul and Pyu remains an open question.

1.3 Delimitation and characterization of the corpus

1.3.1 Duroiselle's inventory

The first attempt to list Pyu inscriptions was that of Charles Duroiselle, who served the colonial archaeological survey from 1912 through 1939.⁴² In an article published in 1912 in the pages of this *Bulletin* (vol. 12), Duroiselle offered the first “*Inventaire des inscriptions pâlies, sanskrites, mōn et pyū de Birmanie*”. His inventory was organized first by language and then, within each language group, by chronological order. The fourth of the language groups, for Pyu, occupied no more than a single page (p. 33) and listed only five inscriptions. In 1921, the same scholar published a greatly expanded inventory, entitled “A list of inscriptions found in Burma”, which contained a two-page appendix B for Pyu inscriptions, now reaching up to fifteen items. Although new Pyu inscriptions have been and continue to be discovered, as far as we are aware no attempt has been made by any subsequent scholar to continue Duroiselle's inventory of Pyu inscriptions.⁴³ Experience in other fields of Southeast Asian epigraphy has demonstrated that inventories of inscriptions, which assemble the most important metadata concerning each inscription in a given corpus – its find-spot, present place of preservation, available estampages or photos, relevant bibliography, but also the nature (object type) of the support on which it is engraved, its dimensions, the number of lines that it spans, and the language(s) in which it is formulated – and assign a stable reference number for each one, are an

39. 掘 MC *gǐut* appears to be an error for 拙 MC *tsywet* corresponding to *-cul* in Mon *tircul*.

40. Although Coblin (1994) does not explicitly state that [r] persisted in the late Táng capital dialect, he consistently reconstructs it for that dialect throughout his book.

41. *Epigraphia Birmanica* III (Blagden 1923–1928), pt. I, no. IX: face B, l. 42; pp. 10 and 42.

42. See Pe Maung Tin 1951; also Tin Htway 2001: 36.

43. Early on in our work, we received useful notes from Tilman Frasch listing a number of Pyu inscriptions.

indispensable tool for organizing this kind of data.⁴⁴ One of the first tasks we set ourselves when we started to work on Pyu inscriptions in 2012 was, therefore, to resume Duroiselle's inventory, and simultaneously to update information pertaining to his fifteen items. In the remainder of this section, we will give a general characterization of the corpus of inscriptions whose inventory we publish below in §6.

1.3.2 *Our inventory*

Our approach is not exactly the same as that adopted by Duroiselle, but inspired rather by epigraphical inventories established for other Southeast Asian epigraphical corpora. Most notably, our inventory of Pyu inscriptions is not limited to inscriptions in the Pyu language. As stated above, Pyu is the language most commonly found in inscriptions at a number of sites of the first-millennium urban system of Upper Burma. But this 'Pyu' culture did not only use Pyu as its epigraphic language of expression, nor did the Pyu language cease to be used after the early urban system had given way to Pagan and its major languages of epigraphic expression: first Mon, and finally Burmese. Our inventory aims to be exhaustive, irrespective of language, for inscriptions engraved on artefacts produced by the archaeologically defined Pyu culture, and so Pyu must be understood, for purposes of our inventory, primarily as a cultural designation. On the other hand, we also include inscriptions that date from the period when the Burmese had settled in former Pyu territory, but in this case only those which include any textual material in the Pyu language itself: these notably include the crucial 'Myazedi' pillar inscriptions (PYU007/008) and the recently discovered inscription of king Saw Lu (PYU039). Both of these happen to be multilingual, but there are also inscriptions belonging to the period of Pyu culture proper which involve two or more languages so, in any case, it would not be possible to limit our inventory to Pyu-language inscriptions only. Nor, clearly, would this be desirable for any other than strictly linguistic purposes.

To reiterate what has been said above, the scope of our inventory is to include:

A – any artefact inscribed on any or all of its inscribed surface(s) with any segment in the language/script known to scholarship as Pyu;

B – any inscribed artefact bearing text in another language (normally Pali or Sanskrit) but coming from a site that has yielded significant numbers of Pyu inscriptions as intended under A;

C – any inscribed artefacts using Pali or Sanskrit coming from a site that, although not positively identifiable as having been inhabited by users of Pyu language, is more or less close to Pyu sites, and not clearly associable with any other linguistically or archaeologically definable culture.

44. For the epigraphy of Cambodia and Campā, see Cœdès & Parmentier (1923); Cœdès (1966); Jacques, C. (1971); Griffiths *et al.* (2012), and <epigraphia.efeo.fr/CIK>. For Java, see Damais (1952, 1970) and Nakada (1982). See also several contributions to the forthcoming EFEO publication *Writing for Eternity: A Survey of Epigraphy in Southeast Asia*, edited by Daniel Perret.

1.3.3 Dates

Very few of the inscriptions in our corpus contain internal absolute dates. The only ones that do, date to the Pagan period, which is posterior by a substantial amount of time to the heyday of Pyu culture in the first millennium CE. We presume, but cannot prove on any other grounds than archaeological context – when such is available –, that the bulk of our corpus dates to the second half of the first millennium. In our opinion, none of the claims that have been made regarding absolute dating of Pyu inscriptions from the first millennium are sufficiently persuasive to be regarded as established fact. We think here especially of the famous urn inscriptions published by Blagden (PYU003–006), and the much more recently discovered urn inscription 020.⁴⁵ See also §2.4.1 below. In the near-total absence of any other than approximate dates, our inventory does not contain a column about dating. For the same reason, it could not be arranged in chronological order. Nor would this have been desirable, because new discoveries would inevitably need to be inserted here or there, and thus come to contravene the principle of assigning stable reference numbers.

1.3.4 Languages and scripts

Our corpus includes, in ascending order of frequency, Chinese, Old Mon, Old Burmese, Sanskrit, and Pali languages, besides a majority of documents in the Pyu language (and one exceptional case in Prakrit). Old Mon and Old Burmese are written in what may be called Mon-Burmese script. Our corpus includes only two texts with portions in Old Mon (007/008, two copies of the same text, and 039), only one containing Old Burmese (007/008), and one containing a side in Chinese characters (011). These three are inscriptions of the Pagan period, when Pyu culture was presumably no longer a dominant factor. Two of them also include parts in Pali, which is in one case written in the same Mon-Burmese script, while in the other we find an apparently archaizing version of the script that is also found in our corpus for a substantial number of Pali inscriptions that we assume date to the first millennium. These ‘Pyu-period’ Pali inscriptions are exclusively written in this script that is also known from India and has in that context been called Late Southern Brāhmī; this is the same as what older generations of scholars have called Pallava script, a designation that is to be avoided.⁴⁶ This Late Southern Brāhmī script is, in the Pyu corpus, never used for writing any other language than Pali.⁴⁷ Sanskrit, on the other hand, in remarkable contrast to the contemporary corpus of inscriptions of Arakan,⁴⁸ is found only in two or three inscriptions in the Pyu corpus. The bilingual and biscript Sanskrit-Pyu inscription (016), to which we will return at length below and which must date to the ‘Pyu period’, uses the Late Northern Brāhmī script for writing

45. San Win 1998, 2000–2001, 2003; Tun Aung Chain 2003.

46. See further discussion in Griffiths & Lammerts 2015: 989–990.

47. Elsewhere in South and Southeast Asia, it has been used to write also other languages, notably Sanskrit.

48. Johnston 1944; Griffiths 2015.

Sanskrit. The same script is also used in an important but very damaged monolingual Sanskrit inscription (059). Finally, one of the multilingual inscriptions of the Pagan period (039) contains an almost unrecognizable portion in Sanskrit that seems to be written in the later script type called Gauḍī in Indian studies. All inscriptions that use Pyu language write this language exclusively in the script that scholars also call Pyu. A crucial distinction must be made here between inscriptions using Pyu script with notation of syllable-final consonants from those exceptional ones that, for reasons about which we can only speculate (see §4), omit such notation. By a strange coincidence, the most significant Pyu inscriptions studied so far belonged to the exceptional second group, a fact that has contributed to the persistent misconception that the Pyu language knew no closed syllables. We will return to this issue below, in §1.5.3.15. Finally, mention must be made here of the numeral signs that are found in several Pyu inscriptions, and clearly continue the early Indian tradition of noting numbers prior to the rise of decimal place-value notation.⁴⁹

1.3.5 Types of support and textual genres

The attentive reader may have noted that we use the word ‘inscription’ as a synonym for ‘inscribed artefact’. This implies that our inventory includes any type of artefact onto or into which signs of writing have been applied by whatever technique, and hence stretches beyond the conventional boundaries of epigraphy by including, *e.g.*, textual material on coins. Our corpus comprises texts written on a range of different types of material support and object types, and exemplifying various textual genres.

In terms of material, our Pyu corpus involves stone, terracotta, and precious or base metal. In the absence of petrographic analyses, we cannot comment in greater detail on stone types other than to say that most stone seems to be a kind of greyish sandstone apparently softer (and less durable) than sandstone used elsewhere in Southeast Asia. The physically largest and textually longest inscriptions are engraved on stone supports. Only short texts are found engraved or stamped into clay, which will in most cases have been subsequently baked. Texts of substantial length are also, in exceptional cases, engraved on gold foils, but precious metal – apparently in gold or silver (although we lack metallurgical analyses to confirm the precise nature of the metal) – as support tends to be reserved for short texts. No Pyu textual material has come down to us on perishable materials.

49. See Salomon 1998, §2.4.1.3. On the issue of antecedents of the Pyu number signs, Luce (1985, I: 140) wrote the following: “It is evident that two scripts at least (see chart Z) were in use by the Pyu in the 7th–8th century AD: [...]. Both are of Indian origin; and their sources and differences have been learnedly discussed by eminent scholars – Blagden, Finot, Duroiselle, U Mya, U Pe Win, U Tha Myat, and others. We can be less sure, I think, about Pyu numeral symbols, where wide differences also occur. Until we can interpret them more certainly, I take leave to wonder whether all are traceable to Indian sources. Some, at least, may be far older, quite possibly native Pyu or Sino-Tibetan in origin. They do not differ all that much from Archaic Chinese.” However, we believe that all Pyu number signs can be explained without great difficulty as standing in the Indian tradition.

The object types are, to a large extent, coterminous with the material supports. In other words, if a given object type is made in one type of material, it will not normally be made also in another – but there are exceptions. In stone, the most common category is one that we provisionally designate as ‘small stela’.⁵⁰ Only one of these (001) has figured prominently in the literature so far, with the idea that it was a ‘funerary’ inscription.⁵¹ As long as none of the texts engraved on these stones has been convincingly translated, applying such a label seems premature. Only two examples of the type of ‘large stela’, so common in other fields of Southeast Asian epigraphy, have so far been discovered (027, 051). A particularity of the Pyu corpus is the group of urns, most examples being in stone (003, 004, 005, 006, 020) but one in burnished earthenware (002). These artefacts show clear archaeological connection with funerary practices. Other noteworthy types of stone supports are pillar-like objects (023, 028), large and only partially prepared slabs or stelae (012, 032, 064), and bases of sculptures (009, 010, 016). The latter type is also represented in bronze (036, 037, 049, 050, 065), although there is no overlap in textual genres. In precious metal, we may distinguish inscriptions on gold or silver leaves or foils (043, 045, 046, 055–058, 073, 172–179), a signet ring (105), the back of a silver Buddha image (165), silverware (038, 047–048, 052–054, 066, 158–159), a reliquary (024), and coins (026, 068–071). In clay, the most abundant object type is that of the stamped brick (059, 108–157, 168–170, 180–194); we also find a substantial number of molded tablets (traditionally called ‘votive tablets’⁵²) which bear text that is either applied by the mold, or engraved on the back after extracting the clay from the mold and before baking it; a very small number of sealings in unbaked clay have so far been unearthed, stamped with a single seal (063).

At this stage of our research, with most Pyu-language texts still defying translation, we cannot do much more than speculate on the textual genres of inscriptions in Pyu language, the majority of our corpus – although the word *ḥuṇa/buṇa* read on two molded tablets (084, 089), a brick (191), and a seal (096) is recognizably from the Pali *puṇṇa* ‘merit’, suggesting that these short texts constituted declarations of merit. The use of Pali language is, in the Pyu period, exclusively limited to texts with canonical parallels to serve as ritual deposits; use of Pali for dedicatory purposes only becomes relevant in the Pagan-period, and then, too, Pali is only one of the languages in which the dedication is expressed (007–008, 039).⁵³ There is only one Sanskrit inscription whose contents are sufficiently well preserved for the

50. 001, 011, 012, 017, 019, 027, 030, 031, 039, 041, 042, 060, 064.

51. Luce (1985, II: 66) calls 001 a “funerary stone tablet”, presumably by association with the “funerary urns” – and also because of the shape of the stone and what was thought to be known about the meaning of the text. Naing Zaw (2011: 501) refers to 001 as a “cemetery inscription”, probably after Luce. Sein Win (2016) also seems to follow Luce in labeling 001 a “burial ground / cemetery inscription”.

52. Recent scholarship has distanced itself from the term, based on the argument that such molded tablets “were not produced as a result of a vow but rather in ritual contexts in order to produce merit” (Skilling 2005: 677).

53. See on these issues Griffiths & Lammerts 2015.

genre of its content to be assessed (016). The inscription is highly unusual, but seems to share aspects of donative and votive (*praṇidhāna*) texts known in Sanskrit epigraphy elsewhere (see §2.4.3). Finally, the corpus even includes material that is non-textual but nevertheless written: the number signs applied on dozens of bricks from Pyu sites.⁵⁴

1.4 Previous research on inscriptions in the Pyu language

1.4.1 C.O. Blagden

It was Charles Otto Blagden, Lecturer in Malay at the School of Oriental and African Studies at London,⁵⁵ who initiated the serious study of the Pyu language with three articles published between 1911 and 1919. The one published in 1911 was an explication of the Pyu version of the inscription preserved in two copies on the so-called Myazedi pillars from Pagan.⁵⁶ The 1919 article was a slight revision of the earlier one and presented vocabulary and text in more compact form. The 1913–1914 article examined most of the other legible Pyu inscriptions available at the time, that is, the short texts inscribed around the rims of four stone urns that had been unearthed not long before at the ‘Pyu cemetery’ (in the vicinity of the Payagyi, the ‘Great Pagoda’) at Sriksetra.⁵⁷

Before he wrote his Pyu articles, Blagden had already made a study of the other faces of the Myazedi. He was familiar with Mon, and in 1909, he published a transliteration and translation of the Old Mon face. With the help of several well-known scholars of his day – notably Taw Sein Ko, Robert Halliday and Louis Finot – he had also managed to provide transcripts of the Pali and Old Burmese faces, arguing that the latter was the basis of the other versions (1909: 1019; 1914: 1068–1069).

When he then embarked on his study of the version in Pyu, a language and script with which no other scholar could help him, Blagden was fortunate to be dealing with a text containing a good number of Indian names and loanwords that gave him a foothold on the likely value of the script signs. He obviously relied on comparison of the Pyu text with those in the three other languages for basic content. If, as seems likely to us, Myazedi Pyu represented virtually the last gasp of Pyu on the historical stage,⁵⁸ this

54. Luce (1985, I: 140): “We come finally to the mason’s marks, 7th-century Pyu no doubt, engraved or embossed on hundreds of bricks found at Kyanigan, Pyôgin-gyi, Bawbawgyi, Hsinmakowundin, and other old Śrī Ksetra sites. Many of these are surely numerals, perhaps in simplified forms; but when they are accompanied by tonal marks (◌̃, ◌̂, ◌̄) above, below or beside them, they should be regarded, no doubt, as Pyu letters, not numerical symbols. At *ASB* 1924, Pl. III and p. 26, Duroiselle suggests readings of a few of them [...]”

55. On this scholar, see the obituaries by Winstedt (1950) and Linehan (1950).

56. The inscription is more accurately named after the Myinkaba Kubyaukgyi temple where these pillars are presumed to have been originally erected, or after its donor Rājajumāra. However, Myazedi, the name of a much later temple where one of the two pillars was found intact, and where some fragments were found and remain to this day, is current in much of the literature.

57. This article was reprinted as Blagden 1917.

58. Only a very worn Pyu-Chinese inscription, our 011, is thought to be later.

fact may account for a relatively large number of lexical correlations with Burmese, another factor that proved helpful to Blagden.

Blagden was quite forthright about potential imperfections in his transliteration of Pyu, and provided helpful running commentary and footnotes. While he took the better preserved of the two pillars, designated as A (our 007) as his basic text, he included alternate readings from the more damaged (but otherwise clearer) pillar, designated as B (our 008). Besides some comments on peculiar features of the writing system – we will return to these below – he also noted the tendency for Indic voiceless plain stops to be represented as voiced (*e.g.*, *rājakumār*·, the Old Burmese name of the donor, appears as *rajaguma* in this Pyu text – with medial *g* rather than *k*).

Blagden further commented on the fact that, unlike Old Mon which had no open syllables, Pyu seemed to have no closed syllables. Most of the texts available to Blagden at the time did not, in fact, show the notation of final consonants that is such a remarkable feature of the majority of the Pyu texts – an issue we will discuss below (§1.5.3.15). One that did have them was the Halin inscription on stone (our 001) discovered by Taw Sein Ko in 1904 (*ASB* 1915, §54, 21–23), but it may not have been available to Blagden at the time. When he did obtain an estampage of it, he failed to recognize the notation of syllable-final consonants for what it was, speculating that the signs in question, arrayed well below the line, might have had a decorative function (1913–1914: 127). So even if he did have access to that inscription, he would not have been primed to see the few syllable-final consonants that actually do appear in the first three lines of the B pillar. Thus, for example, the word for the numeral ‘eight’, which appears as *hram* on the A pillar, shows up with a faint subscript *t* as *hrat-m* on B; and the word for ‘city’, *prih*, appears as *priñ-h* on B, with syllable-final *ñ*. Both finals are etymologically expected if these words are understood to be of Sino-Tibetan stock.⁵⁹ Why only the first three lines of the B pillar show such syllable-final consonants, and why none on the A pillar do so, remains a mystery, just as does the question of why subscript finals appear with some texts and not with others – even in those cases where they share roughly the same provenance and appear to have been found in similar archaeological contexts. These, too, are issues to which we will return below.

The version of the Myazedi Pyu text published by Blagden in 1919 is only slightly revised from the 1911 article. By this time, he has fewer reservations about labeling the language Pyu. He accepts Cœdès’ suggestion (from a review in *BEFEO* 1911, pp. 435–436) that the first three symbols for the date at the beginning of the Pyu Myazedi text were special Indian number signs. Most usefully, this briefer article ends with a glossary of about 120 Pyu words. Blagden’s 1913–1914 article on the urn inscriptions

59. For the final *-t* of *hrat-m*, cf. OB *het*, *hyet*, OC 𑀓𑀭 *p^hret, OT *brgyad*. For the final *-ñ* of *priñ-h*, cf. OB *praññ*. OB *-ññ* is thought to derive from a number of non-palatal nasal rhymes, including *iñ* and *eñ* (Matisoff 2003: 278–284).

appeared between the two on the Myazedi Pyu text. These urn inscriptions were much shorter than the Myazedi, extending only over a few dozen akṣaras at most. However – and here too Blagden was most fortunate – they were relatively well preserved and they seemed to be formulaic statements of the contents of the urns, that included the name, age, dates, and rank or role of the departed. Blagden’s decipherment of the urn inscriptions provided invaluable information for historians on the names and sequence of kings, provided the forms of Pyu numerals that turned out to be clearly Sino-Tibetan in origin, and confirmed Blagden’s earlier view that Pyu was a Sino-Tibetan language, influenced by Burmese, but not closely related to it (Blagden 1911: 382; 1919: 60).

1.4.2 R. Shafer

Lack of tractable new data kept later scholars from building an edifice on Blagden’s foundation. The next major publication on the subject came almost twenty years later when Robert Shafer⁶⁰ published his “Further Analysis of the Pyu Inscriptions”, which reviewed Blagden’s Pyu work, not only on the Myazedi, which Shafer called “Late Pyu” (1943: 316 n. 10), but also on the urns and the inscription on the Halin stone (our 001–006), all of which he characterized as “Early Pyu”. Shafer made a valiant effort to match up the morphemes from the three known languages – particularly Pali – with the Pyu in order to elucidate and refine the meanings of Myazedi Pyu function words. For instance, on the basis of consistent correspondences with the Pali aorist, Shafer argued that *ḥimḥ*, a common word on the Pyu face (identified only as a “particle preceding verbs” by Blagden 1919: 68) is a marker of “past tense” (Shafer 1943: 323). Pali parallels also led him to suggest a single gloss of ‘destined to’ for *ḥḍimḥ* (*hlimḥ* in Shafer’s reading), a word that appears in rather varied contexts in the Pyu text (*ibid.*, 331).

In a short section on subgrouping, Shafer explores the possibility of “a close relationship” between Pyu and Karenic languages (*ibid.*, 354–355). The impetus for connecting the two seems to have been the assumption of earlier geographic propinquity of speakers of the two languages – itself a questionable claim. In any case, the lexical comparisons that Shafer cites are not unique to a subgroup, but apply across the Sino-Tibetan family. Some of Shafer’s correspondences in favor of a relationship with Karenic, like Pyu *tdum* (Shafer *tdū*) ‘water’, Pwo (Karen) *t’i⁴*, point more toward Tibetan (cf. Written Tibetan *chu*), a potential connection that Beckwith considered at some length in a recent article (2002b). Shafer’s article contains some useful and provocative remarks, particularly on lexical meanings. It also lengthens the Pyu glossary to over 150 words along with a new, word-for-word (and idiomatic) rendition of the Myazedi text.

60. This self-taught linguist was the first supervisor of the US government-supported “Sino-Tibetan Linguistics Project” at the University of California, Berkeley. See Benedict 1975.

1.4.3 G.H. Luce

Around the same time that Blagden was conducting his pioneering work on the Pyu inscriptions, Gordon Hannington Luce⁶¹ was beginning a career that would involve him too in the study of the early history of Burma. On graduating from Cambridge in 1912, he had gone to Burma initially to teach English literature, but before long, he had become engrossed in the study of Burmese history. He remained in the country for the next fifty years, and married into the family of U Pe Maung Tin, an expert in Pali and Buddhist studies, with whom he would conduct a long and productive collaboration. Eventually, he produced a large body of work that covered historical, artistic, and linguistic aspects of Burmese culture. His interest in the early history of the region led him, with the help of his team of assistants, to search out as many inscriptions as possible and create estampages of them both as a precaution against loss and damage and in order to make the rich load of early Burmese documents available to scholars at large. Despite facing enormous obstacles and setbacks during the chaos of the war years, Luce and Pe Maung Tin eventually managed to arrange publication of the inscriptions dating up to the beginning of the Ava period in the mid-14th century. These appeared in the five large portfolios of the *Inscriptions of Burma*, published between 1934 and 1956 by Oxford University Press. Portfolios IV and V contained rubbings of ten Pyu inscriptions, including some important ones uncovered in the years since Blagden's publications.

Luce continued to incorporate the data culled from the early inscriptions as well as from Chinese historical sources in articles on early Burmese history and on the Pyu themselves, but a full accounting of what was known of Pyu epigraphy had to wait until the posthumous publication, in 1985, of his *Phases of Pre-Pagán Burma*. This two-volume work was based on a series of lectures given by Luce at the *École des langues orientales vivantes* in Paris, a few years before his death in 1979. Volume I contains two chapters on the Pyu and their language (which, by this time, he called Tircul) and notes and commentary on the plates that are collected in volume II.

A good deal of Luce's contribution to Pyu studies involved aggregating and documenting earlier reports scattered through specialized journals, out-of-print books, or publications in Burmese. In all, Luce provides notes and illustrations for over forty Pyu inscriptions, large and small, and has been the most valuable source of information for our inventory. In most respects, Luce adopts Blagden's conventions for transliterating Pyu, though he interprets some symbols differently (see 1985, I: 62).

1.4.4 U Mya, Tha Myat and other Burmese scholars

Because they wrote primarily in Burmese and published locally, the contributions of Burmese scholars to Pyu linguistic and epigraphical studies have been muted in international scholarship. However, Luce (in *PPPB*) draws attention

61. For information on this scholar's life and work, see Hall 1980, Luce & Griswold 1980 and Tin Htway 2001.

to a number of important Burmese sources. Among the most significant are a two-fascicle study of so-called votive tablets by U Mya, an early director of the Archeological Survey of Burma who had worked with Blagden and Luce. Published in 1961, *Votive Tablets of Burma* – its usual English title – is a catalogue of such tablets in the collection of the Department of Archeology in Yangon, about a dozen of which are inscribed in Pyu (and referenced in our inventory: 013, 014, 072, 074, 077, 078, 081, 083, 084, 086, 087). U Mya's commentary generally includes a transliteration of any Pyu material in Burmese script, a practice that is usual in Burmese-language publications.

U Tha Myat, a contemporary of U Mya, began his career as an agriculturalist before turning his attention to Burmese languages and, particularly, scripts. His study of the Myazedi Pyu inscription, published in 1958, revised some of Blagden's readings and provided an annotated Pyu-Burmese glossary. The parts of that work that dealt with the Myazedi inscription were then reproduced and expanded with additional Pyu inscriptions and material on the history of the script to form the *Pyu Reader*, first published in 1963, and then reprinted (more or less intact) in 2011.⁶² The *Pyu Reader* documents fifteen inscriptions, with photographs of estampages for both Myazedi pillars, and hand-drawings for all of the others. All are transliterated into Burmese script. Four of the inscriptions in the *Pyu Reader* represent Pali alone (our 044, 045, 046 and 058). One is Pali with a short Pyu coda (our 077). For the inscription on the silver reliquary from the Khin Ba mound (our 024), Tha Myat transliterates the texts associated with the Buddha images embossed on the reliquary, which alternate between Pyu and Pali, but he does not transliterate the line that encircles the lower rim which is entirely in Pyu. He also provides a transliteration of the clearer parts of the important Sanskrit-Pyu bilingual inscription (016),⁶³ which we deal with at length in this article.

As noted in §1.3.4, the Sanskrit, Pali and Pyu inscriptions in our corpus are written in three different scripts: Sanskrit in a version of Late Northern Brāhmī, and Pali and Pyu in different versions of Late Southern Brāhmī. Luce (1985, II: 130, chart Z “Two Pyu Alphabets and Number Symbols”) distinguished the last two as “Pyu (Pali)” (*i.e.*, the script that the Pyu people used to write Pali) and Tircul (*i.e.*, Pyu script to write Pyu). These distinctions have tended to be blurred in most Burmese scholarship. Thus, the subtitle of the *Pyu Reader* is *A History of the Pyu Alphabet*, which suggests that Tha Myat was primarily interested in the evolution of the script. If our interpretation of the extensive tables of graphs at the beginning of his book is correct, he regarded the different ‘Pyu’ scripts as stages on a single line of development rather than scripts that represent different sub-branches of the Brāhmī family tree. He also took the forms that write Pali as prototypical,

62. The Burmese title is *pyū phat cā*, with a subtitle of *pyū – akkharā samuiñh*, literally *A Pyu Reader: A History of the Pyu Alphabet*. It is usually cited in English simply as *Pyu Reader*.

63. Tha Myat's analysis of this inscription is disappointing. The b face and d face are reproduced as hand-drawings and transliterated but without explanation (four of the lines on b being shown twice), while four of the six lines of the A face and all five lines of the B face are omitted. Our edition below shows that we disagree on many of his readings of both the Sanskrit and the Pyu.

[illegible]

using them in his chart of Pyu graphs. For learning to read (transliterate) Pyu language texts, therefore, a better guide is the chart provided by Luce (1985, II: 130) which separately lists Pali and Pyu forms under the headings of “Pyu (Pali)” and “Tircul”. It is reproduced above as fig. 6.

Though he has written mostly in English, Tun Aung Chain, an eminent historian and member of the Myanmar Historical Commission has, in the course of his historical research, also concerned himself with Pyu inscriptions, notably in his 2003 study of the kings mentioned in the Hpyahtaung urn inscription (PYU020). The journal issue containing that article also provides, in a separate “Document section”, a complete photographic record of an estampage of the inscription and a Romanized transliteration based on readings done by historians Than Tun, Nyein Maung and San Win.

The last decade has seen a surge of publications dealing with Pyu history and culture, several of which also chart the inscriptional evidence. Naing Zaw (2011)⁶⁴ is a 600-page study whose focus is on archeology,

64. Naing Zaw is the pen-name of Khin Zaw, a professor of medicine as well as a writer and publisher.

but which also includes illustrations and useful commentary (referenced in our inventory) on a number of Pyu inscriptions (*e.g.*, 032, 037, 038 and 106, to cite only a selection). Chit San Win (2011), entitled simply ‘Pyu’, and Bhone Tint Kyaw (pen name of Kyaw Zin, 2012), a two-fascicle study of “two thousand years” of Burmese history, both reinterpret some of the inscriptional evidence in the course of polemics arguing for the continuity of almost all aspects of Pyu and Burmese culture and language. A chapter title from the second fascicle of Bhone Tint Kyaw’s work is indicative: “*pyū cac· lhyañ· || mranmā ||*”, *i.e.*, “If a Pyu, then a Burman”, a play on the phrase cited in §1.2.1.

Aung Thein’s 2005 study of Pyu inscriptions and Khin Maung Than’s 2013 so-called Pyu dictionary deal with a lot of the same inscriptions as the *Pyu Reader* while attempting to explicate additional words in the Pyu lexicon, or, in Aung Thein’s case, producing actual translations of texts. Khin Myint (Pyay) (2008) is another survey of Pyu writings, which covers the usual set of longer texts (whether writing Pali or Pyu) and some of the less prominent ones, such as the inscriptions on silver bowls (038 and 048) and on terracotta tablets (072 and 084). Since these authors tend to recapitulate work done earlier by others, they are not cited in our inventory.

Finally, a recent work by Sein Win (2016) provides an illustrated edition of over thirty Pyu inscriptions. Sein Win’s purpose was to collect all known Pyu stone inscriptions (*kyok cā*) and provide transliterations for them (in Burmese script). He includes relatively recent finds such as the multilingual Petaw stone (039), unearthed in 2014 and now on display at a monastery in Myittha in the Kyaukse region. Where transliterations by other authors already existed, as was the case for 016 and 020, Sein Win provides revised readings. His introductory material (unpaginated) contains some perceptive observations, *e.g.*, on the difference between the two ‘Pyu’ scripts – the one for writing Pali and the one for writing Pyu (*cf.* especially the antepenultimate page of the introductory material), and on possible functions of the so-called ‘interlinear Brāhmī’ (*cf.* §1.5.3.15 below). Sein Win’s catalogue of inscriptions is also referenced in our own inventory.

1.4.5 U. Krech

The most recent original work that deals intensively with Pyu is that of Uwe Krech.⁶⁵ His paper “A Preliminary Reassessment of the Pyu Faces of the Myazedi Inscriptions at Pagan” (2012a) is extremely problematic. As noted in §1.4.1, the “Myazedi Inscriptions”, *i.e.*, our 007 and 008, are two copies of a single 12th-century text that is most probably a chronological outlier within the Pyu corpus. Krech has no interest in any other of the extant epigraphical data. He correctly points out that “the vast majority of these Pyu inscriptions have not yet been deciphered” but dismisses them as being potentially in non-Pyu languages without acknowledging the possibility of

65. As far as we are aware, this scholar so far has one published article on Pyu language and epigraphy to his credit. Another article, dealing with archaeological questions, has been mentioned above.

verifying on the basis of shared vocabulary and structures that they too are in the same language as that of the Myazedi text. Our work so far actually reveals this to be the case. Despite its title, Krech clearly intends his article to be far more than a “preliminary reassessment”. He even calls it “the outset of a methodological theory of how to reconstruct ancient languages” (p. 121). But the problem with his publication is precisely the absence of any explicitly stated “methodological theory” so that even its initial results are not replicable. In Krech’s own words (2012a: 121):

The empirical advances which have enabled this transliteration and translation are based on (i) a palaeographic analysis of the writing system, (ii) a reconstruction of the sound system (from a diachronic perspective), (iii) structural and etymological investigations of the vocabulary, and (iv) an analysis of the grammar of Myazedi Pyu. Due to the limited space of the article only the palaeographic analysis can be provided here.

Krech’s transliteration of the Pyu script turns out to differ only in a few ways from its predecessors, and the reader is left to speculate about his rationale.⁶⁶ Since palaeographic analysis, as generally understood, is inherently a comparative method, Krech’s refusal to look at other inscriptions was bound to impose severe limits on the utility of this undertaking. And indeed, despite his announcement to the contrary, Krech does not stop at “palaeographic analysis”, but goes on to comment on Pyu phonology. We will return to the topic of paleography in §2.4.1; and to phonological issues in §3.4.

Krech rightly stresses the methodological importance of identifying the “genetic position” of the Pyu language in relation to others (2012a: 142). Most Pyu texts are monolingual and it is evident that any monolingual text in an unknown language will stand a better chance of being interpreted with a considerable degree of accuracy if a close linguistic relative has been identified. But we do not find any explicit acknowledgement on Krech’s part that the existence of any close relative may not be taken for granted. An epigraphically attested language can be an isolate without any known relatives: see, *e.g.*, the case of Elamite. And even if it may be taken as an established fact that Pyu belongs to the Sino-Tibetan language family, as we also assume, it may therein have held a position analogous to those of Tocharian or Albanian which are isolated within Indo-European. Regarding the subgrouping of Pyu within Sino-Tibetan, Krech reminds his readers of the state of affairs (2012a: 133):

[... N]one of the researchers presented sufficient evidence to support his respective claim(s). Either (i) no supporting evidence was presented or referred to at all, (ii) the evidence referred to is not readily available, or (iii) the evidence presented with regard to the claims is insufficient.

It is ironic to observe that what Krech writes about his predecessors also applies to himself when, without specifying how he has reached this conclusion, he affirms (2012a: 142):

⁶⁶ The most radical departures concern the graphemes <°o> and <u>, that we discuss below (§1.5.3.2 and 1.5.3.8).

Myazedi Pyu seems to have been either (i) a Yipho-Naxi-Burmese language with some important contact influence from Kuki-Chin or (ii) it was originally a Kuki-Chin language that has been deeply modified by some member of the Yipho-Naxi-Burmese group (most notably Mranma).

Subgroups should ideally be defined on the basis of shared nontrivial and preferably unique innovations, but Krech has not so far published any of the shared innovations that would allow connecting Pyu with this or that group of languages within Sino-Tibetan.

1.5 Interpretation of the Pyu script

1.5.1 Methodology

The decipherment of any written language obviously has to begin with an understanding of its writing system. All scholars agree that Pyu script is a member of the greater family of writing systems ultimately derived from the Indian Brāhmī script, so that Pyu falls within the purview of a comprehensive analysis of the historical developments and geographic spread of Indic writing. In other words, Pyu script is part of the material of the discipline generally called Indian palaeography. Within the history of Brāhmī-derived scripts, Pyu belongs to the Southern branch and several scholars have commented on its archaic appearance – which would mean that this script took its form in the first centuries after the beginning of the common era.

However, much of what has been published by scholars so far with regard to writing in the Pyu period, and on Pyu script in particular, is subject to caution because of four important factors. (1) Previous scholarship has tended not to distinguish clearly between two separate types of script used in our corpus, one for Pali, and one for Pyu. In fact, the label ‘Pyu’ may, depending on the context, designate one or more of the three distinct entities: ‘Pyu culture’, ‘Pyu language’ and ‘Pyu script’. (2) Some important epigraphical discoveries in India, which impacted the understanding of Indian palaeography, occurred only after the most intensive period of epigraphical discoveries in Burma in the first three decades of the 20th century. Since colonial times, connections between scholars working in Burma and India have weakened; as a consequence, advances in Indian palaeography have not led to any updating of conceptions among Burma scholars, among whom some outdated conceptions are still perpetuated. (3) None of the scholars who have so far been involved in deciphering Pyu inscriptions in Burma could bring to bear direct experience with studying early-historic Indian inscriptions and they have, therefore, been limited in their palaeographic statements to information available in relevant handbooks. (4) Since the Pyu language is not so far well understood, and current interpretations are mainly founded on a very small sample of inscriptions which, moreover, turn out to be unrepresentative of the Pyu-language corpus as a whole, interpretations of individual characters are in several cases in need of correction.

The basic method to be adopted when attempting to interpret Pyu script was formulated by Blagden in his studies of the Pyu faces of the two multilingual Myazedi pillars:

Blagden 1911: 366 —

“The script being Indian and the parallel versions containing a number of proper names and Indian loanwords, there was no lack of clues to help towards the reading of the alphabet; and the first step was to pick them out and thus identify as many of the letters as could be determined in that way.”

Blagden 1919: 59 —

“The letters were as far as possible identified by their occurrence in proper names and loanwords and by their resemblance in shape to corresponding letters in other forms of the Indian alphabet.”

This method implies that some “other forms of the Indian alphabet” – Blagden obviously meant other Indic script types of the Brāhmī family – resemble Pyu script more closely than others, and hence it is important to determine in which Indic scripts one finds the greatest degree of resemblance. Blagden himself compared Pyu script as seen on the Myazedi pillars “with the various forms of the Indian alphabet given in Holle’s *Tabel van Oud- en Nieuw-Indische Alphetten* (Batavia, 1882) and with a good many Indian inscriptions without finding anything quite like it” (1911: 370).⁶⁷ We owe to V. Venkayya, who from 1907 until his death in 1912 held the highest post in the epigraphy branch of the Archaeological Survey of India, the suggestion that Pyu script is reminiscent of inscriptions in the Āndhra region of India, specifically at the site Jaggayyapeta which already in the 1880s had yielded three inscriptions dated to the reign of a king Siri-Vīrapurisadata of the Ikṣvāku dynasty.⁶⁸ While only three inscriptions dating to this dynasty were known at the time the first Pyu inscriptions were being published, dozens more became known after the discovery of the major site Nagarjunakonda in 1926 and the first publication of inscriptions of this site by J.Ph. Vogel (1929–1930). The abundant epigraphic discoveries at this site came too late to have any impact on the formative phase of Pyu epigraphy. This no doubt partly explains why even such a major post-independence publication as A. Dani’s handbook *Indian Palaeography* includes no direct indication of the resemblance between the Pyu script and that seen in Ikṣvāku-period inscriptions (Dani 1986: 231):

Burma appears to have been in contact by the overland route with Eastern India and by the sea-route with the eastern coast of South India. The Eastern influence is seen in the inscriptions found in Arakan and as far down as Hmawza near Prome. The inscriptions are datable from the seventh century A.D. onwards. [...] We may be able to detect another contact if we can decide about the origin of the Pyu writing. The medial

67. It is remarkable that Blagden does not seem to have consulted Georg Bühler’s standard work *Indische Palaeographie* 1896 (published in English translation under the title *Indian Paleography* in 1904 as an appendix to the *Indian Antiquary* [separate reprint 2004]) – although he was aware of its existence (1911: 381 n. 3).

68. See the “Government Epigraphist” cited in *ASI* 1911–1912, p. 147 = *ASB* 1912, p. 12 (§37). As becomes clear on p. 13 (§40) of *ASB* 1912, this officer was the Indian scholar V. Venkayya, on whom, see Herring 1975.

vowels used in this writing are exclusively northern, though the medial *i* shows a variation in the local style. Letters such as *u*, *kha*, *ta*, *ya* and *la* suggest influence from western India, possibly Chālukyan. But the letters *a*, *tha*, and the tripartite form of *ya* point to an earlier date. On the whole it seems that the original writing from which these characters are derived is connected with the source of the Vo-Canh inscription, but in course of time this writing became stylized in this region. The examples that we actually have are seventh-century versions of the original writing.

Although Dani's statement contains several inaccuracies due to the complicating factors we have outlined above, we agree with his conclusion. The reference to the Vō Cạnh inscription from Southern Vietnam,⁶⁹ reputed to be the oldest inscription of Southeast Asia, is indeed an indirect indication of palaeographic connections with script used under Ikṣvāku rule at Nagarjunakonda and other sites in the Āndhra region, because the script of the Vō Cạnh inscription has been shown to find its closest Indian parallel precisely in the inscriptions of those Indian sites (Bhattacharya 1961). It is thus to the epigraphical material produced in India under Ikṣvāku rule that we have turned in our effort to evaluate existing interpretations of Pyu script, as reflected in published readings of Pyu inscriptions, and to decipher hitherto unpublished ones.⁷⁰ Most Pyu akṣaras can be connected without much uncertainty to an akṣara with similar shape in the Nagarjunakonda epigraphic corpus or, if not, elsewhere in Indian epigraphy. In most cases such comparison confirms the choices made by Blagden a century ago, but not in all cases. Before reviewing the interpretations of particular graphemes made by Blagden and the most significant of our other predecessors presented above – Shafer, Luce, Tha Myat, and Krech – which we believe are in need of improvement, as well as the interpretation of ones which had not yet been encountered in inscriptions studied so far, we must first explain the transliteration scheme that we use to represent Pyu script (and that we apply also to the other Indic scripts in our corpus).

1.5.2 Our transliteration scheme

Pyu is at this stage still largely an unknown language, so that Pyu-specific phonological arguments are better avoided when determining the rigorous script-to-script conversion that we need to adopt in order to decipher it. For our work on Pyu, we have devised a fully back-convertible transliteration scheme that attempts to be maximally compatible with standard Indological transliteration, and particularly with ISO standard 15919.⁷¹ Besides compatibility with the Indological representation of analogous graphemes in Indian varieties of Brāhmī script and applicability to Old Burmese, Old Mon, Pali, and Sanskrit, our main methodological requirements are that the transliteration scheme should allow for distinct graphemes in the script

69. On this inscription, C. 40 in the EFEO's inventory of Campā inscriptions, see Griffiths *et al.* 2012: 447 and 460; Zakharov 2010; Filliozat 1969; C. Jacques 1969.

70. On the early epigraphy of Āndhradeśa, and particularly the inscriptions engraved under the Ikṣvāku dynasty, see now the research report of Baums *et al.* (2016).

71. See http://en.wikipedia.org/wiki/International_Alphabet_of_Sanskrit_Transliteration and International Organization for Standardization 2001.

to be separated in a linear fashion in transliteration, so that editorial marks can be applied to individual graphemes.

We follow ISO 15919 for all graphemes that have a correspondent in the Indian syllabary. Thus, we represent the superscript dot that looks like an Indic anusvāra by <ṁ>, even though it is clear (as we will show below, §3.4.5) that the sign did not, in Pyu, express any nasal phoneme, as it does in India. We also retain from ISO 15919 the representation of double dots to the right of an akṣara with <ḥ>. It is presumed that cases of triple dots, always after vowel <i>, are in fact allographs for the combination <ṁḥ>.⁷² In addition, our system shows the following signs and ordering rules not foreseen by ISO 15919:

- °V an independent vowel sign V (*i.e.* an akṣara which consists of the vowel V alone) will be represented by <°V>;⁷³
- ḃ a sign unknown in India, derived from with a cross-stroke from left extremity to right vertical, will be represented as <ḃ>;⁷⁴
- C· a syllable-final consonant C will be represented as <C·> immediately to the right of the akṣara's vowel;⁷⁵
- ṁ a dot below an akṣara will be represented by <ṁ> placed immediately to the right of a <C·> or, if there is no <C·>, immediately after the akṣara's vowel;
- ṁ a dot above an akṣara will be represented by <ṁ> placed in the immediately following slot;
- ḥ a double dot to the right of an akṣara will be represented by <ḥ>, being able to stand with or without preceding <ṁ> and/or <ṁ>.⁷⁶

72. See Blagden 1911: 366–367 with footnote; Shafer 1943: 317; Luce 1985, I: 63.

73. This convention is here adopted from the system devised by Louis-Charles Damais for Old Javanese. See Damais 1958: 10–11, §37. We could also have adopted the apostrophe commonly used in transliterating the so-called vowel support in Mon and Khmer, or the optional colon proposed by ISO 15919.

74. This innovation is described by Dani (1986: 245) as follows: “The new letter *ḃa* is formed from *ba* by the addition of a mid-line”. Blagden introduced the transliteration *ḃ* for Pyu, after having earlier introduced it for Mon script. See Blagden 1911: 368, on the sign “*ḃ* (oblong in shape, rather like the other *b*, but with a cross-bar), evidently related to and perhaps borrowed from the Talaing *ḃ*”, and added in n. 2: “I distinguish it conventionally by a dot underneath, as I have previously done in the case of the Talaing equivalent.” This refers to Blagden 1909: 1025. The sign occurs also in Pyu inscriptions of the first millennium. Blagden's hypothesis of borrowing from the Old Mon writing tradition raises the issue of the relative dating of the Pyu and Mon writing traditions. The Old Mon inscriptions from Pra Pathom, in Thailand, published by Cœdès in 1952, where <ḃ> is already used, are conventionally dated to the 7th century.

75. Indological transliteration schemes do not provide a means for representing the “vowel killer” sign called *virāma* or *halanta* in India, အေဝေဝေဝေ *°asat* in Burmese. This deficiency is felt when it is necessary to give a precise transliteration of a document, for instance when it is possible to identify the presence of the vowel killer but not the akṣara to which it is attached. There are many contexts where its representation is superfluous, but for Pyu, whose method of writing vowelless consonants will be described below (§1.5.3.14), we need to mark such consonants in an explicit manner. If we would not do so, we would be unable to indicate, *e.g.*, that in the inscription PYU016, edited below, the gloss of the Sanskrit sequence *śrījayacandravarmmaṇā* (with ligatures *ndra* and *rmma*) is spelt *srijan-travar-ma*, rather than with unitary akṣaras *ntra* and *rma*.

76. The ordering rules with regard to <C·>, <ṁ> and <ḥ> are partly determined by our desire to be able to represent also Mon/Burmese script which unlike Pyu (see below §1.5.3.15) marks final consonants on the line to the left of <ḥ>. In the case of Burmese, it would be very counterintuitive to transliterate a sequence like ၵၵ: as *phlaḥc* rather than as *phlacḥ*.

1.5.3 Interpreting and reinterpreting Pyu graphemes

The basic criteria for the correct identification of a Pyu grapheme are, in our view: (1) correspondence of graphic shape with a grapheme in the writing system of the Ikṣvāku inscriptions or another chronologically suitable Indian syllabary, and (2) the resulting reading yielding a phonological shape likely on etymological grounds to have expressed the meaning that we can attribute to the Pyu syllable or word in question, if any meaning can be attributed at all. Keeping these criteria in mind, we must now discuss at some length the transliteration of specific akṣaras or akṣara-parts – *i.e.*, the graphemes of Pyu script – that have not been properly identified in the few Pyu inscriptions that have been studied by Blagden and his successors, or simply did not occur in any of them. To aid the reader in following our discussion, we refer to Luce’s aforementioned script chart (fig. 6) with columns for “Pyu (Pali)” and “Tircul”, the latter being what we call ‘Pyu’ script.

1.5.3.1 <m̐, ṁ, ḥ> — Loosely referring to them as “tone marks”, Blagden used an iconic representation of the dots or circles, that are so characteristic of Pyu texts, printing them just as they appear in the inscriptions, as super-, sub- or postscript circles. An example is shown in fig. 7.

ti° phvu p(l)ā ta (k)i° (kha) u sni° sni° p(l)ā sū

Fig. 7 — Extract from Blagden’s edition of 006 (1913–1914: 129).

Shafer adopted Blagden’s transliteration of the circumscript dots with only superficial changes, imposed by typographical constraints, and likewise considered them to be tonal marks. Luce too supposed that they indicated tones, estimating that there might be as many as eight of them in all (1985, I: 63); he represented them in his transliterations precisely in the same manner as Blagden. Tha Myat, in his Burmese transliterations of Pyu, also represents the circumscript dots iconically, using the Burmese symbols for anusvāra and visarga, and adding a subscript dot (as illustrated in fig. 8).

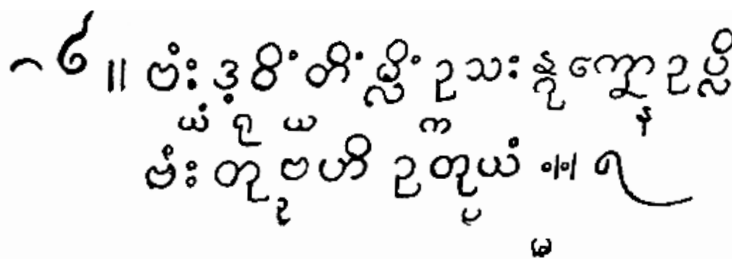


Fig. 8 — Tha Myat’s edition of 001 (1963/2011: 21).

Krech represents the subscript dot with <’> right before the akṣara’s vowel while we represent it by <m̐> immediately after the vowel; for the anusvāra, he writes <m̐> while we use <ṁ>; visarga is <ḥ> in Krech’s system as in ours. As stated, we have chosen the discrete signs <m̐>, <ṁ>, and <ḥ> so as to allow

our system to remain compatible with Indological transliteration while, at the same time, ensuring that it remain linear so that, if the need arises, we can apply editorial brackets to communicate information at the level of these single graphemes – something that would not be possible if we opted for an iconic representation of the sort used by the authors mentioned above. All else being equal, we would therefore represent Blagden’s line shown in fig. 7 as follows:

tiṃ phvum p(l)am ta (k)im (kha) u sniḥ sniḥ p(l)am sū

The occurrence of the dots or circles that we represent as <ṃ> and <ṁ> is bound by constraints that have not been formulated precisely in previous scholarship.⁷⁷ Thus, the underdot <ṃ> generally occurs only if the final consonant of the onset is voiced and belongs to the set <g, d, v, y>. The overdot <ṁ>, on the other hand, with few exceptions occurs only if the akṣara’s vowel is <i> or <a>. We will return below to the issue of the phonological interpretation of these graphemes (§3.4.4–5).

1.5.3.2. <°o> — Previous scholarship has not acknowledged the existence in Pyu script of this independent vowel sign, which is in fact the only frequently occurring independent vowel in the writing system.⁷⁸ It was read as <°u> by Blagden, presumably based on the similarity of the graph to Burmese ဝ, and is shown as such in Luce’s chart. Our reinterpretation is based on comparison with the inscriptions of Nagarjunakonda.⁷⁹ While Shafer, Luce and Tha Myat accepted Blagden’s interpretation without question, Krech represents Blagden’s <u> (our <°o>) as <?a>. He appears to have overlooked the <°a> in 007.26/008.28 which has the typical shape for <°a> in Southern Brāhmī script; on p. 162, he transliterates that akṣara as <?a> without comment, even though it does not look like the <?> in his table on p. 148 (in which the inherent vowel is omitted). Conversely, his proposed <?a> looks like a typical Brāhmī script <°o>, and this is how it must be transliterated.

1.5.3.3. <ṭ> — The existence of the consonant sign <ṭ> in Pyu script has not so far been acknowledged; it is absent from the “Tircul” column in Luce’s chart. Nevertheless, a shape corresponding quite precisely to the prototypical Indic <ṭa>, and indeed to the <ṭa> in the other column in Luce’s chart, occurs in several of the Pyu texts that have been discovered since Blagden’s time. Thus, in the inscription 016 that we edit below, we read *ṭlo[n]·ḥ* in 3A and 5C, as well as *ṭruḥ* in line 6. The only other published readings of this text are by Tha Myat (1968), which is incomplete, and Sein Win’s more comprehensive version (2016). Tha Myat does not include the passages 3A or 5A; for *ṭruḥ* in line 6, he has *druḥ* (p. 41). Sein Win reads retroflex *ḷ* for

77. Krech 2012a: 149 n. 56 has correctly observed that the underdot relates to the onset whereas the overdot (as well as the visarga-sign) relate to the rime of a syllable.

78. The only other independent vowel signs we have identified so far are <°i> in 016.1A, and <°a> in 007.27/008.28, 024 (in *bañḥ°anada yaṃ*) and possibly in 025.7. The only certain occurrences of <°a> are in Indic loanwords. We do not know the source of the sign shown by Luce as <°o> (with a question mark) in his chart, but are convinced it does not represent that value.

79. That Indic <°o> is the prototype of this sign is unmistakable: see the chart in Dani (1986, pl. XVIIa), and further examples in the Ikṣvāku inscription edited by (Vogel 1929–1930: 22) under the label F, where the word *ovaraka* ‘cell’ occurs three times in line 3.



Fig. 9 — Akṣaras involving <ṭ> extracted from (a) 020.2 *ṭloḥ ṭlim·m̄*, (b) 020.2 *pṭray·*, (c) 020.3 *traṇ·ḥ*, (d) 020.4 *troṇ·ḥ*, (e) 020.5 *kṭlik·*.

the initial of *ṭlo[n]·ḥ* in 3A, viz. *ṭo* (p. 52), but finds 5C illegible (p. 58). Like Tha Myat, he reads *ṭruḥ* in line 6 as *druḥ*.⁸⁰ Alas, we are so far unable to connect either *ṭlon·ḥ* or *ṭruḥ* with any words in related languages, so that we lack comparative linguistic confirmation of our choice made on palaeographic grounds. The only other published reading of a text in which we have identified instances of <ṭ> is 020, but the *MHRJ* edition of that inscription disagrees with our readings in each case: in 020.2 our *ṭloḥ ṭlim·m̄* is read *ṭoḥ ṭi*; in 020.2 our *pṭray·* is read *pdrak·*; in 020.3 our *traṇ·ḥ* is read *dra(j)·ḥ*; in 020.3 our *ṭlan· rṭlan·* is read *ṭa ṭam*; in 020.3 our *kṭlot· rom· ndlot·* is read *klon· ro ṭlo*; in 020.4 our *troṇ·ḥ* is read *droḥ*; in 020.5, our *kṭlot· ... kṭlik·* is read *kṭo ... kṭi*.⁸¹ Some of the akṣaras in question are illustrated in fig. 9.

Further research will, we hope, yield evidence to confirm or disprove that our readings with <ṭ> are correct. A number of cases of *dr* and *ṭ* in readings published by previous scholars would then have to be reinterpreted, and it would mean, notably, that the sign which looks like Pali *ṭ* in Luce's chart is not *ṭ* but rather *ṭl* in Pyu. If our readings involving <ṭ> are correct, it must be observed that this sign occurs almost exclusively before <ṛ> and <ṭ>, suggesting it is used to represent some allophonic feature of the language.

1.5.3.4. <ṭ> — The “Tircul” column in Luce's chart is empty for the akṣara <ṭa>. Shafer (1943: 315) had noted that “Blagden recorded *ṭ* but never *l*” for the Pyu faces of the Myazedi pillars, while “[t]he Pyu letter bears no resemblance to the *l* of the other inscriptions”, meaning that Blagden's <ṭ> showed no similarity to the <ṭ> in the Mon-Burmese script used on the other faces of these pillars. Shafer (1943: 315–316) and after him Krech (2012a: 148) simply decided to reinterpret Blagden's <ṭ> as <ṭ>, not taking into account the difference in shape between the sign seen on the Myazedi pillars

80. On these omissions, see n. 63 above.

81. Sein Win (2016), who has not simply reproduced the *MHRJ* transliteration, writes retroflex <ṭ> for our retroflex <ṭ>. It is hard to locate akṣaras in his text since he does not mark lines clearly, but we have identified a few: at 020.5, our <kṭlot> corresponds to Sein Win's <kṭo> (last line, p. 81) and our <kṭlik> corresponds to Sein Win's <kṭim> (last line, p. 82).

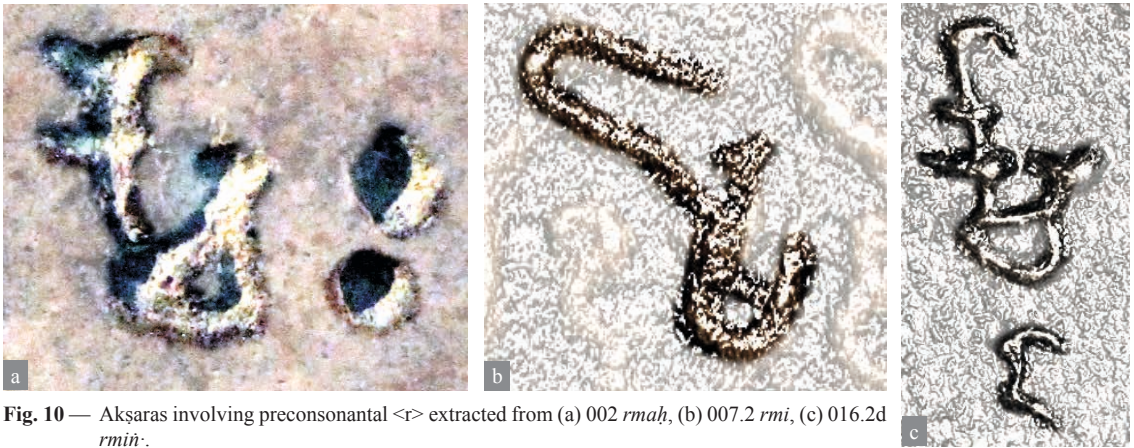


Fig. 10 — Akṣaras involving preconsonantal <r> extracted from (a) 002 *rmaḥ*, (b) 007.2 *rmi*, (c) 016.2d *rmiṇ*.

and that read hesitantly as / by Blagden in the urn inscriptions.⁸² We believe that Pyu script did have an akṣara <la>, and that its shape is somewhere between the prototypes called “*la* with its left hoof broadened” and “hooked variety of *la*” by Dani (1986: 287) – which means that, exceptionally, it is a variety of Northern Indian Brāhmī that seems to have been the model for this Pyu akṣara rather than any variety of Southern Brāhmī. Clear examples are found in the word *lam* written in Pyu language and script in 016.3d and 4b, where the reading is guaranteed by the known etymology of this word (see below, §3.2.2, *s.v.*). Comparison with the akṣaras <la> in the Sanskrit words *dayānukūla* and *kula* written in Late Northeastern Brāhmī script in the same inscription (2A, 6A) reveals virtually the same shape, which is clearly distinct from the Southern Brāhmī <la> shown for Pali in Luce’s chart. If the existence of a proper akṣara <la> in Pyu script is accepted, several readings involving <ḷ> in Blagden’s edition of 003–006 need to be modified; on the Myazedi pillars (007–008), by contrast, we suspect that Blagden’s <ḷ> ought to be interpreted as <ḍ>. Tha Myat seems to have shared our view without applying it consistently, because his readings of the urn inscriptions and 017 only contain cases of initial and medial <ḷ>, although other Pyu texts in his work show initial <ḷ> and medial <ḷ>. Most of the readings involving plain <ḷ> in the *MHRJ* edition of 020 seem correct to us.

1.5.3.5. Preconsonantal <r> — The presence in Pyu script of the superscript sign, to be read before the consonant above which it is placed, called *repha* in India, was not generally recognized by previous scholars of Pyu. We show some examples in fig. 10. The syllable *rmaḥ* in 002 was tentatively read *meḥ* by Luce (1985, I: 75 n. 24), firming up an earlier reading *m(e)ḥ* proposed by Blagden as cited in *ASB* 1915, p. 21, although Indian epigraphist Sastri, cited in the same source (p. 22), did recognize the possibility

82. It is unknown whether Krech chose <ḷ> on palaeographic grounds (*i.e.*, on the basis of resemblance with <ḷ> in other Indic scripts) or phonological grounds (*i.e.*, the assumption that Pyu most likely had a dental [l] instead of a retroflex [ɭ]). In Shafer’s case, the choice was clearly based on the second type of consideration.

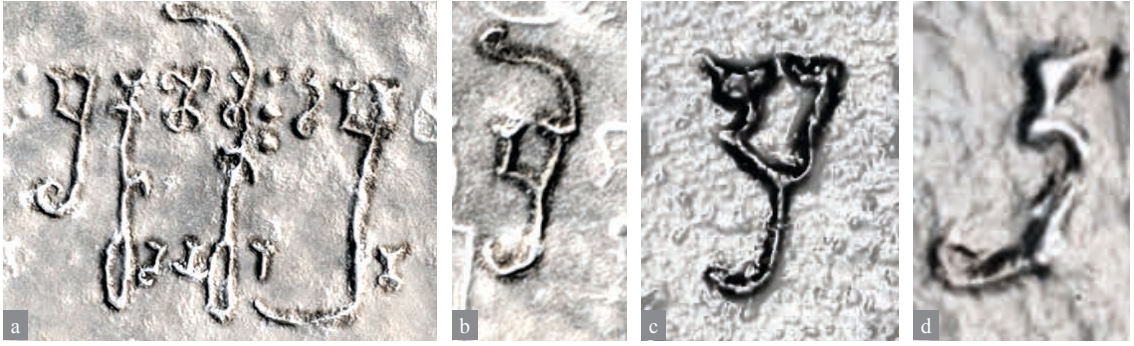


Fig. 11 — Akṣaras involving <r> extracted from (a) 032.7, (b) 032.5, (c) 016.2b, (d) 064.6.

of a superscript <r>. Clinching examples come in the word *rmiñ*· repeatedly occurring in 016, discussed below, whose meaning ‘name’ is known and where the presence of /r/ in the onset is expected. Similarly, in the Pyu part of 024, we see the name Prabhavarman, which is of Sanskrit origin and which one would expect to see spelled as *prabhuvamma* in Southeast Asian vernacular context, represented as *prabhuva[r]rma*.

1.5.3.6. <r> — The existence in Pyu of the sign <r>, which functions as a vowel in the Indian syllabary for Sanskrit but is absent from Pali, is not acknowledged in Luce’s chart. Even though <r> does not seem to be used in any of his transliterations, Tha Myat does deal with this grapheme on page 7 of the *Pyu Reader* (1963), marking it in Burmese transliteration with the symbol ဝ (which in Burmese script represents Sanskrit <r>). Sein Win (2016: 135) refers to Tha Myat’s p. 7 and uses the same symbol in his transliterations. We long remained reluctant to admit the presence of <r> in Pyu, but now believe that Pyu scribes did make a distinction between <Cra> and <Cr>, the former, with a long curl passing outside the left extremity of the consonant C, and the latter, with a shorter curl below C. See for instance fig. 11a, which for the purpose of demonstration we may transliterate as *pX kul· toy· tkir·mñ °o pYn*·: the subscript element *X* is much shorter than the second subscript element *Y*.

Of course it is imaginable that <pra> could be realized in more than one shape. But on palaeographic grounds it is more natural to suspect the first is *pr*, the second, *pra*. If so, at 032.5 one will have to read the akṣara shown in fig. 11b as *pri*, and interpret it as a redundant spelling indicating that <pr> was pronounced [pri].⁸³ This interpretation can then be backed up by referring to the name *brithuvi(k)krama* (020.2), obviously representing Sanskrit *prthuvikrama*. If the local pronunciation of the sign <r> was [ri] in a Sanskrit name, then it will not be surprising to see this sign used to express [ri] even in Pyu words. The issue is of relevance to our edition of

83. Such redundant spellings, though rare, are not unknown in South and Southeast Asian epigraphy. We may refer to the spellings *kkṛtinaḥ* in a 6th-century copper-plate inscription from Āndhradeśa (EIAD 185, l. 31; Fleet 1883–1885), *raktamṛittika* in the 7th-century stela of Mahānāvika Buddhagupta (Malay Peninsula, Chhabra 1935: 17 = 1965: 22 n. 3), and *mātāpitṛpūrvvaṅgamam* in the roughly contemporary Odein inscription from Arakan (Griffiths 2015: 292).

016 below, because at 016.2b and 3A, in the akṣara *pX* (fig. 11c), we twice observe the compact shape intended above: we read it as <ṣṛ>. In other inscriptions, we commonly encounter an akṣara (fig. 11d) whose correct identification long seemed uncertain to us, because the readings <ṣṛ>, <ṇṣṛ>, <nra> or even <nu> all seemed justifiable, depending on which argument is given preference.⁸⁴ But our considerations on <ṣṛ> apply here too, and we have decided to read this akṣara as <ṣṛ>. In the light of such parallel phrases as *ṣṛ hnam*· (064, 3×) versus *tir-m hnam*· (020, 5×) and *ṣṛ kul· sma toy· tkir·(m)ḥ klimḥ ryaḥ* (064.3) versus *pir-m kun· toy· nkir-mḥ sma klimḥ ryaḥ* (020.3) we propose that <ṣṛ> and <ir-m> were equivalent spellings. For their phonological interpretation, see below (§3.4.5).

1.5.3.7. <ā> and <ī> — In previous work on Pyu, scholars have very rarely read long vowel <ī>. Our identification of the *repha* sign means that all supposed cases of *mī* in the Myazedi inscriptions are now reinterpreted as *rmi*.⁸⁵ A special length mark seems to be applied to some cases of <ī>, presumably intending to produce <ī̄>, in Sanskrit loanwords in 020.5 <sīt·dha sīt·dha sīt·dha> and 027.1 <sīddham> (with hypercorrect long vowel, to be compared with <būddha> for *buddha* in 020.4), but also in native Pyu words in 026.3 <tīm> and 027.4, 027.5, 027.7 <vīm̄m̄>. At 027.2, <nīl̄> could also be a Sanskrit loanword. This same length mark is applied to make <ā̄> in 020.5 <sādhu sādhu sādhu> and 027.2 <vān̄·m̄>. Nevertheless, in most cases Sanskrit loanwords are spelled in Pyu with <a> in place of <ā> in the source language.⁸⁶ Compared with the rarity of <ī> and <ā>, for which a special (non Indic) spelling device is used, <ū> is much more widespread and is represented with a regular Indic dependent vowel sign.

1.5.3.8. <u> and <ū> — The shape of a vocalization <u> under a consonant is dependent on the shape of the consonant. This phenomenon of allography is described for early South Indian forms of Brāhmī by Sivaramamurti (1952: 73–75).⁸⁷ Blagden, apparently unaware of this phenomenon, distinguishes

84. See §1.5.3.13 on the recurrent problem of distinguishing <ṣṛ> from <n>; <tu> is excluded because the vowel <u> when attached to <ṣṛ> (and some other consonants) turns to the right, not to the left, as we explain in §1.5.3.8.

85. Shafer reinstated the long *ī* that Blagden had revised to short *i* in his 1919 paper, despite the fact that it only occurs in the word for ‘name’.

86. 020.1 *mahagaruṇa* <*mahākaruṇa*, 020.4 *pūja* <*pūjā*, 020.1 and 024.bottom *barami* <*pāramī*, 020.5 *mahar-nava* <*mahārṇava*.

87. “In the Ikṣvāku letters of the 3rd century A.D. the short hook-like curve and the more common elongate downward stroke ending in a broad curve to left are the two forms of Medial *u*. In the Pallava Prakrit charters that are close in date to the Ikṣvāku inscriptions, there are three forms, viz., the elongate downward stroke with final curve to left, the short downward stroke curving and fully rising up to right hook-like [*? sic*] and the horizontal stroke with curved tip. As may be observed in all these early letters of various dates and in the letters of later date as well, the horizontal stroke in any form is added to letters like *ka* or *ra*, i.e., those with a single long vertical stroke, extending down beyond the body proper of similar letters; it is added either somewhere near the end of the vertical or at the end itself. In the earliest letters, the horizontal is used for letters like *ta*, *bha* etc., i.e., those with more than one short stroke composing the body of the letter, but this soon changes into a small hook as in, *tu*, *gu*, *śu* in somewhat later letters. The downward elongate stroke, which is at first short, then long, subsequently slanting and curved and lastly straight and hook-shaped at the end, is used in the letters with a stroke composing the base of the body, as in *ba*, *na*, *pa*, *sa*, etc.”

a long <ū> in certain words where we see allographs of short <u>, e.g., *būdha* for our *budha* or (harking back to the example in fig. 7) *sū* for our *su*. In Pyu, the basic form of vocalization <u> may be considered to be the vertical stroke with leftward loop at the bottom (e.g., 016.3d *hun-h*). But it is crucial to keep in mind that the leftward loop at the bottom of <ka> and <ra> is an integral element of the consonant itself, so that the notation of <ku> and <ru> will require use of a special form of <u>, viz. a horizontal stroke appended to the right of the consonant's descender; a particularity of Pyu script is that this horizontal stroke is also applied to the subscript consonant <v> (e.g., 016.3d and 4A *hvum*). Notation of <tu> and <gu> requires a small rightward hook (e.g., 016.2b and 3A <tum·>). With the exception of <tu>, Luce's chart shows these facts correctly in his column "Tircul", but it is noticeable that they have been forgotten in the *MHRJ* edition reading of 020, where one reads *kuiy-mh* for our *kir-mh* and *tkuin-h* for our *nkim-h*.⁸⁸ On the other hand, Luce's chart was wrong to suggest that no distinction is made in Pyu (his "Tircul") script between short <u> and long <ū>. Many of the readings <ū> in the published edition of 020 are actually <u>. We may turn again to Sivaramamurti for a description of <ū> in Indian scripts (1952: 76).⁸⁹ No instance of <ū> occurs in 016, but it is rather common in other inscriptions.⁹⁰

1.5.3.9. <o> and <au> — Although Luce's chart does not recognize any distinction between <o> and <au>, Tha Myat's work (1963) shows a distinction between ပုၼ် <pau>, မ္ၼ် <mtau>, etc., on the one hand, and ရော <ro>, ဝေါ <bo>, တော <to>, etc., on the other. The decipherment of 020 in *MHRJ* 11 (2003) presents several cases of both <o> and <au>, just as Blagden's presentation of the Pyu vocabulary known to him (1919) already showed some words with vowel *o*, and others with *au*. Sein Win (2016) on the other hand, writes ပေါ <po>, မ္ၼ် <mto>, တော <to> (for instance in 020), making no distinction between <o> and <au>. The akṣaras in question are characterized by bipartite vocalization, one component being attached to the top of the akṣara and extending leftwards (in the manner of <-e>), the other being appended on the top right and extending rightwards. Whereas Luce's chart tends to show fairly similar shapes of what he considers <o>

88. All these three examples are taken from 020.2. The Burmese scholars responsible for the edition of this inscription clearly thought that <ui> was a possible combination in Pyu, which we contest; on this issue, see §1.5.3.11.

89. "In Aśokan Brahmi ū is represented by two strokes added to the bottom of letters. The strokes are either horizontal or vertical. [...] In the Ikṣvāku inscriptions the shorter of the two vertical strokes is a horizontal stroke that slants downwards a bit and the vertical downward stroke is like 'J' in written script".

90. Krech reinterprets Blagden's <ū> (our <u>), for the vocalization with reversed-D shape, as <av>. Krech's choice of <av> for the reversed-D placed below consonant signs may be influenced by the faint resemblance between it and <v>. He does explicitly mention the correspondence of <savmedha> (our <sumedha>) in PYU007 to <saumedha> (our <somedha>) in PYU008 as an argument for interpreting the reversed-D symbol as <av>. He does not address the fact that his choice to represent this sign as <av> renders his Romanization structurally incompatible with international standards: a sequence such as <savmedha> above would, in the absence of any formulation of special transliteration rules, have to be interpreted as representing a string of three akṣaras <sa>, <vme> and <dha>. Krech's system appears more like a transcription than a transliteration.



Fig. 12 — Akṣaras involving <o> and <au> extracted from (a) 016.3A ṭlo[n]·h, (b) 020.1 goy·, (c) 032.7 loh, (d) 032.8 nhmok·nhmol·h, (e) 016.2A gaum, and (f) 016.3d pau.

independent of the consonants in question, in reality Pyu script shows four clearly different shapes, depending on whether the two graphs extend more or less horizontally or have a marked upward movement, and on whether the two graphs are of equal height or not.

1. high T-shape (1): the two halves of <o> are of equal height and fuse into a single trunk above the base consonant (fig. 12a).
2. high T-shape (2): the two halves of <o> are of equal height and connect separately to the base consonant (fig. 12b).
3. low+low: the base consonant is pushed down, though a visarga to its right remains at a normal height (figs. 12c, d).
4. low + high: the left stroke is at the same height as the top of the base consonant, whereas the right stroke towers over it (figs. 12e, f).

It seems that type 1 occurs only atop <ṭ> and <y>; type 2 only atop <kh> and <g>; type 3 only atop <k, c, ch, j, t, d, n, r, v, h>; and type 4 only atop <p, m, s, h>, but at least once above <g> in 016.2A. As the distribution seems largely to depend on the shape of the consonant, and “minimal pairs” are extremely rare, an argument could be made in favor of transliterating all in the same manner. But the fourth type is undeniably modeled after <-au> in Indic scripts, whereas the other types are modeled after Indic <-o>, and our methodology dictates that we should distinguish in transliteration of Pyu the same graphemes <-o> and <-au> that must be distinguished when transliterating Sanskrit.⁹¹ The distinction resides in whether the two graphs applied to the top of an akṣara are symmetrical or not: if they are (types 1–3), the reading is <-o>; if the one on the right bulges higher than the one on the left (type 4), the reading is <-au>.

1.5.3.10. <p> or <ḍh> — A specific instance of a word read by Blagden with <-au> is his *ḍhau* for the common demonstrative ‘that’. After some hesitation, Shafer had kept Blagden’s *ḍhau*, arguing that the initial lacked the “pronounced bulge to the left” that he felt was characteristic of <p>

91. In the Sanskrit parts of the inscription studied below, observe the clear difference in shapes between the vocalizations of <po>, <ro>, and <to> in 016.1A, 3d, and 5A, on the one hand, and <sau> in 5d, on the other. Those akṣaras are in Northern Brāhmī. For <-au> in Southern Brāhmī, we may refer to the clear examples of *ṭtau* found in the identical Nagarjunakonda inscriptions EIAD 50.2 and 50.3, both times in line 3 (Chhabra 1959–1960: 149, with plates A and B); and to three examples of <-au> in EIAD 53, lines 4, 5, and 7 (Sircar & Krishnan 1960–1961: 19–20).

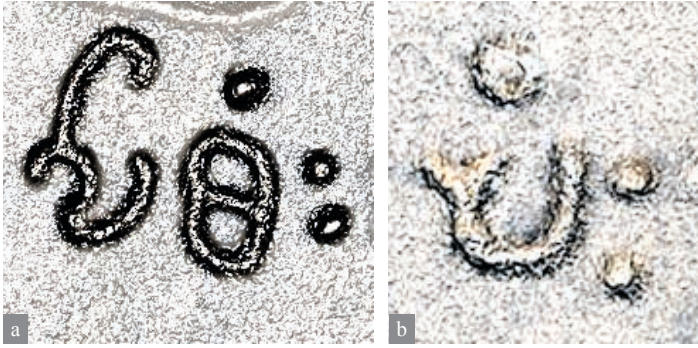


Fig. 13 — Akṣaras extracted from 008.5: (a) read *ḍhau ḥamḥ* by Blagden while we read *pau ḥamḥ* and (b) *pamḥ*.

(Shafer 1943: 316). We find it difficult to make sense of this last remark. The possibility of perceiving a contrast between the two signs is illustrated in fig. 13, where the first extract shows what Shafer and Blagden interpreted as initial <ḍh>; the second shows the symbol that Shafer and Blagden both read <p>. If either of the two extracts involves any “bulge”, it would have to be the first akṣara in fig. 13a, which both read as <ḍh>. Anyhow, Dani (1986: 245) already argued for reading Blagden’s <ḍh> as <p>, and we agree, so that we read the word in question *pau*. In our view, Pyu script knew no consonant <ḍh>.

1.5.3.11. Double vocalization — Previous scholars have been willing to assume that Pyu script, like Mon, Khmer and Burmese, knew a digraph <ui>/<ūi> (that is, vowel marks <u>/<ū> and <i> attached to a single consonant). As explained in §1.5.3.8, this is partly due to scholarly confusion as to the shape of <ka> and <ra>, more than once misinterpreted as <ku>/<kū> and <ru>/<rū>. For instance, Shafer was entirely off the mark when he wrote (1943: 320) “The word which BLAGDEN transcribed (*k*)i̇ in all four urn inscriptions, is clearly *kūi* or *kū̄*”; the word in question is transliterated *kim* in our system. The *MHRJ* edition of 020 also shows several akṣaras read with double vocalization <ui>, but all need to be read differently. Not a single instance of the combination <ui> is known to us so far. A case of <ri> has been discussed in §1.5.3.6.

1.5.3.12. <j> vs <ñ> — A recurrent problem in deciphering Pyu inscriptions is how to distinguish between <j> and <ñ>. The “Tircul” column in Luce’s chart shows the central horizontal to be the distinguishing element: <ñ> has a short indent (often rounded or wavelike); <j> has a substantial central horizontal (like Latin E). Nevertheless, it is easy to confuse the two, and we note that previous scholars have often made different choices than we do. Thus, for instance, we read *knām* in 020.3 and 020.4, while the *MHRJ* edition reads *kja*; for our *ṇav* in 020.4, *MHRJ* has *ja*; for our *traṇḥ* in 020.3, *MHRJ* has *dra(j)ḥ*, etc. As long as the meaning of most of the syllables in question remains uncertain, and etymological connections remain opaque, we need to turn to other arguments to help us make a choice. We may thus usefully take a glance at Written Tibetan, where both འ <ñ> and ཡ <j> can occur initially and both can occur as the second or even third element of clusters: <dn̄, mñ, rñ, sñ, brñ, bsñ> and <mj, ’j, rj, lj, brj>.

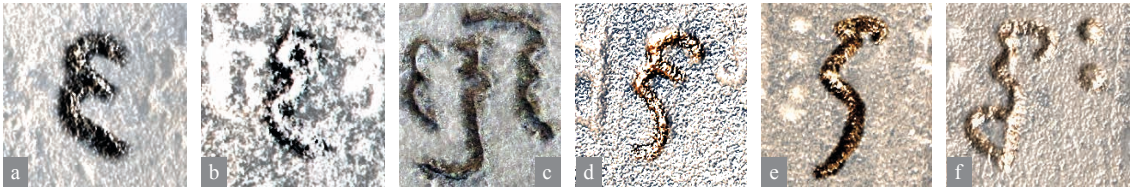


Fig. 14 — Akṣaras involving <j> and <ñ> extracted from (a) 020.4 *ja*, (b) 020.4 *na*, (c) 017.4 *jatra ni*, (d) 008.4 *ja*, (e) 008.14 *nu*, and (f) 008.27 *nuḥ*.

While <ñ> can occur in syllable-final position in Written Tibetan, <j> cannot. Matisoff (2003: 34, 36, 237) reconstructed initial as well as final /ŋ/ for Proto-Tibeto-Burman; he also reconstructed */dz/ and */dʒ/ as initials, but not as finals.⁹² We therefore may expect to find in Pyu both <ñ> and <j> in initial and second position of the onset, but only <ñ> in the rhyme. Words of Indian origin like *candra* (spelled <jatra> in 017.4), and *pūjā* (spelled <pūja> in 020.4) provide clear evidence for the shape of <j>, which may be contrasted with the subtly but clearly different shape of <ñ> in the same (figs. 14a, b). In fact, the illustration for 017.4, where we read the string *jatra ni*, offers something like a minimal pairing for <j> and <ñ> (fig. 14c). The mild indent characteristic of the <ñ> graph in earlier inscriptions almost disappears in ones that we presume to be later (figs. 14e, f). On the basis of our reading of the Pyu inscriptions so far, <ñ> appears to be much more common than <j> in Pyu inscriptions – which is linguistically expected.

1.5.3.13. <n> vs <t> — The basic forms of the akṣaras <ta> and <na> in Pyu script are those shown by Dani (1986: 282 and 284) with the labels “Deccani variety of *ta*, which always has a curved hook on the right” and “*na* with closed loop at the base”. In the prototypical Pyu <ta>, the vertical extension is emphasized, and the curved hook is open to the bottom and left; in the prototypical Pyu <na>, it is the horizontal extension that is more stressed, and the base is open to the bottom. But in reality the distinction between <t> and <n>, especially in syllable-initial position, but also in medial as well as in syllable-final position, is in most cases not objectively determinable without knowing which word the engraver meant to write. The impossibility of making a purely script-based choice between <ta> and <na> is also a feature of Southern Brāhmī as used in Ikṣvāku inscriptions (Falk 1997: 78), but since the language of those documents is well known, it is generally possible to determine which consonant was intended. In the case of Pyu, as long as most of the meanings and etymologies of its lexical items remain unknown, there is always a degree of uncertainty in our decision to read <t> or <n>.

92. Although we would have preferred to cite a reconstruction of Proto-Sino-Tibetan, no widely accepted authoritative reconstruction exists. Matisoff’s Proto-Tibeto-Burman reconstruction that we cite instead is also problematic since there is no consensus on whether Sino-Tibetan had only two primary branches, Sinitic and Tibeto-Burman. Nonetheless it is unlikely that Proto-Sino-Tibetan had final */dz/ and */dʒ/. Baxter and Sagart (2014) did not reconstruct final voiced affricates in Old Chinese, and Matisoff (2003: 238) explains how /z/-like codas in non-Chinese Sino-Tibetan languages are of secondary origin.



Fig. 15 — Akṣaras illustrating similarity between <ce> and <kh> extracted from (a) 020.3 *ce*, (b) 016.2A *khñon* and (c) 016.3A *cev*.

1.5.3.14. <kha> vs <ce> — The akṣara <kha> in Pyu is roughly the “*kha* having a prominent triangular base”, while <ca> in Pyu has a shape like the “beaked type of *cha*” illustrated by Dani (1986: 278–279).⁹³ Combined with the vocalization <e>, the latter becomes virtually indistinguishable from <kha>, and so our readings of Pyu words involving <kha> or <ce> are often guesswork at this stage. When we are dealing with Indic loanwords we may land on more solid ground, but only one such case is known to us so far, in 020.3 <thuva cetya> (Sanskrit *stūpa caitya*, Middle Indo-Aryan *thūva cetiya* – fig. 15a). If any other vocalization than <e> is present, we obviously must be dealing with <kh>, as in 20.3 <khñon> (fig. 15b). We have observed in 016 that (what we take to be) an akṣara <ce> may bear a horizontal stroke on the right, possibly serving to differentiate it from <kha> (fig. 15c).

1.5.3.15. Notation of syllable-final consonants — Blagden (1913–1914: 128) had commented that Pyu “apparently rejects final consonants altogether”, and all subsequent linguistic analysis has assumed that the language only admits open syllables. We argue here that a group of graphemes which has thus far defied interpretation served precisely to mark syllable-final consonants. These signs are absent from a small minority of Pyu inscriptions, and it has been a regrettable coincidence that precisely the small group of inscriptions which have occupied almost all attention in Pyu scholarship so far are among those in which, for unknown reasons, the signs in question were not engraved. But they are prominently present in most Pyu texts, so that Luce (1985, I: 62) observed: “One curious feature of the older form of Tircul, as found both a Śrī Kṣetra and Halin, is the insertion of lines in Brahmi character between the lines of Tircul. *No one, I think, has yet explained this phenomenon, which should (I hope) be not too difficult a task for an Indianist*” (our emphasis). Luce continued to regard these signs as extraneous, describing, for example, the two-line inscription from Halin (our 001) as “two lines of Tircul interlined with two of Brahmi” (1985, I: 66). Blagden himself had already made similar

93. This author follows an outdated transliteration scheme where <cha> is our <ca>.

remarks about these signs, which he admitted being unable to explain; with uncharacteristic precipitation, he went so far as to conclude that they “are clearly not essential, for they do not occur in the shorter inscriptions”, suggesting that “[p]erhaps they are merely ornamental” (1913–1914: 127–128). The Indian epigraphist Sastri, whose view is cited in *ASB* 1915, p. 22, proposed with regard to the ostensibly extraneous lines on the Halin inscription 001: “These two lines belong to a period earlier than the rest of the inscription. It would appear that an older inscription existed on the stone before the other one was engraved.” The apparent archaicism of the sublinear Brāhmī, and its ostensible disconnectedness from the principal lines of text, have remained common themes in subsequent publications. By way of example, it will here be sufficient to quote from Dani’s handbook (1986: 245–246):

As remarked before, in some Pyu inscriptions each line of the Pyu alternates with another line of writing that is definitely in different Indian characters. As far as we have been able to read them, they do not make any sequence. It appears that the letters have been used as pure alphabets, and it is doubtful whether any medial vowel is used with the consonants, except the inherent *a*. Most of the letters repeat themselves, like *ma*, *ma*, *ma* or *ta*, *ta*, *ta* or *va*, *va*, *va*, &c., or we find them in combinations with others. It is for the epigraphists to decide whether they are to be taken as musical notes. But the letters have clearly preserved certain older forms. [...] It is difficult to account for the preservation of the older forms unless these were used for some definite purpose, musical or otherwise.

Such unfounded interpretations of these signs as being of merely ornamental value, or as palimpsests, or as musical notation, can now be replaced by a well-founded hypothesis, namely that these signs express consonants in syllable-final position, *i.e.*, consonants without inherent vowel *a*. We illustrate the phenomenon with an extract from 016 (fig. 16), showing Sanskrit in Northern Brāhmī (and without sublinear signs) on the left, followed by Pyu in Pyu script (with sublinear signs) on the right.



Fig. 16 — Sublinear graphs to express consonants in syllable-final position. Extract from 016.2d.

We interpret the sublinear signs as furnishing the final consonant for the akṣaras under which they are placed. In the extract shown here, Pyu *srijan-travar-ma*, with the syllable-final <n> and <r> suspended below <ja> and <va>, obviously corresponds to Sanskrit *śrījayacandravarmmaṇā* (the Sanskrit element *jaya* for some reason remaining unrepresented in the Pyu). In line with our general methodology, this interpretation is based on the existence of an analogous spelling practice in early Indian epigraphy. The earliest Indian inscriptions (from the 3rd century BCE through the 2nd/3rd century CE)

are formulated in various dialects of Middle-Indo Aryan (*i.e.*, Prakrit), which has exclusively open syllables, so that the earliest forms of Brāhmī did not require a system for expressing syllable-final consonants. But when inscriptions started to be written in Tamil, and later in Sanskrit, it became necessary to devise a system for expressing such phonemes in these languages.⁹⁴ As observed by Dani himself (1986: 121), with regard to Sanskrit inscriptions of the early centuries CE, “[t]he usual practice was to write the final consonant in smaller size slightly below the usual line”,⁹⁵ while in later centuries “we see the use of an arc-like mark over the consonant in order to indicate that the vowel is absent”. As Dani correctly observes, “[t]his last practice is the real source of the modern *halanta* (*i.e.* consonant without vowel)” – and it is also the source of the Burmese အဝဝဝဝ °*asat*.⁹⁶ It is clearly the simple fact that South Asia scholars, like Dani, who knew about the older manner of noting syllable-final consonants but did not seriously engage with the Pyu language, while the Burma scholars engaged with Pyu did not know the prehistory of the °*asat*, that has prevented the function of the sublinear signs in Pyu being determined in the light of the Indian evidence. Besides the Sanskrit word *siddham* at the opening of most Pyu inscriptions, spelt with a small <m> sign suspended below the <ddha>, strong internal evidence in support of our hypothesis comes in the form of further Sanskrit loanwords, such as seen in the extract in fig. 16, and will find confirmation also in our linguistic analysis of native Pyu words.

Blagden only knew of one inscription with clear examples of the signs in question (*i.e.*, the Halin stone, our 001), so it is understandable that he regarded them as aberrant. But even as more examples of texts with sublinear akṣaras came to light,⁹⁷ later writers have tended to follow Blagden and the early reportage in regarding these signs as extraneous and archaic.

Burmese authors from Tha Myat on have indicated the sublinear consonants sublinearly, but because they do so in Burmese script it is not immediately clear whether they regard them as pure consonants or as full akṣaras, *i.e.*, as including the inherent vowel <a>, along the lines of Blagden and Sastri in the initial *ASI* reports (and, based on them, Dani in the above citation). The one exception is the Romanized edition of the Hpayhtaung inscription (our 020) in *MHRJ* 11 (2003) where the sublinear signs of this inscriptions are represented in Romanized transliteration as consonants without vowel. But

94. See Mahadevan 2014: 265–266, with a useful contrastive discussion of the Brāhmī script as designed for Middle-Indo Aryan dialects, on the one hand, and its adaptations to transcribe the early Tamil language, “which abounds in final consonants”, on the other.

95. See also Sivaramamurti (1952: 197): “Final *m* is represented by a miniature *ma* below the line”; Bhattacharya (1961: 222–223): “Considérons, enfin, l’absence du *virāma* et l’habitude d’écrire la consonne dépourvue de voyelle, par un petit caractère au-dessous de la ligne. Cette particularité se retrouve dans une inscription de Nāgārjunakoṇḍa, plus tard encore, dans la charte de Śivakandavarman à Hirahadagalli, dans les chartes de Siṃhavarman Vilavatti, etc., et dans les inscriptions de Bhadravarman et de Mūlavarman.” The latter two are the names of Southeast Asian kings, who ruled in Campā (Vietnam) and Borneo (Indonesia) in the 5th century CE. For clear examples of <t> and <m> in a Nāgārjunakoṇḍa inscription of the 4th century, see Chhabra 1959–1960.

96. See also Dani 1986: 83 with fig. 8.vii on p. 80.

97. Cf. Aung Thaw 1968b: 50–51, which lists a number of Pyu inscriptions with sublinear akṣaras.

in his article in the same issue of that *MHRJ*, Tun Aung Chain does not show any consciousness of the idea that they represent syllable-final consonants, for when citing from the transliterated text in his discussion, he leaves out the transliterated sublinear consonants altogether (2003: 2–3 and *passim*).

If they comment at all on the sublinear signs, Burmese scholars label them as “Brāhmī”,⁹⁸ and regard them as older than (and therefore also extraneous to) the signs in Pyu script proper written above them. Thus Aung Thein (2005), writing about the Halin stone again (001), judges the script of the “extra lines” to be older than that of the “base line” (2005: 9, cited approvingly by Chit San Win 2011: 196). Bhone Tint Kyaw, describing the lengthy horseshoe-shaped inscription 027, also from Halin, writes that “each line of Pyu has a line of Brāhmī dating from the time of the Buddha” (2012, pl. 26 *ka* caption). The notion that the sublinear signs are extraneous has led to them being transliterated without °*asat*· and, in some cases (fig. 17), with loss of horizontal alignment with the on-line akṣaras below which they are suspended.



Fig. 17 — Transliteration into two lines of Burmese script of inscription 038, actually a single line of Pyu, with sublinear consonant notation, engraved on the rim of a silver dish (Chit San Win 2011: 196).

It is surprising that no scholar, Burmese or otherwise, seems explicitly to have expressed suspicion, in published writing, that Pyu sublinear consonants represented the final consonants of syllables. It seems that the impression created by the Pyu texts that were studied in the earliest phase of research on Pyu (the Myazedi pillars and the Sriksetra urns), which lacked interlinear consonants, made it hard to accept the notion that Pyu might, in fact, have been a language in which closed syllables predominated, even though several clues pointed to that very conclusion. One is that the sublinear consonants are not randomly distributed along their lines, but are in each instance clearly aligned with a specific akṣara above them. Another clue involves the aforementioned conventional opening of inscriptions with the Sanskrit word *siddham*·: the final *m* of *siddham*· is also written below the line, level with other sublinear consonants, yet only the *m* of this *siddham*· has been interpreted as a syllable-final consonant in Burmese publications. The last clue is that the consonants in question are those typically found in syllable-final position in Sino-Tibetan languages such as Tibetan and reconstructed for the proto-language.

98. Cf. Aung Thaw 1968b: 50–51 where the term is *brāhmī cā* ‘Brāhmī writing’ or *brāhmī °akkharā* ‘Brāhmī script’.

Sein Win (2016) comes closest to a breakthrough. In the foreword to his book, and then again in the introduction that follows, he tantalizingly hovers around a solution, not only citing the *siddham*-case but even going so far as to provide two versions of the transliteration of inscription 001, one with sublinear signs in sublinear position, but another with the same signs treated as final consonants.⁹⁹ However, as the vocabulary list cited for 001 (p. 16) makes clear, Sein Win ultimately rejects the interpretation as final consonants, in favor of the view that the intermediate signs represent some sort of guide to the pronunciation of certain akṣaras.¹⁰⁰ The fact that a significant number of Pyu inscriptions lacked the signs in question apparently played a role in that decision.

Sino-Tibetan cognates for Pyu words provide the conclusive evidence for the function of the sublinear consonants. Once it is accepted that they represent syllable-final consonants, this acts as a constraint on the sort of forced etymologizing typical of some of the authors cited in §1.4.4: if, for example, the Pyu honorific *ḥamḥ* appears as *ḥay·mḥ* in texts with sublinear finals, then OB *pāy·* ~ *pay·* ‘beloved’ (as in OB *thiv·mañ·°e·pāy·mayā* ‘the beloved wife of the king’) starts to look like a much more plausible cognate than Pali *vara*, proposed as source for the Pyu word by Aung Thein (2005: 6) – though one will still need to find precedents for the correspondence of Pyu *ḥ* to OB *p*.

2. The Kan Wet Khaung Mound inscription (PYU016)

We now turn to our edition of an inscription that offers potential for making progress in understanding the Pyu language, in that it consists in a bilingual text, with phrases in Sanskrit being glossed in Pyu.

2.1 Presentation

The years 1926 to 1928 were good years for Pyu discoveries. First, Charles Duroiselle, director of archeology at the time, uncovered a hoard of artifacts in Khin Ba’s mound at Sriksetra. The Khin Ba mound gave us the silver reliquary (024) and the Pali text inscribed on 20 gold leaves (045) – probably the two most photographed Pyu antiquities – as well as 60 additional artifacts (*ASI* 1926–1927, pp. 176–181). Low mounds were a common feature of the landscape in and around the Sriksetra ruins. Most of them were presumably the remains of brick or stone structures which, through neglect, had become buried in layers of vegetation that ultimately decayed into soil. Duroiselle had noted 23 of them (*ASI* 1927–1928, p. 127). One of them, the Kan Wet Khaung (*kan vak khorḥ*) mound near the Bawbawgyi Pagoda,¹⁰¹ produced

99. Cf. the bottom of the second page of the unpaginated introductory sections in Sein Win 2016.

100. Cf. bottom of penultimate introductory page and top of the last one.

101. Tun Aung Chain (2003: 5) and San Win (2003: 16) give the site name as Wetkhaungkangon. If the syllables spell ‘pig’, ‘head’, ‘tank’, and ‘mound’, as seems to be the case, then this reordering makes more sense: ‘pig-head-tank-mound’, perhaps based on the mound’s location near a tank of a particular shape.



Fig. 18 — Front view of headless Buddha images from the Kan Wet Khaung mound. Sriksetra Museum 2013/1/48. Photo James Miles.

another find which, though less spectacular than the Khin Ba trove, may be considered equally important. Excavation of the Kan Wet Khaung mound revealed a sandstone statue of a headless Buddha, about 59 cm tall (without head), seated cross-legged, palm on palm, in meditational posture (fig. 18). The base of the statue – the socle – turned out to be inscribed in Sanskrit and Pyu continuously around all four sides (six lines on the front side, five on each of the other sides).

The sculpture is exhibited today in the site museum (inv. no. 2013/1/48), and was part of the historic exhibition *Lost Kingdoms* at the Metropolitan Museum of Art in New York City in 2014 (Guy 2014: 91–92, cat. 41). The inscription itself was mentioned briefly by Nihar-ranjan Ray (1936: 19–20); more details were furnished the next year by G.H. Luce (1937: 243):

The inscription was sent to India for decipherment, and by the courtesy of U Mya, our late Archaeologist, I have been shewn extracts from Mr. Dikshit's note on the subject, which is soon, I think, to be published. This note is obscure, but so interesting, that I take the liberty of quoting it, almost in full: – “I have been able to read the extant portion of the Sanskrit inscription on the Buddha statue. It yields 8 complete verses in the Vamśasthavila metre, and the Pyu words interspersed between the

Sanskrit expressions are literal translations or in some cases longer explanations of Sanskrit originals. . . . The sense of the inscription, as I see it, is to record the erection of this statue (?) by the prince Jayacandravarman. In the first sloka is mentioned the creation in one day of two cities (one of which must be Hmawza) where apparently the venerable Guha or Guhadīpa was preaching, and who was apparently the religious instructor of Jayacandravarman himself. The younger brother of the prince named Harivikrama (who was possibly ruling in the other city) was also associated (in the gift ?). There is mention of the increase of the feeling of mutual love probably between the two brothers (and the two cities) under the influence of the teacher. Verse 5 expresses the sentiment that the descendants, relations, etc., will not quarrel. . . . In the last verse the hope is expressed that the friendship between the two cities will continue to the end of the world, and the dear younger brother with his sons and descendants etc. is also referred to.”

As far as we are aware, Dikshit’s note was never published. But scholars will remain indebted to this scholar for having correctly identified the metrical structure of the Sanskrit parts of the inscription. The *vaṃśasthavila* is a meter in which stanzas comprise four lines each with the following pattern of short (˘) and long syllables (—): ˘ — ˘ — — ˘ ˘ — ˘ — ˘ — ˘ —. This metrical structure is of tremendous help in restoring lost or damaged akṣaras that belong to Sanskrit phrases. The fact that the Sanskrit text is interspersed with Pyu glosses, splitting up metrical units and sequences that would have been bound by sandhi if the Sanskrit text had been presented uninterruptedly, makes the metrical structure less easy to recognize. The Sanskrit is written in the “Late Northeastern Brāhmī” script that was used in inscriptions of the greater Bengal region in South Asia during the 6th and 7th centuries. Short spaces are inserted between Sanskrit phrases and their glosses in Pyu, which is written in Pyu script.

The tentative reading published by Tha Myat (1963: 41–43) covers only large face A and small faces b and d, omitting the badly preserved large back face C. It is unreliable for the parts that it does include and comes with no analysis or translation. Sein Win (2016: 45–60) reproduces what Tha Myat did (not photographically, but by copying) and adds what Tha Myat omitted. Where they overlap, both the eye drawings and the Burmese transcriptions are almost exactly the same.

Estampages of the inscription published in *IB* (portfolio IV, plate 356a) and in *PPPB* (vol. II, plates 16–17 – reproduced here as fig. 19), combined with Reflectance Transformation Imaging (RTI) we have carried out in 2014 (fig. 20) and 2016 have made it possible for us to establish the text of this extremely challenging inscription.¹⁰² Suggestions received initially from U San Win, later from Yuko Yokochi, and then from Dániel Balogh are hereby gratefully acknowledged.

102. The estampages reproduced in *PPPB* are better than the ones in *IB*, and seem to have been produced before the inscription suffered some damage. The RTI images, taken many decades later still, reveal that the stone has suffered further damaged in the interval. On the left end of face A and the right end of face d, 1–2 akṣaras have been lost since the time the *IB* estampages were made.



Fig. 19 — Photos of a good inked estampage of inscription PYU016 reproduced from Luce 1985, II: pl. 17 (identified in Luce 1985, I: 132 as Arch. Neg. 3029–3034).

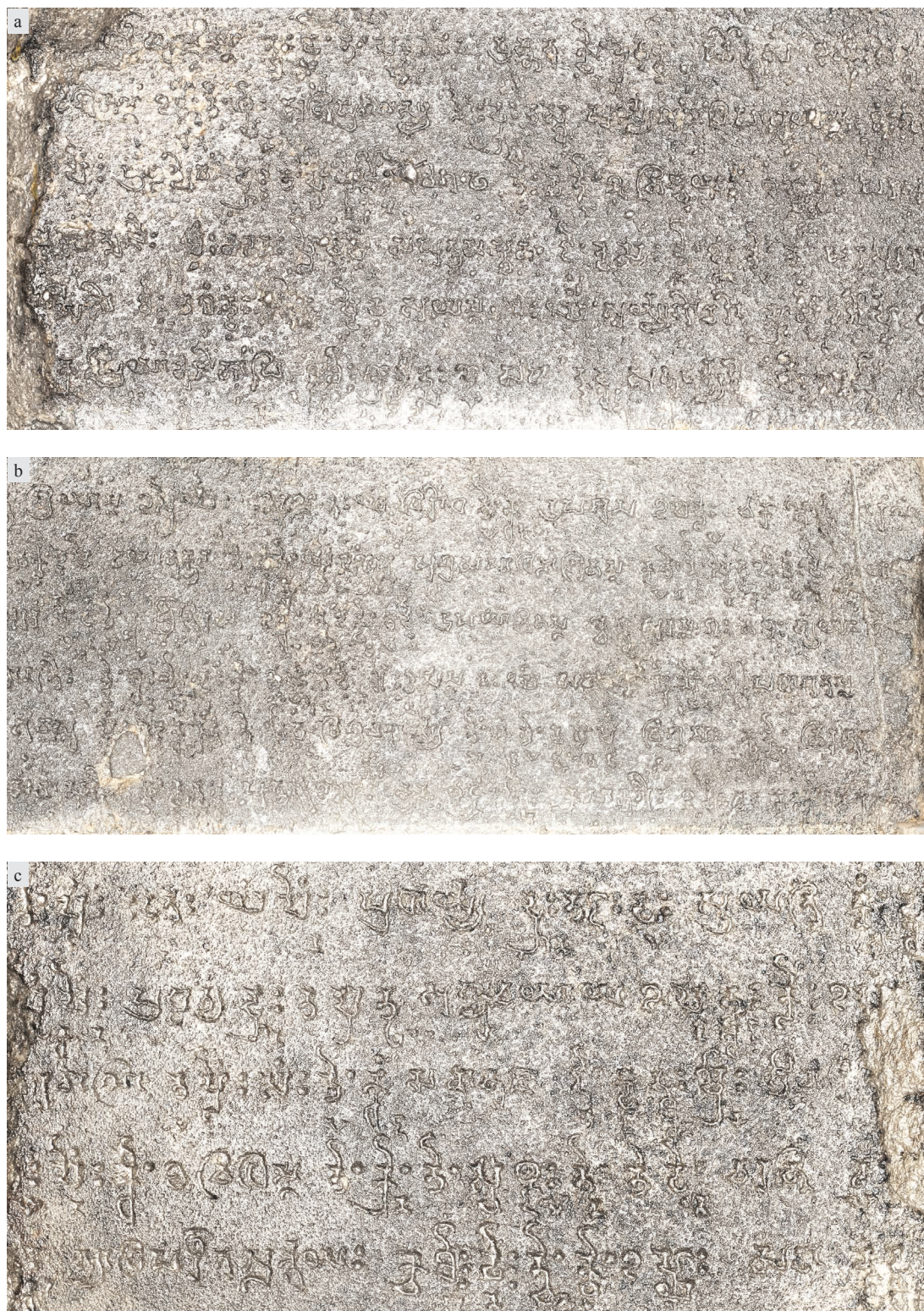
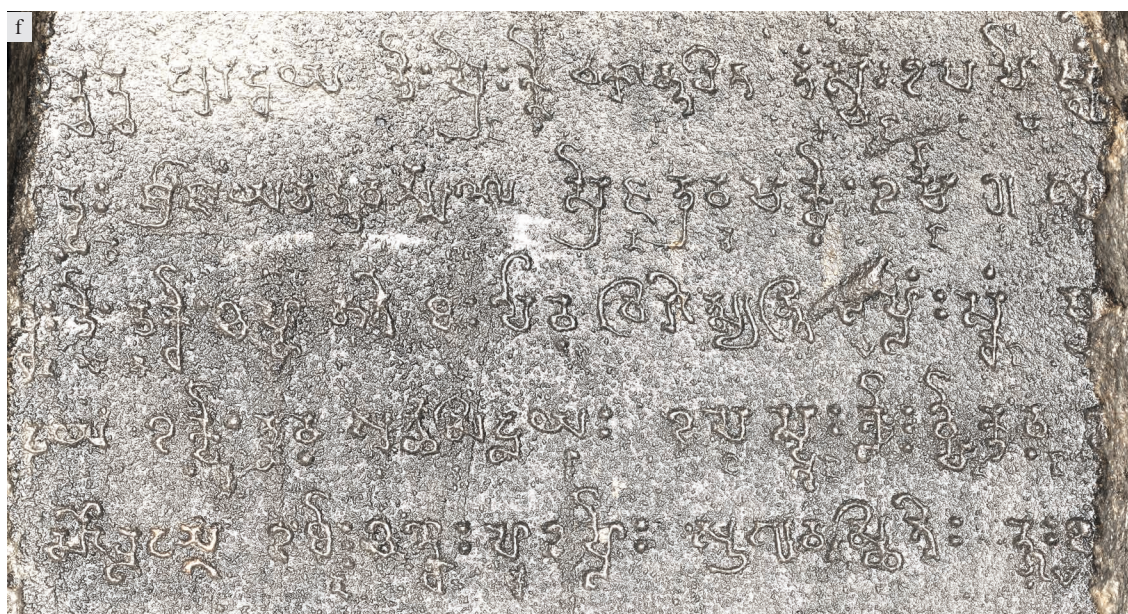
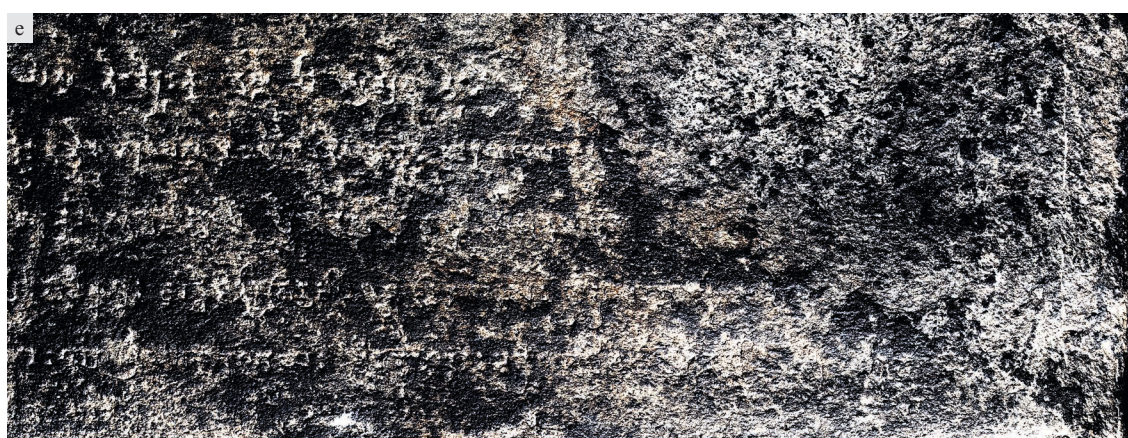
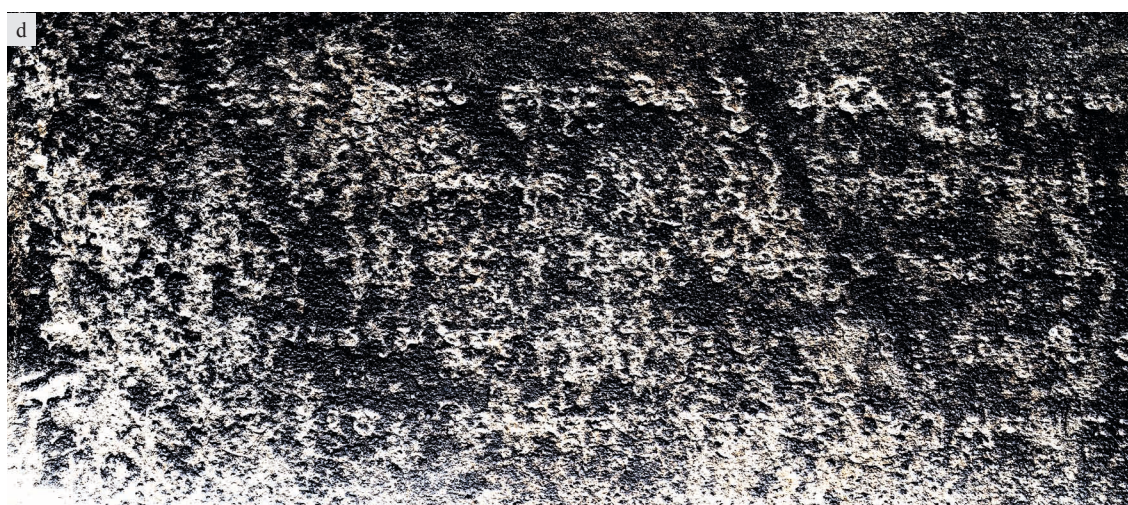


Fig. 20 — Extracts from Reflectance Transformation Imaging of inscription PYU016 produced by Arlo Griffiths, in collaboration with D. Christian Lammerts, in 2014. The labels (a) through (f) to correspond to those shown in fig. 19



We first present in subsection §2.2 a line-by-line diplomatic edition of the inscription. This is followed in §2.3 by a metrical reconstitution and translation of the Sanskrit text, and in §2.4 by discussion of date, bilingual form, and meaning of the inscription. In section §3 of this article we present detailed analysis of the linguistic data on Pyu that can be obtained from the inscription.

2.2 Diplomatic edition

We use bold-cum-italic typeface to highlight the Sanskrit phrases in the text and indicate the faces (A, b, C, d) over which the lines are spread in superscript, while we assign numbers to the Pyu glosses, also in superscript, with the sign #. We use the following editorial conventions:

| | |
|---------|--|
| [] | uncertain reading |
| () | editorial restoration of lost text |
| < > | editorial addition of omitted text |
| « » | scribal insertion |
| { { } } | scribal deletion |
| ? | illegible akṣara |
| C | illegible consonant element of an akṣara |
| V | illegible vowel element of an akṣara |
| + | lost akṣara |
| ◇ | punctuation space |

Each line of text is immediately followed by critical notes on our readings. It is to be noted that the *PPPB* rubbing in several instances preserves akṣaras or parts thereof that have subsequently been lost and are untraceable on the more recent documentation in RTI. We do not comment on such cases in our apparatus.

^{L1A} (ma)[h]t̥bhujām · ◇ ^{#1}tga[m·]m̥h diṃr̥m̥ t̥m̥ p̥m̥ir·[h] [sa]h ◇ [°]unnata ◇
^{#2}kdir·m̥r̥m̥ t̥r̥ vaṃ kv̥im̥r̥m̥ ◇ *porusa* ◇ ^{#3}°o [sa]h p̥ir·m̥ t̥gaṃ ◇ *śriyām* · ◇ ^{#4}°o sri
 yaṃ { {h} } ◇ [°]idam · ◇ ^{#5}[n]aḥ yaṃ ◇ *virodha* ◇ ^{#6}t̥im·m̥ kaṇ·m̥ ◇ [°]upaśama ◇
^{#7}°o paṇ· d̥lim·h ◇ [°]eka ◇ ^{#8}°ik· ? ◇ *kāraṇam* ^{L1b #9}t̥im̥ plaṇh̥ ◇ [°]itaḥ ◇ ^{#10}yaṃ
 p̥in·m̥h̥ ◇ *pradhāryya* ◇ ^{#11}dr̥n·h̥ ta n̥ar·h̥ dam·m̥h̥ ◇ [°]āyati ◇ ^{#12}kn̥at·m̥h̥ du[k·]m̥
^{L1C} ? ? ? ? ◇ ^{#13}dor· dam·h̥ [kn]iḥ ◇ *vyadhāyi* ◇ ^{#14}lam· ta sdam·h̥ ◇ *yena*
 ◇ ^{#15}p̥dik·m̥r̥m̥ ◇ [°]ekadine ◇ ^{#16}t̥[va] ta[k]·m̥ duk·m̥ ◇ *puradvayam* · ◇ ^{#17}t̥im̥
 p̥riṇ·h̥ kn̥i ◇ *tam* · ◇ ^{#18}pau ◇ [°]āsrava ◇ ^{#19}t̥in·m̥ lim·m̥ tin·m̥ + + + + + + + +
 + ^{L1d #20}°o ncat· nca ◇ *puradvaya* ◇ ^{#21}t̥im̥ p̥riṇ·h̥ kn̥i ◇ [°]ekāntahita ◇ ^{#22}tak·m̥
 scaṇ·h̥ °o paṇ· hip· syaṃ

1A. *tga[m·]m̥h* ◇ what must be the same word, perhaps meaning ‘earth’, also occurs in 5d (whence we assume presence of final *m*· here) and in PYU017.5.

1A. *yaṃ* { {h} } ◇ the faint visarga-shaped sign may be due to the scribe having begun to write the °i of *idam* (which contains the same shape) before realizing that he had forgotten to leave open some space and deleting the sign. We hesitantly treat as an accidental blotch below this akṣara what could also be read as *v*·.

1A. *idam* · ◇ [n]aḥ yaṃ ◇ below (2C, 4A, 5A, 5C), we repeatedly find the sequence *naḥ yaṃ*, once somewhat unclearly but thrice without any possibility of doubt as to the reading *n* rather than *t*, after direct-case forms (*ayam*, *imam*) of the Sanskrit near-deictic pronoun, of which *idam* is another instance. Although the *prima facie* reading here is *taḥ*, we consider it not so likely that the difference *taḥ/naḥ* represents a linguistic reality, while the script is inherently ambiguous on the distinction <t> vs. <n> (§1.5.3.13) so that reading *naḥ* is not impossible.

- 1b. *knaṭ-mḥ* ◇ our reading is partly founded on the assumption that the penultimate word of the text, in 6A, is the same as we see here. An anusvāra is clear in the present instance, while none is clearly visible in the occurrence in 6A, but we tentatively assume the poorer state of preservation of the stone there may have caused an original anusvāra to have become undetectable.
- 1b. *du[k-]m* ◇ this word is tentatively read here on the assumption that this line ends with the same word as 5d.
- 1C. The illegible stretch at the beginning of this line must have extended over five akṣaras, in Sanskrit with prosodic pattern – ~ – ~ –, as the metrical structure of the Sanskrit text requires.
- 1C. *t[va]* ◇ we tentatively read *tva* on the assumption that encounter here the same word *tva* as is found in l. 1 of PYU007–008.
- 1C. *kni* ◇ *tam* ◇ instead of a punctuation space, a || punctuation is expected between these two akṣaras.

L2A °*upadeśinam* ◇ #23°o khñon·h tim thmi[n]·h ◇ °*abhipraṇāmya* ◇ #24[g]amḥ
 drun·h ta sba ◇ °*aryaguhādhīpāhvayam* ◇ #25ḥay·mḥ gaum vam· kviṃm °o
 rmiṇ· ◇ *dayānukūla* ◇ #26tin·m da[k/r]·mṃ tin·m yav· °o [v]r[el]· ndrom·m ◇
 °*agrasamādhilābhinam* ◇ #27kdam·m tin·m rmiṇ·m sdin·m tdiḥ·m °o kdi[m]
 ḥay·mḥ di[m·mṃ] [] y(*ataḥ*)^{L2b #28}pd[i]k·(m)ṃ pin·mḥ ◇ *prabhṛtya* ◇ #29drun·h
 ta pṛ tum· ◇ °*abhyudaya* ◇ #30°o pañ· tdluñ·h klīmḥ °o plamḥ^{L2C} ?? ? [m-] ◇ #31?
 ? ? vañ·m ◇ *ta[t-]* #32pau ◇ °*agrāpā[d]āmvaṇa* ◇ #33°o plamḥ traḥ sdin·m tdiḥ·m ◇
pīṭhalāñchitaḥ ◇ #34°o [dñey·]h du[r]· ḥin·mḥ ta tdit·m ◇ °*ayam* ◇ #35naḥ yañ ◇
kriyā ◇ #36tsamḥ ◇ *kāraṇayā* ◇ #37[t]i(n·)m ? + + + + + (nr)^{L2d}[pa] #38tdav·mḥ
 ◇ *śrījayacandravarmanā* ◇ #39srijan·travar·ma kviṃm °o rmiṇ· || °*ataḥ*

- 2A. *gamḥ* ◇ restore *gay-mḥ*?
- 2A. °*aryya-* ◇ emend °*āryya-*. Cf. the same error in 5A.
- 2A. *y(ataḥ)* ◇ restoration on the basis of the Pyu gloss.
- 2C. *[t]i(n·)m* ◇ reading established on the basis of comparison with 5C.
- 2Cd. (nr)[pa] ◇ restoration on the basis of the Pyu gloss.
- 2d. *srijan-travar-ma* ◇ this gloss does not represent the element *jaya* in the Sanskrit.

L3A #40yam pin·mḥ ◇ *prabhṛty eva* ◇ #41dru[n]·h ta pṛ tum· tlo[n]·h ◇ *vigāḍha*
 ◇ #42tim·m dañ·m tim·m gam ◇ *nīścayaḥ* ◇ #43°o ndo[y]· tdam·h ◇ *paraspara*
 ◇ #44tim·m dañ·m tim·m ra ◇ *prītīrasa* ◇ #45°o kiC·m kCeñ· °o kdiv·mṃ cev·
 din·m ◇ °*upaghātīnam* ◇ #46kce k[ga] ◇ °*aham* ◇ #47gay·mḥ ◇ *na* ◇ #48ḥaḥ ◇
bhūyāḥ ◇ #49g[o]t· ?^{L3b} [ka]ravāñi ◇ #50ta plimḥ samḥ tim·m kañ·m ◇ *sahānuja*
 ◇ #51ñit·m kdañ· nḥun·h mrauy·h ◇ *śrīhārivikra[m](e)*^{L3C} (ṇa ca) ◇ #52? ? ? ?
 sri[ha]rivi[k·]krama [°o rm]iñ· || *bhaveyuh* ◇ #53leḥ ce °o kap· ñaḥ ◇ °*asmat*·
 ◇ #54ga[y]·mḥ ◇ *punaḥ* ◇ #55kna[t]·mḥ ◇ °*ātmajās ca ye* ◇ #56pdi[k]·mṃ gi
 saḥ pli[m] vañ·m hnaut· ◇ *saputtrasantāna* ◇ #57ñit·m [k]da[n]· + + + + +
 + #58(tin·m)^{L3d} ḥun·h tim·m tak· kiṃ ce hvum ◇ *na te* ◇ #59ḥaḥ pau vañ·m ◇
virotsyanti ◇ #60lam· hlimḥ skañ·m ◇ mra vañ·m

- 3A. *paraspara* ◇ it would be possible to read here *parasparam*, but we consider the ostensible anusvāra an accidental unevenness in the stone.
- 3A. *cev* ◇ we assume the appendage to the right is serif and indicates <c> rather than <kh>.
- 3b–C. *śrīhārivikra[m](e)(ṇa ca)* ◇ the restoration, with *ca* serving no other purpose than to complete the meter, is stylistically unsatisfactory, and also otherwise implausible as a trace of -e should be visible if the antepenultimate syllable of the stanza were really *me*.
- 3C. (*tin·m*) ◇ the restoration follows from repeated occurrence of *tin·m ḥun·h tim·m* in 4A. Comparing that passage, and the requirements of the meter, one would *a priori* be inclined to supply *paramparāgatāḥ* as well, but there does not seem to be sufficient space for those akṣaras plus the full gloss *ñit·m kdañ· saḥ tin·m ḥun·h tim·m tak*· that is expected to have stood in front of it. We assume some sequence of text was omitted at the time of engraving.
- 3d. *hvum* ◇ for the allograph of -u attached to subscript -v-, see several cases in PYU005 and 006.

^{L4A} *saha tva[dā]tmajaiḥ* ◇ #⁶¹bay·mḥ la saḥ pli vañ·m dañ·m ◇ *saputtrasantāna* ◇ #⁶²ñit·m kdañ· saḥ tin·m bun·h tim·m ta[k]· ◇ *paramparāgataiḥ* ◇ #⁶³tin·m bun·h ti[m]·m del·mñiḥ kiṁ ce hvuṁ vañ·m dañ·m || *°imam*· ◇ #⁶⁴naḥ yañ ◇ *sad[ā](cā)ra* ◇ #⁶⁵mra sdiñ·m [°o] got· ◇ *pathāgatam*· ◇ #⁶⁶o de(l·mḥ) ^{L4b} (la)m·h pin·mñi kiṁ ce *vidhim*· ◇ #⁶⁷tim krin·m tim sca thñam·h tin·m ti din·mñi ◇ *caranti* ◇ #⁶⁸lam· pgau[t·] ^{L4C} *ye* ◇ #⁶⁹[pdi](k·mñi) [na]ḥ tse[C·] [vañ·m] ◇ *[°a]pa[nna]-gasambhavā[ya]* ^{#70}? g[i] sḥuC· mrauy·h pin·mñi ◇ *te* ◇ #⁷¹[ti][n]·m ba vañ·m ◇ *bhavantu* ◇ #⁷²[peḥ] ce °o ka ñaḥ ◇ *sar[v]ve* ^{#73}o hnaut· *nirujāḥ* ◇ #⁷⁴ba kca ◇ *cirāyusaḥ* ◇ #⁷⁵droñ· hra ◇ *sadā* ^{#76}? [tim] ? ? ? + + [u] ^{L4d} *daya* ◇ #⁷⁷o kdir·mñi tṣ vañ ◇ *artthasiddhayaḥ* ◇ #⁷⁸o pañ· sdlañ·h klīmñi khmi[n]· kta vañ·m ||

4A. *bun·h* ◇ we consider the dot above this akṣara as accidental, rather than as anusvāra. Cf. the same at the beginning of 3d.

4A. *ta[k]·* ◇ the final consonant is unrecognizable as *k*, but the parallel in 3d helps us choose the intended consonant.

4A. *mra sdiñ·m [°o] got·* ◇ the same sequence occurs in 5A. As for [°o], the sign we encounter here is the one we normally transliterate <°o> but with an appendix of the left-turning type we normally transliterate <-ra>. Comparison with the presumptive identical sequence in 5A, where we read a normal <°o>, suggests scribal confusion here.

4A. *del·mñiḥ* ◇ the reading is quite uncertain, but we presume we have here the same morpheme as at the end of this line (where no more visible than <de> and that too only on the PPPB estampage) and toward the end of 6A, where it is reduplicated, and where <e> cannot be read without much force.

4b. *pgau[t·]* ◇ we ignore a possible anusvāra, arguing that we are at the transition between faces and hence that disturbance of the estampage is likely to have occurred (RTI entirely lacks the akṣara in question); according to our hypothesis on the function of anusvāra (see §3.4.5), occurrence of the dot on syllables with /o/ is not expected. We restore final *t* on the assumption that we have here the same word as in the gloss of *anuvarttyate* in 6A, although the identity of its final consonant is uncertain.

4C. *[°a]pa[nna]gasambhavā[ya]* ◇ our reading assumes that <°a> has been engraved only partially by the stonemason, its descending element apparently having been forgotten. The reading with *pannaga* is supported by the Buddhist conception that birth as a snake is the reward for bad conduct in a previous life. See n. 108.

4C. *[ti][n]·m ba* ◇ reading determined on the basis of multiple occurrences of the sequence *tin·m ba* in PYU027 and 032.

4C. *[peḥ]* ◇ this syllable is almost unreadable here. It should presumably be identical to the one following the same Sanskrit verb form *bhavantu* in 5A, but what little remains visible suggests that there might be an *e*-vocalisation here; this in turn is reminiscent of the syllable we hesitantly read *leḥ* immediately after the nearly synonymous Sanskrit verb form *bhaveyuh* in 3C.

4C. *ka ñaḥ* ◇ we see no trace of the final <p> expected below <ka> on the grounds of the parallelism with the glosses of *bhaveyuh* in 3C and *bhavantu* in 5A.

4C. *sadā* ◇ it is remarkable that this word does not here receive the same gloss as it does in 5b and 6A.

^{L5A} *[v]i[la]ñghito* ◇ #⁷⁹bin·mñi ta bak·m tvān·mñi ◇ *yaiḥ* ◇ #⁸⁰pdik·mñi vañ·m ◇ *°ayam*· ◇ #⁸¹naḥ yañ ◇ *°aryagocarō* ◇ #⁸²mra sdiñ·m °o go[t·] rheC· ◇ *bhavantu* ◇ #⁸³pañ[h ce] °o kap· ñaḥ ◇ *te* ◇ #⁸⁴pau vañ·m ◇ *vigrahakāryya* ◇ #⁸⁵tim·m kañ·m tim·m vañ·m prat· pañ· ◇ *vibhramah* ◇ #⁸⁶kmuñ· kmiC·m ◇ *nirantara* ^{#87}[ḥa] sar· ^{L5b} ?[k]·h ◇ *vyādhiparītamūrttayaḥ* ◇ #⁸⁸kca ḥimñi vin·mñi ncit·m kvimñi °o hyaḥ ◇ *sadā* ◇ #⁸⁹nñā[p]· duk·m ^{L5C} ? ? ? *[mbha]* ◇ #⁹⁰ti[n]·mñi droḥ kdiñ °o pa[n]· duk·m ◇ *nivad[dha]sid[dh]ayaḥ* ◇ #⁹¹tañ tyā[n]·h kvimñi °o khmi[n]· kta || *°ayam*· ◇ #⁹²n[a]ḥ yañ ◇ *kr[i]yākāraṇayaḥ* ◇ #⁹³tsamñi ti[n]·mñi yaḥ °o krin·m ◇ *tathaiva* ◇ #⁹⁴[p]au nay· tlo[n]·h ◇ *te* ◇ #⁹⁵pau vañ·m ◇ *para(sparam)* ^{L5d} *sauḥdam*· ◇ #⁹⁶o ḥin·mñi ce tkoḥ hak· °o hliḥ ◇ *°ā bhuvasthiteḥ* ◇ #⁹⁷tgam·mñi °o tco[n]·

5A. °*aryyagocarō* ◇ emend °*āryyagocarō*. Cf. the same error in 2A.

5A. *paṃ[h ce] kap·ñāḥ* ◇ apparently a variant spelling of *[peḥ] ce °o ka ñāḥ* in 4C.

5A. *vibhramah* ◇ it seems impossible to read *vibhramāḥ*, which is required by context, so long *-ā* must be obtained by emendation.

5A. *kmiC·m* ◇ the final consonant is not damaged at all, but we are unsure how to identify it; viable options seem to be <ñ> (but this final consonant is not attested elsewhere), <v> or <n>.

5b. *nṇa[p]·duk·m* ◇ cf. *duk·m* at the end of 1b, and 6A for the collocation *nṇap·duk·m*. The *prima facie* reading here would be *nṇam*, but there is some room for doubt here between <m> and <p>, while the <p> in 6A seems clear.

5C. ? ? ? *[mbha]* ◇ if the reading *mbha* is correct, then one could possibly think of restoring the entire sequence as *samārambha*.

5C. *n[a]h* ◇ there seems to be a leftward extension on the serif of the <n>, but since the Sanskrit proximal deictic pronoun *ayam* is elsewhere glossed with *naḥ*, we presume vowel <e> is not intended.

5C. *te* ◇ emend *taiḥ*, although the Pyu gloss is clearly for *te*.

5d. *tco[n]* ◇ it is only on the PPPB estampage that a trace of the final consonant remains visible, and it seems to be <n>. However, some doubt remains as the only other known Pyu syllable with <tco> is *tcom* which occurs three times with clear <m> in PYU020. Should we read *tcom* here too?

L6A *haḥ k[m]V* ◇ *priyānujenāpi* ◇ #98[°o] *ḥin·mḥ kroḥ tsaḥ tom* ◇ *sadā* ◇ #99 *nṇap·du[k]·m* ◇ °*anuv[arttyate]* ◇ #100 *ḥi[n]·mḥ na[h] pgau[t]* ◇ *sahānujai(h)* ◇ #101 *ñit·m kda[n]* *nḥ(un)[h ra]* ◇ *puttra* ◇ #102° *o saḥ kula* ◇ #103° *o truḥ hnau[r]·h* ◇ *kramānugaiḥ* ◇ #104° *o da[l]·mḥ dal·mḥ knat·[m]ḥ tḥimḥ vaṃ || (scroll)*

6A. *ñit·m kdañ·nḥ(un)[h ra]* ◇ cf. *ñit·m kdañ·nḥun·h mrauy·h* in 3b. It is impossible to read *mrauy·h* here; the *ta* we read is very uncertain; it is even uncertain whether there is any sign at all between *nḥun·h* and *puttra*; and if, as seems likely to us, there is one more akṣara, then it seems uncertain whether a visarga immediately follows *nḥun*, because *nḥun·ka* might also be a possible reading.

6A. *knat·[m]ḥ* ◇ the presence of <m> here is very uncertain, but we restore it because we assume we have here the same word as in 1b, where the <m> is clear.

6A. || (*scroll*) ◇ this is the only case of the Pyu variety of double bar punctuation in this inscription; so far, we have seen only the form that this bar takes in Late Northeastern Brāhmī.

2.3 Metrical reconstitution and translation of the Sanskrit text

In the metrical reconstitution that follows, we have paired down the number of editorial brackets, removing altogether the [...] used above to indicate uncertainty. We silently normalize all cases of consonant gemination after *r*.

- I. (ma)hībhujaṃ unnatapuraśaśriyām¹⁰³
idaṃ virodhopaśamaikakāraṇam
itaḥ pradhāryāyati — — — —
vyadhāyi yenaikadine puradvayam· «||»

‘[He], by whom, after considering (or: meting out punishment) ... from this time onward (? *itaḥ*) ... the future ...’, this Pair of Cities was in a single day made into a singular cause of the cessation of strife between kings of prominent valor and majesty:

- II. tam āsrava — — — — —
puradvayaikāntahitopadeśinam

103. Line a. *-pauruṣa-* ◇ corrected; *-poruṣa-* Ins.

abhipraṇamyāryaguhādhipāhvayam
dayānukūlāgrasamādhlābhinaṃ ||

‘after prostrating to him, named Ārya Guhādhipa, who ... the influxes (*āsrava*), who teaches what is singularly beneficial for the Pair of Cities, who attains the excellent concentration (*samādhi*) which is conducive to compassion,’

III. y(ataḥ) prabhṛty abhyudayāya – ~ – m
tadagrapādāmbujapīṭhalāñchitaḥ
ayaṃ kriyākāraṇayā ~ ~ ~
~ – (nṛ)paśrījayacandravarmaṇā ||¹⁰⁴

‘this [ordinance], marked on the stool of his (Guhādhipa’s) excellent lotus feet, [in favor] of a policy of agreement (*kriyākāra-naya*)¹⁰⁵ [has been made] by [me], king Śrī Jaya Candravarman. From the moment (that this had been done) for the elevation of ...,’

IV. ataḥ prabhṛty eva vigāḍhaniścayaḥ
parasparaprītirasopaghātinam
ahaṃ na bhūyaḥ karavāṇi «vigraham»
sahānujaśrīharivikram(eṇa ca) ||¹⁰⁶

‘from that very point onward, having fully adopted [this] resolve, I must no longer engage with my younger brother Śrī Harivikrama in conflict, that hurts [our] feeling of affection for each other.’

V. bhaveyur asmat punar ātmajās ca ye
saputrasantāna«paramparāgatāḥ»
na te virotsyanti saha tvadātmajaiḥ
saputrasantānaparamparāgataiḥ ||

104. a. *prabhṛty a-* ◇ the analytic text *prabhṛtya a-* in the inscription is redundant; combining the two lemmata as *prabhṛtyā°* would not be interpretable in the context. • *abhyudayāya* ~ ~ ~ m ◇ restore *abhyudayāya bhūbhṛtām*? One expects here some word also figuring in VI d, but none seems to fit the meter. • b. *-pādāmbuja-* ◇ normalized; *-pādāmvuja-* Ins. • c. *kriyākāraṇayā* ~ ~ ~ ◇ perhaps restore something like *kriyākāraṇayāgato vidhiḥ* or emend and restore *kriyākāraṇayād vidhiḥ kṛtaḥ*? Cf. VI a and VIII c. In the first case, one must assume an error in the analysis, for *kriyākāraṇayā* would be expected; in the second, one must assume involuntary omission of *t*. • d. ~ ~ (nṛ)paśrījaya- ◇ perhaps restore *kṛto nṛpaśrījaya-* or, if a solution like the second alternative is adopted for line c, *mayā nṛpaśrījaya-*.

105. *kriyākāraṇayā* = *kriyākāra*+*naya*, with slightly irregular retroflexion. See st. VIII. On the term *kriyākāra*, see Edgerton 1953, II: 197 s.v. “the making of a decision, determination; so, resolution, agreement”; Schopen 1996: 589 n. 45 shows that the word could also designate a monastic ordinance, potentially one engraved on stone.

106. c. «*vigraham*» ◇ three syllables are lacking here; Yuko Yokochi proposes to restore *vigraham*. This hypothesis is significantly strengthened by the fact that the same Pyu syllables seem to be used immediately after *vigrahakārya* in 5A, and before *sahānuja* in 3b. • d. *-hari-* ◇ emended; *-hāri-* Ins. • d. As pointed out above, the restoration *śrīhārivikra[m](eṇa ca)* is not likely to be correct, but no other plausible solution has suggested itself to us. Theoretically imaginable solutions such as *-vikramākhyaṇā* or *-vikramāhvinā* would be supported by the present of °o *rmiṇ* in the gloss and the resulting parallelism with 2A °*aryyaguhādhipāhvayam* ◇ *ḥay·mḥ goṃ vam· kviṃṃ °o rmiṇ*, but neither *ākhyin* nor *āhvin* seems to be attested in Sanskrit sources known to us.

‘And again, whatever descendants will be born from us (*i.e.*, me), coming down in a lineage of succession including sons, they will not contend with your descendants, coming down in a lineage of succession including sons.’

VI. imam sadā(cā)rapathāgataṃ vidhim
caranti ye ’pannagasambhavāya te
bhavantu sarve nirujāḥ cirāyuṣaḥ
sadā ~ — — [u]dayārthasiddhayaḥ ||¹⁰⁷

‘Those who practice this ordinance (*vidhi*) transmitted along the path of good conduct (or: of those of good conduct), in order not to be reborn as a snake,¹⁰⁸ let them all be healthy, long-lived, always successful in their achievements due to the arising of ...’

VII. vilaṅghito yair ayam āryagocarō
bhavantu te vigrahakāryavibhramāḥ
nirantaravyādhiparītamūrtayaḥ
sadā ~ — — mbhanibaddhasiddhayaḥ ||¹⁰⁹

‘Those by whom this range of action for the noble is transgressed,¹¹⁰ let them be perturbed by the tasks of war, their bodies afflicted by incessant disease, their success always fettered from the beginning.’

VIII. ayam kriyākāraṇayas tathaiva taiḥ
para(sparaṃ) sauhṛdam ā bhuvaḥ sthiteḥ
priyānujenāpi sadānuvartyate
sahānujai(h) putrakulakramānugaiḥ ||¹¹¹

‘This policy of agreement as well as (*tathaiva*) mutual friendship is always followed up also by [my] dear younger brother (*anuja*), together with those (*i.e.*, our) younger brothers¹¹² following one another in a succession of families of sons, as long as the earth remains.’

107. c. -*cirāyuṣaḥ* ◇ normalization; -*cirāyuṣaḥ* Ins. • d. Perhaps restore *bhyudayārthasiddhayaḥ*. Cf. IIIa.

108. See, *e.g.*, stanza 39 of Dhārmika Subhūti’s Śaḍgatikārikā: *sarpāḥ krodhopanāhābhīyām mānastabdhā mṛgādhipāḥ | abhimānena jāyante gardhabhāśvādiyoṇiṣu* ‘La colère et la malveillance [font renaître] serpent; les orgueilleux [deviennent] des lions; l’arrogance fait renaître dans la condition d’âne ou de chien’ (ed. and transl. Mus 1939: 244–245); see also the Saṃsappanīyasutta of the Aṅguttaranikāya (ed. Morris & Hardy 1883–1900, V: 289–290), where the snake (*ahi*) figures first among a group of creeping animals as which a dishonest (*jimha*) person is liable to be reborn.

109. a. *ārya-* ◇ emended; *aryya-* Ins. • b. -*vibhramāḥ* ◇ emended; -*vibhramāḥ* Ins. • d. ~ — — *mbha-* ◇ the reading is very uncertain; we very tentatively propose to restore *samārambha-*, and translate accordingly; another possibility is to restore here the word *stambha* ‘post’ – a post to which the transgressors’ achievements would be fettered. • d. -*nibaddha-* ◇ normalization; -*nivaddha-* Ins.

110. Alternatively, on may read here an allusion to the ‘noble’ (*ārya*) Guhādhipa, mentioned in st. II, and hence translate: ‘Those by whom the boundary of (the sanctuary) of the noble one (Guhādhipa) is transgressed ...’.

111. a. *taiḥ* ◇ emended; *te* Ins. • b. *bhuvaḥ* ◇ normalized; *bhuva* Ins.

112. One has the impression that *ātmajaiḥ* would have suited better here than *anujaiḥ*. Perhaps that word can have the sense of ‘descendant’ or else it could be emended to *ātmajaiḥ*.

2.4 Date, bilingual form, and meaning of the inscription

2.4.1 Palaeographic dating

The general difficulty of internal dating of Pyu inscriptions has been referred to in §1.3.3. Previous scholarship has noted the similarity of Pyu script to archaic Southern Brāhmī of about the 3rd or 4th century (§1.5.1), but also underlined that the persistence of substantially the same script even into the 12th and 13th centuries, as witnessed by rare datable Pyu inscriptions of the Pagan period (007–008 and 011), indicates that the graphemes of Pyu script must over several centuries have remained comparatively resistant to evolution in their shapes.¹¹³ For this reason, the common method of palaeographic dating – on which we refer to the discussion by Richard Salomon (1998: 168–170) – is of virtually no use when dealing with epigraphic material in Pyu script. The fact that the present inscription includes portions not only in Pyu script, but also, to write Sanskrit language, in a form of Northern Brāhmī script, opens the perspective of applying the palaeographic method to the latter script and to infer the date of the Pyu text by association.

Admittedly, the general limitations of the palaeographic method, and *a fortiori* the example of its inapplicability to the case of Pyu script itself, demand that we remain extremely prudent in applying this method in the case at hand. Nevertheless, we may note here that the Northern Brāhmī script of the Sanskrit text of inscription PYU016 would under normal circumstances have to be dated to the period between about 500 and 600 CE. This conclusion is based on the following considerations. First, the basic letter shapes of our variety of Northern Brāhmī, shown in the left-hand boxes in tables 1 and 2, can be directly compared with corresponding akṣaras shown in the right-hand boxes extracted from a copper-plate inscription originating from Ganjam in Southern Orissa (straight across the Bay of Bengal from Sriksetra) dated to 300 Gupta Era, *i.e.* 619–620 CE.¹¹⁴ It will be noticed that the script of PYU016 is more archaic whenever there is difference (notably the shapes of <°i>, <ka>, <ma>, <ya>, <sa> and <ha>).¹¹⁵ This means that PYU016 should be considerably older than the plates from Orissa. A date in the 6th century also follows from comparison with the palaeographic table of selected dated North Indian inscriptions of the 6th and 7th centuries presented in Jürgen Neuss' 2003 study of Muṇḍeśvarī Hill, a site situated 70 km southeast of Benares in Uttar Pradesh state, India, and hence not far removed from the Buddhist heartland around Bodhgayā which is one likely source of the use of Northern Brāhmī at Sriksetra.

Considering the possibility of this script having been disseminated to Pyu territory by the overland route through Bengal and Arakan, we have also

113. Cf. Blagden 1911: 370.

114. Cf. Hultzsch 1900–1901. The plates are preserved in the Chennai Government Museum where we were able to photograph them, in collaboration with Emmanuel Francis, in August 2017.

115. These differences correspond fairly closely to the ones observed between two script types in the Sanskrit inscriptions of Arakan, which have been discussed at length by Griffiths (2015: 322–330).

tried to compare it with the recently published copper-plate inscription, dated 184 Gupta Era = 502/503 CE, of a king Vainyagupta who ruled in what is now far eastern Bangladesh or Tripura state in India around the turn of the 6th century (Furui 2016). Unfortunately, the copper plate in question, like the two other known inscriptions of this first historically attested ruler of Southeast Bengal, has come down to us in heavily corroded state, making extraction of akṣaras unfeasible. Judging from the photos that we have seen of the Vainyagupta plate, nothing suggests that the Northern Brāhmī of PYU016 is more archaic.

A dating in the 6th century is thus indicated by palaeographic considerations, and this casts doubt on Blagden's assumption "for the sake of convenience" (1913–1914: 131) that the dates given in the Sriksetra urn inscriptions are to be interpreted in terms of the Burmese era beginning 638 CE, for the urns must be globally contemporary with 016 (see §2.4.3).¹¹⁶ It is true that if we make our own the "principle of plus or minus one hundred years for the range of accuracy of paleographic dating" (Salomon 1998: 170, with reference to the late Indian epigraphist K. V. Ramesh), and reckon with the possibility of conservatism in the case of employment of a script form far away from its center of active usage, we are unable categorically to exclude the possibility that our inscription would have been engraved in the 7th century, or even later. Nevertheless, all factors considered, we are inclined to date inscription 016, as also those that can be assumed to be contemporary with it, to the 6th century CE.

2.4.2 The earliest example of nissaya?

The Kan Wet Khaung inscription 016 is not a bilingual text in the same way that the Myazedi is quadrilingual, with textual content represented separately in different languages. Nor is it like the inscription on the silver reliquary from Sriksetra (024), comprising scriptural citation in Pali and different content in Pyu. In 016, the Sanskrit and Pyu are interspersed in dyads, the Pyu apparently providing a gloss, a paraphrase, or perhaps some other form of elaboration of the Sanskrit. In the example most cited in the literature, the Sanskrit phrase *puradvaya* 'two cities' is twice (in line 1C and 1d) glossed by the Pyu *tiṃ priṇ-ḥ kni*, a phrase for which the meaning 'two cities' is supported by reliable cognates in related languages (e.g., Written Burmese *praññ* 'royal city', Written Tibetan *gñis* 'two').

116. We therefore take exception to the uncritical reliance on Blagden's hypothesis that is endemic in the secondary literature, and which we may illustrate by the following citation from Brown & Stadtner (2015: 46): "Dating the inscriptions on the basis of their paleography has been problematic. Luckily, inscriptions on four stone burial urns from Sri Ksetra contain dates. [...] The urns are ossuaries from a dynasty at Sri Ksetra, for kings whose names end in "vikrama," [...]. The name of the king and the year of his death are identified on his urn. C. O. Blagden suggested that the dating belonged to an era that began in 638, which most scholars accept. This dating system, later called the Chulasakaraja, was adopted in other parts of Southeast Asia, which is perhaps another indication of the importance of the Pyu in the region. These four Pyu urn inscriptions range in date from 673 to 718. We can therefore perhaps conclude that the seventh to the eighth century at Sri Ksetra was an important period in the city's development and a firm anchor for scholars to form a chronology for Pyu art." In contrast, a 6th-century date was ascribed by Guy (2014, cat. 41) to the Buddha image on which inscription 016 is engraved.

| | | | | | | | | | | | |
|--|--------|--|--|--------|--|--------|--|-----|--------|--|--|
| | °a | | | °ā | | °i | | °u | | | |
| | ka | | | kā | | ku | | | | | |
| | ga | | | gu | | gaiḥ | | | ghā | | |
| | ca | | | ja | | jā | | je | | | |
| | ḍha | | | ṇā | | ṇi | | | | | |
| | ta | | | ti | | te | | | taiḥ | | |
| | thā | | | thai | | | | | | | |
| | da | | | dā | | de | | dha | | | |
| | na | | | nā | | ni | | nu | | | |
| | pa | | | pā | | pi | | pu | | | |
| | bha | | | bhi | | bhu | | bhū | | | |
| | ma | | | mā | | mū | | ya | | | |
| | ra | | | rā | | ri | | rī | | | |
| | la | | | lā | | va | | vā | | | |
| | śa | | | śi | | sa | | si | | | |
| | ha | | | hā | | hi | | hṛ | | | |
| | virāma | | | virāma | | virāma | | | virāma | | |
| | daṇḍa | | | daṇḍa | | | | | | | |






















| | | | | | | | | | |
|---|--------|---|---|--------|---|---|----|--|--|
|  | °e | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
|  | to |  | | | | | | | |
| | | | | | | | | | |
|  | dhā |  |  | dhi |  | | | | |
| | | | | | | | | | |
|  | po | | | | | | | | |
|  | bhr̥ | | | | | | | | |
|  | yā |  | | | | | | | |
|  | ru |  |  | ro |  |  | ro | | |
|  | vi |  | | | | | | | |
|  | sau | | | | | | | | |
| | | | | | | | | | |
|  | virāma | |  | virāma | | | | | |

Table 1 —
Independent vowel akṣaras,
consonant+vowel akṣaras,
virāmas and punctuation
signs in the Northern Brāhmī
script of PYU016. These are
shown in the lefthand col-
umns; corresponding akṣaras
from the Ganjam plates of
619–620 CE are shown in the
righthand columns.

| | | | | | | | | | | | |
|--|-----|--|--|------|--|--|------|--|--|------|--|
| | ṅhi | | | | | | | | | | |
| | rta | | | nta | | | ntā | | | nti | |
| | mpa | | | spa | | | rmma | | | | |
| | tye | | | tsya | | | bhyu | | | mya | |
| | kra | | | gra | | | ttra | | | ndra | |
| | dva | | | hva | | | | | | | |

Table 2 — Complex akṣaras in the Northern Brāhmī script of PYU016. These are arranged by subscript, consonant on main line, and vowel, and shown in the lefthand columns; corresponding akṣaras from the Ganjam plates of 619–620 CE are shown in the righthand columns.

In general terms, the Kan Wet Khaung inscription has the structure seen in monolingual pairings of base texts with glosses of the sort found throughout the Buddhist world. South Asian representatives include Pali *aṭṭhakathās* (literally ‘elucidations of meaning’) and Sanskrit *bhāṣyas* (‘explanations’). What can be considered bilingual representatives of the same commentarial tradition have a long history in Burmese, where they are known as *nissaya*, in origin a Pali word meaning ‘that on which something depends; support, help, reliance’. There are several varieties of Burmese *nissaya* texts. Most typically, they involve the insertion of Burmese phrasal or verbal glosses in pre-existing Pali source texts. Though *nissaya*-type glosses are attested as early as the late Bagan period (13th century),¹¹⁷ the genre is not thought to have been fully developed until the mid-15th century (Okell 1965: 187 and note 7). Texts comparable to Burmese *nissaya* are also reported for Mon, Thai, Lao, Sinhala and other languages.¹¹⁸

Okell (1965, 1967) shows how Burmese *nissaya* adapted certain particles and syntactic orderings to represent Pali morphological and syntactic categories

117. For example, *IB* 200 of ca. 1270 CE (Nyein Maung *et al.* 1972–2013, vol. III: 62–63, List 303), line 3: [...]*chanavutirogā || kuiv chay khrok pā so anā || battīṣsakammā || krammā 32 || paññcavisatibhayā || bhuīy 25 pā [...]*. In this excerpt, the terms ‘ninety-six diseases’, ‘thirty-two punishments’, and ‘twenty-five dangers’ are written first in Pali (*chanavutirogā*, etc.), then in *nissaya*-style Old Burmese (*kuiv chay khrok pā so anā*, etc.). As our transliteration shows, only the number ‘ninety-six’ is spelled out in the Old Burmese. For additional detail on *nissaya* style, see the paragraphs that follow in this section.

118. Duroiselle (1921–1924, vol. II, part I: vi) notes two kinds of Mon *nissaya*, called *naṃ* and *trāai*, “according as the explanation of the text is longer or shorter”. Cf. also Tin 1963: 45 and note 1 which makes reference to possible analogues in Tocharian and Khotanese. For Sinhala, where texts comparable to *nissaya* are called *sannaya*, cf. Blackburn (2001: 68–69); for Northern Thai and Lao, see McDaniel (2008: 122–142) and later in this section.

| | | | | | | | | | | | | |
|---|------|---|---|------|---|---|------|---|--|-----|--|--|
| | | | | | | | | | | | | |
|  | sthi | |  | ddha |  |  | nna |  | | | | |
| | | | | | | | | | | | | |
|  | ryya | |  | vyā | | | | | | | | |
|  | pra |  |  | prī | |  | bhra | |  | śrī | | |
| | | | | | | | | | | | | |

in a Sino-Tibetan language typologically quite different from Indo-Aryan Pali. For example, in colloquial Burmese, whether spoken or written, what might notionally be called the subject may be marked for contrast but is otherwise left unmarked. However, in Burmese *nissaya* texts, the nominative, an obligatory category in Pali, is generally represented by the literary particle *saññ* (spoken / *θi*). Similarly, the classifier phrase, a feature of Sino-Tibetan but not of ancient Indo-Aryan languages is, in Burmese *nissaya* texts, usually recast as an adjectival phrase using the formal Burmese noun attribute marker *so*: Burmese *su kha mīn nāḥ yok* ‘five wise men (wise-men five CLF)’ corresponds in *nissaya* to *nāḥ yok so su kha min tui*. (with *tui*. regularly marking plural), a pattern that conforms more closely to the order of elements in a Pali equivalent such as *pañcapaṇḍitā*. *Nissaya* Burmese contains a range of such particles that serve to gloss features of Pali morphology, and once the conventions were established through *nissaya* glosses on Pali texts, they influenced the composition of prose vernacular literature, leaving literary Burmese in a style redolent of the language of scripture.

Tin (1963: 45) distinguishes four kinds of Burmese *nissaya*, only one of which involves glosses on the Pali comparable to the ‘two cities’ example above. The others involve paraphrasing and various degrees of elaboration. A similar range has been noted in Northern Thai or Lao-Pali bilingual texts, where the term *nissaya* applies to only the last of the three following genres: *nāmasadda* texts are glossed word-by-word; *vohara* texts provide translations and commentary for longer chunks; *nissaya* texts “fall in between the two genres and often cite four to ten words before offering glosses and creative asides” (McDaniel 2008: 131). Our inscription involves Sanskrit rather than Pali, of course, and indications are that some of the dyads – if not the majority – involve phrasal units with paraphrases or elaborations rather than glosses.

Duroiselle noted that the Pyu phrases tended to be longer than the corresponding Sanskrit phrases, which were generally quite short (*ASI* 1927–1928, p. 128). In some cases, the length disparities may simply reflect differences in language type, the Sanskrit case endings corresponding to Pyu sequences of auxiliaries and particles. However, examples such as the following (line 4b), in which the two syllables of Sanskrit *vidhim*, accusative singular of the masculine noun meaning ‘rule’ or ‘precept’, correspond to eight akṣaras in the Pyu, suggest that at least in some cases, the Pyu is, to use Tin’s characterizations, more of a “free translation” than a “verbatim translation”.

vidhim · ◊ tim krin · m tim sca thnam · ḥ tin · m ti din · m m

Given our state of knowledge about Pyu, it is difficult to be certain whether, or to what degree, the Pyu mimics the grammar of the Sanskrit. The question will be considered in more detail in §3.3. It seems important to emphasize here that if the comparison with *nissaya* is not totally off the mark, this inscription predates by centuries the earliest examples known for Burmese and other Southeast Asian languages, and hence takes a special place in the literary history of Southeast Asia.

2.4.3 The purport of the text

It is not only the particular bilingual and biscript, *nissaya*-like features of our inscription that make it remarkable. The content of the Sanskrit text, which we presume to have been the primary composition, with the Pyu serving to represent its meaning, is another aspect which ensures for it a unique position in Southeast Asian epigraphy. In a recent publication (Griffiths & Lammerts 2015: 992), it was noted that its partly damaged text does not evidently permit classification among one of the three main types of Buddhist inscription distinguished there, *i.e.*, as scriptural citation, as caption, or as donative record. In fact, the closest typological resemblance seems to be with the so-called *satyapraṇidhān*, “statements in the first person of accomplished pious works accompanied by the dedication of the accruing merit toward happy and prosperous rebirths, protection from danger, and the eventual enlightenment of self and/or others” (Griffiths & Lammerts 2015: 1001), known from Khmer epigraphy in the second half of the second millennium. But the absence of any reference to enlightenment remains problematic. Likewise, although the deployment of epigraphical Sanskrit stanzas for political purposes is by no means exceptional, the message of brotherly and familial harmony that this text seems to contain is, to our knowledge, unparalleled. There is no evident connection with the Buddha image on whose socle the inscription is engraved, although one may imagine that the inscription itself contains or constitutes the ‘ordinance’ (*vidhi*) explicitly mentioned in stanza VI, and – we suspect – lost in a lacuna in stanza II, in which case the expression *tadagraṇādāmbujapīṭhalāñchitaḥ* may allude to the fact that the text is engraved on the socle and might then better be translated as ‘marked on the seat of Guhādhipa’s excellent lotus feet’. If so, the sculpture, now headless, would have represented the otherwise unknown saint Guhādhipa as a Buddha. The name of king Harivikrama is known also from inscriptions 005 and 020 (line 1). The difference between the Sanskrit (*śrījayacandravarmanā*) and the Pyu (*srijan·travar·ma*) in 016.2d suggests

that the element *jaya* in the former had primarily ornamental function and served *metri causa*, while the name of this elder sibling of Harivarman would have been Candravarman, not Jayacandravarman, as presumed by previous scholars.¹¹⁹ If so, the sequence *srijaṇ-tranana* in 020.2, which may have represented a Sanskrit name such as Candrananda ‘Moon Son’ or Candrānana ‘Moon Face’, possibly denoted the same king.¹²⁰ In any case, these correspondences of names are sufficient to establish that our inscription dates from the same general period as the Sriksetra urn inscriptions (003–006).

3. Linguistic analysis of the Pyu text in inscription 016

3.1 Preliminary observations

Inscription 016 contains 105 Pyu glosses of Sanskrit, which are numbered in our edition above. In the lexicographical analysis presented here, our gloss numbers are in parentheses following Pyu or Sanskrit elements of glosses. The Sanskrit that is glossed consists of

- (a) simple words: *e.g.*, °*idam* ‘this’ (#5);
- (b) compound words: *e.g.*, *pura-dvayam* ‘city-pair’ (#17);
- (c) elements of compound words: *e.g.*, °*unnata-* ‘high’ (#2);
- (d) sequences of two or three words: *e.g.*, *na te* ‘not they’ (#59).

There is never any word spacing inside Pyu glosses. If Pyu morphemes appear in isolation in glosses and/or a variety of positions, we tentatively regard them as monosyllabic words: *e.g.*, both *baḥ* ‘not’ and *pau* ‘that’ are words, because the former glosses *na* ‘not’ (#48) and the latter glosses *tam* ‘that’ (m. acc. sg.) (#18). When a Pyu gloss consists of multiple akṣaras, it is not always clear whether it contains one or more Pyu words: *e.g.*, does the gloss *baḥ pau vaṇ-m* for *na te* ‘not they’ (#17) contain one word, two words, or three words? When we find recurring correspondences between Sanskrit morphemes (or their semantic features like case or number) and Pyu akṣaras, we can identify the latter as Pyu morphemes. Thus, we can break *baḥ pau vaṇ-m* (#17) down into three morphemes meaning ‘not that PL’ because *baḥ* and *pau* are known as words and *vaṇ-m* appears in glosses for Sanskrit plurals (#56, 60, 61, 63, 71, 78, 80, 84, 95).

If Pyu morphemes have abstract meanings and appear in a fixed position relative to specific parts of speech, we tentatively regard them as affixes: *e.g.*, *vaṇ-m* ‘PL’ appears at or toward the ends of glosses of nouns, pronouns, and verbs, so it is probably a suffix, and *pau-vaṇ-m* is a suffixed pronoun

119. See the quotation in §2.1, which has been the source of all subsequent statements on the contents of the inscription in references listed in our inventory. On the ornamental use of such elements as *jaya*, see Sircar 1939: 64.

120. The sequence in 020.2 was read *sri jatraṇana* in the appendix to *MHRJ* 11 (L2.D) and by Sein Win (2016: 79), but as *sri ja tra ta ta* and interpreted as Candradatta or Cattradatta by Tun Aung Chain (2003: 3–4). In connection with this king’s name, one must also note the occurrence of a queen named Jatra in 017.3–4 (*mahadevī sri jatra*) and perhaps in 033.1 (*jatradevī*). Her Sanskrit name would presumably have been Candrā.

‘they’. We can confirm that *pau-vam̃ñ* is ‘they’ because it glosses Sanskrit *te* ‘they’ (#84, 95).

We can also sometimes confirm meanings by checking other multilingual texts: *e.g.*, in 007 and 008, *pau* ‘that’ corresponds to Old Burmese *thiv* ‘that’ and Old Mon *goh(h-)* ‘that’. But such confirmation is usually not possible because (a) only four long multilingual texts are known (007, 008, 011, 039), (b) only two of those texts have been extensively studied (007 and 008), (c) those two texts are almost identical to each other, and (d) those two texts do not share much vocabulary with 016. Often a gloss in 016 is our only evidence for the meaning of a Pyu word or morpheme: *e.g.*, *gay-m̃h*, the gloss of °*aham* ‘I’ (#47), does not appear in any other multilingual text.

If a multi-akṣara gloss in 016 contains a mix of known and unknown elements, we can use the following basic rules of Pyu word order to guess what an unknown element may mean: (a) possessor noun precedes possessed noun, (b) noun precedes adjective, (c) object precedes verb. We can also use the possessive preposition and nominalizer °*o* to divide meaningful units in multi-akṣara glosses; whatever follows °*o* must be a noun or a verb, and if it is a preposition marking a possessed noun, then what precedes it must be that noun’s possessor.

On the other hand, if a multi-akṣara gloss in 016 contains two or more akṣaras that are unique in our corpus and do not map onto two or more Sanskrit morphemes, we cannot identify them as morphemes, and we tentatively treat them as a single unit that may be broken into smaller parts in the future. For example, the Pyu gloss of Sanskrit *-kula-* ‘family’ (in context, ‘of families’) is °*o truḥ hnau[r]·ḥ* (#103). °*o* precedes possessed nouns, so *truḥ hnau[r]·ḥ* is presumably a noun. However, neither of its akṣaras appear elsewhere in our corpus. Hence we cannot determine whether it is a disyllabic word or a compound word, and we have a single entry for it in our lexicon.

3.2 Assessment of the Pyu lexicon in 016

3.2.1 Structure of the lexicon

Entries are arranged by transliteration in an alphabetic order modeled after that of Burmese with the addition of *ḥ* which is unique to Pyu. Although <ṛ> may be equivalent to either <ri> or <ir-m̃> (§1.5.3.6), for consistency we position <ṛ> as if it were the sequence <ri> in all cases. Symbols for lost text such as C and ? precede *k*.

k kh g gh ñ
c ch j jh ñ̃
ṭ ṭh ḍ ḍh ṇ
t th d dh n
p ph b ḥ bh m
y r l v
s h °
a i u e o au
ṃ ṁ ḥ

Entries have five sections:

1. Transliteration of the Pyu. Superscript numbers differentiate homophonous entries: *e.g.*, *nah*¹ ‘this’ and *nah*² ‘after’.

2. Transliteration of the corresponding Sanskrit followed by the gloss number in parentheses. Hyphens have been added to indicate the presence of preceding and following compound elements and divisions between elements: *e.g.*, **-kula-** (#103) is in the middle of the compound **putra-kula-kramānugaiḥ** (#102–104). We only add hyphens to reflect divisions between glossed elements; we do not intend to provide a comprehensive morphological or etymological analysis of the Sanskrit. Thus we do not divide **vidhim-** (#67) into *vidh-i-m-* because we are unable to map its three morphemes onto Pyu *tiṃ krin-m̃ tiṃ sca th̃nam-ḥ tin-m̃ ti din-m̃m*. Sanskrit forms are omitted from entries for high-frequency Pyu grammatical morphemes. There would be little sense in including all 36 Sanskrit forms glossed with the possessive preposition °o which has no analogue in Sanskrit.

3. English gloss of the Pyu.

4. Sino-Tibetan cognates that are secure and/or contain final consonants predicted by our hypothesis laid down in §1.5.3.15. Unless a Pyu form has noteworthy cognates in other languages, cognates are listed only from the four earliest attested written languages: Old Burmese (or Written Burmese when an Old Burmese form is not available), Old Tibetan (or Written Tibetan when an Old Tibetan form is not available), Tangut in Gong Hwang-cherng’s reconstruction as published in Li (2008) with Li’s serial numbers and pre-Tangut reconstructions in Guillaume Jacques’ (2014) system; Old Chinese as reconstructed by Baxter & Sagart (2014). No attempt is made to provide comprehensive lists of cognates, a task that would be futile until we have a firmer understanding of Pyu phonological history. The probability of coincidental resemblance is particularly high in Sino-Tibetan languages with monosyllabic roots. At this point it is difficult to filter out chance lookalikes from true cognates because of the paucity of examples of regular correspondences. It is also possible that sound changes have altered some Pyu forms to the point where they no longer look like cognates in other languages.

5. Notes. Gender and the active/middle voice distinction do not appear to correlate with any Pyu morphemes and are hence not indicated in Sanskrit glosses to avoid clutter.

3.2.2 Lexicographical entries

? *g[i] s̃buC-*

Sanskrit: **[°a]pa[nna]ga-** (#70)

Gloss: ‘not a (kind of?) snake’

Cognates: OB *mr̥uy-* ‘snake’ and OT *sbrul* ‘snake’.

Notes: Meaning inferred by process of elimination. The last two syllables *mrauy-ḥ pin-m̃h* of the Pyu gloss correspond to **-sambhavāya** ‘birth.DAT.SG’, so the rest probably corresponds to **[°a]pa[nna]ga-** ‘NEG-snake’. *mrauy-ḥ*

is not cognate to OB *mruy* ‘snake’; the resemblance of the two words is fortuitous. See *pin-mh* and *mrauy-h*.

-pa[nna]ga- ‘snake’ literally means ‘fallen’ + ‘go’, but the Pyu gloss may consist of one or two words specifying a kind of *sḥuC* ‘snake’. Pyu *ḥ* may be from *m, and neither (s)*ḥr-* nor *smr-* are attested in our corpus. If pre-Pyu *smr was simplified to *sḥ*, then *sḥuC* may be cognate to OB *mruy* ‘snake’ and OT *sbrul* (< *smrul; Hill 2014a: 101) ‘snake’, provided that its unidentifiable final consonant is *l-*. Although we have not yet found any definite Pyu cognate of a Tibetan word ending in *-l*, we assume that, unlike Burmese which shifted **l* to *-y* after **u* and lost it elsewhere (Hill 2014a: 107), Pyu, like Tibetan, preserves original **l*.

The *g[i]* of this gloss is unlikely to be the first person possessive pronoun of #56. It may either be the first syllable of a term for a kind of a snake or the second syllable of a negative expression corresponding to the Sanskrit negative prefix *ṛa-*. The lost first syllable of the Pyu gloss may have been *ḥa* ‘without’ or *ḥaḥ* ‘not’. See *ḥa* and *ḥaḥ*.

kañ-m

Sanskrit: part of glosses for *virodha* (#6), *[ka]ravāṇi* (#50), and *vigraha-* (#85)

Gloss: ‘to engage in conflict’

Cognates: A reviewer suggests the root KAK in WT *’gegs-pa* (past *bkag-pa*) ‘to obstruct’.

Notes: Meaning inferred from context. #6 is a gloss for ‘strife’, #50 is a gloss for ‘I must do’ (i.e., engage in conflict; the omitted Sanskrit word after *[ka]ravāṇi* is probably *vigraham* ‘war’), and #85 is a gloss for ‘tasks of war’. Appears in reciprocal structures with *tim-m*. May be related to *skañ-m*.

kiṃ ce

Sanskrit: part of glosses for ? (probably *«-āgatāḥ»*; #58), *-āgataiḥ* (#63), and *-āgatam* (#66)

Gloss: ‘to come’

Notes: As explained in §1.5.3.14, the reading of the second akṣara is uncertain. If the second akṣara is *ce*, *kiṃ ce* may be related to *kce* of *kce k[ga]* (#46). Comparative evidence cannot resolve this issue since Sino-Tibetan languages typically have unrelated *l-* or *r-* words for ‘to come’. The second akṣara may be a root ‘to come’ that is also found in glosses for ‘to be’ (cf. English *become*). See *ce* °o *kap-ñah*.

kiC-m kCeñ-

Sanskrit: part of gloss for *prīti-* (#45)

Gloss: either a noun ‘affection’ or a verb ‘to love’

Notes: Preceded by °o which may either be a possessive marker indicating that a noun ‘affection’ is possessed by *tim-m dañ-m tim-m ra* ‘each other’ or a nominalizer of a verb ‘to love’ possibly forming a pleonastic compound with chiming syllables along the lines of Burmese *khyac-khañ* ‘be fond of (to love-to be fond of)’.

kca

Sanskrit: **-rujāḥ** (#74), **vyādhī-** (#88)

Gloss: ‘disease’

Cognates: WB *chā* ‘be hungry’ and *chā* ‘be limp, be impaired (of limbs)’, WT *tsha* ‘hot’.

kce k[ga]

Sanskrit: **-^oupaghātinam** (#46)

Gloss: ‘hurt’ (noun or verb?)

Notes: The Sanskrit word is an agentive adjective ‘hurt-ing’ that modifies the omitted noun that we have restored as *«vigraham»* ‘conflict’ in the next line of the verse; together they mean ‘conflict that hurts ...’. *kce* and *k[ga]* are hapax legomena, so it is not possible to determine whether they are two morphemes or indivisible halves of a disyllabic morpheme. The combination could be a noun ‘hurt’, a simple verb ‘to hurt’ or a compound verb ‘to hurt-hurt’ taking the previous Pyu gloss as an object, or an object-verb sequence like ‘pain inflict’.

If ‘to come’ is *kim ce*, then *kce* may be a monosyllabic variant, and *kce k[ga]* may mean something like ‘to come to hurt’. However, if *kce* meant ‘to come to ...’, we would expect it to combine with other verbs in our corpus.

kce resembles *kca* ‘disease’, but we do not know of any other Pyu word pairs with an *e ~ a* alternation that would allow us to confidently identify them as cognates.

If *k[ga]* is a marker corresponding to the Sanskrit possessive suffix *-in*, then *kce* may correspond to the Sanskrit noun *upaghāta* ‘hurt’ (noun) or the verb *upa-√han* ‘to hurt’ from which it is derived. But the absence of *k[ga]* elsewhere in our corpus suggests that it may not be a grammatical morpheme.

kdam·m tin·m rniñ·m

Sanskrit: **-samādhi-** (#27)

Gloss: ‘concentration’

Cognates: WT *sñiñ* ‘heart’, Ta. 2518 𑄢𑄣𑄤 *nji²* < *njeen ‘heart’, OC 仁 *niñ ‘humane’.

Notes: The first syllable is a hapax legomenon. The final syllable may mean ‘heart’ or ‘mind’; it vaguely resembles *hñim* (007.25) which Shafer (1943: 336) glossed as ‘thought’ and regarded as a cognate of WT *sniñ*. However, Blagden (1919: 68) glossed *hñim* as ‘violence (?)’, and the vowels *i* and *im* do not match. (The absence of a final consonant in *hñim* is not a problem, as 007 lacks final consonants.)

kdi[m] bay·mḥ di[m·mḥ]

Sanskrit: part of gloss for **-lābhinam** (#27)

Gloss: ‘to obtain’ (honorific?)

Notes: Preceded by the nominalizer ^o to gloss the adjective **-lābhinam** ‘obtaining’ (#27). May be a Burmese-like pleonastic verb phrase with chim-ing initials with an honorific marker *bay·mḥ* attached to the second verb.

kdir-ṃṃ tr

Sanskrit: part of glosses for °*unnata-* (#2) and [°*u*] *daya-* (#77)

Gloss: ‘high’?

Notes: Meaning inferred from the glosses *kdir-ṃṃ tr vaṃ kviṃṃ* for ‘high’ (lit. ‘up-bent’ in Sanskrit; #2) and °*o kdir-ṃṃ tr vaṃ* for ‘rise (noun)’ (#77) after subtracting the possessive marker or nominalizer °*o*, *vaṃ* ‘go’, and the marker *kviṃṃ*.

kdiv-ṃṃ cev· din·ṃ

Sanskrit: part of gloss for *-rasa-* (#45)

Gloss: ‘fee(ling)/sense’ (noun or verb?)

Notes: Preceded by °*o* which may either be a possessive marker indicating that a noun ‘feeling/sense’ is possessed by the preceding phrase °*o kiC·ṃ kCeṇ·* ‘affection’ or a nominalizer of a verb ‘to feel/sense’. The internal structure of *kdiv-ṃṃ cev· din·ṃ* is unclear. Both *kdiv-ṃṃ* and *din·ṃ* occur in isolation elsewhere in our corpus, but *cev·* is a hapax legomenon, so it is impossible to determine if *cev·* is associated with *kdiv-ṃṃ* or *din·ṃ*.

knat·ṃḥ

Sanskrit: *punaḥ* (#55); part of glosses for °*āyati-* (#12) and *-anugaiḥ* (#104)

Gloss: ‘further’

Notes: Can refer to ‘further’ both in terms of time (*knat·ṃḥ du[k·]ṃ* ‘future’, lit. ‘further time’; #12) and space (*knat·[ṃ]ḥ tḥimḥ vaṃ* ‘to follow’ or ‘follower’, lit. ‘further ? go’; #104). See *duk·ṃ* and *tḥimḥ*.

kni

Sanskrit: *-dvayam·* (#17), *-dvaya-* (#21)

Gloss: ‘two’

Cognates: Garo *gni* ‘two’, Jingpho *ni* ‘two’.

Notes: The Sanskrit word *dvaya* literally means ‘pair’, not ‘two’. We translate Pyu *kni* as ‘two’ because it appears in 005 in contexts where a numeral is expected: *sniḥ ṇa (s)u kni* ‘year five ten two’ and *rla kni* ‘month two’.

kmun· kmiC·ṃ

Sanskrit: *-vibhramāḥ* (scribal error for *-vibhramāḥ*; #86)

Gloss: ‘restless, perturbed, confused’ or ‘agitation, confusion’

Cognates: first syllable: WT *rmon·ba* ‘be obscured’ and OC 矇 *mʰoŋ ‘blind’, 濛 *mʰoŋ ‘darkening of the sky by rain’ (see Schuessler 2007: 380 for a discussion of these etyma); second syllable: OC 昏 *mʰu[n] ‘dark’, Ta. 3925 𑖦𑖫 *mur¹* ‘dark’, 2727 𑖦𑖫 *mur¹* ‘confusion’, and 2764 𑖦𑖫 *mur¹* ‘stupid’ or OC 黑 *mʰək ‘black’.

Notes: The Sanskrit word *vibhrama* is a noun meaning ‘agitation, confusion’ but, as it is part of an adjectival (*bahuvrīhi*) compound, we translate *-vibhramāḥ* as ‘perturbed’ in 016. Its Pyu gloss, which could be a noun as well as an adjective, resembles Sino-Tibetan words for darkness.

kmun· kmiC·ṃ may be a reduplicated expressive. If so, the root is likely to be the first syllable, as it has firmer cognates than the second. It is difficult

to identify cognates of *kmiC·m̃* since its final consonant is unknown. A final *-ñ* or *-r̃* might point to a connection with OC 昏 *m̃^hu[n] ‘dark’ whose [n] may be either **-ñ* or **-r̃*, but the vowels do not match. However, Schuessler (2007: 379) reconstructed 昏 as *hm̃ên with a schwa which is similar to the Pyu central vowel [i] written as *i...m̃* (§3.4.5). Pyu may preserve a **km̃*-cluster that became OC *m̃^h-. A final *-r̃* might point to a connection with Ta. 3925 𑀓𑀮 *mur¹* ‘dark’, 2727 𑀓𑀮 *mur¹* ‘confusion’, and 2764 𑀓𑀮 *mur¹* ‘stupid’ which may be from *m̃^hr̃, *rm̃, or *rmo. A final *-k̃* might point to a connection with OC 黑 *m̃^hək ‘black’ whose *m̃^h- may be from a **km̃*- preserved in Pyu. If the second syllable is an independent root rather than a partial copy of the first syllable, then *kmuñ· kmi[n]·m̃* is a collocation of alliterative synonyms.

krin·m̃

Sanskrit: part of glosses for *vidhim·* (#67) and *-ṇayah* (#93)

Gloss: ‘policy’; possibly also ‘to lead’; part of misanalysis of *kr̥iṣṭyākāra-ṇayah* ‘agreement-policy’ as *kriyā-kāra-ṇayah* ‘deed-action-policy’

Notes: Preceded by [°o] which may either nominalize a verb ‘to lead’ (if [°o] *krin·m̃* is a literal translation of *-ṇayah* ‘policy’ (#93), a noun derived from the root √nī ‘to lead’) or indicate the possession of a noun ‘policy’ by the preceding noun *yah* ‘action’. If *tim̃* in *tim̃ krin·m̃* in the gloss for *vidhim·* ‘ordinance’ (#67) is a locative marker, then *krin·m̃* is a noun ‘policy’ in that context. *krin·m̃* may be a noun or a verb depending on the context. See *tim̃ krin·m̃ tim̃ sca thñam·ḥ tin·m̃ ti din·m̃m̃*.

kroh̃

Sanskrit: *-jena* or *-anu-jena-* (#98)

Gloss: ‘to be born (later?)’

Notes: Preceded by the nominalizer [°o] and the preverbal marker *ḥin·m̃h̃*; the combination means ‘one who has been born (later?)’. It is not clear whether ‘later’ (corresponding to Sanskrit *-anu-*) is part of the meaning of this verb. See *tom̃*, *tsah̃*, *mrauy·ḥ* and *ra*.

klim̃ḥ

Sanskrit: part of glosses for *°abhyudayāya* (#30) and *-°arttha-* (#78)

Gloss: ‘to achieve?’

Notes: Meaning inferred from context. We interpret the sequence *sīt-dha sīt-dha sādhu sādhu sādhu klim̃ḥ klim̃ḥ klim̃ḥ* at the end of 020 as ‘successful successful successful good good good’ followed by a native Pyu word with a similar meaning. The presence of *klim̃ḥ* in *°o pañ· sđlañ·ḥ klim̃ḥ* ‘POSS NMLZ achieve?’ glossing *-°arttha-* ‘achievement’ (#78) indicates that it means ‘achieve’. Such a meaning for *klim̃ḥ* would be appropriate in *°o pañ· tđluñ·ḥ klim̃ḥ °o plañḥ* ‘POSS NMLZ rise? POSS base’ glossing *°abhyudayāya* ‘elevation.DAT’ (#30). See *sđlañ·ḥ*.

kviṃm̃

Sanskrit: part of glosses for *°unnata-* (#2), *°aryaguhādhīpāhvayam·* (#25), *śrījayacandravarmmañā* (#39), *-parīta-* (#88) and *nivad[dha]-* (#91)

Gloss: ?

Notes: Attested only in 016 and 020. Precedes the possessive marker or nominalizer °o except in *kdir-m̃m t̃r vaṃ kviṃm̃* ‘high go ?’ for °unnata- ‘high’ (#2) and *nhom-ḥ radam̃na ḥay-m̃h kviṃm̃ t̃nam- pin-m̃h* ‘three jewel HON ? ? ABL’ = ‘from ... of the venerable Three Jewels’ (020.1). It is not clear how the construction ‘possessor + *kviṃm̃* + °o + possessed’ differs from the far more common ‘possessor + °o + possessed’ construction. *kviṃm̃* may have meant something like ‘the one who is’: e.g., ‘the one who is high’ (#2), ‘the one who is Ārya Guhādhīpa’ (#25), ‘the one who is Śrījayacandravarman’ (#39), ‘the ones who are afflicted’ (#88), and ‘the ones who are fettered’ (#91). All of those ‘ones’ are of royal descent except for Ārya Guhādhīpa who was an instructor of kings, so *kviṃm̃* may have been honorific. In any case, it seems to add little semantic value.

We might have considered *kviṃm̃* to be part of the *nissaya*-like style known only from 016 if not for its frequent usage in 020. We do not know why this word is not attested elsewhere. Is it an archaic word abandoned in regular Pyu texts but retained for particular reasons in 020 and 016?

khmi[ñ]- kta

Sanskrit: **-siddhayaḥ** (#78, 91)

Gloss: ‘success’

Notes: Unanalyzable hapax legomenon. It is odd that this word and its component syllables are not found outside 016 given the frequency of *sid-dham* ‘success’.

gaṃ

Sanskrit: in gloss for **vigāḍha-** (#42)

Gloss: ‘to plunge into’?

Notes: Part of speech inferred from being preceded by the verbal marker *tim-m̃*. Final element of #42 ‘plunged into’ whose *tim-m̃ dan-m̃ tim-m̃ X* structure is shared with #44 ‘each other’. Since #42 and #44 have different meanings, those differences must be due to the final elements *gaṃ* ‘plunge into’? and *ra*. See *tim-m̃*.

[g]am̃ḥ

Sanskrit: °**abhi-** (#24)

Gloss: ‘toward’, ‘to face’?

Notes: This equivalent of the Sanskrit prefix °**abhi-** ‘toward’ in the gloss *[g]am̃ḥ drun-ḥ ta sba* ‘? fore place bow’ for °**abhi-pra-ṇam-ya** ‘toward-fore-bow-ABS’ = ‘having prostrating to’ (#24) may be a verb meaning something like ‘to face’. See *drun-ḥ* for another equivalent of a Sanskrit prefix.

gay-m̃ḥ

Sanskrit: °**aham-** (#47), °**asmat-** (#54)

Gloss: first person pronoun ‘I’ and/or ‘(royal) we’

Cognates: Lai (Falam) *káy mǎ?* ‘I’, Mizo *kěi* ‘I’ (VanBik 2009).

Notes: Glosses both singular °*aham*· ‘I’ (#47) and plural °*asmat*· ‘1^{PL}.ABL’ (#54). Not clear whether this is ‘I’ or a royal ‘we’. The absence of **gay·mḥ van·ṃ* with the plural marker *van·ṃ* in the corpus suggests that *gay·mḥ* may have been plural. The *g*- corresponds to a voiceless stop in other languages. No other cognates have this sound correspondence. *gay·mḥ* could be an unrelated soundlike noun used as a royal pronoun. We do not know if *gay·mḥ* could be used by nonroyal speakers. G. Jacques (2007) discusses an alternation between voiced *ŋ*- and voiceless nasal *k*- or *q*- in the paradigm for ‘I’ in two different branches of Sino-Tibetan. Perhaps Pyu *g*- is a compromise initial resulting from a levelling of that alternation. Possibly cognate to the first person possessive pronoun *gi*.

gi

Sanskrit: °*ātma*- (#56)

Gloss: first person possessive pronoun ‘my’ and/or ‘(royal) our’; see *gay·mḥ* for a discussion of whether these pronouns are singular and/or plural.

Notes: °*ātma*- (#56) means ‘self, own’ but in context can be translated as ‘my’ or as a royal ‘our’. *gi* is also in 007.24 and 008.25 where it corresponds to OB *ña* ‘I’ and OM °*ey*· ‘I’ (both ‘my’ in context) and Pali *me* ‘my’. *gay·mḥ* and *gi* may be *a*-grade and zero-grade derivatives of a first person pronominal root √*g*-*y*. Apart from the possible *a* ~ *e* alternation in *kca* ‘disease’ ~ *kce* ‘hurt?’, there is no other evidence to suggest that Pyu had Indo-European-style vowel gradation, though Pulleyblank (1965: 92) has independently observed parallels between Sino-Tibetan and Indo-European vowel alternations. If *gay·mḥ* and *gi* are related, see *gay·mḥ* for a list of cognates of *gi*.

got·

Sanskrit: *bhūyah* (#49), parts of glosses for *-[ācā]ra*- (#65) and *-gocaro* (#82)

Gloss: a motion verb like ‘to pass’, ‘to exceed?’; by extension, ‘to behave’
Cognates: WT *’grod-pa* ‘to go, walk’, OC 越 *[c]ʷat ‘to pass over’.

Notes: Nominalized motion verb meaning ‘conduct, action’ (*i.e.*, how one goes) in #65 and #82: [°*o*] *got*·. Used as an adverb glossing *bhūyah* ‘more’ in #49: ‘exceed?’ > ‘exceedingly’ > ‘more’. *pgau[t]*· (#68, 100) may be a prefixed derivative.

gaum

Sanskrit *-guhā*- (#25)

Gloss: ‘cave’

Notes: Borrowing from Sanskrit or Pali *guhā* ‘cave’. The diphthong *au* is unusual, as it normally is only atop U-shaped letters (*p*, *m*, *s*). The more common spelling *gom* in 007.19, 007.20, 007.22, 008.19, 008.20, and 008.22 corresponds to OB *kū*, OM *guoh*·, and Pali *guha*. This is the only known example of telescoping of an Indic CVCV word into a Pyu CVṃ word.

nar·ḥ dam·mḥ

Sanskrit: *-dhāryya*- or *-pradhāryya*- (#11).

Gloss: ‘to hold’ or ‘to punish’?

Notes: Since *drun·h* or *drun·h ta* regularly corresponds to the Sanskrit prefix *pra-*, we think what follows *drun·h (ta)* in Pyu may be a literal translation of Sanskrit *-dhāryya-*. It is not clear whether *nar·h dam·mḥ* is a combination like ‘hold-punish’ pairing a literal translation of the root $\sqrt{dhṛ}$ of Sanskrit *-dhāryya-* with a translation of Sanskrit *-pradhāryya-*, a sequence of synonymous verbs ‘hold-hold’ or ‘punish-punish’, or a verb ‘hold’ or ‘punish’ followed by an equivalent of the Sanskrit gerundive. *nar·h* occurs by itself in 027.7 and *dam·mḥ* in 020.4. The preceding *ta* may correspond to the Sanskrit absolutive suffix *-ya*. See *drun·h* and *ta*.

nit·m kdañ·

Sanskrit: *saha* (#51, 101), *sa-* (#57, 62)

Gloss: ‘with’, ‘including’

Notes: The preposition *saha* means ‘with’. We would expect ‘with’ to be translated as a postposition as in Burmese *nissaya*. Similarly, if the Sanskrit prefix *sa-* ‘including’ were translated as a verb ‘include’, we would expect such a verb to follow that which is included. However, *nit·m kdañ·* is in initial position like both *saha* and *sa-*. We do not know if that is the normal position of *nit·m kdañ·* or if it is a peculiarity of the Sanskrit-influenced style of 016. *nit·m kdañ·* also occurs in 020.4, 027.7, and 032.9, but we do not understand the context in those attestations and are hence unable to determine whether *nit·m kdañ·* goes with the preceding or the following noun in other styles of Pyu.

ce

Sanskrit: part of gloss for *para(sparam)* (#96)

Gloss: Verb expressing mutuality: *e.g.*, ‘to exchange’?

Notes: Although we transliterate this word as *ce* in our edition, its proper reading may be *kha*. See §1.5.3.14. Must be a verb since it is preceded by the realis verb marker *ḥin·mḥ*. The preceding *°o* nominalizes *ḥin·mḥ ce* and the resulting noun corresponding to *para(sparam)* ‘mutual’ – perhaps ‘exchange’ – modifies the following noun *tkoḥ* ‘heart’. Although ‘exchange’ would make sense in *°o ḥin·mḥ ce tkoḥ hak·°o hliḥ* ‘NMLZ RLS ? heart good POSS bond’ = ‘a bond of good ...-hearts’ = ‘mutual friendship’, such an interpretation would rule out a connection with *kim ce* ‘come’ and its possible cognate *kce*. *paraspara-* ‘mutual’ (#44) also has a very different gloss with a reduplicative *tim·m X tim·m Y* structure. See *tim·m*, *dañ·m*¹, and *ra*.

ce °o kap·ñah

Sanskrit: part of glosses for *bhaveyuh* (#53) and *bhavantu* (#72, 83)

Gloss: elaborate expression roughly corresponding to ‘be’

Notes: Meaning inferred by subtraction of the optative marker *leḥ* and the marker *pamḥ ~ peḥ* ‘let’ from glosses for ‘may be’ (#53) and ‘let be’ (#72, 83). The reading of the first akṣara is not absolutely certain: see §1.5.3.14. *ce* may be a root ‘come’ related to *kim ce* ‘come’ (#58, 63, 66) and *kce* of *kce k[ga]* (#46). Comparative evidence cannot resolve this issue since

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ta as a compound preverbal marker corresponding to Sanskrit *pra-*. The existence of a native preverbal marker *ta* may have facilitated the usage of other morphemes such as *drun·h* and *gam·h* as translations of Sanskrit prefixes. See *nar·h dam·m·h*, *drun·h*, *pr tum·*, and *sba*.

taṁ tya[n·]h

Sanskrit: *nivad[dha]-* (#91)

Gloss: ‘fettered’

Notes: *tyaṁ·h* appears without a preceding *taṁ* three times in 032.4, twice in 020.4 and 032.3, and once in 030.2, 032.5, and 032.6. We do not know whether there is a relationship between *taṁ tya[n·]h* in 016 and those other cases of *tyaṁ·h*.

tak·m

Sanskrit: *°eka-* (#22)

Gloss: ‘one’

Cognates: OB *tac* < *dik ‘one’ (Shafer 1940: 311; Nishi 1999: 49, 68), WT *gcig* < *gtjek ‘one’ (Hill 2014b: 91), OC 隻 *tek ‘one of a pair’.

Notes: Appears in 007.20, 007.21, and 008.21 where it corresponds to OB *tac* and OM *moy·*. Has a rarer synonym *°ik·* ?.

tiṁ

Sanskrit: part of glosses of *kāraṇaṁ* ‘cause’ (#9), *puradvayam·* (#17), *puradvaya-* (#21), and *sadā* (#76)

Gloss: locative marker

Notes: The syllable *tiṁ* never actually corresponds to the Sanskrit locative case. Nonetheless, its function can be inferred from its contexts and verified by its usage in 007 and 008, where it corresponds to the OB marker *nhik·* ‘in’, the OM preposition *de(y·)* ‘in’, and the Pali locative case. First identified by Blagden 1919 as “apparently a particle of relation, corresponding sometimes to our preposition ‘in’.” *tiṁ* may be an unstressed form of *tva* (#16). ? [*tiṁ*] *pCV* ? ? for *sadā* ‘always’ (#76) may mean something like ‘? at all times’; it does not match the other glosses for *sadā* ‘always’ that contain *duk·m* ‘time’: *nṇa[p·] duk·m* (#89) and *nṇap· du[k·]·m* (#99). *tiṁ prin·h kni* ‘in the two cities’ glosses *pura-dvayam·* ‘city-pair’ (#17) and *pura-dvaya-* ‘city-pair’ (#21). *tiṁ plam·h* ‘on the basis’ glosses *kāraṇaṁ* ‘cause’ (#9). *tiṁ* also occurs in other glosses, but it is not clear whether those *tiṁ* are truly locative or if they serve other functions: e.g., it is a different morpheme and/or part of a disyllabic word. See *tiṁ krin·m tiṁ sca thṇam·h tin·m ti din·m·m*, *diṁm tiṁ pmir·h CV naḥ*, and *°o khñon·h tiṁ thmi[n·]·h*.

tiṁ krin·m tiṁ sca thṇam·h tin·m ti din·m·m

Sanskrit: *vidhim·* (#67)

Gloss: ‘ordinance’

Notes: This eight-akṣara gloss is suspected to be an explanation rather than a simple translation of *vidhim·* ‘ordinance.ACC.SG’. *tiṁ krin·m* and *tiṁ sca* may be marker + noun sequences. See *krin·m*.

[t]i(n·)ṁ ///

Sanskrit: part of gloss of **-kāra-ṇayā** (#37)

Gloss: ‘doing-leading’ (lit.); part of misanalysis of **kriyākāra-ṇayā** ‘agreement-policy’ as **kriyā-kāra-ṇayā** ‘deed-action-policy’

Notes: Noninitial akṣaras lost. The entire gloss was probably identical or similar to *ti[n·]ṁ yaḥ* [°o] *krin·ṁ* for **kāra-ṇayaḥ** (#93), also containing the akṣara *tin·ṁ*. See *ti[n·]ṁ yaḥ*. Impossible to determine whether the anomalous final long **-ā** of the Sanskrit is an error for stem form **-a** or an incomplete representation of the ablative ending **-āt**; we would expect the latter to correspond to *pin·ṁḥ*.

tin·ṁ da[k/r]·ṁṁ tin·ṁ yav·

Sanskrit: **dayā-** (#26)

Gloss: ‘compassion’

Notes: A reduplicative expression with the structure *tin·ṁ* X *tin·ṁ* Y. The meanings of the components are unknown. *dak·ṁṁ* appears in 021.6 but may not be the same word as the second component. *yav·* is a hapax legomenon.

ti[n·]ṁ droḥ kdim °o pa[n·] duk·ṁ

Sanskrit: lost (#90)

Gloss: unknown

Notes: *tin·ṁ droḥ* also occurs in 012, 020, and 073; *ti[n·]ṁ droḥ ktoy· kdim* occurs in 024 with an extra syllable *ktoy·* absent from 016. *duk·ṁ* may be ‘time’. *°o pa[n·] duk·ṁ* may be a compound possessed by an unknown noun glossed by the first three syllables.

[t]i[n]·ṁ ḥa

Sanskrit: part of gloss for **te** (#71)

Gloss: common noun (phrase) or third person pronoun or demonstrative?

Notes: Meaning inferred by subtraction of the plural marker from *[t]i[n]·ṁ ḥa vaṇ·ṁ* which is an unusual gloss for **te** ‘they’; instead of *[t]i[n]·ṁ ḥa*, we would expect *pau* as in the glosses for **te** in #59 and #95. Could be a disyllabic noun or noun phrase referring to who ‘they’ are rather than a pronoun ‘they’. The fact that *[t]i[n]·ṁ ḥa* only occurs in one other text in our corpus (025.3) suggests that it may not be a pronoun. In any case, *ḥa* here is not the negative marker *ḥa*. See *pau*.

tin·ṁ ḥun·ḥ tim·ṁ tak·

Sanskrit: ? (probably **¶paramparā-**; #58), **-santāna-** (#62)

Gloss: ‘lineage’, ‘succession’

Notes: The first akṣara of #58 has been restored on the basis of #62. Although the Sanskrit for #58 has been lost, it is likely to have been nearly identical to **-paramparāḡataih** (#63), and the surviving Pyu in #58 is identical to that for #63 except for *tak·* instead of *del·ṁṁḥ* and the absence of *vaṇ·ṁ dan·ṁ* ‘PL INST’. The meaning of *tin·ṁ* is unknown; *ḥun·ḥ* may be related to *nḥun·ḥ* (#51, 101); *tim·ṁ* is a reciprocal marker.

tak· may be a synonym of *del·ṁṁḥ*. See *tin·ṁ ḥun·ḥ ti[m·]ṁ del·ṁṁḥ*.

tin-m̐ bun-h̐ ti[m̐]m̐ del-ṇm̐h̐

Sanskrit: **-paramparā-** (#63)

Gloss: ‘lineage’

Note: *del-ṇm̐h̐* may be a synonym of *tak-*. See *tin-m̐ bun-h̐ tim-m̐ tak-*.

tin-m̐ lim-m̐ tin-m̐

Sanskrit: **°āsrava** (#19)

Gloss: ‘influx’

Notes: Unclear whether the gloss contains any further akṣaras after the second *tin-m̐*. If *tin-m̐ lim-m̐ tin-m̐* is not a three-akṣara expression with a *tin-m̐* X *tin-m̐* structure, it may be part of an *tin-m̐* X *tin-m̐* Y construction like *tin-m̐ da[k/r]-ṇm̐ tin-m̐ yav-*.

ti[n̐]m̐ yah̐

Sanskrit: **-kāra-** (#93)

Gloss: ‘action’; part of misanalysis of *kr[i]yākāra-ṇayah̐* ‘agreement-policy’ as *kr[i]yā-kāra-ṇayah̐* ‘deed-action-policy’

Notes: *yah̐* is probably the akṣara lost after *[t]i(n̐)m̐* in *[t]i(n̐)m̐ ///*. See also *[t]i(n̐)m̐ ///*.

tim-m̐

Sanskrit: in glosses for **virodha-** (#6), **vigāḍha-** (#42), **paraspara** (#44), **[ka]ravāṇi** (#50), ? (#58), **-santāna-** (#62), **-paramparā-** (#63), and **vigraha-** (#85)

Gloss: reciprocal marker

Notes: Meaning inferred from glosses for words involving two parties doing things to each other: ‘strife’ (#6), ‘each other’ (#44), ‘I must do’ (*i.e.*, engage in conflict; #50), ‘succession’ (*i.e.*, following each other; #62), ‘lineage’ (again, following each other; #63), and ‘war’ (#85). Apparently idiomatic in ‘adopted’ (lit. ‘plunged into’, #42), though perhaps the Pyu viewed plunging into water as involving both one going into water and the water going around oneself. #6, #50, #58, #62, and #63 have the structure *tim-m̐* X, #42 and #44 *tim-m̐* X *tim-m̐* Y, and #85 *tim-m̐* X *tim-m̐* before *vañ-m̐*. #50 is a verb, a verb is expected in final position, and *tim-m̐ kañ-m̐* is in final position, so *kañ-m̐* must be a verb. Y in *tim-m̐* X *tim-m̐* Y constructions may also be a verb. We do not know whether the absence of Y before the plural marker *vañ-m̐* in #85 is optional, obligatory (cf. #19 which may contain a *tin-m̐* X *tin-m̐* reconstruction), or accidental. Such an absence may have been motivated by a desire to make reduplicated phrases fit a four-syllable template even when ending in a marker. See also *kañ-m̐*, *gam̐*, *tin-m̐ bun-h̐ tim-m̐ tak-*, *tin-m̐ bun-h̐ ti[m̐]m̐ del-ṇm̐h̐*, *dañ-m̐*, and *ra*.

tom-

Sanskrit: **priya-** or **-api** (#98)

Gloss: ‘dear’ or ‘even’?

Notes: The interpretation of this word as an adjective ‘dear’ or a marker ‘even’ is dependent on whether the nominalized verb *[°o] ḥin-m̐h̐ kroḥ* that it modifies corresponds to **-jena-** ‘born’ or **-anu-jena-** ‘later born’ (*i.e.*,

younger brother). We would expect a word for ‘even’ to be common, but *tom* is a hapax legomenon in our corpus. This may indicate that *tom* is a special word for translating *api* or that *tom* is something other than a function word: e.g., an adjective ‘dear’. See also *kroh*, *tsah*, *mrauy·h* and *ra*.

tkoh

Sanskrit: *-hṛdam* (#96)

Gloss: ‘heart’?

Notes: Meaning inferred from the context: *tkoh hak· °o hlih* ‘? good poss bond’: i.e., ‘a bond of good ...’ as a gloss for *sauhṛdam* ‘friendship’, literally ‘good-heartedness’.

tgam·mḥ

Sanskrit: *(ma)[h]ī-* (#1), *bhuva* (#97)

Gloss: ‘earth’

tco[n̄]· haḥ k[m]V

Sanskrit: *°ā ... sthiteḥ* (#97)

Gloss: ‘as long as ... remains’

Notes: *tco[n̄]·* is a hapax legomenon. The *°o* preceding it could either nominalize a verb ‘remain’ or indicate possession of a noun corresponding to *sthiteḥ* ‘remaining.ABL’. *haḥ* appears in 007.9, 008.10, and 020.6, but its meaning in those texts is unknown. Hence it is not clear whether those other *haḥ* are related to the *haḥ* in #97. All *km*-akṣaras in our corpus are hapax legomena, so it is unlikely that *k[m]V* is a marker ‘as long as’. It may mean ‘limit’ or be part of a polysyllabic word for ‘limit’: cf. Japanese *nokoru kagiri* ‘remain limit’ for ‘as long as ... remains’.

tdav·mḥ

Sanskrit: *(nṛ)[pa]* (#38)

Gloss: ‘king’

Cognates: OB *tav-/tāv·*, WB *tau* < *d- ‘suffix indicating sacred, royal, or official status’, OC 主 *to? ‘master’.

Notes: Also appears without a final consonant in 007.7, 007.9, 007.13, 007.17, 008.7, 008.9, 008.14, and 008.18 as *tdamḥ* corresponding to OB *mañ* ‘king’ and OM *smiñ* ‘king’. Compression of a longer expression *tar·dav·mḥ* in 012.1 etc. The syllable *tar·* is never attested without a following *dav·mḥ*. Unclear whether *tar·dav·mḥ* is a compound noun or a prefixed derivative of a root *dav·mḥ* found in 020.3, 024, 027.1, 027.5, 027.6, 032.2, 032.6, and 056.1. The Burmese word may be borrowed from Pyu.

tdit·m

Sanskrit: part of gloss for *-lāñchitaḥ* (#34)

Gloss: ‘to mark’

Notes: Preceded by the realis marker *bin·mḥ* and the verb *ta* ‘to place’ to gloss the Sanskrit past passive participle *-lāñchitaḥ* ‘marked’. *tdit·m* is a hapax legomenon in our corpus. See *ta*.

tdluṇ·ḥ

Sanskrit: part of gloss for °*abhyudayāya* (#30)

Gloss: ‘to rise’?

Notes: Meaning inferred by process of elimination. #30 means ‘elevation’, and none of the other elements in the gloss °*o paṇ· tdluṇ·ḥ klimḥ °o plamḥ* ‘POSS NMLZ ? achieve POSS base’ means ‘rise’. Part of speech inferred from *tdluṇ·ḥ* being preceded by the nominalizer *paṇ·*. Also attested in 020.1.

tḥimḥ

Sanskrit: *-anu-* (#104)

Gloss: something like ‘after’ or an agentive marker?

Notes: *-anu-gaiḥ* ‘follower.INS.PL’, lit. ‘after-go.INS.PL’ (#104) may have been glossed somewhat literally as *knaṭ-[m]ḥ tḥimḥ vaṃ* ‘further ? go’. It is not clear whether *tḥimḥ* is an adverb like ‘behind’, a noun like ‘back’ that would be the object of the verb ‘go’, the first verb in a compound verb sequence, or an agentive marker for ‘go’. The last option is less likely, as *tḥimḥ* only appears once elsewhere in our corpus (023.6); we would expect an agentive marker to be more frequent.

traḥ

Sanskrit: *-amvuja-* (#33)

Gloss: ‘lotus’

Cognate: WB *krā* ‘lotus’. WB has no *tr*-clusters. Cf. the correspondence of *tr-* in *tru* ‘six’ (004) to *khr-* in WB *khrok* ‘six’.

Notes: Not to be confused with *traḥ* ‘slave’ corresponding to OB *kyon* ‘slave’, OM *ḍik* ‘slave’, and Pali *dāsa* ‘slave’ in 007 and 008, whose Pyu orthographies almost entirely lack subscript final consonants. *traḥ* ‘slave’ may have originally had a final consonant distinguishing it from *traḥ* ‘lotus’.

t[va]

Sanskrit: °*ekadine* (#16)

Gloss: temporal or locative marker

Notes: Meaning conjectural. The second word of *t[va] ta[k]·m duk·m*, the Pyu gloss for °*ekadine* ‘in one day’ (#16) definitely means ‘one’, and the third seems to mean ‘time’ (but not ‘day’). The first word may correspond to the Sanskrit locative case. *tva* also appears in 007.1 and 008.1 before the date which is in the locative case in the Pali text. It may have been a more general locative marker if *tim* is its unstressed form. The limited range of usage of *tva* may be an artifact of the small size of our corpus.

tsamḥ

Sanskrit: *kriyā-* (#36, 93)

Gloss: ‘deed’

Cognate: If *tsamḥ* is a nominalized derivative of *samḥ* ‘to do’, its *t-* may be cognate to Japhug *tu-* ‘NMLZ’.

Notes: *krīḷyā-kāra* (#93), literally ‘deed-action’, means ‘agreement’ (see n. 104), but its first component has been glossed literally as *tsamḥ*. Prefixed derivative of *samḥ*.

tsaḥ

Sanskrit: *priya-* or *-anu-* (#98)

Gloss: ‘dear’ or ‘later’?

Notes: The interpretation of this adjective is dependent on whether the nominalized verb [°o] *ḥin-mḥ kroḥ* that it modifies corresponds to *-jena-* ‘born’ or *-anu-jena-* ‘later born’ (i.e., younger brother). See *kroḥ* and *tom-*.

da[l·]ṃmḥ dal·ṃmḥ

Sanskrit: *kram(-a)-* (#104)

Gloss: ‘to succeed?’, ‘step?’, ‘succession?’

Notes: It is not clear whether the °o in the gloss °o *da[l·]ṃmḥ dal·ṃmḥ* for *krama-* ‘succession’ is nominalizing a verb *da[l·]ṃmḥ dal·ṃmḥ* ‘to succeed’ (or ‘step’ if *da[l·]ṃmḥ dal·ṃmḥ* is a literal translation of the Sanskrit root *kram* ‘step’) or indicates that *da[l·]ṃmḥ dal·ṃmḥ* is a possessed noun ‘succession’. In either case, the word is a reduplication of a root *dal·ṃmḥ* ‘succeed’ or ‘step’. Reduplicated forms are uncommon in the glosses of 016 but are more common in original Pyu texts. We have not created an entry for *dal·ṃmḥ* since we cannot be certain how the isolated root differs in meaning from its reduplicated derivative. *de(l-mḥ)* (#66) may be a spelling of the isolated root with *e* instead of *aṃ*. Cf. §3.4.5.

dañ·m

Sanskrit: in glosses for *vigāḍha-* (#42) and *paraspara* (#44)

Gloss: verb?

Notes: Part of speech inferred from being preceded by the verbal marker *tim·m* in both instances. As #42 ‘adopted’ (the Sanskrit is lit. ‘plunged into’) and #44 ‘each other’ have very different meanings despite a common *tim·m* X *tim·m* Y structure, *dañ·m* may have lost its original semantic value when in second position, and the semantic center of gravity may lie in the final element of the construction. See *gaṃ*, *ce*, and *ra*.

dañ·m

Sanskrit: in glosses for *saha tva[dā]tmajaiḥ* (#61) and *-paramparāgataiḥ* (#63)

Gloss: instrumental or comitative marker

Cognate: WT *dañ* ‘comitative marker’.

Notes: Corresponds to Sanskrit instrumental case (governed by *saha* ‘with’ in #61), but absent from glosses of most instrumental case forms in 016. Possibly a feature unique to the *nissaya*-like style of Pyu absent from regular Pyu. Only attested twice outside of 016, viz. in 032.6 and 159 where its function remains to be determined.

diṃm tim pmir-[h] [sa]ḥ

Sanskrit: *-bhujām* (#1)

Gloss: ‘enjoyer’ (if a literal translation), ‘ruler’?

Notes: Is *tim* locative (and followed by a location)? *[sa]ḥ* may be ‘son’ serving as a noun marker before ‘enjoy’ or ‘rule’: ‘one who ...’. Rest unanalyzable.

duk·ṃ

Sanskrit: *-°āyati-* (#12), *°ekadine* (#16), *sadā* (#89, 100), perhaps ? (#90)
Gloss: ‘time’

Notes: Meaning inferred from occurrence in time expressions. The Pyu gloss for *-°āyati-* ‘future’ (lit. ‘stretching’), *kna[t]·ḥ du[k]·ṃ* (#12), may mean ‘coming time’; cf. English *the coming* or *to come* meaning ‘future’. See *kna[t]·ḥ*. The Pyu gloss for *°eka-dine* ‘one-day.LOC.SG’, *tva ta[k]·ṃ duk·ṃ* (#16), may literally mean ‘at one time’, as the Pyu word for ‘day’ is *phvum* (005 and 006). Perhaps *dine* ‘day.LOC.SG’ is not meant to be taken literally and merely refers to a short period of time. The Pyu gloss for *sadā* ‘always’, *nṇap· duk·ṃ* (#89, 99), may mean something like ‘all time’. May also mean ‘time’ in *ti[n]·ṃ droḥ kdim °o pa[n]· duk·ṃ* (#90), but this cannot be confirmed since the Sanskrit has been lost.

de(l·ṃḥ)

Sanskrit: part of gloss for *-pathāgatam·* (#66)

Gloss: ‘step’ (noun?)

Notes: Its position between the possessive marker *°o* and *(la)m·ḥ* ‘road’ suggests that it is a noun modifying ‘road’. If so, it does not correspond to anything in the Sanskrit. However, *de(l·ṃḥ) (la)m·ḥ* may be a disyllabic word for ‘path’ corresponding to Sanskrit *-patha-* ‘path’. Its first syllable could be a spelling of the isolated root of *da[l]·ṃṃḥ dal·ṃṃḥ* ‘to succeed?’, ‘step?’, ‘succession?’ (#104) with *e* instead of *aṃ* (cf. §3.4.5). If that root means ‘step’, then *de(l·ṃḥ) (la)m·ḥ* may be a noun compound ‘step path’ (cf. English *footpath*, *walkway*).

dor· dam·ḥ [kn]iḥ

Sanskrit: lost (#13)

Gloss: unknown

[dney]·ḥ du[r]·

Sanskrit: part of gloss for *pīṭha-* (#34)

Gloss: ‘footstool’

Notes: The preceding *°o* indicates that ‘footstool’ is possessed by the preceding noun phrase ‘excellent lotus feet’.

drun·ḥ

Sanskrit: *pra-* (#11, 24, 29, 41)

Gloss: ‘fore’?

Notes: This equivalent of the Sanskrit prefix *pra-* is always followed by the preverbal marker *ta* whose source may be the verb *ta* ‘to place’. See *ta* for an alternate analysis.

The following combinations may be calques of Sanskrit: (1) *drun·ḥ ta nar·ḥ dam·ṃḥ* ‘fore place hold’ for *pra-dhāryya-* ‘fore-hold.ABS’ = ‘will have punishment inflicted’ (#11); see *nar·ḥ dam·ṃḥ*. (2) *drun·ḥ ta pr tum·* ‘fore place bear’ for *pra-bhṛ-tya* (for *prabhṛti*) and *pra-bhṛ-ty-* ‘fore-bear-NMLZ’ = ‘beginning’ (#29, 41); see *pr tum·*. (3) *[g]amḥ drun·ḥ ta sba* ‘face fore place bow’ for *°abhi-pra-ṇam-ya* ‘toward-fore-bow-ABS’ = ‘prostrating’ (#24); see *[g]amḥ* and *sba*.

dron·hra

Sanskrit: *cirāyusaḥ* (#75)

Gloss: ‘long-lived’ or ‘long life’

Cognates: OC 長 *Cə-[N]-traŋ ‘long (length, not time)’ or OC 遐*[g]ʳa ‘distant’ or WB *krā* ‘long (in time)’.

Notes: Although Sanskrit *cira-āyus-aḥ* ‘long-life-M.NOM.PL’ is an adjective, its Pyu gloss may be an adverb-verb phrase ‘long live’ or a noun-adjective phrase ‘life long’ (a literal translation of Sanskrit *cira-āyus-* ‘long-life’). Potential cognates support either interpretation. *dron·* resembles OC 長 *Cə-[N]-traŋ ‘long (length, not time)’. *hra* resembles WB *krā* ‘long (in time)’ and OC 遐*[g]ʳa ‘distant’ on the one hand and Pyu *ra* ‘be born’ on the other.

The *hra* of 016 is probably not the *hra* in 007.13 and 008.13 that Blagden glossed as ‘sacred image’ (probably cognate to OB *purhā*, WB *bhurāḥ*). That *hra* corresponds to OB °a *chañ·* ‘image’, OM *kyek·* ‘object of worship’, and Pali *bimban* ‘image’.

dlim·ḥ

Sanskrit: part of gloss for °*upaśama-* (#7)

Gloss: ‘to cease’

Notes: Meaning inferred from analysis of °o *pañ· dlim·ḥ* ‘cessation’ as possessive marker indicating that the cessation belonged to ‘strife’ (#6) + nominalizer + verb. Hapax legomenon.

*naḥ*¹

Sanskrit: part of glosses for proximal deictics °*idam·* (#5), °*ayam·* (#35, 81, 92), and °*imam·* (#64), part of gloss for *ye* (#69)

Gloss: ‘this’?

Notes: Followed by *yam* ‘this’ which also occurs by itself in 016 and other texts. Not found outside 016. Unique to the Sanskrit-influenced style of Pyu? Unclear whether *naḥ*¹ somehow narrows down the meaning of *yam* or is a redundant morpheme ‘this’. Possibly also found in *naḥ tse[C·]*.

*na[h]*²

Sanskrit: °*anu-* (#100)

Gloss: ‘after’?

Notes: *na[h]*² may correspond to the prefix °*anu-* because *pgau[t·]* ‘to turn’ corresponds to the root √*ṛt* of °*anu-[v]artt-ya-te* ‘is followed up’, lit. ‘after-turn.CAUS-PASS-3SG’. *na[h]*² is unrelated to the proximal demonstrative *naḥ*¹. See *nḥun·ḥ* for another equivalent of Sanskrit °*anu-*.

naḥ tse[C·]

Sanskrit: part of gloss for *ye* (#69)

Gloss: noun?

Notes: Unexpected in *[pdi](k·m̃m)* *[na]ḥ tse[C·]* *vañ·m̃* ‘REL ? ? PL’ glossing *ye* ‘REL.M.NOM.PL’. Other glosses of the Sanskrit relative pronoun lack *naḥ tse[C·]*.

naḥ may be the grammatical morpheme *naḥ*¹ that precedes *yam* ‘this’ in 016 or an unrelated homophone. *tse*[C:] is probably not a grammatical morpheme since there is only one other instance of a *tse*-akṣara in our corpus: the verb *tset*· in 064.8 preceded by the preverbal realis marker *ḥin-niḥ*. [*na*]ḥ *tse*[C:] or *tse*[C:] may be a noun referring to the descendants of the speaker.

nay·

Sanskrit: part of gloss for *tathaiva* (#94).

Gloss: ‘manner’

Notes: *pau nay*· ‘thus’ (lit. ‘that manner’) corresponds to *tathā* ‘thus’. *tathaiva* (#94) is from *tathā* ‘thus’ plus *eva* ‘exactly, only, just’. Corresponds to *na* in 007.11, 007.22, 008.11, and 008.23. *na* in turn corresponds to OB *si* ‘manner’ and OM *rov*· ‘manner’ in those texts.

nṇap·

Sanskrit: part of gloss for *sadā* (#89, #99)

Gloss: ‘all’?

Notes: The Pyu gloss for *sadā* ‘always’, *nṇap*· *duk-m* (#89, #99), may mean something like ‘all time’; see *duk-m*.

ndo[y]·ṇ *tdam*·ḥ

Sanskrit: part of gloss of *niścayaḥ* (#43)

Gloss: ‘to resolve’

Notes: Meaning inferred from context. The Sanskrit noun *niścayaḥ* ‘resolve’ was glossed as °*ndo*[y]·ṇ *tdam*·ḥ ‘NMLZ?’ which may be an °*o*-nominalization of a verb *ndo*[y]·ṇ *tdam*·ḥ ‘to resolve’. °*o* cannot be a possessive marker in #43 because *niścayaḥ* is not possessed by the preceding adjective *vigāḍha*- (#42).

nḥun·ḥ

Sanskrit: *-anu-* (#51, 101)

Gloss: ‘after’, ‘later’, ‘younger’?

Notes: Sanskrit *anu-* means ‘after’. *nḥun*·ḥ, presumably with a similar meaning, combines with the verbs *mrauy*·ḥ and *ra*, both ‘be born’, to form words for ‘younger sibling’. Likely related to *ḥun*·ḥ in words for ‘succession’. See *naḥ*² for another equivalent of Sanskrit °*anu-*.

pam[ḥ]

Sanskrit: part of gloss for *bhavantu* (#83)

Gloss: preverbal marker ‘let’

Cognates: OB *piy*· ‘give’, OC 𑀧𑀺𑀢𑀺𑀓 *pi[t]-s ‘to give’.

Notes: Meaning inferred by subtracting [*ce*] °*o kap*· *ñah*, an elaborate expression for ‘be’, from the gloss *pam*[ḥ *ce*] °*o kap*· *ñah* for *bhavantu* ‘let be’. The source of *pam*[ḥ] may be a verb *pamḥ* attested in 007 and 008 as an equivalent of OB *piy*· ‘give’, OM *kil*· ‘give’, and various forms of Pali *dadāti* ‘gives’. Jenny (2015: 173) regarded *pamḥ* in 007.26 and 008.28 as a postverbal “permissive causative” marker that he translated as ‘may ...

be permitted'. The use of 'give' for 'let' is widespread in Southeast Asia, being attested in Old Mon (Shorto 1971: 42), Old Khmer (Jenner & Sidwell 2010: 88) and Old Javanese (Zoetmulder 1982: 2251); see Jenny (2015) for examples in modern languages of the region.

However, Sanskrit *bhavantu* in #83 is not a permissive causative; it is morphologically a third person plural imperative, and the function of the Sanskrit imperative is to express "an expression of earnest desire" (Whitney 1889: 215, §572a). It is not within the speaker's power to permit or cause 'those who practice this ordinance' to 'be healthy, long-lived, always successful'; that is merely the speaker's wish for them. The English word *let* is ambiguous; it may represent either a permissive causative or – in our translation – a wish for a third party. We are unable to determine whether *paṁ[h]* was similarly ambiguous, though the use of 'give' as a grammatical marker is certainly a Southeast Asian areal trait.

On the one hand, *paṁ[h]* may be a permissive causative marker used as a conventionalized equivalent of a Sanskrit imperative despite a difference in semantics: cf. the use of the Burmese causative suffix *-ce-* (but not *peh* 'give'!) to render *hontu*, the Pali equivalent of Sanskrit *bhavantu*, in *nissaya* as *phrac--ce-kun-sataññ-h* 'be-CAUS-PL-EMPH' (Okell 1965: 203). On the other hand, *paṁ[h]* as a marker may have had a semantic range similar to English *let*. We have chosen the gloss 'let' to permit either interpretation. Further study of *paṁh* in the corpus is needed to resolve this issue.

The spelling *[peh]* in an otherwise identical context in #72 seems to imply that *aṁ* and *e* were phonetically similar or even homophonous in the speech of the scribe. See our discussion in §3.4.5.

pañ·

Sanskrit: part of glosses for *°upaśama-* (#7), *°-hita-* (#22), *°abhyudaya* (#30), *°artthasiddhayaḥ* (#78), and *-kāryya-* (#85)

Gloss: nominalizer? action?

Notes: Meaning has to be inferred from context. All glosses containing *pañ·* are for nominals without any semantic common denominator: 'cessation' (#7), 'beneficial' (#22), 'elevation' (#30), and 'successful in achievements' (#78). *pañ·* is often preceded by the possessive marker *°o* which precedes nouns. *pañ·* occurs in an unexpected final position in *prat· pañ·* glossing *-kāryya-* 'deed' (#85). *prat·* is 'to do, deed, task', so perhaps the *pañ·* following it is a synonymous noun like 'action' which later became a nominalizer. See *ti[n·]m droḥ kdiṁ °o pa[n·] duk·m*.

pin·mḥ

Sanskrit: part of glosses for *°i-taḥ* (#10), *y(a-taḥ)* (#28), *°a-taḥ* (#40), *-paṭhāgatam·* (#66), and *[°a]pa[nna]gasambhavā[ya]* (#70)

Gloss: 'origin'

Notes: Corresponds to a suffix *-taḥ* 'from' in #10, #28, and #40, a past participle *-āgatam·* 'came' indicating a source in #66, and the dative noun *sambhavā[ya]* 'for birth'. Sanskrit *sambhava-* may also mean 'origin', so perhaps *pin·mḥ* could mean something similar. Another possibility is that

pin-mh in #70 is ‘because’. If ? or ? *gi* is a negative expression, then ? *g[i]* *ṣbuC*· *mrauy-h* *pin-mh* would be ‘NEG snake birth because’ = ‘in order not to be reborn as a snake’. A final possibility is that *pin-mh* in #70 is an aversive or evitative marker (Blake 2001: 174) indicating that what precedes it is to be avoided: birth as a snake. If *pin-mh* is an ablative of avoidance, there may be no negative morpheme in the remaining three syllables of #70, and ? *gi* may specify a type of *ṣbuC*· ‘snake’. Although *pin-mh* in other contexts could be interpreted as an ablative marker, it is not used to gloss the only Sanskrit word that appears in ablative case in 016: °*asmat*· ‘1PL.ABL’ (#54) is glossed without any marker as *ga[y]*·*mh* ‘I’ or ‘we’.

Notes: The ablative marker *pin-mh* may be from a noun *pin-mh* ‘origin’.

pir-m tgam

Sanskrit: part of gloss for **-porusa-** (for **-pauruṣa-**) (#3)

Gloss: a noun for a positive masculine trait?

Notes: Preceded by [*saḥ*] ‘son’ expressing a sense like ‘man’. **-pauruṣa-** ‘valor’ is literally ‘manliness’, so [*saḥ*] *pir-m tgam* may be a compound like ‘man-courage’. Both *pir-m* and *tgam* occur independently of each other in other texts, but their contexts there do not shed light on their meanings here or elsewhere.

[*peḥ*]

Sanskrit: part of gloss for **bhavantu** (#72)

Gloss: preverbal marker ‘let’

Notes: Meaning inferred by subtracting *ce* °*o ka ṇaḥ*, an elaborate expression for ‘to be’, from a gloss [*peḥ*] *ce* (or *kha*) °*o ka ṇaḥ* for ‘may be’. Spelling variant of *paṁ[h]*. See our discussion in §3.4.5.

pau

Sanskrit: **tam**· (#18), **ta[t-]** (#32); part of glosses for **te** (#59), **tathaiva** (#94), and **te** (#95)

Gloss: ‘that’

Notes: Corresponds to OB *thuiv*· ‘that’ and Mon *goḥ* ~ *goḥh*· ‘that’ in 007 and 008. **tathaiva** (#94) is from **tathā** ‘thus’ plus **eva** ‘exactly, only, just’. Not in a gloss for **te** (#71) which has [*t*]*i*[*n*]·*m* *ba* instead of the expected *pau*.

pgau[t-]

Sanskrit: part of glosses for **caranti** (#68) and °**anu[v]arttyate** (#100)

Gloss: a motion verb; perhaps ‘to turn’

Notes: Meaning inferred from **caranti** ‘practice.PRS.3PL’ (#68), glossed as *lam*·*pgau[t-]*· ‘road ?’, presumably a noun-verb sequence. May be a literal translation of the root √*ṛt* ‘turn’ of °**anu[v]arttyate** ‘is followed up’ (#100). *lam*·*pgau[t-]*· may then literally be ‘turn on the road’. The bare root of *pgau[t-]* may be *got*· (#49, 65, 82). The Pyu vowel symbols *au* and *o* are in near-complementary distribution in our corpus and probably represented the same vowel; see §1.5.3.9.

pdik-m̃m

Sanskrit: *yena* (#15); part of glosses for *y(atah)* (#28), *ye* (#69) and *yaiḥ* (#80)

Gloss: relative pronoun

Notes: Unique to the *nissaya*-like style of 016. Followed by the plural marker *vañ-m̃* in #69 glossing *ye* ‘REL.M.NOM.PL’ and #80 glossing *yaiḥ* ‘REL.M.INS.PL’. The gloss for *ye* ‘REL.M.NOM.PL’ is *[pdi](k-m̃m) [na]ḥ tse[C] [vañ-m̃]* ‘REL ? ? PL’ instead of the expected **pdik-m̃m vañ-m̃* ‘REL PL’. See *naḥ tse[C]*.

prat-

Sanskrit: part of gloss for *-kāryya-* (#85)

Gloss: ‘to do, deed, task’

Notes: Occurs without a final consonant in 007.23 and 008.23 as *pra* ‘deed’ corresponding to OB *°amho-* ‘deed’, OM *sinrañ-* ‘deed’, and Pali *karontena* ‘do.PRS.PTCP.INS’. Also occurs as a verb ‘to do’ in 007.14 and 008.14 modified by the adverb *ha* ‘well’, a codaless spelling of *hak-* ‘good’ (#96). *prat-pañ-*, the gloss for *-kāryya-* ‘task’ (#85), may be a synonym compound. See *pañ-*.

pr tum-

Sanskrit: *-bhr̥tya* (for *-bhr̥ti-*; #29) and *-bhr̥ty-* (#41)

Gloss: ‘bear(ing)’, ‘bring forward’, ‘begin(ning)’?

Notes: Since *drun-ḥ* or *drun-ḥ ta* regularly corresponds to the Sanskrit prefix *pra-*, we think what follows it in Pyu may be a literal translation of what follows the Sanskrit prefix. It is not clear whether *pr tum-* is a combination like ‘bear-begin’ pairing a literal translation of the root *bhr̥-* ‘to bear’ of Sanskrit *-bhr̥ti* with a translation of Sanskrit *prabhr̥-* ‘bring forward’ or *prabhr̥ti* ‘beginning’, a sequence of synonymous verbs ‘bear-carry’, ‘bring forward-place before’, or ‘begin-start’, or a verb ‘to bear’, ‘to bring forward’, or ‘to begin’ followed by an equivalent of the Sanskrit noun-forming suffix *-ti*.

tum- only occurs once outside 016 in 020.1, so if it is here a grammatical morpheme, it may be unique to the *nissaya*-like style of this text. It may retain its original meaning in 020.1.

prin-ḥ

Sanskrit: *pura-* (#17, 21)

Gloss: ‘city’

Notes: Appears in 008.2 and as *priḥ* in 007.2 where it corresponds to OB *prañ-* ‘city’, OM *[ḍu]ñ-* ‘city’, and Pali *pure* ‘city.LOC.SG’. Although the Pyu and OB words are clearly related, it is unlikely that they were inherited from a proto-language because speakers of the common ancestor of Pyu and OB did not live in cities. The OB form may have been borrowed from Pyu before pre-OB **-iṅ* became OB *-añ-* (Hill 2014c: 24).

plamḥ

Sanskrit: part of glosses for *kāraṇaṁ* (#9), *°abhyudayaṅya* (#30), and *-pā[d]ja-* (#33)

Gloss: ‘base’?

Notes: Meaning inferred from context as the common denominator of ‘cause’ (#9), ‘elevation.DAT.SG’ (#30), and ‘-foot-’ (#33). *tiṃ plamḥ* (#9) is lit. ‘LOC base’: *i.e.*, ‘on the basis of’; °*o paṇ· tdluṇ·ḥ klinḥ* °*o plamḥ* (#30) is lit. ‘POSS NMLZ rise achieve POSS base’: *i.e.*, ‘basis of the rise to achievement of ...’ in which °*o plamḥ* corresponds to the Sanskrit dative of purpose; °*o plamḥ traḥ* (#33) may be lit. ‘POSS base lotus’. We would expect ‘lotus base’ for Sanskrit *pā[d]a-amvujā-* ‘foot-lotus’, but the order in the gloss follows the Sanskrit.

pli

Sanskrit: part of gloss for *ātmajaiḥ* (#61)

Gloss: ‘grandson’

Cognate: OB *mliṃ* ‘grandson’.

Notes: The context insures that *pli* in 016 must be the same word as *pli* ‘grandson’ in 007.24 and *pḍi* ‘grandson’ in 008.25 corresponding to OB *mliṃ* ‘grandson’, OM *cov* ‘grandchild’, and Pali *paputto* ‘grandson’. Although the Pyu glosses of 016 generally follow the Sanskrit closely, *ātmajaiḥ* ‘self-born.INST.PL’ (#61) actually means ‘with sons’, not ‘with grandsons’.

pli[m̐]

Sanskrit: part of gloss for °*ātmajās* (#56)

Gloss: ‘grandson’

Notes: Spelling variant of *pli*. If not an error, the anusvāra may indicate an unstressed [i]-like vowel in ‘grandson’ as part of a compound *sah plim* ‘sons and grandsons’. See §3.4.5. °*ātmajās* ‘self-born.NOM.PL’ (#56) actually means ‘sons’, not ‘grandsons’.

plimḥ

Sanskrit: part of gloss for *[ka]ravāṇi* (#50)

Gloss: preverbal mood marker?

Notes: A hapax legomenon that might correspond to the imperative mood of *[ka]ravāṇi* ‘I must do’.

bak-m tvan-mḥ

Sanskrit: part of gloss for *[v]i[la]ṅghito* (#79)

Gloss: ‘to transgress’

Notes: The preceding realis marker *ḥin-mḥ* and perhaps also the following preverbal marker *ta* may correspond to the past passive participle suffix *-to* of *[v]i[la]ṅghito* ‘transgressed’. The semantic overlap between the two morphemes is only partial; *ḥin-mḥ* is neither passive nor a participial affix. The absence of a consistent morpheme glossing Sanskrit passives suggests that Pyu lacked a passive. See *ta*.

ḥa

Sanskrit: *ni-* (#74), *nir-* (#87)

Gloss: ‘without’

Notes: Reduced form of the Pyu negative marker *ḥaḥ* glossing Sanskrit prefixes meaning ‘without’. Not related to the *ḥa* in *[t]i[n]·m ḥa*, the gloss

for *te* ‘they’ (#71). Possibly the lost first syllable of the gloss for *[ʰa]pa[nna]ga-* ‘not a snake’ (#70).

ḥah

Sanskrit: *na* (#48, #59)

Gloss: ‘not’

Cognates: OB *ma* ‘not’, OT *ma* ‘not’, Ta. 1918 𑀓𑀲 *mji*’ < *mja or *mje ‘not’, OC 無 *ma ‘there is no’.

Notes: Full form of the Pyu negative marker. *ḥ-* may be from *m-. *m-* in initial position in Pyu is rare and may be from an earlier cluster. Possibly the lost first syllable of the gloss for *[ʰa]pa[nna]ga-* ‘not a snake’ (#70).

ḥay-mḥ

Sanskrit: *°aryya-* (for *°āryya-*; #25)

Gloss: honorific marker

Cognates: OB *pāy-* ~ *pay-* ‘beloved’.

Notes: Appears in 007 and 008 as *ḥamḥ* corresponding to the OB honorific *pay-* which may be a borrowing of Pyu *ḥay-mḥ*. Blagden (1911: 376) inferred from the distribution of *ḥay-mḥ* before ‘wife’ (of the king), ‘Buddha’, ‘Saṅgha’, etc. that it was “an honorific prefix or title, meaning ‘lord’ or ‘lady’ as the case may be.” However, *ḥay-mḥ* cannot simply be a prefix because it can also follow nouns: e.g., *ḥūḍha ḥay-mḥ* ‘Buddha HON’ (020.1) and *nhom-ḥ radamṇa ḥay-mḥ* ‘three jewel HON’ (020.1). In postnominal position, *ḥay-mḥ* may be a noun like ‘lord’ or an adjective like ‘honorable’ that later became an honorific prenominal marker. If so, the different position of the derived marker needs explanation. Perhaps an adjective ‘honorable’ was moved into a special prenominal position to form a compound word (as in Tangut grammar, cf. Nishida 1966: 274).

ḥin-mḥ

Sanskrit: part of glosses for *-lāñchitaḥ* (#34), *[v]i[la]ṅghito* (#79), *-parīta-* (#88), *para(sparaṁ)* (#96), *priyānujenāpi* (#98), and *°anu[v]arttyate* (#100)

Gloss: preverbal realis marker

Notes: Appears in 007 and 008 without a final consonant as *ḥimḥ* which corresponds to OB *brī* ‘to complete’ and OM *tuy-* ‘to be finished’. In 016, *ḥin-mḥ* glosses past passive participles (#34, 79, 88) and a passive verb (#100). It is not passive in 007 and 008, in *ḥin-mḥ ce* which may mean ‘exchanged’ (#96), or in *ḥin-mḥ kroḥ* which may mean ‘(later?) born’ (#98). First glossed by Blagden (1919: 68) as a ‘particle preceding verbs’.

mra

Sanskrit: part of gloss for *virotsyanti* (#60)

Gloss: future or irrealis postverbal marker or second syllable of a verb ‘to contend’?

Notes: Meaning inferred from the context of *lam-ḥlimḥ skañ-m mra vañ-m* ‘road ? obstruct ? PL’, lit. ‘? obstruct the ? road’ for *virotsyanti* ‘they will contend/obstruct’ (#60). If *mra* is not a marker, it may be a synonym of *skañ-m* ‘obstruct’ forming a pleonastic compound.

mra sdin-m

Sanskrit: *sad-* (#65) and *°āryya-* (#82)

Gloss: ‘goodness, nobility’?

Cognate: WB *mra* ‘emerald’?

Notes: Sanskrit *sad-* (#65) ‘good’ and *°āryya-* ‘noble’ (#82) are adjectives, but we presume *mra sdin-m* is a noun ‘goodness, nobility’ because it precedes rather than follows what it modifies (*[°o] got-* ‘conduct’ and *°o go[t-] rheC-* ‘range of conduct’). If the *mra* of *mra sdin-m* is a noun that is the source of WB *mra* ‘emerald’, then *sdin-m* may be an adjective, and ‘*sdin-m* emerald’ is an idiomatic expression for ‘goodness, nobility’. If *mra sdin-m* is a pleonastic adjective compound, it is in a special position either to form a compound word (as in Tangut grammar; Nishida 1966: 274) or to calque Sanskrit adjective-noun order. In any case, the *mra* of *mra sdin-m* is unrelated to the verb or postverbal marker *mra* (#60); by contrast, the *sdin-m* of *mra sdin-m* is the same as that of *sdin-m tdik-m* (#27, 33).

mrauy-h

Sanskrit: *-ja-* (#51), part of gloss for *-sambhavā[ya]* (#70)

Gloss: ‘to be born’

Notes: Combines with *nḥun-h* ‘after’ to form *nḥun-h mrauy-h* ‘younger sibling’ (#51); with *pin-mh* which may be ‘origin’, ‘because’, or an aversive/evitative marker to form *mrauy-h pin-mh* in the gloss for ? *[°a]pa[nnal]-gasambhavā[ya]* ‘in order not to be reborn as a snake’ (#70). See also *kroh* and *ra*.

yam

Sanskrit: part of glosses for proximal deictics *°idam-* (#5), *°i-taḥ* (#10), *°ayam-* (#35, 81, 92), *°a-taḥ* (#40), and *°imam-* (#64)

Gloss: ‘this’

Cognates: OB *°ȳ-* ‘this’, Ta. 1139 𑖦𑖧𑖨𑖩 *jij*’ ‘genitive marker’.

Notes: Corresponds to OB *°ȳ-* ‘this’ and OM *vo-* ‘this’ in 007 and 008. First identified by Blagden 1919 as ‘a demonstrative, “this”’; also used where we should say “the”.’ Can stand alone in normal Pyu texts, and it seems to be a stylistic feature of 016 that *yam* receives an extra syllable *nah* before it. Few words in Pyu have initial vowels. Most original initial vowel words may have developed initial glides: e.g., *am > *yam*. Such a change has a parallel in Slavic: e.g., *esti ‘is’ > Russian *jest* ‘there is’. Thus a Pyu initial *y-* may correspond to OB *°-* and Tangut *-*. Pyu *am* is a front vowel like OB *ī* and Tangut *i*; see §3.4.5.

*ra*¹

Sanskrit: part of gloss for *paraspara* (#44)

Gloss: a verb somehow involving reciprocity

Notes: Part of speech inferred from being preceded by the reciprocal marker *tim-m*. Final element of #44 ‘each other’ whose *tim-m dañ-m tim-m* X structure is shared with #42 ‘plunged into’. Since #44 and #42 have different meanings, those differences must be due to the final elements *ra*¹ and *gam*

‘plunge into?’. May not be related to *ra*² ‘be born’ (#101). See also *ce*, *tim-m̃*, and *dan-m̃*.

*ra*²

Sanskrit: **-jai(h)** (#101)

Gloss: ‘to be born’

Notes: Combines with *nḥun-h̃* ‘after’ to form *nḥ(un-)[h̃ ra]* ‘younger sibling’ (#101). May not be related to *ra*¹ in ‘each other’ (#44). See also *kroḥ* and *mrauy-h̃*.

rmiñ

Sanskrit: part of glosses for °*aryyaguhādhīpāhvayam*· (#25) and *śrījaya-candravarmmañā* (#39)

Gloss: ‘name’

Cognates: OB *mañ*· ‘to be named’, OT *myiñ* ‘name’, Ta. 2639 𑀢𑀺𑀢𑀺𑀓 *mjiij*² < *mjeeN ‘name’, Japhug *tx-rmi* ‘name’, OC *C.mej ‘name’.

Notes: Appears as *rmi* in 007 and 008 where it corresponds to OB *mañ*· ‘to be named’, OM °*imo*· ‘name’, and Pali *nāma* ‘name’.

rheC

Sanskrit: part of gloss for **-gocarō** (#82)

Gloss: ‘range’?

Notes: Meaning inferred from **-gocarō** ‘range of behavior’ (#82), glossed as [°o] *go[t-] rheC*, a noun-noun compound of a nominalized motion verb meaning ‘conduct’ modifying a noun *rheC*.

la

Sanskrit: part of gloss for **-tva[d]**- (#61)

Gloss: part of second person possessive pronoun?

Notes: This word resembles *la* ‘or’ corresponding to OB *lañ*· *goñ*· ‘as well, also’ in 007.24. However, ‘or’ follows ‘son’ and ‘grandson’ in 007, whereas in #61, *la* precedes ‘son’ and ‘grandson’. Therefore, the *la* of 016 may be a different word from the *la* of 007 which may have had an unwritten final nasal if it is cognate to OB *lañ*· ‘as well’. The *la* of 016 may have combined with the honorific marker *ḥay-m̃ḥ* to form an honorific second person possessive pronoun corresponding to Sanskrit **-[tvad]**- ‘your’ (#61). Comparative evidence is not helpful; OC 余 **la* was the Shang dynasty kings’ pronoun for ‘I’, not ‘you’.

lam

Sanskrit: part of glosses for *vyadhāyi* (#14), *virotsyanti* (#60), and *caranti* (#68)

Gloss: ‘road’?

Cognates: WB *lam-h̃* ‘road’, WT *lam* ‘road’.

Notes: Meaning inferred from *caranti* ‘practice.PRS.3PL’ (#68), glossed as *lam-pgau[t-]* ‘? motion verb?’: to practice is to walk a path. *vyadhāyi* ‘make/create/build.AOR.PASS.3SG’ is glossed as *lam-ta sdam-h̃* ‘road ? ?’; perhaps

ta sdam·h is a verb compound like ‘place down’, and the gloss means ‘laid down paths’, perhaps an expression for building the foundation of a city. (The absence of the preverbal realis marker *bin·m̃h* is curious.) **virotsyanti** ‘contend/obstruct.FUT.3PL’ (#60) is glossed as *lam· hliñh skañ·m̃ mra vañ·m̃* ‘road ? obstruct FUT PL’: lit. ‘will obstruct the ? road’. Lacks the *-h* expected on the basis of its Burmese cognate; but see also *(la)m·h* which has the expected *-h*.

(la)m·h

Sanskrit: **patha-** (#66)

Gloss: ‘path’

Notes: *(la)* has been restored on the basis of *lam·* ‘road’ (#14, 60, 68), the expected Pyu gloss for **patha-** ‘path’. However, *lam·* lacks the visarga present in #66. If *(la)m·h* is a correct restoration, it may be a derivative of *lam·* with a suffix *-h* whose function is unclear. It is also possible that the akṣara ending in *-m·h* could be unrelated to *lam·*; the shared *-m·* may be a coincidence. In any case, the akṣara ending in *-m·h* is likely to be a noun or the end of a noun because it is followed by the ablative marker *pin·m̃h*. The akṣara ending in *-m·h* may form a noun ‘path’ with the preceding akṣara *de(l·m̃h)*. That disyllabic noun in turn is preceded by the marker *°o* indicating that it is possessed by the preceding phrase *mra s̃din·m̃ [°o]* got ‘goodness NMLZ behave’ glossing **sad[ā]cara-** ‘good conduct’ (#65).

leḥ

Sanskrit: part of gloss for **bhaveyuh** (#53)

Gloss: preverbal optative marker

Notes: Meaning inferred by subtracting *ce °o kap· ñah*, an elaborate expression for ‘be’, from a gloss *leḥ ce °o kap· ñah* for **bhaveyuh** ‘be.OPT.3PL’.

vaṃ

Sanskrit: **-gaiḥ** (#104); part of glosses for **°unnata-** (#2), **°udaya-** (#77)

Gloss: ‘to go’?

Cognates: OC 于 **G^w(r)a* (reconstructed by Schuessler 2007: 583 as **wa*) ‘to go’ and WB *svāḥ* ‘to go’.

Notes: **°unnata-** (#2) ‘high’ is literally ‘up-bent’, so it may be tempting to link *vaṃ* to OC 迂 **q^w(r)a* ‘bent, crooked’ (reconstructed by Schuessler 2007: 582 as **ʔwa*). However, *vaṃ* may correspond directly to **-gaiḥ** ‘go.INS.PL’ (#104), and it is doubtful that ‘bent’ would also be in the gloss for **°udaya-** ‘rising’ (noun; #77) unless its Pyu gloss were something like ‘turned upward’.

Burmese *-h* often corresponds to Pyu *-h*, but *vaṃ* lacks *-h* like the OC form which also lacks a final glottal.

vañ·m̃

Sanskrit: part of glosses for nouns (#56, 61, 63, 78, 85), pronouns (#59, 69, 71, 80, 84, 95), verbs (#60), and an unknown part of speech (#31)

Gloss: plural marker for nouns, pronouns, and verbs

Notes: Not all Sanskrit plurals are glossed with *vañ-m*. Conversely, *vañ-m* may appear in glosses for Sanskrit compounding stems which lack number distinctions: e.g., in *tim-m kañ-m tim-m vañ-m* for **vigraha-** ‘war, engagements in conflict’ (#85). *vañ-m* is only attested in 016, 020, and 024. It is not clear whether *vam* in 039, a text without final consonants, is the same morpheme as *vañ-m*, as 016 and 020 with final consonants contain both *vam* and *vañ-m*.

vam-

Sanskrit: **-adhipa-** (#25)

Gloss: ‘ruler’?

Notes: Meaning inferred from context. *gaum vam-* ‘cave?’ corresponds to **guhā-adhipa-** ‘cave ruler’. Hapax legomenon.

vin-mh ncit-m

Sanskrit: **-parīta-** (#88)

Gloss: ‘to be afflicted (by disease)’

Notes: Hapax legomenon. Could be a pair of synonymous verbs.

[v]r[el]-ndrom-

Sanskrit: part of gloss for **-anukūla** (#26)

Gloss: ‘to be kind’ or ‘kindness’?

Notes: **-anukūla**, literally ‘along-bank’, has a wide range of figurative meanings: e.g., ‘favorable’ or ‘kind’. The preceding °o in the gloss may either nominalize a verb ‘to be kind’ or indicate the possession of a noun ‘kindness’. However, **-anu-kūla** has the relatively literal meaning ‘conductive to’ after **dayā** ‘compassion’, so it is possible though unlikely that *[v]r[el]-ndrom-* may be a noun compound like ‘bank side’. Both akṣaras are hapax legomena in our corpus. We would expect a directional noun like ‘side’ to occur more than once.

saṃh

Sanskrit: part of gloss for **[ka]ravāṇi** (#50)

Gloss: ‘to do’?

Notes: May be the unprefix root of *tsaṃh* ‘deed’. The *saṃh* in 007.20 and 008.20 that Blagden (1919: 67) glossed as ‘to pronounce, to declare (?)’ may be an unrelated homophone or may have had an unwritten final consonant absent from *saṃh* ‘to do’.

saḥ

Sanskrit: **-putra-** (#62), **putra-** (#102), part of glosses for **-porusa-** (for **-pauruṣa-**) (#3), **ātma-jāś** (#56) and **ātma-jaiḥ** (#61)

Gloss: ‘son’

Cognates: OB *sā* ‘son’, WT *tsha-bo* ‘grandchild, descendant’, OC 子 *tsə? ‘child’.

Notes: Appears in 007 and 008 where it corresponds to OB *sā* ‘son’ (cf. WB *sāḥ*), OM *kon-* ‘child’, and Pali *putto* and *suto*, both ‘son’. The OB word may be a loan from Pyu because it has initial *s-* instead of the *c-* that is the regular correspondence to the *ts-* in the words for ‘son’ in other languages.

In #3 *saḥ* refers to masculinity rather than to a child since *-pauruṣa-* ‘valor’ is literally ‘manliness’.

sar· ?[k]·ḥ

Sanskrit: *-antara-* (#87)

Gloss: ‘interval’

Notes: Preceded by *[ḥa]* ‘not’ corresponding to the negative prefix *nir-* in *nirantara-* ‘incessant’. See *ḥa*.

skāṇ·m

Sanskrit: part of gloss for *virotsyanti* (#60)

Gloss: ‘to obstruct’

Notes: Meaning inferred from similarity to *kaṇ·m* ‘to engage in conflict’, which a reviewer suggested may be cognate to WT *’gegs-pa* (past *bkag-pa*) ‘to obstruct’, and the context of *lam· hlimḥ skāṇ·m mra vaṇ·m* ‘road ? ? ? PL’: lit. ‘? the ? road’ for *virotsyanti* ‘they will contend’ (#60) which can also mean ‘they will obstruct’. May be a prefixed derivative of *kaṇ·m* ‘to engage in conflict’.

scaṇ·ḥ

Sanskrit: part of gloss for *ekānta-* (#22)

Gloss: noun marker for numerals?

Notes: Meaning inferred from context. *tak·m scaṇ·ḥ* ‘one ?’ (#22) corresponds to *°ekānta-* ‘singularly’ but may be a noun meaning ‘singularity’ since it is followed by an *°o* indicating possession of *paṇ· hip· syam* ‘NMLZ beneficial’.

sdam·ḥ

Sanskrit: *vy-* (#14)

Gloss: ‘to separate’

Notes: A verb corresponding to the Sanskrit prefix *vy-* ‘apart’ in the gloss *lam· ta sdam·ḥ* for *vyadhāyi* ‘divided’ (#14). *sdam·ḥ* occurs without a preceding *lam·* or *ta* in 029.1. See *ta* and *lam·*.

sdin·m tdik·m

Sanskrit: *-°agra-* (#27, 33)

Gloss: ‘best’, ‘excellent’

Notes: Perhaps a pleonastic adjective compound. *sdin·m* is also in *mra sdin·m* (#65, 82), which may be a noun-adjective sequence. *sdin·m* is not attested without an adjacent *mra* or *tdik·m* in our corpus. *tdik·m* is attested without a preceding *sdin·m* in 020.2, so it can be an independent word.

sdlāṇ·ḥ

Sanskrit: part of gloss for *-°arttha-* (#78)

Gloss: ‘to achieve’?

Notes: Meaning inferred from context. *sdlāṇ·ḥ* must be similar in meaning to *klimḥ* in *°o paṇ· sdlāṇ·ḥ klimḥ* ‘POSS NMLZ ? achieve’ glossing *-°arttha-* ‘achievement’ (#78). See *klimḥ*.

sba

Sanskrit: **-ṇam-** (#24)

Gloss: ‘to bow’

Notes: At the end of the gloss *gaṁḥ drun-ḥ ta sba* ‘face fore place bow’ for **°abhi-pra-ṇam-ya** ‘toward-fore-bow-ABS’ = ‘having prostrated’ (#24). The preverbal marker *ta* may correspond to the Sanskrit absolutive suffix **-ya**. See also *gaṁḥ*, *ta*, and *drun-ḥ*.

sri yaṁ

Sanskrit: part of gloss for **śriyām-** (#4)

Gloss: ‘majesty’

Notes: The preceding ° in the gloss indicates that the majesty (plural in Sanskrit) is possessed by the kings earlier in the line (#1).

sri is clearly a loan from Sanskrit *śrī*, the base form of the genitive plural *śriyām*. Pyu has *s* for Sanskrit *ś* since Pyu only has a single sibilant. Sanskrit *ī* has been shortened to Pyu *i* since Pyu lacked vowel length.

It is not clear what *yaṁ* is. If *yaṁ* were ‘this’, it would not correspond to anything in **śriyām-**, and it would be in an unusual position following instead of preceding a noun. Is it a native (or at least certainly non-Indic) synonym of *sri* paired with it in a redundant compound? Or is it a marker? In any case, its similarity to Sanskrit **-yām-** is coincidental; Pyu *-m* is not a nasal (§3.4.5), the Pyu did not borrow inflected Indic forms, and even if they had borrowed **śriyām-**, it would have become **sriyam-* with final subscript *-m- rather than an anusvāra.

srijan-travar-ma

Sanskrit: **śrījayacandravarmmaṇā** (#39)

Gloss: Pyu form of Śrījayacandravarman

Notes: An equivalent of **-jaya-** is absent from the Pyu version which is followed by *kviṇṇi* ° *o rmiṇ-* ‘? poss name’: ‘name of ...’. *-jan-tra-* corresponds to **-candra-**. Voiced *j* and voiceless *t* for voiceless *c* and voiced *d* may indicate that Pyu had neutralized a voicing distinction in obstruents. It is possible that the neutralization was partial: *e.g.*, voiceless /c/ became voiced [j] after a vowel in close juncture (as in modern spoken Burmese), and voiceless /t/ and voiced /d/ both became voiced [d] after a nasal, so both <nt> and <nd> were pronounced [nd]. In any case, *srijan-tra-* is similar to *srijatra* (for Śrīcandra?) in 017. One might expect Sanskrit **rmm** to correspond to Pyu *-rm-m-*, *-r-mm-* or *rmm-* but it actually corresponds to Pyu *-r-m-* since Pyu does not permit *-rm-* or *(r)mm-*. There is no attempt to gloss the instrumental case ending **-ā**. See also *sri yaṁ*.

sri[ha]rivi[k·]krama

Sanskrit: **śrīthārivikra[m](eṇa ca)** (#52)

Gloss: Pyu form of Śrītharivikrama

Notes: The gemination of *k* before *r* in the Pyu version of the Sanskrit name is an option allowed for by traditional Sanskrit grammarians (Pāṇini 8.4.46) and is present in early Indian writing practices. It does not reflect

Pyu phonology. No such gemination has been observed in non-Indic Pyu words. Although the beginning of the gloss is lost, we would not expect any equivalents of the instrumental or ‘and’ there because morphemes with such meanings usually follow nouns in non-Chinese Sino-Tibetan languages. Followed by [°o rmi]ñ· ‘POSS name’: ‘name of ...’. Other names (#25, #39) are followed by a *kviṃṃ* °o ‘? POSS’ construction. We do not know whether the absence of *kviṃṃ* in #52 is deliberate or accidental. See also *sri yaṃ*.

hak·

Sanskrit: *sau-* (#96)

Gloss: ‘good’, ‘well’

Notes: In 007.14 and 008.14 spelled as *ha* which corresponds to OB *koñ·* ‘good’, OM *thic·* ‘well done’, and Pali *sādhū* ‘good’. However, *ha* in those two texts is an adverb preceding *pra* ‘to do’ (see *prat·*) rather than an adjective following a noun. Sanskrit *sau-* is the prefix *su-* ‘good’ with the *ṛddhi* vowel grade used to derive *sauhydam·* ‘friendship’ (#96) from *su-hṛd* ‘friend’ (lit. ‘good-heart’). If the Pyu gloss follows the structure of the Sanskrit original, then *hak·* ‘good’ must modify the preceding word *tkoḥ* which should then mean ‘heart’.

hip· syaṃ

Sanskrit: part of gloss for *-hita* (#22)

Gloss: ‘to be beneficial’?

Notes: °o *pañ· hip· syaṃ* is ‘POSS NMLZ beneficial’: *i.e.*, the benefit possessed by the preceding expression *tak·m scañ·h* ‘singularity’. *hip· syaṃ* may be a compound. *hip·* also occurs in 020, a text containing words unique to it and 016. *syaṃ* is a hapax legomenon.

hnaut·

Sanskrit: *ca* (#56), part of gloss for *sar[v]ve* (#73)

Gloss: ‘and?’, ‘to unite?’, collective marker?

Notes: Meaning inferred from context. °o *hnaut·* glosses *sar[v]ve* ‘all’ (#73). °o cannot be a possessive marker here since ‘all’ is not possessed. °o may be nominalizing a verb *hnaut·* meaning something like ‘to unite’, and ‘union’ by extension could then mean ‘all’. In #56 *hnaut·* appears in final position as a comitative marker corresponding to Sanskrit *ca* ‘and’. That *hnaut·* could also be interpreted as a collective marker following *gi saḥ pli[m] vañ·m* ‘my/our son grandson pl’: *i.e.*, ‘the group of our own sons and grandsons’. Either of these possibilities may be unique to the *nissaya*-like style of Pyu because all instances of *hnaut·* outside 016 are preceded by °o, suggesting that the word only survived in the fixed expression °o *hnaut·* ‘all’ in regular Pyu.

hyah

Sanskrit: *-mūrttayah* (#88)

Gloss: ‘body’

Cognates: WB *sāḥ* ‘meat’, WT *sha* ‘meat’.

hlimḥ

Sanskrit: part of gloss for **virotsyanti** (#60)

Gloss: adjective, locative marker, preverbal future or irrealis marker, or first syllable of a verb ‘to contend’?

Notes: Meaning inferred from the structure of *lam· hlimḥ skaṇ·m mra vaṇ·m* ‘road ? contend ? PL’: lit. ‘will contend on the (?) path’ (#60).

It is not clear whether *hlimḥ* is an adjective or locative marker modifying *lam·* ‘road’ or part of the following verbal complex built around the root *skaṇ·m* ‘contend’. If it is part of the complex, it is either a preverbal future or irrealis marker or a synonym of *skaṇ·m* ‘contend’ forming a pleonastic compound.

hlih

Sanskrit: part of gloss for **sauhydam·** (#96)

Gloss: ‘bond’?

Notes: Meaning inferred from the context: °o ḥin·mḥ ce tkoḥ hak· °o hlih ‘NMLZ RLS exchange heart good POSS ?’: i.e., ‘a bond of good exchange-hearts’ as a gloss for ‘friendship’.

hvum

Sanskrit: part of glosses for ? (probably <<-āgatāḥ>>; #58) and **-āgataih** (#63)

Gloss: marker for motion verbs?

Notes: Follows *kim ce* ‘to come’ in 016 and the motion verb *pgau[t]*· in 032.6.

°ik· ?

Sanskrit: °**eka-** (#8)

Gloss: ‘one’

Cognate: OC — *ʔi[t] ‘one’.

Notes: Hapax legomenon. Rare synonym of *tak·m*. While the second syllable is lost, the first is etymologically ‘one’. The old word for ‘one’ may have only survived in Pyu as the first half of a disyllabic expression. OC *-i[t] may be from either *-it or *-ik. The Pyu form points toward *-ik.

°o

Sanskrit: part of glosses #3, 4, 7, 20, 22, 25, 26, 27, 30, 33, 34, 39, 43, 45 (twice), 52, 53, 65, 66, 72, 73, 77, 78, 82, 83, 88, 90, 91, 93, 96 (twice), 97, 98, 102, 103, 104

Gloss: possessive marker, nominalizer

Cognates: OT °u ‘this’, Lai Chin ʔa- ‘3SG(.GEN)’ (Matisoff 2003: 106); a reviewer suggests a third person singular prefix with possessive and nominalizing functions in Rgyalrong languages (Situ wə-, Japhug u-, Tshobdun o-) and in Kiranti (Khaling u-).

Notes: The most common word in our Pyu corpus. Occurs almost three hundred times. Also the most controversial in terms of graphic and hence phonetic interpretation (see §1.5.3.2). According to Blagden (1919: 64), °o came “after words in the genitive relation”, but we regard it as indicating

that the *following* noun is possessed. Unlike genitive markers in Burmese, Tibetan, or Tangut, °o can appear in phrase-initial position, and it is the first word in eighteen glosses in 016. Moreover, °o only appears once in a gloss for a Sanskrit genitive (°o *sri yam* for *śriyām* ‘majesty.GEN.PL’, #4), and in that case it indicates that ‘majesties’ (lit.) were possessed by kings (#1). See °o *khñon·h tim thmi[n]·h* for an instance in which °o may be a nominalizer in a gloss for a noun that is not possessed. Shafer (1943: 328) translated °o as ‘his, her, its’ in 007 and 008. Could °o be an old third person pronoun like Lai Chin *ʔa-* ‘3SG(.GEN)’ reinterpreted as a possessive marker?

°o is typologically interesting in two ways. (1) Its double function of both a genitive postposition and a nominalizer is reminiscent of both Chinese 的 *de* and Japanese の *no*, both of which serve the same two functions. (2) The Pyu possessive construction is somewhat parallel to that of Hungarian which lacks a genitive case and which only marks the possessed with a possessive suffix. However, Hungarian possessive suffixes indicate the person and number of possessors, whereas °o does not indicate such details: *e.g.*, it occurs in the glosses for both ‘also by [my] dear younger brother’ (#98) and ‘[their] sons’ (#102).

°o *khñon·h tim thmi[n]·h*

Sanskrit: °*upadeśinam*· (#22)

Gloss: ‘teacher’ (lit. ‘teach[ing]-er’), ‘who teaches’ (adj.)

Notes: °o cannot mark a possessed noun since °*upadeśin-am*· ‘teacher-ACC’ is the object of the following verb ‘prostrating’ and is not a possessed noun. Could °o also mark objects of certain verbs like ‘prostrating’? If so, then it corresponds to the Sanskrit accusative case and *khñon·h tim thmi[n]·h* is ‘teacher’. °o cannot be a generic accusative marker since it does not correspond to other accusatives in 016. °o may be a nominalizer if *khñon·h* is a verb like ‘teach’. °o *khñon·h* could then mean ‘teaching’ and correspond to Sanskrit *upadeśa* ‘teaching’. The following *tim thmi[n]·h* might then mean something like ‘one who does’, but *thmin·h* occurs only one more time in the corpus (020.1). An agentive noun marker would appear more frequently. Although *tim* looks like a locative marker, it is difficult to imagine how ‘NMLZ teach LOC ?’ could be interpreted as ‘teacher’.

°o *ncat· nca*

Sanskrit: lost (#20)

Gloss: unknown

Notes: If °o is the possessive marker, *ncat· nca* may be a noun. If °o is a nominalizer, *ncat· nca* may be a verb. If *ncat· nca* is a reduplicated form, it may be either from a root *nca* plus *-t-* in the reduplication or a root *ncat-* minus *-t-* in the reduplication. *ncat·* is a hapax legomenon. [*nca*] in 014.1 may be a spelling of *ncat·* without a final consonant if it is not the same as the *nca* of 016.

3.3 Assessment of the morpho-syntax of the Pyu text in 016

We have suggested above (§2.4.2) the possibility that our bilingual inscription represents a particularly early instance or an ancestor of the later Burmese *nissaya* tradition. Given the present state of our knowledge about Pyu, it is difficult to be certain whether, or to what degree, the Pyu in this text mimics the grammar of the Sanskrit. Yet it is clear that Pyu text of 016 lacks the systematic equivalents of Indic cases found in the Burmese *nissaya* tradition (table 3):

- The nominative, accusative, and ablative cases are never marked in Pyu, though *pin-mh* has an ablative function.
- The instrumental case is only marked 2 out of about 10 times.
- The dative is glossed once with °o *plamh* and once with *pin-mh*.
- Pyu has no morpheme for possessors equivalent to the genitive case; °o indicates that the following noun is possessed.
- The only instance of a locative case is marked with *tva*.
- There are no examples of vocatives.

None of the four Pyu morphemes corresponding to Sanskrit cases in 016 are unique to its glosses; they appear in other texts, albeit infrequently. Without an understanding of those texts, it is not possible to determine whether they are obligatory or optional in the contexts where they appear.

Roughly half the plural nominals in our text are marked with *van-m* which also occurs in the gloss of one plural verb in line 3d. A single plural marker for nominals and verbs is unexpected in a Sino-Tibetan language. Outside of 016, *van-m* only appears five times in 020 and once in 024. Since plurality is surely not unique to those texts and 016, we conclude that the frequent use of *van-m* in our text (table 4) is due to influence from the model of Sanskrit.

Apart from the aforementioned isolated instance of plurality, only two other aspects of Sanskrit verbal morphology have been found to be reflected in Pyu. Two out of three imperatives are glossed with a marker derived from the verb *panh* ‘to give’. Two out of four past participles are glossed with the realis prefix *bin-mh*. None of the strategies for indicating other Indic verbal categories in Burmese *nissaya* have parallels in our text.

Since only the outlines of Pyu word order are currently understood, we cannot fully gauge the influence of Sanskrit on the order of elements in the glosses in our text. However, we can note two un-Sino-Tibetan oddities: preverbal elements as systematic equivalents of Sanskrit preverbs (e.g., Pyu *drun-h ta* for Sanskrit *pra-*) and a negation particle (*bah*) followed by a pronoun (*pau van-m*) in a sequence mirroring Sanskrit *na te* ‘not they’ in line 3d. The only instance of a Pali preverb known to us with a Burmese *nissaya* equivalent is *ā-* ‘to, at, toward, near to, etc.’ which is rendered as a suffix *-khai*. ‘displacement in time/space; over there; back then, etc.’ in Burmese (Okell 1965: 221–222).

Although Sanskrit morphological calques distinguish the Pyu of 016 from the Pyu of the rest of the corpus, they are not as plentiful as the Pali morphological calques in a Burmese *nissaya* text, so we are hesitant to call the style of our text *nissaya*. Moreover, we cannot demonstrate a direct connection between the style of our text and Burmese *nissaya* which is first attested much later. Hence to use a term like ‘proto-*nissaya*’ for our text might imply a relationship that did not exist. Nonetheless our text was definitely an attempt to go beyond a simple translation. It approaches *nissaya* but is not identifiable as such. We suggest the term ‘incipient *nissaya*’ to describe a style partway between a natural-sounding translation and a consistently Indicized translation.

| Indic case | Nominative | Accusative | Instrumental | Dative | Ablative | Genitive | Locative | Vocative |
|---------------------------|---|-----------------------------|---|---|-------------------------------|-----------|--|---------------------------|
| Frequency in 016 Sanskrit | 24 (26) | 10 (12) | 9 (10) | 2 (3) | 1 | 2 (10) | 1 | 0 |
| 016 Pyu | unmarked | unmarked | <i>dañ-m</i> 2× | <i>°o plaṃḥ</i> 1×, <i>pin-mḥ</i> 1× | unmarked | (N/A) | <i>tva</i> 1× | unknown |
| Other Pyu texts | | | <i>dañ-m</i> 159 1× | <i>°o plaṃḥ</i> 017 1×, 020 2×, <i>pin-mḥ</i> 020 4×, 022 1×, 027 1×, 032 1×, 064 1× | | | <i>tva</i> 007 1×, 008 1×, 032 2×, 159 1× | |
| Burmese <i>nissaya</i> | <i>-saññ</i> , <i>-kāḥ</i> , <i>-saññ-kāḥ</i> | <i>-kui</i> , <i>-sui</i> . | <i>-phran.</i> , <i>-sa phran.</i> , <i>-nhañ</i> . | <i>-āḥ</i> | <i>-mha</i> , <i>-thak</i> | <i>-i</i> | <i>-nhuik</i> , <i>-tvañ</i> | unmarked or <i>ui-</i> |

Table 3. — Case morphemes in 016, other Pyu texts, and Burmese *nissaya*. Frequency figures in parentheses include cases that nominals would have had if they had not been compounded: e.g., *unnataporusaśriyām* (line 1A, st. I) is analyzed as a sequence of three genitives: *unnatānām*, *pauruṣānām*, and *śriyām*.

| Part of speech | Nouns | Pronouns | Verbs |
|--|---------|--|-------|
| Frequency of plural forms in 016 | 11 (13) | 8 | 5 |
| Frequency of <i>vañ-m</i> ‘PL.’ in 016 Pyu | 4 (5) | at least 5 (the end of the gloss of one pronoun possibly ending in <i>vañ-m</i> has been lost) | 1 |

Table 4. — Plural marking in 016. Frequency figures in parentheses include plurals that nominals would have had if they had not been compounded.

3.4 Preliminary observations on Pyu phonology

Throughout this study, we have been assuming that an Indic transliteration of Pyu is a rough approximation of the underlying phonology: e.g., the Pyu akṣara <ka> represented something like /ka/. There is of course no guarantee that this was actually the case at the time 016 was written. Even though it is likely that the Pyu akṣara <ka> originally stood for /ka/ when the script was adopted, it is possible that /ka/ had become something else when 016 and/or other Pyu texts were composed: e.g., /kɔ/ and /ko/

as in Bengali.¹²¹ Moreover, the fact that Sanskrit /ka/ was written as <ka> in Northern Brāhmī does not guarantee that Pyu /ka/ was also written as <ka> in the Pyu script. The Pyu may have been like the Thai and Khmer who write Sanskrit /ka/ as <ka> but generally write native /ka/ with other akṣaras in their respective scripts.¹²² If, as seems likely, Pyu script was in use for centuries, it is possible that Pyu spellings became historical over time and reflected long-extinct pronunciations.

A careful analysis of the Pyu corpus may reveal variant spelling patterns hinting at differences between earlier and then-current pronunciations. As this analysis is ongoing, we are reluctant to draw definite or detailed conclusions about Pyu phonology at this early stage of our research. Nonetheless, it may still be useful to present our current hypotheses based primarily on our study of 016 for further exploration and testing.

3.4.1 Pyu syllable structure

A maximum Pyu syllable has the structure <C₁C₂C₃VC₄·m̄m̄h̄>. The following grapho-phonotactic rules can be observed in 016 and the vast majority of the corpus, if it is understood that C₁ through C₃ form the onset of the written syllable:

1. *m̄* only occurs if the last C of the onset is one of the group *g d v y*; no other constraints of syllable structure seem to apply to its presence.
2. *m̄* occurs only if V is *i* or *a*.
3. C₄ can be any one of the group *k ṇ t n p m y r l v*.
4. C₄· can occur with or without a following *m̄* and/or *h̄*.
5. *m̄* can appear with or without a following *h̄*.
6. *h̄* can appear with or without a preceding *m̄*.
7. *m̄* and/or *h̄* can occur with or without a preceding C₄·.

The complex onsets are reminiscent of those found in Old Tibetan, reconstructions of Old Chinese, and conservative Sino-Tibetan languages like the rGyalrong languages. We will formulate constraints for possible onsets in a future paper.

3.4.2 Did Pyu have tones?

Our proposed structure for Pyu syllables has no tonal component even though Blagden (1919: 60) and Luce (1985, I: 63) regarded all dots in the Pyu script (*i.e.*, *m̄*, *m̄*, *h̄*) as tone markers. Over the last six decades, it has become clear that tones in Chinese and Southeast Asian languages arose in conjunction with loss of final consonants (Haudricourt 1954a, 1954b; Pulleyblank 1962; Matisoff 1973; Ratliff 2010; Norquest 2015). It seems very likely at this stage of our research that Pyu was a conservative

121. The inherent vowel of the Bengali script is /ɔ/ except in certain environments where it is /o/.

122. The inherent vowel of the Khmer script is generally /ɔ:/ after *voiced consonants and /a:/ after *voiceless consonants. The inherent vowel of the Thai script is /ɔ:/ in isolated akṣaras and /o/ in closed syllables. In both scripts, the inherent vowel is /a/ in certain environments: *e.g.*, before <h̄> in Thai and before <h̄> following a consonant of the (historically voiceless) ‘first series’ in Khmer.

Sino-Tibetan language with a rich inventory of consonant clusters like atonal Old Chinese, Old Tibetan, and the present-day rGyalrong languages. Tones developed only in the mid-first millennium CE in Chinese after it lost initial and final consonant clusters and final glottals; they may have developed even later in other languages of the region under Chinese influence. Thus it is most likely that Pyu was atonal at the time it was first written – an event that, judging from the form of Pyu script, is likely to have taken place in the mid-first millennium CE (§1.5.1) –, though the language may have developed registers or even tones later in its history. Luce’s proposal of eight tones for Pyu is particularly unlikely since early Sinospheric tone systems only had four tones; more elaborate systems are of later origin and are associated with much simpler syllable structures: *e.g.*, the seven-tone system of Lahu CV syllables or the nine-tone system of Kam CV(C) syllables.

We will proceed under the working assumption that Pyu was atonal at the beginning of its written history and propose further arguments for atonality in sections §3.4.4–7 below.

3.4.3 *The Pyu onset *

Blagden’s choice of the symbol *b* for the only non-Indic letter in the Pyu script does not seem to have been motivated by more than convenience; ideally the choice for subscript dot, used elsewhere in the system of transliteration for Indic scripts to render retroflex consonants, would be motivated by some shared phonetic feature with <ṭ ṭh ḍ ḍh ṇ ṣ>; the feature of implosion shared between the sounds expressed by and <ḍ> in Mon does not seem to have been part of Blagden’s motivation.

Blagden (1911: 369) gave non-implosive “b (or p?)” as “suggested phonetic values” for . In 1919 (p. 61) he merely commented on the graphic resemblance between Pyu and Mon saying nothing about its phonetic value in Pyu, and described the Mon sound as “somewhat nasal and vaguely like w” to his ears (p. 78): *i.e.*, not as an implosive. Luce (1985, I: 63) put forward the reasonable notion that the barred “b” of Pyu script (our *b̄*) represented a preglottalized b, distinct from the plain “b” (our *b*).

Whether preglottalized is the correct choice of manner or not, distributional evidence supports the notion that *b̄* forms a series with the subscript-dot consonant signs (primarily *d*, *g*, *v*, and *y* – but not *b*¹²³) representing a manner of consonant distinct from the plain voiced (§3.4.4). Nearly three decades after Luce, Krech (2012a: 148, table) classified *b̄* as a “fricative” sound after *s* and *h* and before the glottal stop. It is not clear whether Krech actually regarded *b̄* as a fricative or if he merely placed it and the glottal stop in the “fricative” row under the influence of Mon script order (in which Mon *b̄* and ° follow *s* and *h*).

123. There are seven exceptions to this pattern in our corpus: *rḍom̐h̐* (008.21), *kkut-m̐* (020.3), *tnim̐h̐* (020.3), *drom̐h̐* (020.5), *dlin-m̐h̐* (027.2), *dran-m̐* (032.4), and *dram̐* (089). Without further investigation we are unable to determine whether these are misreadings on our part, errors by the engraver, or genuine.

The Chinese transcription of Pyu *but-dha hay-mh* ‘Lord Buddha’ (attested in 020.2) as 沒駄彌 [^mbor da ^mbi] (§1.2.3) suggests that *b* may have been prenasalized. The *mb* that only occurs twice in our corpus (020.4 and 074.5) may have been an error or variant spelling for a prenasalized *b*. Our proposed Sino-Tibetan *m*-cognates for Pyu *baḥ* (§3.2.2, *s.v.*) support a nasal source of *b*. However, there is no guarantee that *b* still retained nasality at the time Pyu was written. Furthermore, if Pulleyblank (1970: 211) is correct, the mid-Tang capital dialect lacked plain voiced stops, and [^mda] was actually [^mt^ha] whose [^h] matches the aspiration of Pyu *dha*. Hence the [^mb] of that dialect might have approximated a Pyu implosive [ɓ], *i.e.*, a consonant absent from that dialect. The shift of implosives to nasals in Vietnamese (Phan 2013: 318) demonstrates that the two classes of consonants are phonetically similar.

We regard *b* as a stop because we have not found any evidence to support any other manner of articulation. But we remain agnostic as to how *b* differed from a plain *b*.

3.4.4 Pyu onsets with subscript dot <ṁ>

It may be tempting to regard the Pyu subscript dot (§1.5.3.1) as a precursor of the Burmese *ok mrac* subscript dot for creaky tone, but the latter is a much later unrelated abbreviation of the glottal stop sign ʔ <’> and can occur with any consonant unlike the former which is primarily limited to *d*, *g*, *v*, and *y*. The restricted distribution of the Pyu dot suggests that it represented a consonantal rather than a tonal distinction, though it is not impossible that a consonantal distinction later gave rise to a tonal one.

If *b* was implosive [ɓ] and formed a series with the subscript-dot consonant signs (cf. §3.4.3), we might expect the latter to also represent implosive stops and implosive-like preglottalized glides:¹²⁴

- d* ... ṁ = [^md]
- g* ... ṁ = [^mg] (otherwise unknown in the region)
- v* ... ṁ = [^mʔw] (cf. Vietnamese *o/u* [ʔw] before vowels contrasting with *v* [v] < *w)
- y* ... ṁ = [^mʔy] (cf. Proto-Tai *ʔj contrasting with *j in Pittayaporn 2009)

We could phonemically analyze the entire series as preglottalized /*ʔb ʔd ʔg ʔw ʔy/. But if all five had a common feature, why was /ʔb/ the only one written with a unique sign instead of a consonant-subscript dot combination? Was the sign *b* borrowed from Mon? If so, one might have expected Pyu script to emulate the Mon practice of writing the alveolar counterpart of *b* with retroflex *ḍ*. We also cannot explain why Indic words with *b*, *d*, *g*, *v*, and *y* were sometimes borrowed with subscript dot if simple *b*, *d*, *g*, *v*, and *y* also existed in Pyu:

124. Implosive glides are a phonetic impossibility.

but-dha (020.2) < *buddha*
tribhuvamnadit-mṁtya (008.3) < *tribhuvānaditya*
gom (007.19, 007.20, 007.22, 008.19, 008.20, 008.22) and *gaum*
 (016.2) < *guhā*
 °*arimedeyam* (007.26, 008.) < *ariyametteyya*

We could hypothesize that the Indic words were borrowed before simple voiced stops and glides became preglottalized, though we would then need to explain where the new simple voiced stops and glides came from.

/ * ? ? ? ? ? / > / * b d g w y / > / * ʔ b ʔ d ʔ g ʔ w ʔ y /

We could also hypothesize that the Pyu *b*-series represented simple voiced stops and glides whereas Pyu *b*, *d*, *g*, *v*, and *y* represented a series of fricatives and a glide inappropriate for Indic borrowings: e.g., [**β ð ɣ w z*]. That solution in turn raises another problem: why write [**b d g v y*] with special symbols (*b* and subscript dots) rather than with unmarked Indic signs? Conversely, why write un-Indic consonants with unmarked Indic signs? Although such counterintuitive orthographic choices are not without precedent in the region,¹²⁵ at present we prefer not to commit to any particular interpretation of the two consonant series.

3.4.5 The Pyu ‘anusvāra’ <ṁ>

The Pyu superscript dot *ṁ* resembles an Indic anusvāra, but graphic resemblance does not necessarily entail phonetic equivalence or even a single function. The anusvāra in the modern Mon script can represent nonnasal /h ʔ ɔ/¹²⁶ as well as nasal /m ŋ/ (Nai Pan Hla 1988–1989: 16, 18–19). None of the nonnasal uses of modern Mon anusvāra can be traced back to Pyu; those uses were all later innovations. Nonetheless the possibility of a nonnasal interpretation of the Pyu anusvāra cannot be dismissed *a priori*, and in fact it is supported by both internal and external evidence.

The markers *paṁh* and *peḥ*, both ‘let’, in the glosses for Sanskrit *bhavantu* ‘be.IMP.3PL’ (#83, #72) may be different spellings for the same morpheme. An alternation between *aṁ* and *e* suggests that they represented similar or identical vowels in the speech of the engraver. That marker could be derived from *paṁh* ‘give’ (007.5, 6, 12, 13, 23, 26; 008.5, 6, 12, 24, 28) which may be cognate to OB *piy* ‘to give’ and OC 界 **pi[t]-s* ‘to give’ both of which have nonnasal vowels. If all this is true, it suggests that *aṁ* may have been an *a*-like front vowel such as [**æ*] which is not far from Beckwith’s proposal (2002a: 159), on purely comparative grounds, of [**ɛ*]. Another potential instance of an alternation between *aṁ* and *e* is *da[l-]ṁmḥ dal-mḥ* ‘to succeed?’, ‘step?’, ‘succession?’ (#104) which may be a reduplication of *de(l-mḥ)* ‘step?’ (#66).

125. In the Thai and Lao scripts long postdating Pyu, the simple signs for *p* and *t* (Thai ๒๓, Lao ບ) represent [b d] from earlier implosives [**b d*], whereas modified forms of *p* and *t* (Thai ๒๔, Lao ດ) represent [p t] from nonimplosive [**p t*].

126. The Mon anusvāra only has the value /ɔ/ before the velar codas *k*- and *ṅ*-.

The case for a nonnasal interpretation of *im̃* is both weaker and dependent on data from inscriptions other than 016. For that reason, we will not attempt to present it in full here. For now, we will simply note three points. First, both *am̃* and *im̃* can occur with final consonants. Rhymes of the type -VNC or -VC̃ are unknown in languages of the region and hence unlikely in Pyu. Second, a nasal interpretation of *im̃* is improbable in Indic loans whose sources contained no nasals after *i*:

tribhuvam̃nadit-m̃m̃tya (008.3) < *tribhuvānaditya*
mugam̃tubudim̃saṭhe (008.15) < *muggaliputtatissatthera*
sumedhabadiṃm̃ (007.15) < *sumedhapañḍita*
sagaṃsivam̃rabadiṃm̃ (007.17) < *saṅghasenavarapaṇḍita*

Third, there are spelling alternations between *ir-m̃* and *r̃* (§1.5.3.6) suggesting that *im̃* was similar or identical to the vowel of the Pyu pronunciation of *r̃*. If the anusvāra-like symbol of *am̃* indicated an *a*-like low vowel distinct from *a* (e.g., [**æ*]), then the anusvāra-like symbol of *im̃* is likely to have indicated an *i*-like high vowel distinct from *i* (e.g., [**ĩ*]), in which case *ir-m̃* and the *r̃* alternating with it were both pronounced [**ir̃*].¹²⁷

There are a handful of cases where anusvāra accompanies a vowel other than *a* or *i*. The cases known to us at this time are *mvum̃h̃* (017.8), *tdum̃* (025.7), *kdlem̃h̃* (144.1, 145.1), *toy-m̃* (012.1, twice in 012.2), *mson-m̃* (019.2), *rom-m̃h̃* (030.1), *som̃h̃* (056.1), *ttoy-m̃* (064.4), and *slon-m̃* (158.1). At least some of these instances may be errors of reading on our part, or of engraving on the part of ancient stone carvers. Because *toy-* without anusvāra appears once in 012.1 and several times elsewhere in our corpus (020, 027, 032, 064, 165); the collocation *toy- tkir-m̃h̃* (020.3) resembles *toy-m̃ tkir-m̃h̃* (012.1, 2). If *toy-* is the same morpheme as *toy-m̃*, the latter spelling may be an idiosyncrasy of the engraver of 012. We do not think it is a good idea to reconstruct additional phonemes to account for such rarities.

3.4.6 Pyu final consonants

PYU016 contains several words whose final consonants match those of their probable cognates:

Pyu *tak-m̃* ‘one’: OB *tac-* < **dik* ‘one’, WT *gcig* ‘one’, OC 隻 **tek* ‘one of a pair’.

Pyu *kmuñ- kmin-m̃* ‘confusion’: WT *rmon-ba* ‘be obscured’ and OC 矇 **m̃oŋ* ‘blind’, 濛 **m̃oŋ* ‘darkening of the sky by rain’.

Pyu *prin-h̃* ‘city’: OB *prañ-* < **prin* ‘city’ (probably a loan from Pyu).

Pyu *rniñ-m̃* ‘heart’: WT *sñiñ* ‘heart’, Ta. 2518 𑀭𑀸𑀓𑀢 *njiij*² < **njeen* ‘heart’, OC 仁 **niŋ* ‘humane’.

Pyu *rmiñ-* ‘name’: OB *mañ-* ‘be named’, OT *myiñ* ‘name’, Ta. 2639 𑀭𑀸𑀓𑀢 *mjiij*² < **mjeeN* ‘name’, OC 名 **C.meŋ* ‘name’.

127. As noted in §1.5.3.6, the redundant spelling *ri* implies a pronunciation [**ri*] for *r̃*. The Pyu symbol *r̃* is hence ambiguous like its Thai counterpart 𑀭𑀸𑀓𑀢 which has three unpredictable pronunciations [ri ru rɜ:]. Without alternating spellings, a redundant -i, or a Sanskrit etymology, there is no way to determine whether a given Pyu *r̃* was pronounced [**ir̃*] or [**rĩ*].

Pyu *got* ‘motion verb’: WT *’grod-pa* ‘go, walk’, OC 越 **[g]ʷat* ‘pass over’.

Pyu *lam* ‘road’: WB *lam·h* ‘road’, WT *lam* ‘road’.

Pyu *gay·m̥h* ‘I’: Lai (Falam) *káy màʔ* ‘I’, Mizo *kěi* ‘I’.

There is one *-av-* word with *-o-* cognates: Pyu *tdav·m̥h* ‘king’: OB *tāv·/tav·*, WB *tau* [tə] < **d-* ‘suffix indicating sacred, royal, or official status’, OC 主 **toʔ* ‘master’. We have not yet found any cognates of Pyu words ending in *-n-*, *-p-*, *-r-*, or *-l-*. But we have found no cases at all in which Pyu has an open syllable where we would expect a final consonant on the basis of potential cognates. Nor have we found any cases in which Pyu has final consonants that do not match those of potential cognates.

The Pyu inventory of final consonants is typical for a Sino-Tibetan language. The overlap with the inventories of OB, OT, and OC is considerable if one takes into account the facts that (1) OB palatals developed from **k*, **ŋ*, **t*, and **n* after front vowels, (2) OT has orthographic final voiced stops, and (3) OC has **j* and **w* instead of **y* and **v*.

| Pyu | <i>k·</i> | <i>ñ·</i> | <i>t·</i> | <i>n·</i> | <i>p·</i> | <i>m·</i> | <i>y·</i> | <i>r·</i> | <i>l·</i> | <i>v·</i> |
|-----|--------------|--------------|--------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OB | ✓ / <i>c</i> | ✓ / <i>ñ</i> | ✓ / <i>c</i> | ✓ / <i>ñ</i> | ✓ | ✓ | ✓ | | | |
| OT | <i>g</i> | ✓ | <i>d</i> | ✓ | <i>b</i> | ✓ | | ✓ | ✓ | |
| OC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | <i>*j</i> | | | <i>*w</i> |

Table 5. — Comparison of final consonants in Pyu, OB, OT, and OC.

Voiceless stops, nasals, and glides are present while voiced stops, aspirates, and palatals are absent. The lack of palatals differentiates Pyu from OB which developed those typically Austroasiatic codas under the influence of OM. Pyu lacks the final glottals and fricatives that are present in OB (*-h·*), OT (*-’[ɣ]*, *-s*),¹²⁸ and OC (**-ʔ*, **-s*). It also lacks the *-Cs* clusters of OT and OC and the **-Nʔ* clusters of OC. In the following section, we present a hypothesis to account for these gaps in an otherwise highly conservative inventory.

3.4.7 The Pyu ‘visarga’ <ḥ>

We must always be careful not to assume simple equations between Indic and Pyu phonetic values for similar-looking signs: Pyu *ḥ* may not have stood for /h/. Other scripts in the region demonstrate how visarga and visarga-like signs may not have /h/-like values. WB *ḥ* indicates a high tone in modern pronunciation. The Thai descendant of the visarga sign, *ḥ* /saràʔ ʔàʔ/, represents /àʔ/ or /áʔ/ depending on the preceding consonant or a shortening of a preceding vowel sign plus /ʔ/, not /h/ which is not a possible Thai coda. Modern Khmer has both a visarga : representing /h/ and a recently created visarga-like /juʔkəleəʔpintuʔ/ sign : representing /aʔ/ or /eəʔ/ depending on the preceding consonant.

The fact that Pyu *ḥ* sometimes corresponds to WB *ḥ* might be taken as evidence for the two signs representing the same tone, e.g., Pyu *hauḥ*

128. We follow Hill (2005) who interprets OT *-’* as [ɣ].

~ WB *sumh* ‘three’. But there are instances where the two signs do not correspond (e.g., Pyu *prin-h* ‘city’: WB *prañ* ‘id.’). Moreover, tones and their representations can change over time: what is now consistently written as WB *h* after most non-stop final rimes was written as a consonant *-h* or simply not written at all in the OB text of 007 and 008. The OB source of the modern Burmese high tone may have been characterized by breathy phonation which no Indic sign could naturally represent, and could perhaps only be approximated with *-h*. If OB had a true /h/ like OM, it would have been consistently written as *-h*, *-h*, or *-h·h* as in the very similar OM script. The same would then be expected of Pyu.

Another argument against Pyu *h* being /h/ is its presence after final stops in a few akṣaras (none found in 016): *dok·h* (020.4), *tduk·h* (020.5), *nhmok·h* (027.5), *nrat·h* (020.4), *nat·h* (030.1), *rat·h* (032.5), *nrut·h* (032.10). None of these words have known meanings or Sino-Tibetan etymologies. There are no examples of *-p·h* in our corpus. If Pyu had final stop-/h/ clusters, they could have been written as final aspirated stops: /kh/ as <kh>, etc.

The following scenario attempts to reconcile the above observations with the absence of final /s/ and glottals in Pyu: Proto-Sino-Tibetan and early or archaic languages such as OC and OT had final /s/ and glottals. These sounds could have merged into **-h* in pre-Pyu. **-h* may have devoiced preceding sonorants.¹²⁹ This **-h* in turn may have left a trace as breathy phonation:

*priŋs > *priŋh > (*priŋʔ >) *prin·h* / *priŋ/ ‘city’

The rare stop-*h* syllables may have developed breathy phonation as a trace of lost final aspiration:

*doks > *dok^h > *dok·h* / dɔk/ ‘?’

Stop-*s* syllables are much more frequent in OC and OT than stop-*h* syllables in Pyu, so perhaps stop-**s* clusters simply became final stops or *-h* in Pyu, and Pyu speakers later created and/or borrowed a handful of stop-*h* words.

The possibility that breathy phonation later developed into a true tone cannot be ruled out. A contrast between unmarked (clear) and breathy phonation could have become a two-tone system like that of Pyu’s distant relative Tangut in the north.¹³⁰ Such a change in phonetic detail may not be detectable on the basis of written evidence. If one only had access to Punjabi in written form, one might think that *ਘੋੜਾ* <ghoṛā> ‘horse’ was pronounced like its atonal Hindi cognate *घोड़ा* <ghoṛā> [g^ho:ṛa:] rather than as [kò:ṛà:] with low tones offsetting the devoicing and deaspiration of the **g^h* preserved in Hindi. Similarly, the conservative atonal Tibetan script disguises the loss of consonants and the presence of tones in modern Lhasa Tibetan. We can only guess the reasoning behind Pyu orthographic conventions when they were first devised; their later phonetic referents may be beyond our grasp.

129. Voiceless final glides are found in Kri, a Vietic language spoken in Laos (Enfield & Diffloth 2009: 19).

130. The Tangut tones may have actually been phonations. The second, less common Tangut tone may have developed from final glottals like the phonetic quality symbolized by Pyu *-h* (Miyake 2012).

4. On the absence of final consonants in certain Pyu inscriptions

The absence of final consonant notation in some Pyu texts has an areal parallel in some of the scripts of the Philippines such as Hanunóo which was still in use as of the mid-20th century CE (Kuipers & McDermott 1996: 481–483). Hanunóo is a Philippine language with a typically large inventory of fifteen possible syllable-final consonants /k g ŋ t d n p b m j r l w s ʔ/ that are traditionally never indicated in its Indic script.¹³¹ Readers must supply those consonants from context: e.g., *ᳵ᳚᳚᳚* <ma nu ga> is to be read /madnugan/ ‘will be heard’ with syllable-final /d/ and /n/. In theory, the degree of ambiguity is greater than in Pyu which has only ten syllable-final consonants that can be written with subscript characters: <k· ṇ· t· n· p· m· y· r· l· v·> for /k ŋ t n p m j r l w/. However, in practice Hanunóo script is used almost exclusively to write love songs, so many hypothetical readings of unlikely words could be excluded by readers familiar with the genre.

The Philippine scripts belong to the Indonesian branch of the Indic family of scripts, though “their precise attachments are uncertain” (de Casparis 1975: 67). They predate the arrival of the Spanish in the 15th century and postdate the Indian invention of methods for writing syllable-final consonants. It is not known why no such methods were used in the Philippine scripts when Fr. Francisco Lopez introduced the *virāma* to the Ilocano script in 1621.¹³² In any case, the Philippine scripts demonstrate that languages with large numbers of syllable-final consonants can be successfully written with symbols for open syllables. The absence of subscript syllable-final consonants in some Pyu texts does not necessarily entail the absence of syllable-final consonants in the language of those texts.

5. Material excluded from the inventory

In this section we briefly indicate certain categories of inscriptions that we have – in some cases provisionally – excluded from our inventory.

5.1 Molded tablets with *ye dharmāḥ/dhammā* inscription

The same archaeological contexts as the ones with inscriptions in Pyu and/or Pali language that we include in our inventory have also yielded a substantial number of molded tablets engraved with Sanskrit or Pali versions of the ubiquitous *ye dharmāḥ/dhammā* stanza.¹³³ Since recording them would have implied a significant amount of extra work with very limited compensation in terms of new textual/linguistic data, we provisionally exclude such items.

131. Antoon Postma introduced the *pamudpod*, a *virāma*-like vowel cancellation symbol to the Hanunóo script some time after arriving in the Philippines in the 1950s (Everson 2000: 1–2).

132. Fr. Lopez’ innovation did not take hold even though the Ilocano language also had a large number of syllable-final consonants like Hanunóo (Everson 2000: 1).

133. See Luce 1985, I: 152 (pl. 56c, d), 153 (pl. 57d, e) and 155 (pl. 59a) for specimens of such inscriptions in “Nāgarī” script.

We do include instances on other kinds of support than molded tablets; we also do include Pali inscriptions on molded tablets that give any other text than the *ye dhammā*. In several cases, a single artifact shows Pyu on one face and Sanskrit/Pali on the other; these too have, naturally, been included.

5.2 Suspected forgeries

Production of more or less convincing lookalikes for ancient inscriptions has been going on in Burma for a long time. In *ASB* 1926, p. 31, one reads how in 1925, a monk was said to have found a magical iron ball buried at the spot where his supporters were digging foundations for a new building. Inscriptions on two accompanying silver plates said that if the ball was placed in water, those who drank the water would be free from disease. People came from far and wide to drink the water. The inscriptions on the plates were purportedly written 120 years after the Buddha's *parinirvāṇa*, but could be read by people without any training in epigraphy. The Deputy Commissioner of Prome concluded that this was a device to collect donations for the building project.

We suspect that a number of the artifacts that have come to our attention as potential Pyu inscriptions belong to the category of forgeries, and reckon with a range of possible motivations, from the pious to the pecuniary, for the production of such forgeries. In principle, such forgeries are obviously to be excluded from our inventory; and we discuss below two prominent cases that we have indeed decided to exclude. But given the difficulties of evaluating the authenticity of certain artifacts, we have on the whole preferred to err on the side of including too much by including some suspect items, rather than run the risk of condemning potentially authentic material to oblivion.

5.2.1 An ostensible foreign coin

During fieldwork in November 2016, we were shown by the staff members of the Department of Archaeology posted at Halin a coin that had reportedly been found by a villager and acquired by the Department (fig. 21). Being engraved on one side with two lines of text easily readable as *śrīdvāravatīśvarapunya*, and showing on the reverse a right-facing horned animal with its young, it evidently looks like the well-known Dvāravatī medallions found at several Dvāravatī sites in Thailand.¹³⁴ Since so-called Pyu coins¹³⁵ have been found at several sites in Thailand¹³⁶ and even at the Funan site Oc Eo, in Vietnam,¹³⁷ implying that Pyu coinage circulated far and wide in ancient Southeast Asia, there would in itself be nothing surprising in finding that an ancient Dvāravatī

134. See Cœdès 1963; Boeles 1964; Ronachai Krisadaolarn & Mihailovs 2012: 49–50; and especially Revire 2016: 400–403 with Map 1.

135. This means coins resembling those found in great numbers at several Pyu sites, discussed and illustrated e.g. in Luce 1985, I: 125–126 and II: pl. 3.

136. See Ronachai Krisadaolarn & Mihailovs 2012: 33–44.

137. Mahlo 2012: 11, 39–41, 69.



Fig. 21 — Dvāravatī coin seen in Halin; a suspected forgery: (a) obverse, (b) reverse.
Photos Arlo Griffiths.

coin had traveled in the opposite direction. But we do not believe the coin found at Halin reflects such ancient patterns of exchange. The dimensions of the coin at Halin (diameter 30 mm, thickness 3 mm, weight 13 grams) are very different from those of published Dvāravatī coins, while none of the animals on published Dvāravatī coins are ever the same as the one on the Halin coin and they never face to the right. It seems that a modern artisan has attempted to imitate a Dvāravatī coin from a photograph, without taking the scale and other aspects of his model into account.

5.2.2 Bronze seal and clay sealing

Mahlo 2012: 190, pl. 14, no. 5 shows a “Bronze seal with inscription reading ‘the great abbot of Sri Ksetra’ (?); Ø ca. 5 cm; 5th/6th century”, said to have been found at Sriksetra. The same artefact, held in Dietrich Mahlo’s collection, was discussed in an earlier article by Krüger & Letz 2006. An impression of this seal matrix in clay was photographed by Bob Hudson in the collection of a Pyay resident known as U Ja-pan (fig. 22). Two texts are engraved on the seal matrix in Mahlo’s collections, one on its front (A) and one on the edge of its back (B). We exclude these inscriptions from our inventory because we consider the first a likely fake, both text and iconography being highly suspect. The text (on the obverse) is enclosed by iconography on top (a scene of two gazelles facing a central tree) and below (a crouching lion). This very arrangement is, to our knowledge, unparalleled: seals known to us show iconography on an upper, and inscription on a lower register.

The text of A was quite obviously intended to be read as *srikṣetra mahate*.¹³⁸ In view of the non-attestation in any historical document from Burma of the name of Sriksetra (*śrīkṣetra*) in anything closely resembling this orthography (see Griffiths & Lammerts 2015: 996), and since the name is not unambiguously attested in any form in any document of the first

138. Krüger & Letz (2006: 90) propose *sre ksetra mahate* or *sri ksetra mahati*. The intended second consonant cluster can only be *kṣ* (not *kkh*, which might have been expected if the language were intended to be Pali-like, and certainly not *ks*). The reading of the vowel signs is not really problematic.



Fig. 22 — Impression of a seal seen in Sriksetra; a suspected forgery. Photo Bob Hudson.

millennium CE, the creation of a forgery would obviously fill what must feel like a major lacuna to anyone who imagines *śrīkṣetra* as the Pyu-period name of the site. Indeed, in their publication, Krüger & Letz emphasize the importance of the document, which they considered authentic, “as evidence of use, much prior to the well-known Mon inscription of king Kyanzittha, of the city name Śrī Kṣetra by the Pyu”.¹³⁹ A Pyu word corresponding to Pali *mahāthera* and Old Burmese *mahāther/mahāthe/mahāte* is attested in the spelling *mahaṭhe* and *mhaṭhe* in the Myazedi pillar inscription (PYU007, l. 15; 008, l. 15), but the difference in spelling suggests, if we are correct in our assumption that the text in question is a modern forgery, that some Old Burmese document was taken as a source of inspiration to create a document resembling authentic Pyu by someone unattentive to spelling issues.

As for the iconography, the top register makes no sense. It is obviously inspired by the extremely well-known motif of two gazelles flanking the *dharmacakra*. While this motif is understood by any Buddhist, it is impossible to understand what a variant with a tree – which moreover does not seem to be a *Ficus religiosa* but a palm (Krüger & Letz 2006: 90) – in place of the wheel could signify. The squatting lion in the lower register recalls similar elements of decoration seen on several molded tablets from Sriksetra (Luce 1985, II: pl. 60 ef) and is known also farther afield, for instance on the royal seal affixed to a ca. 9th-century copper plate from Chittagong (Islam 2016).

In the text of B, Krüger & Letz have detected the akṣaras *sagara*. This reading seems reasonable, but the text seems to be cut by the seal’s ring, and it seems hard to imagine why anyone would have wanted to produce this inscription in modern times. We therefore tentatively propose an alternative scenario to that imagined by Krüger & Letz.¹⁴⁰ We believe that an originally flat object bearing an authentic Pyu inscription (B) may have been reshaped in modern times, affixed with a ring and endowed with a seal inscription (A).

139. Krüger & Letz (2006: 91): “als Zeugnis einer, der bekannten Mon-Inschrift des Königs Kyanzittha weit vorläufigen, Verwendung des Stadtnamens Śrī Kṣetra bereits durch die Pyu.”

140. Krüger & Letz (2006: 91): “Die Schreibung des *sa* in *sagara* weicht dabei jedoch erheblich von der des gleichen Zeichens in Inschrift (A) ab, so dass hier vermutet werden darf, dass die seitlich neben dem Griff angebrachte Inschrift (B) später hinzugefügt worden ist.”

5.3 *Brick inscriptions included and excluded*

The bricks stamped or engraved with Pyu numeral signs or akṣaras that have been found at various sites (§1.3.5) probably number in the hundreds. Of these, only a few have benefited from publication in the form of photographs allowing verification of any interpretations that have been proposed, and even fewer have been formally entered into museum collections where they were accessible for us to document them. Since it was not practicable to include all brick inscriptions for which we have photographic evidence (mainly thanks to Bob Hudson's many years of fieldwork), for the time being we include only those specimens for which there exists published photographic evidence and/or which are preserved in accessible museum collections where they can be retrieved. We have excluded the many that have been photographed in excavation context but have not been published and whose present location is unknown to us. Future updates of the inventory may include additional epigraphic material of this sort.

6. Inventory of Pyu inscriptions

The inventory subjoined here extends Duroiselle's list published in 1921 from 15 to 195 items. The following explanations seem to be in order.

Problems of provenance

Users of our geographic data must keep in mind that linking an inscription stone or other artefact to an originating site is not always simple, even if the archaeological literature has preserved information about provenance. Authors such as Duroiselle in the colonial period, and Luce up until the 1980s, referred to sites particularly in Sriksetra, whose walls alone enclose more than 12 km², by local names, which often did not appear on maps, and today may have been forgotten. Archaeological finds were considered important in their own right, not for where they came from. Duroiselle was prone to use trite expressions in his reports such as "I opened up twenty-three mounds within an area of three square miles; some were situated within the old city walls, others without" (*ASI* 1927–1928, p. 127).¹⁴¹ Today, antiquarians, antique dealers and treasure hunters, who are responsible for the majority of finds of objects such as intaglios or coins, are almost invariably vague about the origins of the items they possess, and may say that something is "from Sriksetra" or simply "ancient". The Department of Archaeology will often list a find according to the township it came from. This is an administrative unit containing the town or village near which the find was made. The findspot could be a long way from the central township. Moreover, geographical names are liable to change. A site can have an official map name, a formal Pali name, and a familiar name used by the local people. And there are still buildings that have for various reasons been located but then lost to view. Luce, for instance, published a plan of a

141. For a broader review of Duroiselle's work, see Hudson & Lustig 2008: 281–282.

building at Sriksetra, the North Zegu (1985, II: pl. 25c), which had vanished below a modern village. The foundations of this small temple were only rediscovered and excavated by the Department of Archaeology in 2016. The Department of Archaeology archives at Mandalay contain excavation plans for nine brick structures at Sriksetra whose locations are not known today, at least not by these names: Kansaukkankon, Kyanikankon (probably the Kyanikan mound, recorded by Luce 1985, I: 141 as being “south of the Bagbawgyi”), Kyibinkankon, Kyundawsukon, Mathinkon, Okshitpinkon, a Payagon (holy mound) in a Pyudaik (an otherwise unidentified burial platform), Pohnaungkon, and Thakhutshokon. Pyogingyi, from which came artifacts including lettered bricks (see, for example, PYU144 and 149) is mentioned in the literature (Luce 1985, I: 141–142), but its location seems to have been known so well to the small band of researchers involved that they felt no need to record it on any map.

Visual documentation and bibliographic references

As a matter of principle, we cite only reproductions that we have seen ourselves. This means, for instance, that we cite estampages held at the Department of Historical Research (DHR) in Yangon for only three inscriptions, even though this institution certainly holds estampages for many more Pyu inscriptions. For the same reason, even though Luce (1985) often cites “Arch. Neg.” numbers to refer to negatives of the Department of Archaeology, we include references to these only if we have managed to see the photographs in question, and confirmed the number in the *List of Archaeological Photo-Negatives of Burma Stored in the Office of the Superintendent, Archaeological Survey, Burma Circle, Mandalay* (1936, Delhi, Manager of Publications). For photographs or related digital images (RTI and photogrammetry) taken in the course of our own research, we cite the name of the photographer (by initials – see the list of abbreviations). Whenever the availability of RTI or photogrammetry is indicated, we also dispose of conventional digital photographic documentation. Much of the visual documentation in question is already available online, in our digital archive: <https://zenodo.org/communities/pyu-epigraphy>. Material not yet found in that archive at the time this study goes to press will be added later. It is hoped that the archive will prove to be perennial.

We do not provide specific references for all Burmese publications that have come to our attention because they are generally derivative of Tha Myat and Mya, covering inscriptions already included also in the work of those scholars, whose contributions we have striven to reference exhaustively. However, we have cited recent Burmese publications that present epigraphic material not included in Tha Myat and Mya; Sein Win 2016, for example – the most recent Burmese publication to have come to our attention – covers at least 31 inscriptions, and gives photos for all of them, though generally of poor quality. While we have referenced all entries from this publication under our respective inventory numbers, we have separately cited the photographic reproductions only in cases where other photographic documentation has not yet been published at all, or may be hard to access.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|--------------------|---------------------------------|-------------------------------------|---------------------------------------|---|
| 1 | stone, small stela | 2 | h:>67, w:38, d:20 | Pyu | Halin, south of south-east corner of city-wall |
| 2 | earthenware urn | 1 | h:46, dia:38 | Pyu | marked as a historical monument, 100 m south of Payagyi pagoda, East Pyay |
| 3 | stone urn | 1 | h:72, dia (bottom):77, dia (top) 85 | Pyu | marked as a historical monument, 100 m south of Payagyi pagoda, East Pyay |
| 4 | stone urn | 1 | h:95, dia:68 | Pyu | marked as a historical monument, 100 m south of Payagyi pagoda, East Pyay |
| 5 | stone urn | 1 | h:92, dia:66 | Pyu | marked as a historical monument, 100 m south of Payagyi pagoda, East Pyay |
| 6 | stone urn | 1 | h:83, dia:42 | Pyu | marked as a historical monument, 100 m south of Payagyi pagoda, East Pyay |
| 7 | stone pillar | A:39, B:41, C:33, D:26 | h:142, w:36, d:36 | Old Burmese, Pali, Old Mon, Pyu | Myazedi pagoda (<i>IMP</i> 1320), Myinkaba, Pagan |

1 Formerly Pagan Museum, no. 96.

2 Duroiselle indicated that the urn was in the Archaeological Office at Mandalay at the time he wrote; the same was still indicated in *IB* V (1956).

3 See also PYU25. — Dated to a year 35, possibly in the Burmese era of 638 CE.

4 Wrongly said to come from Bawbawgyi in *ASI* 1911–1912, 147. Dated to a year 50, possibly in the Burmese era of 638 CE.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|--|--|---|--|
| Halin Museum, no. 2014/1/25 | Mentions ‘lord <i>luñ ḥa</i> , son of ..., grandson of ...’. | <i>ASI</i> 1929–1930, pl. XLI (e). — <i>IB</i> IV, CCCLVII (a). — <i>PPPB</i> II, pl. 52b. — RTI JM. | <i>ASB</i> 1904–1905, 8–9, 35; 1915, 21–23. — <i>ASI</i> 1904–1905, 126; 1929–1930, 152. — Shafer 1943: 339. — <i>PR</i> , 21. — <i>PPPB</i> I, 66, 75 n. 27, 149. — Sein Win 2016: 14–15. |
| Sriksetra Museum, no. 2013/6/39 | | BL photo 1004/2 (1174-6). — <i>IB</i> V, DLXX (b). — <i>PPPB</i> II, pl. 8abc. | Blagden 1913–1914: 127 (E). — <i>ASB</i> 1913, 14–15; 1915, 21–23. — <i>PPPB</i> I, 65, 75 n. 24, 127. |
| Sriksetra Museum, no. 2013/1/2 | Mentions Sūryavikrama. | BL photo 1004/2 (1164-7). — Blagden 1913–1914 (D1). — <i>ASB</i> 1913, pl. I (1–2). — <i>IB</i> IV, CCCLIV (d). — <i>PPPB</i> II, pl. 5a, 6a. | <i>ASI</i> 1912–1913, pt. I, 29. — <i>ASB</i> 1913, 9–10, 14. — Blagden 1913–1914 (D1). — <i>PR</i> , 47 (D), 51. — <i>PPPB</i> I, 48, 57 n. 13, 126–127. — Sein Win 2016: 65. |
| Sriksetra Museum, no. 2013/1/1 | Mentions Sūryavikrama. | BL photo 1004/2 (1170-3). — Blagden 1913–1914 (C). — <i>IB</i> IV, CCCLIV (c). — <i>PPPB</i> II, pl. 5bc, 6b. — photos JM. | <i>ASI</i> 1912–1913, pt. I, 29. — <i>ASB</i> 1913, 13–14. — Blagden 1913–1914 (C). — <i>PR</i> , 47 (C), 51. — <i>PPPB</i> I, 48, 57 n. 13, 126–127. — Sein Win 2016: 64. |
| Sriksetra Museum, no. 2013/1/3 | Mentions Harivikrama. | BL photo 1004/2 (1005-7). — Blagden 1913–1914 (A). — <i>ASI</i> 1911–1912, pl. LXIX (1). — <i>IB</i> IV, CCCLIV (a). — <i>PPPB</i> II, pl. 5d, 6c. | <i>ASI</i> 1911–1912, 147. — <i>ASB</i> 1912, 7, 11. — Blagden 1913–1914 (A). — <i>PR</i> , 47 (A), 50. — <i>PPPB</i> I, 48, 57 n. 13, 126–127. — Sein Win 2016: 62. |
| Sriksetra Museum, no. 2014/1/4 — National Museum, Nay Pyi Taw, 2015/1/2337 | Mentions Simhaviikrama. | BL photo 1004/2 (1008-13). — Blagden 1913–1914 (B). — <i>ASI</i> 1911–1912, pl. LXVIII (3). — <i>IB</i> IV, CCCLIV (b). — <i>PPPB</i> II, pl. 5 (ef), 6 (d). — Photogrammetry JM. | <i>ASI</i> 1911–1912, 147. — <i>ASB</i> 1912, 7, 11. — Blagden 1913–1914 (B). — <i>PR</i> , 47 (B), 50. — <i>PPPB</i> I, 48, 57 n. 13, 126–127. — Shafer 1943: 339. — Guy 2014: 76–77 (cat. 24). — Sein Win 2016: 63. |
| Pagan Museum, no. 1 | Quadrilingual text. Records building of a shrine by Prince Rājakumāra, son of Kyanzittha < <i>kyan cac sāḥ</i> >, and dedication of three villages and slaves thereto. | de Beylié 1907a, pl. VIII. — <i>EB</i> I, 1, pl. IV (A). — <i>IB</i> IV, CCCLXIII (a). — RTI AG&BH, JM. | de Beylié 1907a: 9, 83, 108. — Blagden 1911 (A). — <i>EB</i> I, 1, 59–68 (A). — Shafer 1943: 320–337, 340–344, 357–563. — <i>PR</i> , 53–61. — <i>PPPB</i> I, 62–64, 74 n. 15. — Tun Aung Chain 2003: 7–8. — Krech 2012a: 153–165 (A). — Sein Win 2016: 166–170. |

5 *ASI* 1911–1912 fig. 1 on pl. LXIX shows Blagden’s A urn but it is identified in the caption as being from the Bawbawgyi, which must be a mistake.

6 Comprises two texts of which only the first has been read (Blagden’s B1); the second (B2) is almost entirely illegible on available estampages. Text B1 is dated to a year 80, possibly in the Burmese era of 638 CE.

7 Dated 1112/1113 CE. But this is the date of Kyanzittha’s death (see *OBEPI*, p. 12). The date of engraving of the inscription may have been removed from it by a greater or smaller interval.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|-------------------------------------|---------------------------------|----------------------------|---------------------------------------|--|
| 8 | stone pillar | A:34, B:40, C:46, D:29 | h:215, w:34, d:56 | Old Burmese, Pali, Old Mon, Pyu | in parts near the Kubyaukkyi temple (<i>IMP</i> 1323) and in the Myazedi pagoda (<i>IMP</i> 1320), Myinkaba, Pagan |
| 9 | base of megalithic relief sculpture | unknown | h:250, w:190.2, d:38 | Pyu | Bèbè pagoda, Sriksetra |
| 10 | base of megalithic relief sculpture | 10 | h:250, w:195, d:45 | Pyu | Kyaukkathein, Sriksetra |
| 11 | stone stela | A:25, B:25 | h:138, w:66, d:23 | Pyu, Chinese | near the Tharaba gate (<i>IMP</i> 1634), Pagan |
| 12 | stone stela, rough | 3 | h:115, w:93/18, d:10/19 | Pyu | unknown |
| 13 | terracotta molded tablet | 3 | unknown | Pyu | Bawbawgyi pagoda, Sriksetra |
| 14 | terracotta molded tablet | 1 | unknown | Pyu | Lémyethna or Bawbawgyi pagoda, Sriksetra |
| 15 | terracotta molded tablet | 3 | h:12.7, w:14 | Pyu | Tawadeintha (Tāvatimsa) pagoda in hills west of Sriksetra |

8 See note on 007 concerning the date of the inscription.

11 During or after the Chinese invasion of Pagan in 1287 CE; but *ASB* 1916 suggests “probably dated 1284 A.D.” The reference to a “bilingual inscription in Chinese and Mongol” in *ASB* 1910 must be a slip of the pen for “Chinese and Pyu”.

12 Removed to Amarapura by King Bodawpaya in 1793 CE; from there to Mandalay in 1941 (see *IB* IV, p. 21).

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|--|--|---|--|
| Myazedi pagoda, Myinkaba, Pagan | Ditto. Duplicate of 007. | <i>EB</i> I, 1, pl. IV (B). — <i>IB</i> IV, CCCLXIII (b). — RTI AG&BH, JM. | Blagden 1913–1914 (B). — <i>EB</i> I, 1, 59–68 (B). — Shafer 1943: 320–337, 340–344, 357–363. — <i>PR</i> , 63–71. — <i>PPPB</i> I, 62–64, 74 n. 15. — Tun Aung Chain 2003: 7–8. — Krech 2012a: 153–165 (B). — Sein Win 2016: 171–174. |
| <i>in situ</i> | Illegible. | de Beylié 1907a, pl. VII (1). — <i>ASI</i> 1909–1910, 121 fig. 3. — <i>PPPB</i> II, pl. 21 (b). | de Beylié 1907a, 98. — <i>ASI</i> 1909–1910, 120. — Blagden 1913–1914, 127 (1). — <i>PPPB</i> I, 54, 59 n. 51, 134. |
| <i>in situ</i> : Sriksetra Museum, no. 2013/1/72 | Illegible. | <i>ASI</i> 1909–1910, pl. L (2). — DHR estampage. — RTI AG&BH, JM. | de Beylié 1907a: 82–83. — <i>ASI</i> 1909–1910, 120. — Blagden 1913–1914: 127 (2). — <i>PPPB</i> I, 129. |
| Pagan Museum, no. 7; formerly no. 3 | Pyu: illegible; Chinese: Yuan dynasty memorial (“not destroy Mien kingdom”), but this face too barely legible. | <i>IB</i> V, DLV and DLVI. — Sein Win 2016: 175–176. — RTI BH&AG, JM. | de Beylié 1907a: 83 (n. 1). — <i>ASB</i> 1907, 10; 1910, 21; 1916, 18 (with n. §), 20, 55; 1917, 24–25; 1922, 17. — Blagden 1913–1914: 127 (6). — Chen Yi-Sein 1960. — <i>PPPB</i> I, 67, 75 n. 38–39. — Sein Win 2016: 175–185. |
| Inscription shed, Mandalay Palace Museum, no. 12 | Mentions <i>tar·dav·mḥ</i> and <i>tdav·mḥ</i> ‘king, royal’. | <i>IB</i> V, DLXX (a). — Sein Win 2016: 127. — RTI AG&BH, JM. | <i>ASB</i> 1912, 12 §37; 1913, 21–22. — Blagden 1913–1914: 127 (5). — Sein Win 2016: 127–130. |
| unknown; formerly at Archaeological office, Mandalay | < ḃamḥ deri / sa °o ku pa / klinḥ [c]o> | BL photo 1004/2 (808). — <i>ASI</i> 1909–1910, pl. XLIX (11). — Marshall 1911, pl. VIII (1). — Mya 1961a, II, pl. 34–35. — <i>PPPB</i> II, pl. 56 (d, e). | <i>ASI</i> 1909–1910, 123. — Marshall 1911: 155. — Mya 1961a, II, 23. — <i>PPPB</i> I, 152. |
| unknown; formerly at Archaeological office, Mandalay | <ḃamḥ [s]gumḥ sa tca kdiḥ> | de Beylié 1907a: 89 fig. 62; 1907b: 246 fig. 199. — <i>ASI</i> 1909–1910, pl. XLIX (12, 13). — Mya 1961a, II, pl. 60 (gha). — <i>PPPB</i> II, 59 (f). | de Beylié 1907a: 89; 1907b: 245–246. — <i>ASI</i> 1909–1910, 123. — Mya 1961a, II, 31. — <i>PPPB</i> I, 155. |
| unknown; formerly at Archaeological office, Mandalay | Mentions Buddha. | BL photo 1004/2 (888). — <i>ASI</i> 1910–1911, pl. XLVII (21). — <i>PPPB</i> II, pl. 62 (d, e). | <i>ASI</i> 1910–1911, 93. — <i>ASB</i> 1911, 6, 41 (no. 2). — <i>PPPB</i> I, 158. |

14 Relevant publications do not allow verifying provenance. Luce refers to de Beylié 1907a, pl. V (3); 246 fig. 199. The latter is an error for 1907b: 246 fig. 199. Luce mistakenly cited these photos published by de Beylié, for de Beylié does not say that they show the obverse of the inscribed reverse copied in his (1907a) fig. 62. Comparing the other photos available, it seems obvious that de Beylié’s V (3) and 62 have no connection with each other.

15 Not in Mya 1961a. Wrongly ascribed to Bawbawgyi pagoda by Duroiselle (1921).

| Inv. no. PYU | Support | (Faces) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|------------------------------|--|---|---------------|--|
| 16 | stone Buddha image, socle | A:6, B:5, C:5, D:5 | h:59, w:57, d:20 | Sanskrit, Pyu | Kan Wet Khaung mound, Sriksetra |
| 17 | stone stela | 8 | h:139, w:50, d:15 | Pyu | west bank of Nagayon lake, Halin |
| 18 | stone slab | 1 | h:88, w:53, d:8 | Pyu | Sinlu village, Pwinbyu township, Minbu district, Magwe division |
| 19 | stone, small stela | 3 | h:50, w:48, d:15 | Pyu | site HMA 31(D), near Hpyahtaung pagoda, Sriksetra |
| 20 | stone urn | 5 | h:106, circum- ference:273, depth of cavity:55 | Pyu | site HMA 31, 30 m north of Hpyataung pagoda, Sriksetra |
| 21 | stone slab | 6 | h:72, w:57, d:6 | Pyu | Thegon township |
| 22 | stone relief-sculpture | 8 | h:99, w:48, d:10 | Pyu | Kyanigan, 300 m south of Bawbawgyi pagoda, Sriksetra |
| 23 | stone menhir | 6 | h:65, circumference at bottom: 110 | Pyu | hill called Hpyataung near the local monastery at Tondaw village, 50 km from Sandoway town, Rakhine State |
| 24 | silver-gilt relic casket | 3 (top rim: 1, bottom rim: 1, above bottom rim: 1) | h:58, circumference at bottom: 127, circ. at top: 104 | Pali, Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |

16 Indicated in *IB* IV (1956) to be held at Archaeological Office, Mandalay. We have no information on the history of the sculpture's movement to and from Mandalay.

17 For another (more damaged) specimen of the sun-and-moon symbol, see 061.

18 Found about 38 years ago, and kept in monastery until taken to Pagan Museum. Information from former director Aung Kyaing.

19 Found 5 March 1999. Text very similar to 030.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|-----------------------------------|--|---|--|
| Sriksetra Museum, no. 2013/1/48 | Bilingual text, Pyu glossing Sanskrit. Describes the reconciliation of kings Harivikrama and Candravarman and the consequent founding of two cities. | <i>ASI</i> 1927–1928, pl. LIV (g, h). — <i>IB</i> IV, CCCLVI (a). — <i>PPPB</i> II, pl. 16–17. — RTI AG&BH, JM. | <i>ASI</i> 1927–1928, 128, 145. — Ray 1936: 19–20. — Luce 1937: 243–244. — <i>PR</i> , 41–43. — <i>PPPB</i> I, 51, 57 n. 24, 65, 74 n. 22, 131–132. — Guy 1997: 91; 2014: 91–92 (cat. 41). — Tun Aung Chain 2003: 5–6. — Sein Win 2016: 45–60. |
| Halin inscription shed, no. 8 | Mentions queen Candradevī. | <i>ASI</i> 1929–1930, pl. XLI (a). — <i>IB</i> IV, CCCLVII (b). — <i>PPPB</i> II, pl. 52 (a). — RTI AG&BH, JM. | <i>ASI</i> 1929–1930, 152, 182. — <i>PR</i> , 22. — <i>PPPB</i> I, 66, 75 n. 28, 149. — Sein Win 2016: 17–21. |
| Pagan Museum, no. 74 | <1 tdav·ṛmḥ bam·ḥ gaṃḥ cok· kir·ṛmḥ kdramḥ> | Sein Win 2016: 187. — RTI AG&BH. | Sein Win 2016: 187–188. |
| Sriksetra Museum, no. 2013/1/51 | | Sein Win 2016: 35. — RTI AG&BH. | Sein Win 2016: 35–36. |
| National Museum, Yangon, no. 9 | Mentions Buddha, Saṅgha, Devamitra, Harivikrama, Sūryavikrama, Pṛthuvikrama, etc. | DHR estampage. — <i>MHRJ</i> 11, unnumbered pages after 132. — RTI AG&BH. | San Win 1998, 2000–2001, 2003. — Tun Aung Chain 2003: 1–4, Appendix on unnumbered page after 14. — <i>MHRJ</i> 11, pp. 133ff. — Sein Win 2016: 71–83. |
| Sriksetra Museum, no. 2013/1/52 | Mentions <i>tar·dav·ṛmḥ</i> ‘king’. | Sein Win 2016: 100. — RTI AG&BH. | Sein Win 2016: 100–102. |
| Sriksetra Museum, no. 2014/1/47 | Only very partly legible. | <i>ASI</i> 1934–1935, pl. XXII (a). — <i>IB</i> V, DLXIX. — Le May 1956, fig. 1. — <i>PPPB</i> II, pl. 15b. — RTI AG&BH, JM. | <i>ASI</i> 1934–1935, 45–46. — Le May 1956: 47. — <i>PPPB</i> I, 65, 75 n. 25, 131. — Sein Win 2016: 84–87. |
| <i>in situ</i> | Only very partly legible. | <i>PPPB</i> II, pl. 54. — Sein Win 2016: 190. — EFEO estampages n. 2389, n. 2408, n. 2409. — RTI JM. | <i>PR</i> , 78. — <i>PPPB</i> I, 50, 57 n. 22, 150. — Sein Win 2016: 189–193. |
| National Museum, Yangon, no. 1640 | Pali: parallels with <i>Paṭisambhidāmagga</i> and formulae such as <i>iti pi so, svākkhāto</i> , and <i>paṭiccasamuppāda</i> . Pyu: names of four Buddhas and of four attendants; mentions king Prabhavarman and queen Prabhudevī. | <i>ASI</i> 1926–1927, pl. XXXVII (d), XXXVIII (c). — Le May 1956, fig. 4. — Mya 1961a, II, pl. 1, 5, 6. — <i>PPPB</i> II, pl. 28–29. — Guy 2014: 66 (fig. 54), 81 (cat. 27). — RTI AG&BH. | <i>ASI</i> 1926–1927, 175–176, 201. — <i>PR</i> , 34. — Le May 1956: 48. — <i>PPPB</i> I, 51, 57 n. 23, 137. — Falk 1997: 88–91. — Stargardt 2001: 498, 503–506. — Guy 2014: 66–67, 80–82 (cat. 27). |

20 San Win 2000–2001 is an English version of 1998. The complete reading furnished in the Document section of *MHRJ* 11, pp. 133ff., was probably done by Than Tun, Nyein Maung, and San Win to whom the reading in Appendix to Tun Aung Chain’s article in the same issue is ascribed.

21 Received in museum in 1990.

22 Found in 1935. We do not believe this inscription comprises any parts in Sanskrit, despite statements in the literature to that effect.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|-----------------------------------|--|---------------------|-------------|---|
| 25 | stone urn, bottom | 7 | see PYU3 | Pyu | Payagyi pagoda, East Pyay |
| 26 | silver coin | 4 | dia:3.3 | Pyu | unknown |
| 27 | stone stela, horse-shoe shaped | 7 | h:148, w:136, d:30 | Pyu | Halin, northeast part of the city, 400 m north of palace site |
| 28 | stone pillar | 25 lines on lateral and front faces | h:195, w:47, d:31 | Pyu | Minte mound, Sriksetra |
| 29 | fragment of reused stone | 1 | h:75, w:90, d:20 | Pyu | Khin Ba mound (HMA 64), Sriksetra |
| 30 | stone, small stela | 3 | h:52, w:46, d:10 | Pyu | Shwegyobin village, 300 m southwest of palace at Sriksetra |
| 31 | stone, small stela | 1 | h:63, w:65, d:13 | Pyu | Museum records state this stone was a gift from U Nyan Maung, probably a local resident |
| 32 | stone slab | 10 | h:80, w:181, d:13 | Pyu | Myanadi village (8 km east of Maingmaw), Kan Swei village tract, Myittha township, Kyaukse district, Mandalay Region |
| 33 | stone fragment | 2 | h:33, w:25.4, d:7.6 | Pyu | Halin |
| 34 | clay sealing fragment | 1 | 3.4 × 3.0 × 2.2 | Pyu | unknown |
| 35 | relief sculpture | traces of 3 | h:120, w:132, d:19 | Pyu | south of Tagantha village, which is 4 km north of the northwest corner of the Halin wall |

25 According to Luce *PPPB* I, 75 n. 23: “Blagden transcribed this inscription but never published his readings”. Previous publications assume 8 lines. We read 7 full lines, but there are descenders from a cut off line above and some ascenders from an originally ensuing line at the bottom as well. This implies the support is an urn only in re-use.

28 Found in 1966. Text almost entirely obliterated.

30 Found 3/12/2002. Text very similar to 019. Sein Win 2016: 40, 42 show identical photographs that correspond to our 030. Only the transliteration on pp. 43–44 seems to match 030. The p. 40

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|---|--|---|--|
| Sriksetra Museum, no. 2013/1/2 | | BL photo 1004/2 (1168–1169). — <i>IB</i> IV, CCCLV (a). — <i>PR</i> , 49. — <i>PPPB</i> II, pl. 7. — EFEO estampage n. 2390. — RTI AG&BH, JM. | Blagden 1913–1914: 127 (D2). — <i>ASB</i> 1913, 14, 41. — <i>PPPB</i> I, 65, 75 n. 23, 127. — Sein Win 2016: 66–70. |
| Ratchamangala Phisek National Library, Chiang Mai (Thailand), acc. no. 034/2534 | Mentions <i>[ḥ]amḥ tdamḥ sri pūdanmyavamaka.</i> | Cha-Aim Kaewklai 1992: 86, 88. | Cha-Aim Kaewklai 1992. |
| Halin inscription shed, no. 1 | Mentions Trivikrama and Sridhara. | <i>ASB</i> 1964, pl. 25. — <i>PPPB</i> II, pl. 51. — RTI AG&BH, JM. | <i>ASB</i> 1964, 19–20. — <i>PPPB</i> I, 65, 75 n. 26, 149. — Sein Win 2016: 22–28. |
| Sriksetra Museum, no. 2013/1/76 in first Kyauk Ka Thein shed | Mostly illegible. | Sein Win 2016: 88–89. — RTI JM. | Sein Maung Oo 1968: 184 (= 1993: 135). — Sein Win 2016: 88–98. |
| Sriksetra Museum, no. 2013/1/78, in second Kyauk Ka Thein shed | Mentions a stūpa. | <i>IB</i> IV, CCCLVI (b). — RTI AG&BH, JM. | |
| Sriksetra Museum, no. 2013/1/49 | | Sein Win 2016: (40 =) 42. — RTI AG&BH. | Sein Win 2016: 43–44. |
| Sriksetra Museum, no. 2013/1/50 | < tviy·mṃḥ tpan·ḥ yaṃ @ > | Sein Win 2016: 103. — RTI AG&BH. | Sein Win 2016: 103. |
| Shwemoktaw Pagoda, Myittha | | Naing Zaw 2011: 525. — Sein Win 2016: 137–142. — RTI AG&BH. — photos JM. | Nyunt Han <i>et al.</i> 2007: 13. — Moore 2009: 111–112. — Naing Zaw 2011: 524. — Sein Win 2016: 137–151. |
| unknown; reportedly Pagan Museum but not found there | Mentions Candradevi. | <i>PPPB</i> II, pl. 52c. | <i>ASI</i> 1930–1934, I, 246–247. — <i>PPPB</i> I, 66, 75 n. 29, 149. |
| unknown | <tga siri> | Middleton 2005, App. 58, pp. 173–174. | Middleton 2005: 173 (App.58). |
| Halin inscription shed, no. 9 | Almost entirely effaced. | <i>ASI</i> 1929–1930, pl. XLI (b). — Le May 1956, fig. 2. — <i>PPPB</i> II, pl. 53a. — Sein Win 2016: 29. — RTI AG&BH, JM. | <i>ASI</i> 1929–1930: 154–155. — Le May 1956: 47. — Aung Thaw 1972: 12. — <i>PPPB</i> I, 53, 58 n. 43, 149–150. — Sein Win 2016: 30. |

illustration is probably in error since it does not match the transliteration that follows it on p. 41. If the latter represents a separate inscription, then its identity is unknown to us.

32 According to Naing Zaw, unearthed in June 1982 in Myanadi <mranadi> village about three miles east of old Maingmaw, due east of the right bank of the Panlaung River.

34 Middleton reports three readings, all incorrect, and her statement that the inscription is in Pali is likewise incorrect.

35 Le May 1956 fig. 2 mis-cited as 3 by Luce *PPPB* I, 150.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|---|--------------------|----------------------|---|---|
| 36 | metal sculpture of preaching Buddha | 2 | h:15.7, w:9 | Pyu (?) | Aung Seigon pagoda, Innwa, Mandalay Region |
| 37 | metal sculpture | 1 | h:20.5, w:13.0 | Pyu | Ouk Shit Pin <u shyac pañ> village, Lewei Township, near Pyinmana, Nay Pyi Taw |
| 38 | silver dish with low central knob | 1 | h:4.5, dia:21 | Pyu | U Hnaung gon Maletha village, Myinmu township |
| 39 | stone stela, broken | A:28, B:10/13/7 | h:151, w:124, d:13 | A: Pali and Mon in Mon script. — B: Sanskrit in Gaudi; Pali in Late Southern Brahmi and Pyu in Pyu scripts. | Petaw monastery, Myittha |
| 40 | stone slab | A:19, B:4 | h:42, w:59, d:7 | Pali | Top of Htingonsu Hill, Kunzeik village, on east bank of Sittaung river, Shwegyin township, Bago district |
| 41 | stone stela | 4 | h:40, w:59, d:4 | Pali | Kan Pauk gate, Kone Yoe village, Sriksetra |
| 42 | stone stela | 29+ | h:108, w:79, d:18/27 | Pali | Shwedaga gate of the city-wall, Sriksetra |
| 43 | 6 fragments of gold and silver foil | | unknown | Pali | Bawbawgyi pagoda, Sriksetra |

36 Presence of inscription not yet noted when catalogue entry was written for Guy 2014.

37 Found 2 Oct. 1993 according to Sein Win (“about a mile south of Shitpyin village, Lewei township, Mandalay district”); another source states found in 1994; the measurements in Guy 2014 are incorrect for H, for the piece is taller than it is wide. Stadtner indicates H. 20 cm, W. 15.6.

38 Found in 1972. Myint Aung and Sein Maung U references perhaps to be moved to 158, because, according to Win Maung (p.c.), the bowl exhibited in Halin and shown by Naing Zaw is more likely to be the one from Halin, formerly possessed by Terrence Tan, then taken by authorities.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|--|--|---|--|
| Yangon, Dept. of Archaeology and Museums — National Museum, Nay Pyi Taw, 2011/2/34 | Mentions Buddha and stūpa. | RTI AG. — RTI and photogrammetry JM. | Guy 2014: 91 (cat. 40). |
| National Museum, Nay Pyi Taw, 1/3/1994, new number 2011/2/1 | Possibly mentions Gotama. | Stadtner 2005: 53. — RTI AG. — RTI and photogrammetry JM. | Sein Win 1997. — Naing Zaw 2011: 546–547. — Guy 2014: 90–91 (cat. 39). |
| Halin Museum, no. 2014/5/28 | | Naing Zaw 2011: 87. — Photos AG, JM. | Myint Aung 1978: 2. — Sein Maung U 1981c; Sein Maung Oo 1989: 138. — Naing Zaw 2011: 87. |
| <i>in situ</i> (in a purpose-built shed) | Records the donation of two gold and two silver Buddha images by king titled Vajrābharanadeva (Sawlu). | Ni Tut 2013–2014: 62, 65. — Sein Win 2016: 152–153, 155–156. — RTI AG&BH, JM. | Ni Tut 2013–2014: 62–67. — Sein Win 2016: 152–165. |
| Bago Archaeological Museum, no. 284 | Parallel with <i>Bodhikathā</i> of <i>Vinaya-mahāvagga</i> . | Aung Thaw 1972: 110, 116. — Sein Win 2016: 194. — RTI JM. | Aung Thaw 1972: 110–111. — Luce 1974: 126. — <i>PPPB</i> I, 176. — von Hinüber 1991: 25 n. 53. — Skilling 1997b: 95 n. 7. — Sein Win 1998. — Stadtner 2011: 48–49. — Maung Maung Swe 2011. — Sein Win 2016: 194–200. |
| Sriksetra Museum, no. 2013/1/53 | Parallel with <i>Ratanasutta</i> . | <i>ASB</i> 1965, pl. 19. — Sein Win 2016: 37. — RTI AG&BH. | <i>ASB</i> 1965, 32 §9, 37 §9. — Aung Thaw 1968b: 57 (= 1993: 235); 1972: 32. — Skilling 1997a: 152–153. — Sein Win 2016: 37–39. |
| Sriksetra Museum, no. 2013/1/75, in first Kyaukkathein shed | Parallel with <i>Moraparitta</i> and <i>Maṅgalasutta</i> . | Sein Win 2016: 111. — DHR estampage. — RTI JM. | <i>ASB</i> 1965, 37 §8. — Aung Thaw 1968b: 57 (= 1993: 234). — Skilling 1997a: 152–153. — Sein Win 2016: 111–117. |
| unknown | | <i>ASI</i> 1910–1911, pl. XLVII (4–8). — Mya 1961a, II, pl. 72. | <i>ASI</i> 1910–1911, 90. — Mya 1961a, II, 33. — <i>PPPB</i> I, 128 (pl. 8f). |

39 Mon side mentions date 441 BE / 1078 CE, which corresponds to the beginning of the reign of Saw Lu. Three pieces, later a fourth, found at the Petaw <Peto> monastery in Myittha in Nov. 2013; one chunk still missing.

40 Face B written upside-down compared with A. — Maung Maung Swe speaks of discovery in 1996 on top of Htingonsu hill. Even if that was the original provenance, this must have been a rediscovery.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|---|--|------------------------------------|-------------|---|
| 44 | terra-cotta or stone stūpa rim in 3 fragments | 3 | l:37 (Finot) | Pali | Bawbawgyi pagoda, Sriksetra |
| 45 | 20 gold leaves | leaves 1–18: 3 lines, leaf 19: 4 lines, leaf 20: 2 lines | h:3.1, l:16.5 | Pali | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 46 | 2 gold leaves | both 3 | A h:3.2, w:25.3 — B h:3.4, w:33 | Pali | Maunggan or Lèbaw village, 11 km south of Sriksetra |
| 47 | silver bowl | 1 | unknown | Pyu | unknown |
| 48 | silver bowl | 1 | dia:±12 | Pyu | unknown |
| 49 | bronze Buddha, headless | 2 | unknown | Sanskrit | southwest of Thounpanhla village, near Pounna (Brahmin) tank, Sriksetra |
| 50 | bronze Buddha | 1 | unknown | Sanskrit | relic chamber, Myinbahu Pagoda, southwest of wall at Sriksetra |
| 51 | large stone stela | 12 | h:105, w:108, d:14 | Pyu | Subok Gone, Taun Lone Nyo village, Pyay |
| 52 | silver plate with 5-petaled edge | 1 | h:2.0, dia:18.6 | Pyu | donation, Taung Lone Nyo villagers, Sriksetra |
| 53 | silver plate with plain edge | 1 | h:3.5, dia:19.0 | Pyu | donation, Taung Lone Nyo villagers, Sriksetra |
| 54 | silver dish with 5-petaled edge | 1 | h:5.7, dia:19.0 | Pyu | donation, Taung Lone Nyo villagers, Sriksetra |
| 55 | silver foil | 1 | h:1.6, w:9 | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |

44 The references feature contradictory statements on the nature of the material: stone or terracotta.

47 Original duplicate or forgery modelled after 048?

48 Original duplicate or forgery modelled after 047?

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|---|--|--|---|
| unknown | Parallel with <i>Paṭiccasamuppāda-vibhaṅga</i> . | <i>ASI</i> 1910–1911, pl. XLVII (1–2). — <i>ASI</i> 1911–1912, pl. LXVIII (1). — Finot 1913, plate. — <i>PPPB</i> II, pl. 98 (c). | <i>ASI</i> 1910–1911, 89. — <i>ASI</i> 1911–1912, 141–142. — Finot 1912: 134–135 — Finot 1913. — <i>ASB</i> 1912, 10–11; 1913, 21. — <i>PR</i> , 35–36. — Luce 1974: 127. — <i>PPPB</i> I, 61, 74 n. 4, 175–176. — Stargardt 1995: 201. — Sein Win 2016: 104–110. |
| deposited by Department of Archaeology at National Museum, Yangon | Composite text with multiple parallels across the <i>tipiṭaka</i> , including <i>Vinaya-mahāvagga</i> , <i>Vesarajjasutta</i> , <i>iti pi so</i> formula, etc. | <i>ASI</i> 1926–1927, pl. XLII (g, h). — <i>ASB</i> 1939, pl. 4c, 5, 6. — Mya 1961a, II, pl. 4. — <i>PPPB</i> II, pl. 33–34. — Than Hswe 1991. | <i>ASI</i> 1926–1927, 178–180, 200–201. — <i>ASB</i> 1939, 12–22. — <i>PR</i> , 25–33. — <i>PPPB</i> I, 139. — Than Hswe 1992. — Falk 1997. — Stargardt 2000: 22, 24–27. |
| London, British Library, no. Or5340 A and B; formerly at British Museum | <i>ye dhammā</i> , <i>iti pi so</i> and <i>svākkhāto</i> formulae in addition to elements related to the <i>bodhipakkhi yadhammā</i> , qualities of the Buddha, etc. | Tun Nyein 1898–1899, pl. — Finot 1912, pl. — <i>PPPB</i> II, pl. 98 (b). | Tun Nyein 1898–1899. — <i>ASI</i> 1907–1908, 41; 1909–1910, 115. — Finot 1912: 130–132. — Mon Bo Kay 1961: 112, 115. — <i>PR</i> , 44–46. — <i>PPPB</i> I, 61, 73 n. 2, 175. |
| private collection, Pyay | <°o hyamḥ 10 > | Photos BH. | |
| private collection, Pyay | <°o hyamḥ 10 > | Photos BH. | |
| unknown | The <i>ye dharmāḥ</i> formula runs along all four sides of the base. | <i>ASI</i> 1928–1929, pl. LI (b). — Mon Bo Kay 1961: 115. — <i>PPPB</i> II, pl. 45 (e-h). | <i>ASI</i> 1928–1929, 108. — Ray 1936: 20. — Mon Bo Kay 1961: 112, 121. — <i>PPPB</i> I, 146. |
| unknown | Only the first five akṣaras of the <i>ye dharmāḥ</i> formula. | <i>ASI</i> 1934–1935, pl. XXII (i). — Mon Bo Kay 1961: 116. | <i>ASI</i> 1934–1935, 47. — Mon Bo Kay 1961: 112, 116, 121. |
| Sriksetra Museum, 2013/1/183 | Mostly illegible. | Sein Win 2016: 118. — RTI AG&BH. | Sein Win 2016: 118–125. |
| Sriksetra Museum, no. 2013/5/19 | <kham· °o hyamḥ 10 2> | Photos BH, AG, JM. | |
| Sriksetra Museum, no. 2013/5/20 | <kham· °o hyamḥ 10 ? 1> | Photos BH, AG, JM. | |
| Sriksetra Museum, no. 2013/5/22 | <kham· 10 [[]> | Photos BH, AG, JM. | |
| Sriksetra Museum, nos. 2013/5/25 (2) | Mentions <i>trailokya</i> . | Arch. Neg. 2865. — Other colonial-period photos collected by BH. — RTI AG&BH. — Photos JM. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |

54 Two bowls with the same inscription were found together. The other one is 171.

55 One of 16 “small gold and silver plates with Pyū inscriptions punched on them in relief”, all reported to have 1 line of Pyu and most, with sublinear consonants; 056, perhaps 057, 073 and 172–179 are the other members of the 16 that we were able to document.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|---------------------------------|-------------------|---|-------------|---|
| 56 | silver foil | 1 | h:2.2, w:15.2 | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 57 | silver flag for miniature stūpa | 1 | fits in rectangle of 7.5 × 9.5 | Pyu | possibly Khin Ba mound (HMA 64), Sriksetra |
| 58 | 7 fragments of a gold foil | 2 | total length: 21.3 | Pali | Kyundawzu village, Sriksetra |
| 59 | fragments of a brick slab (?) | at least 13 | 1960 fragment: h:18, w:33, d:7.5; largest 1970 fragment: h:38, w:25 | Sanskrit | northwest corner of “Beikthano Myo”, Sriksetra |
| 60 | stone, small stela | 1 | h:33, w:39, d:13 | Pyu | unknown |
| 61 | stone fragment | 1 | h:34, w:22, d:11 | Pyu | 150 m south of Shwegugyi, Halin (near HL 26) |
| 62 | gem seal | 1 | unknown | Pali (?) | Pyogingyi mound, Sriksetra |
| 63 | clay sealing | 1 | whole piece l:4; seal dia:1.5 | Prakrit | Beikthano |
| 64 | stone stela, rough | 8 | h:90, w:90, d:20 | Pyu | Sin Ywa village, Meiktila district, Thazi township |
| 65 | bronze Buddha | 1 | h:11.8, w:8.6, d:4.5 | Pyu | relic chamber, Shwehsandaw pagoda (<i>IMP</i> 1568), Pagan |
| 66 | silver dish | 1 | h:4.7, dia:14 | Pyu | near Mandalay |

56 See note on 055.

57 Perhaps part of the same group as indicated under 055, though no flag-shaped object is mentioned in the sources.

59 Aung Thaw reports discovery in 1970 of fragments published by Sircar in 1976. *ASB* 1960 reported earlier discovery of single fragment. Griffiths 2015 hypothesizes that all these fragments form one inscription. The text mentions Lord of Kalaśapura.

61 Although very little text remains, the stone offers a well-preserved specimen of the type of sun+moon symbol seen, in damaged form, on PYU017.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|--|--|---|--|
| Sriksetra Museum, no. 2013/5/25 (3) | Mentions <i>sri demvaduḷ-ya</i> (Śrī Devatulya). | Arch. Neg. 2865. — Other colonial-period photos collected by BH. — RTI AG&BH. — photos JM. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |
| Sriksetra Museum, no. 2013/5/25 (4) | | RTI AG&BH. — photos JM. | |
| unknown | The <i>iti pi so</i> formula. | <i>ASI</i> 1928–1929, pl. LI (a). | <i>ASI</i> 1928–1929, 108–109. — <i>PPPB</i> I, 139. |
| unknown | Very fragmentary. Mentions Śrī Kalaśapureśvara, Śrī Parameśvara, a stūpa, a great monastery. | EFEO estampages n. 2391–2403. — <i>ASB</i> 1960, fig. 13. | <i>ASB</i> 1960: 22. — Sein Maung Oo 1968: 183 (= 1993: 134–135). — Aung Thaw 1972: 32. — Sircar 1975–1976: 210–217. — Gutman 2001: 109 with n. 1. — Griffiths 2015: 282 n. 1 [2]. |
| Halin inscription shed, no. 17 | | Sein Win 2016: 31. — RTI AG&BH, JM. | Sein Win 2016: 31. |
| Nyaung Ku Pay (U Naga) monastery, Nyaung bin gon village, Halin | | Sein Win 2016: 32. — RTI AG&BH. — Photos JM. | Sein Win 2016: 32–33. |
| unknown | <rūravadī > | Sein Maung U 1970 (fig. 5). | Aung Thaw 1968b: 56–57 (= 1993: 234). — Sein Maung U 1970: 114. |
| National Museum, Yangon | <saṃghasiri> | <i>ASB</i> 1959, pl. 16–17. — Aung Thaw 1968a, fig. 79.9, pl. LIVab. — Sein Maung U 1970 (fig. 1). — Photos BH, JM. | <i>ASB</i> 1959, 19. — Aung Thaw 1968a: 50–51; 1968b: 56 (= 1993: 233). — Sein Maung U 1970: 110. — Aung Thaw 1972: 4. — Griffiths & Lammerts 2015: 989. |
| Inscription shed, Mandalay Palace Museum, without no. | | Sein Win 2016: 131. — RTI JM. | Sein Win 2016: 131–135. |
| National Museum, Yangon, no. 36 — National Museum, Nay Pyi Taw, 2015/2/202 | Badly worn. Possibly mentions Metriya. | <i>ASI</i> 1926–1927, pl. XXXIX (f). — <i>OBEP</i> , pl. 444 (a, b). — Photogrammetry JM. | <i>ASI</i> 1926–1927, 164–165. — <i>OBEP</i> I, 188–189; II, 204. |
| Joost Buschman, priv. collection | | Photos received from owner. | |

62 Discovered in 1931–1932; read <rūpavādī> by Sein Maung U, but we suspect a case of unmirrored <ra>, because it's impossible to read a good <pa>.

63 Early Southern Brāhmī script of about the 2nd century CE. Probably an import from India.

64 Found on 20/05/2015 by Tampawaddy Win Maung and his group; information Kyaw Minn Htin email on the same day.

65 Read <baṃḥ metriya> by Duroiselle, but this reading not verifiable from the existing photos.

66 Perhaps this is the second silver bowl (besides PYU38) referred to by Sein Maung Oo 1989: 138.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|--|-------------------------------------|----------------------|-----------------------------|--|
| 67 | terracotta molded tablet, fragment | 1 | unknown | Pyu | Myinbahu pagoda, Sriksetra |
| 68 | coin | 2 | dia:2.3 | Pyu | Western Shan States |
| 69 | coin | 2 | dia:2.4 | Pyu | Western Shan States |
| 70 | coin | 2 | dia:2.7 | Pyu | Western Shan States |
| 71 | coin | 2 | unknown | Pyu | Western Shan States |
| 72 | terracotta molded tablet, fragment | 1 | | Pyu | Myinbahu pagoda, Sriksetra |
| 73 | gold and silver foil, fragments | 1 | unknown | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 74 | terracotta molded tablet | front 2, back 6 | unknown | front Sanskrit, back Pyu | relic chamber, Shwehsandaw pagoda (<i>IMP</i> 1568), Pagan |
| 75 | terracotta molded tablet, fragments | front 2, back remains of 5 | unknown | front Sanskrit, back Pyu | unknown |
| 76 | terracotta molded tablet, fragment | 2 | unknown | Pali | Pyoyingyi mound, Sriksetra |
| 77 | terracotta molded tablet, fragment | 3 | unknown | Pali, Pyu | Pyoyingyi mound, Sriksetra |
| 78 | terracotta molded tablet | 1 | h:8.3, b: 6.8, d:1.1 | Pyu | Kyazin temple, southeast of Myinkaba, Pagan (<i>IMP</i> 1219) |
| 79 | terracotta molded tablet | 1 | same as 078? | Pyu | west (or northwest) of Sinpahto pagoda (<i>IMP</i> 377), Pagan |
| 80 | terracotta molded tablet | 1 | same as 078? | Pyu | “mound near the riverbank, close to the south of Taw-ya- kyaung monastery, west of the Nan-hpaya” (possibly near Theinhpaya, <i>IMP</i> 1082), Pagan |

73 See note on 055.

74 075 is apparently another copy from the same mold of the same text.

75 Luce’s wording (*OBEF* II, 26: “This precious tablet, now at Mandalay Arch. Office, is now in a shattered state. (e), the Obverse, and (b), the Reverse, are all that remained of it in 1960”) is ambiguous, and can be read to mean that he is speaking of the same tablet as the one discussed

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|---|---|---|--|
| unknown | <ḥarīḥ buña ? draṃ> | PPPB II, pl. 59 (e). | ASI 1934–1935, 47. — PPPB I, 155. |
| collection D. Mahlo, Berlin | | Mahlo 2012: 167 (app. 27.1). | Mahlo 2012: 132. |
| private collection, Yangon | | Mahlo 2012: 167 (app. 27.2). | Mahlo 2012: 132. |
| collection D. Mahlo, Berlin | | Than Htun 2007: 130, pl. 247.2. — Mahlo 2012: 167 (app. 27.3). | Than Htun 2007: 130. — Mahlo 2012: 132. |
| unknown | | Mahlo 2012: 167 (app. 27.4). | Mahlo 2012: 132. |
| unknown | <yaṛī nu hna dra mra °o phu> | Mya 1961a, II, pl. 60 (ga). — PPPB II, 59 (d). | ASI 1934–1935, 47. — Mya 1961a, II, 31. — PPPB I, 155. — Tun Aung Chain 2003: 9. |
| unknown | | Arch. Neg. 2866. | ASI 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |
| unknown | Mentions <sri bañaṇa> and <metriya>. | ASI 1926–1927, pl. XXXIX (b, e). — Mya 1961a, I, pl. 29–30. — Mon Bo Kay 1961: 120 (bottom). — OBEP, pl. 34 (c, d). | ASI 1926–1927, 164. — PR, 77. — Mya 1961a, I, 23–24. — Mon Bo Kay 1961: 120 (bottom), 122. — OBEP I, 99–100; II, 25. — PPPB I, 66, 75 n. 30. |
| 1960: Mandalay Archaeological Office (Luce) | Line 3 too damaged to show <sri bañaṇa>, but <metriya> preserved. | OBEP, pl. 34 (e, f). | OBEP II, 26. |
| unknown | <(°adhi) patipaccayo / anantarappaccayo> | No photo published. | ASI 1928–1929, 107. |
| unknown | | ASI 1928–1929, pl. LII (b). — Mya 1961a, II, pl. 62. | ASI 1928–1929, 107. — Mya 1961a, II, 32. |
| unknown, marked I 168 (1928–1929) | <ḥudha mguḥ psuḥ kha ṇu> | Mya 1961a, I, pl. 105. — OBEP, pl. 55 (a, b). | Mya 1961a, I, 69–70. — OBEP I, 100; II, 44–45. |
| unknown, marked I 169 (1928–1929) | <ḥudha mguḥ psuḥ kha ṇu> | OBEP, pl. 55 (c). | OBEP I, 100; II, 45. |
| unknown | <ḥudha mguḥ psuḥ kha ṇu> | No photo published. | ASI 1927–1928, 125–126. — OBEP I, 100; II, 45. |

under pl. 34 (c, d), our 074. But absence of marking ‘1B’ on pl. 34 (e) seems to indicate that this is a different tablet made from the same mould as the one that produced 074.

78 078–080 are three specimens made from the same mold, found at different locations. Luce’s Myinpagan is old designation of Myinkaba.

79 078–080 are three specimens made from the same mold, found at different locations.

80 078–080 are three specimens made from the same mold, found at different locations.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|---------------------------------------|--------------------|---------------------|-----------------------------|---|
| 81 | terracotta molded tablet | 1 | unknown | Pyu | a mound near Nga Shin Gan, southwest of Mahtaw village, Sriksetra |
| 82 | terracotta molded tablet | 1 | unknown | Pyu | Payagyi pagoda, Sriksetra |
| 83 | terracotta molded tablet | front 3, back 1 | unknown | front Sanskrit, back Pyu | a mound near Nga Shin Kan, southwest of Mahtaw village, Sriksetra |
| 84 | terracotta molded tablet | 2 | unknown | Pyu | Myinbahu pagoda, Sriksetra |
| 85 | terracotta molded tablet | 1 | unknown | Pyu | Sriksetra |
| 86 | terracotta molded tablet | 1 | unknown | Pyu | north of Palace, Sriksetra |
| 87 | terracotta molded tablet | 1 | h:10.2, w:8.9 | Pyu | north of Palace, Sriksetra |
| 88 | terracotta molded tablet | 1 | unknown | Pyu | north of Palace, Sriksetra |
| 89 | terracotta molded tablet | 1 | unknown | Pyu | north of Palace, Sriksetra |
| 90 | terracotta molded tablet, fragment | 1 | unknown | Pyu (?) | Tawadeintha (Tāvatiṃsa) pagoda, Sriksetra |
| 91 | terracotta molded tablet | 2 | h:7.7; w:6.6, d:1.7 | Pali | unknown |
| 92 | terracotta molded tablet | 2 (?) | h:9.1, w:6.6, d:2.5 | Pyu (?) | unknown |
| 93 | clay sealing | 1 | h:1, dia:3 | Pyu | unknown |
| 94 | clay sealing | 1 | h:0.7, dia:2.8 | Pyu | unknown |
| 95 | clay sealing | A:1, B:1 | unknown | Pyu | unknown |

81 Luce *PPPB* cites LV (5). It's not the same molded tablet as his own 62 (c) = Mya pl. 12. The correct plate in *ASI* is LV (3). The page ref. (p. 65) given by Luce for Mya is wrong: it should be 15–16. Mya II, p. 14, gives the location as Nga Shin Koun (mound = Kone or Kon, but not Gan), Mahtaw village. On the provenance, see 082. This is a duplicate of 082.

82 This is a duplicate of 081. Identification of item shown in ASB 1958 with tablet now kept at Yangon is tentative.

83 Luce noted (*PPPB* I, 155f.): “There are at least 3 other damaged specimens (obverse and reverse) of this tablet, from the same site, at Mandalay Archaeological office”. This information

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|---|---|---|--|
| unknown | < ḃarīṇḃ roḥ co rya co > | <i>ASI</i> 1927–1928, pl. LV (3). — <i>Mya</i> 1961a, II, pl. 12. — <i>PPPB</i> II, pl. 60 (c). | <i>ASI</i> 1927–1928, 130–131. — <i>Mya</i> 1961a, II, 15–16. — <i>PPPB</i> I, 156. |
| National Museum, Yangon | < ḃarīṇḃ roḥ co rya co > | <i>ASB</i> 1958, pl. 18. | <i>ASB</i> 1958, 21. — <i>PPPB</i> I, 156. |
| Shwedagon Museum, Yangon | Front <i>ye dharmāḥ</i> , back < ḃarīṇḃ ca rke>. | <i>ASI</i> 1927–1928, pl. LV(1), LVI(d). — Arch. Neg. 2958–2959 (1927–1928). — <i>Mya</i> 1961a, II, pl. 17, 17ka. — <i>PPPB</i> II, pl. 60 (a, b). | <i>ASI</i> 1927–1928, 129–130. — <i>Mya</i> 1961a, II, p. 17. — <i>PPPB</i> I, 155. |
| unknown | < ḃarīṇḃ raḥ [ḃ]arīṇḃ daṃṃṃḃ ḃuṇḃa ḃimīḃ cīm yaṃ @> | Arch. Neg. 3801, 3802. — <i>Mya</i> 1961a, II, pl. 61, 61ka. — <i>PR</i> , 39. — <i>PPPB</i> II, pl. 58 (e). | <i>Mya</i> 1961a, II, 31–32. — <i>PR</i> , 39. — <i>PPPB</i> I, 154. |
| 1960: Mandalay Archaeological Office, marked ‘II 170. Hmawza’ | <budha jo> | <i>PPPB</i> II, 58 (f). | <i>PPPB</i> I, 154. |
| unknown | <sri phaḥ cho> | <i>Mya</i> 1961a, II, pl. 60 (kha). — <i>PPPB</i> II, 59 (c). | <i>ASB</i> 1925, 18 (1). — <i>Mya</i> 1961a, II, 31. — <i>PPPB</i> I, 155. |
| unknown | <phaḥ tra °o> | <i>ASB</i> 1958, pl. 16, 17. — <i>Mya</i> 1961a, II, pl. 60 (ka). — <i>PPPB</i> II, pl. 59 (b). | <i>ASB</i> 1925, 18 (2); 1958, 19. — <i>Mya</i> 1961a, II, 31. — <i>PPPB</i> I, 155. |
| unknown | <maḥ bu tda> | No photo published. | <i>ASB</i> 1925, 18 (3). |
| unknown | <phaḥ maḥ> | No photo published. | <i>ASB</i> 1925, 18 (4). |
| unknown | <va khaḥ> | BL photo 1004/2 (890). | <i>ASB</i> 1911, 6, 41 (no. 3). |
| Richard Cooler, priv. coll. | < so °iti pi (so) bhagavā ti> | Photos received from owner. | |
| Richard Cooler, priv. coll. | | Photos JKW. | |
| Joost Buschman, priv. collection | <ḃu go yaṃ na> | Photos received from owner. | |
| Joost Buschman, priv. collection | <sa ri daṃ> | Photos received from owner. | |
| U Ja-pan, Pyay, priv. collection | A: <sa ga do ta>, B: <ṇa ... paṃ>. | Photos received from owner. | |

probably dates from 1960. Luce also refers to “a mound (No. 2957)”: the number is that of the Arch. Neg. showing the mound. 081 found at same site.

87 Presumably in error, this is said to be from Hpayagyi by captions for *ASB* 1958, pl. 16, 17, the same cited in *PPPB* I, 155. *ASB*, the only source citing dimensions, says circumference rather than width, but that has to be a mistake as well. *Mya*’s plate is printed upside down. His caption says this tablet is similar to the one shown, only from the front, in his pl. 59 = *PPPB* II, 59 (a).

90 *ASB* 1911, 41 states it was “in the Archeological Office” in 1911, and indicates its extent as “two words”, which can only be correct if the language is indeed Pyu.

91 Same text as in 195.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|----------------------------------|-------------------|---|-------------------------|---|
| 96 | stamp | 1 | unknown | Pyu | unknown |
| 97 | token | 1 | unknown | Pyu | unknown |
| 98 | token | 1 | unknown | Pyu | unknown |
| 99 | token | A:1, B:1 | unknown | Pyu | unknown |
| 100 | token | A:2, B:1 | unknown | Pyu | unknown |
| 101 | gem seal, yellow | 1 | unknown | mixed Sanskrit/ Pali | unknown |
| 102 | gem seal, sardonyx | 1 | h:1.2, w:1.65, d:0.45 | Sanskrit | unknown |
| 103 | gem seal, agate | 1 | h:1.7, w:1.5, d:0.4 | Sanskrit | unknown |
| 104 | glass tabloid with gold inlay | 1 | h:1.6, w:0.95, d:0.33 | Sanskrit | unknown |
| 105 | gold ring | 1 | h:2.3 (from base to top of relief), diam:2.2 (max.) | Sanskrit | gift of U Kyaw Myint, Sien Myee Swe town, Thegon |
| 106 | gem seal, agate | 1 | 1.5 × 1.2 × 0.5 | Sanskrit/Pali | unknown |
| 107 | gem seal, onyx | 1 | h:0.14, w:0.155, d:0.4 | Sanskrit (?) | unknown |
| 108 | brick | 1 | unknown | Pyu (?) | Sriksetra |
| 109 | brick | 1 | unknown | Pyu (?) | Sriksetra |
| 110 | brick | 1 | unknown | n.a. | Bawbawgyi pagoda, Sriksetra |
| 111 | brick | 1 | unknown | n.a. | Bawbawgyi pagoda, Sriksetra |
| 112 | brick | 1 | unknown | n.a. | Bawbawgyi pagoda, Sriksetra |

96 Writing negative.

101 Writing negative.

104 Writing positive.

105 Writing negative.

106 The material has also been identified as cornelian. Myint Aung (as well as scholars after him) points out that an identical artefact has been found at Oc Eo. Apparently more than one specimen of

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|-------------------------------------|---|--|---|
| U Ja-pan, Pyay, priv. collection | <ro ja buña> | Photos received from owner. | |
| F. Mandeville, priv. collection | <ḥa sya> | Photos received from owner. | |
| F. Mandeville, priv. collection | <ri ḥaṃ gaṃ> | Photos received from owner. | |
| F. Mandeville, priv. collection | A: <rū sa ri>, B: <ḍaṃ yaṃ>. | Photos received from owner. | |
| F. Mandeville, priv. collection | A: <h.au viṃ dha ga ḥo>, B: <sukha di ya ghu ga ra jā>. | Photos received from owner. | |
| F. Mandeville, priv. collection | <dhānyarakkha> | Photos received from owner. | |
| F. Mandeville, priv. collection | <nanditavyaṃ> | White 1993: 128 (6). — Middleton 2005: 90 (60), color pl. II (60). | White 1993: 130. — Middleton 2005: 90 (60). — Skilling 2015: 65. |
| F. Mandeville, priv. collection | <jīvadayā> | White 1993: 128 (6). — Middleton 2005: 91 (61), color pl. II (61). | White 1993: 130. — Middleton 2005: 91 (61). — Skilling 2015: 65–66. |
| F. Mandeville, priv. collection | <apramāda> | Middleton 2005: 92 (62). | Middleton 2005: 92 (62). — Skilling 2015: 65. |
| Sriksetra Museum, no. 2013/4/5 | <kumbharāṣi> | Than Win 2014: 111. — Photos BH, AG, JM. | Than Win 2014: 111. |
| Nyaung Ku Pay monastery, Halin | <dayādānaṃ> | Myint Aung 1970, pl. 9a. — Sein Maung U 1970 (fig. 2). — Aung Thaw 1972: 14. | Myint Aung 1970: 61. — Sein Maung U 1970: 110. — Aung Thaw 1972: 14. — Naing Zaw 2011: 495. — Skilling 2015: 66. |
| priv. collection | Reading <dharmaṃvamma> cited by Middleton is very uncertain. | Middleton 2005: 160 (App.24). | Middleton 2005: 160 (App.24). |
| unknown | | ASI 1909–1910, pl. XLIX (17). | ASI 1909–1910, 123. |
| unknown | | ASI 1909–1910, pl. XLIX (18). | ASI 1909–1910, 123. |
| unknown | <4> | ASB 1924, pl. III (1). | ASB 1924, 26. |
| unknown | <20 3> | ASB 1924, pl. III (2). | ASB 1924, 26. |
| unknown | <90 3> | ASB 1924, pl. III (3). | ASB 1924, 26. |

this intaglio was made; other intaglios with the same inscription but applied rather less artfully are shown and/or referred to by Middleton 2005: 15, 159. Their provenance from ‘Pyu’ sites is uncertain.

108 Akṣara or number?

109 Identification as writing (whether akṣara or number) unverifiable from published photo.

111 Interpreted as 53 in ASB.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|---------|-------------------|--------------------|-------------|--|
| 113 | brick | 1 | unknown | n.a. | Bawbawgyi pagoda, Sriksetra |
| 114 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 115 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 116 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 117 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 118 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 119 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 120 | brick | 1 | h:25, w:19, d:6 | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 121 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 122 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 123 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 124 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 125 | brick | 1 | unknown | n.a. | south of Bawbawgyi, Sriksetra |
| 126 | brick | 1 | unknown | n.a. | Hsinmakowundin mound, Sriksetra |
| 127 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 128 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 129 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 130 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |

113 An identical stamped inscription is also seen in 121 and in a photo from Bawbawgyi excavations collected by BH.

115 Interpreted as *1001* in *PPPB*.

116 Interpreted as *102* in *PPPB*.

117 The reading *102* in *PPPB* seems unlikely to be correct.

118 Interpreted as *1002* in *PPPB*.

119 Interpreted as *104* in *PPPB*; our interpretation *1005* rather uncertain.

120 Another brick with same stamp is 183. Interpretation as *165* in *PPPB* unlikely to be correct. Identification of *PPPB* entry with brick now kept at Nay Pyi Taw tentative.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|---------------------------------|--|--|---|
| unknown | <1000 6> | <i>ASB</i> 1924, pl. III (4). — Stargardt 1990, pl. 21 (right). | <i>ASB</i> 1924, 26. |
| unknown | <1000> | <i>PPPB</i> II, pl. 35 (a). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <3000 1> | <i>PPPB</i> II, pl. 35 (b). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <1000 2> | <i>PPPB</i> II, pl. 35 (c). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <? 2> | <i>PPPB</i> II, pl. 35 (d). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <3000 2> | <i>PPPB</i> II, pl. 35 (e). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <1000 5> | <i>PPPB</i> II, pl. 35 (f). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| National Museum, Nay Pyi Taw | <2000 10 5> | <i>PPPB</i> II, pl. 35 (g). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <1000 6> | <i>PPPB</i> II, pl. 35 (h). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <1000 ? 2> | <i>PPPB</i> II, pl. 35 (i). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <2000 1> | <i>PPPB</i> II, pl. 35 (j). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <1000 10 3> | <i>PPPB</i> II, pl. 35 (k). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <20 5> | <i>PPPB</i> II, pl. 35 (l). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <20 4>; <90 8> | <i>PPPB</i> II, pl. 35 (m). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <40 2> | <i>PPPB</i> II, pl. 35 (n). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <40 3> | <i>PPPB</i> II, pl. 35 (o). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <40 3> | <i>PPPB</i> II, pl. 35 (p). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |
| unknown | <40 ?> | <i>PPPB</i> II, pl. 35 (q). | <i>PPPB</i> I, 62, 74 n. 9, 140–142. — <i>ASB</i> 1958 / Mya 1961b, chart 3. |

121 Interpreted as 106 in *PPPB*. Identical to the stamp in 113.

122 Interpreted as 162 in *PPPB* – the middle figure must stand either for a multiple of 100 or of 10.

123 Interpreted as 83? in *PPPB*.

124 Interpreted as 113? in *PPPB*.

125 Interpreted as 25? in *PPPB*.

126 Interpreted as 25 and 94? in *PPPB*.

130 Interpreted as 44? in *PPPB*.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|---------|-------------------|--------------------|-------------|--|
| 131 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 132 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 133 | brick | 1 | unknown | n.a. | Hsinmakowundin mound, Sriksetra |
| 134 | brick | 1 | unknown | Pyu | Hsinmakowundin mound, Sriksetra |
| 135 | brick | 1 | unknown | n.a. | south of Bawbawgyi, Sriksetra |
| 136 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 137 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 138 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 139 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 140 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 141 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 142 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 143 | brick | 1 | unknown | n.a. | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 144 | brick | 1 | unknown | Pyu | Pyogingyi mound, Sriksetra |
| 145 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 146 | brick | 1 | unknown | Pyu | south of Bawbawgyi, Sriksetra |
| 147 | brick | 1 | unknown | Pyu | south of Bawbawgyi, Sriksetra |
| 148 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |

131 Interpreted as 40? in *PPPB*.

132 Interpreted as 101? in *PPPB*.

133 Two fragments, the second with stamp in negative? Interpreted as 899? in *PPPB*.

134 Interpreted as <ka ka> in *PPPB*, the sign on the right remaining unnoticed.

135 Interpreted as <ru rû> in *PPPB*. Same sign seen in item 155.

136 Interpreted as <rû> (?) in *PPPB*, but more likely a numeral sign. Same as sign on right side of item 134?

138 Interpreted as <kya> (?) in *PPPB*.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|------------------|--|----------------------|---|
| unknown | <4> | PPPB II, pl. 35 (r). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <40 3> | PPPB II, pl. 35 (s). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | Unclear. | PPPB II, pl. 35 (t). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <? 5 + + d[i]> | PPPB II, pl. 36 (a). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <? 5> | PPPB II, pl. 36 (b). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | | PPPB II, pl. 36 (c). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <kḃa> | PPPB II, pl. 36 (d). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <ja ka ra> | PPPB II, pl. 36 (e). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <sau> | PPPB II, pl. 36 (f). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | | PPPB II, pl. 36 (g). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | | PPPB II, pl. 36 (h). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <? 9> | PPPB II, pl. 36 (i). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <90> | PPPB II, pl. 36 (j). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <ktlōmḥ> | PPPB II, pl. 36 (k). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <khloh> | PPPB II, pl. 36 (l). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <mrauḥ> | PPPB II, pl. 36 (m). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <tgaṃḥ> | PPPB II, pl. 36 (n). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <thyaḥ> | PPPB II, pl. 36 (o). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |

139 Interpreted as <sā> in PPPB.

140 Interpreted as 66? in PPPB. Plate perhaps published upside down?

141 Interpreted as 66? in PPPB. Plate perhaps published upside down?

142 Interpreted as 10? in PPPB.

144 Interpreted as <kjemḥ> in PPPB (presuming ee is a printing error).

145 Interpreted as <nloḥ> in PPPB.

146 Interpreted as <mre> (?) in PPPB.

147 Interpreted as <tnaṃḥ> in PPPB.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|---|-------------------|-----------------------------|-------------|--|
| 149 | brick | 1 | unknown | Pyu | Pyogingyi mound, Sriksetra |
| 150 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 151 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 152 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 153 | brick | 1 | unknown | Pyu | Kyanigan mound, south of Bawbawgyi, Sriksetra |
| 154 | brick | 1 | unknown | Pyu | unknown |
| 155 | brick | 1 | h:20, w:15, d:6 | n.a. | unknown |
| 156 | brick | 1 | h:18, w:17, d:6.5 | n.a. | unknown |
| 157 | brick | 1 | h:24, w:36.5, d:7 | n.a. | unknown |
| 158 | silver bowl | 1 | h:12.3, dia at top: 14.3 | Pyu | U Hnaung Kone, Maletha village, Myinmu township |
| 159 | silver bowl | 1 | unknown | Pyu | Pegu, Sagaing District, Myinmu Township |
| 160 | terracotta plaque of large figure atop two smaller figures | 1 | h:82, w:55, d:9.5 | Pyu | Khin Ba mound (HMA 64), Sriksetra |
| 161 | pottery fragment | 1 | unknown | Pyu (?) | Mound HL 2, Halin |
| 162 | pottery fragment | 1 | unknown | Pyu | unknown |
| 163 | earthenware pottery anvil, fragment | 1 | h:7, dia:8 | Pyu | Halin |
| 164 | earthenware pottery anvil | 1 | h:6, dia:8 | Pyu | Halin |

150 Interpreted as <pla> in *PPPB*, where plate is upside down.

151 Interpreted as <ḥa ḥam> in *PPPB*.

153 Interpreted as <°uro> (?) in *PPPB*. More likely a numeral sign.

155 Same sign as seen in items 134 and 135.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|---|--|--|---|
| unknown | <[ta] va daḥ> | PPPB II, pl. 36 (p). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <plam> | PPPB II, pl. 36 (q). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <ḥa ḥa> | PPPB II, pl. 36 (r). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <mra> | PPPB II, pl. 36 (s). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| unknown | <200> | PPPB II, pl. 36 (t). | PPPB I, 62, 74 n. 9, 140–142. — ASB 1958 / Mya 1961b, chart 3. |
| Pyay University Museum | <trḥ bam> | Photo JKW. | |
| National Museum, Nay Pyi Taw | | Photos JM. | |
| National Museum, Nay Pyi Taw | <8> | Photos JM. | |
| National Museum, Nay Pyi Taw | <100 5> | Photos JM. | |
| National Museum, Nay Pyi Taw, 2015/5/173 | | Photos JM. | |
| unknown | | Photos received from Win Maung. | |
| Dept. of Arch., Division of World Heritage Sites, Sriksatra office | <ha ṭi sa> | Photos JM. | |
| unknown | | Sein Maung U 1970 (fig. 4). — Hsan Ni Nyein 2016 (fig. 3-159). | Sein Maung U 1970: 115. — Hsan Ni Nyein 2016: 84. |
| unknown | <[nr] tim sa> | Hsan Ni Nyein 2016 (fig. 3-168). | Hsan Ni Nyein 2016: 92. |
| collection Win Maung (Tampawaddy), Mandalay | <s[m]a viy·mṛṇ sla °o [n]gav· ya(m)> | Photos BH, JM. | |
| collection Win Maung (Tampa- waddy), Mandalay | <s[i]ddha ḥat· tṇa yam> | Photos BH, JM. | |

158 Information about provenance from Win Maung; Nat. Mus. records say Sriksatra. See also remarks on 038 and 066.

160 Found on 17 November 2016. Inscription next to larger statue.

161 Discovered in 1963–1964; read *karjññarjññaya* by Sein Maung U, but indecipherable for us.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|-----------------|---------------------------------|----------------|----------------------|-------------|--|
| 165 | silver Buddha | 5 | h:21.5, weight 400 g | Pyu | near Ngama village, Thanse village tract, Saytoktayar-Pwinbyu township, Minbu district, Magwe division |
| 166 | molded tablet | 5 | unknown | Pali | Mound HMA 3, near Shwedaga gate of the city-wall, Sriksetra |
| 167 | bronze fragment of censer | 1 | h:4,max. length: 16 | Pyu | Sriksetra |
| 168 | brick | 1 | h:25, w:22, d:6.5 | n.a. | unknown |
| 169 | brick | 1 | unknown | n.a. | Sriksetra |
| 170 | brick | 1 | unknown | Pyu | Nyazasri, Pagan |
| 171 | silver dish with 5-petaled edge | 1 | unknown | Pyu | donation Taung Lone Nyo villagers |
| 172 | gold or silver foil | 1 | unknown | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 173 | gold or silver foil | 1 | unknown | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 174 | gold or silver foil | 1 | unknown | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 175 | gold or silver foil | 1 | unknown | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 176 | gold or silver foil | 1 | unknown | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 177 | gold or silver foil | 1 | unknown | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 178 | gold or silver foil | 1 | unknown | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |

166 Excavated in 1966.

169 The brick on the right of Stargardt's plate 21 is our 113, published on its own in *ASB* 1924, plate 3, fig. 4. Since the two photographs of 113 look to be identical, it is possible that the other brick was included in the original photograph (as it is in Stargardt's) but removed from the published plate because no additional examples of incised bricks (as opposed to fingermarked ones) were needed. The original photo of the two bricks together may be from a glass negative. Neither the *ASB* nor Stargardt include the neg. number, so the source of the photo is hard to resolve. Stargardt credits it to the Archaeological Survey of Burma without giving further detail.

170 It is uncertain whether Naing Zaw on the cited page actually refers to inscription 170 or not.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|--|--|--|--|
| Dept. of Arch., Yangon, acc. no. D.12 | | | |
| National Museum, Nay Pyi Taw, 2012/6/67 | Excerpt of the <i>paṭiccasamuppāda</i> formula. | Sein Maung Oo 1968 / 1993, pl. 9. — Photos JM. | Sein Maung Oo 1968: 180 (= 1993: 131). |
| collection Win Maung (Tampawaddy), Mandalay | Mentions <i>mauṇḍidaṃ</i> , <i>i.e.</i> Mucalinda. | Photos JM. | |
| National Museum, Nay Pyi Taw | <90> | Photos JM. | |
| unknown | <20 4> | Stargardt 1990, pl. 21 (left) | |
| Dept. of Arch., Pagan | <ñadasri> | Naing Zaw 2011: 613, pl. 15-202. — Photo BH. | Naing Zaw 2011: 613 (?). |
| National Museum, Nay Pyi Taw, 2015/5/171. | | Photos JM. | |
| unknown | | Colonial-period photos collected by BH. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |
| unknown | | Arch. Neg. 2865. — Other colonial-period photos collected by BH. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |
| unknown | | Colonial-period photos collected by BH. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |
| unknown | | Colonial-period photos collected by BH. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |
| unknown | | Colonial-period photos collected by BH. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |
| unknown | Mentions Sakyamuni. | Arch. Neg. 2865. — Other colonial-period photos collected by BH. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |

171 Two bowls with the same inscription were found together. The other one is 054.

172 See note on 055.

173 See note on 055.

174 See note on 055.

175 See note on 055.

176 See note on 055.

177 See note on 055.

178 See note on 055.

| Inv. no. PYU | Support | (Faces:) Lines | Dimensions (cm) | Language(s) | Original locality |
|--------------------|-----------------------------|-------------------|--------------------|-------------|---|
| 179 | silver foil | 1 | h:2.2, w:13 | Pyu | relic chamber, Khin Ba mound (HMA 64), Sriksetra |
| 180 | brick | 1 | h:23, w:20, d:7 | n.a. | unknown |
| 181 | brick | 1 | h:23, w:16, d:6.5 | n.a. | unknown |
| 182 | brick | 1 | h:28, w:24, d:5.5 | n.a. | unknown |
| 183 | brick | 1 | h:24, w:20, d:8 | n.a. | unknown |
| 184 | brick | 1 | h:25, w:24, d:8 | n.a. | HA 38 |
| 185 | brick | 2 | h:23, w:23, d:8 | Pyu (?) | HA 38 |
| 186 | brick | 1 | h:18, w:20, d:8 | n.a. | HA 39 |
| 187 | brick | 1 | h:25, w:24, d:8 | n.a. | HA 39 |
| 188 | brick | 1 | h:23, w:23, d:8 | n.a. | HA 39 |
| 189 | brick | 1 | unknown | Pyu | unknown |
| 190 | brick | 1 | unknown | Pyu | unknown |
| 191 | brick | 1 | unknown | Pyu | unknown |
| 192 | brick | 1 | unknown | n.a. | unknown |
| 193 | brick | 1 | unknown | n.a. | unknown |
| 194 | brick | 1 | unknown | n.a. | unknown |
| 195 | terracotta molded tablet | 1 | unknown | Pali | unknown |

179 See note on 055.

183 Another brick with same stamp is 120.

195 Same text as in 091.

| Present locality | Substance or <complete reading> of inscription | Visual documentation | References |
|---|--|---|--|
| Sriksetra Museum, nos. 2013/5/25 (1) | | Arch. Neg. 2865. — Other colonial-period photos collected by BH. — RTI AG&BH. — Photos JM. | <i>ASI</i> 1926–1927, 180 (no. 38), 201. — Stargardt 2000: 52 (no. 38). |
| National Museum, Nay Pyi Taw | <100 1> | Photos JM. | |
| National Museum, Nay Pyi Taw | <3000 1> | Photos JM. | |
| National Museum, Nay Pyi Taw | <1000> | Photos JM. | |
| National Museum, Nay Pyi Taw | <2000 10 5> | Photos JM. | |
| Halin Museum, no. 1036 | | Photos JM. | |
| Halin Museum, no. 1042 | | Photos JM. | |
| Halin Museum | <1000> (?) | Photos JM. | |
| Halin Museum | | Photos JM. | |
| Halin Museum | <4> | Photos JM. | |
| Shwephonpwint library, Pyay | <ṭṛ va> | Photos Don Stadtner. | |
| Shwephonpwint library, Pyay | <nhoḥ> | Photos Don Stadtner. | |
| Shwephonpwint library, Pyay | <buña> | Photos Don Stadtner. | |
| Shwephonpwint library, Pyay | <100> | Photos Don Stadtner. | |
| Shwephonpwint library, Pyay | <90> | Photo JKW. | |
| National Museum, Yangon | <100 5> | Photos JM. | |
| National Museum, Yangon | <so °iti pi so bhagavā [ti]> | Photos JM. | |

Abbreviations

| | |
|------------|--|
| Arch. Neg. | Archaeological negatives (see explanation above, p. 155) |
| AG | Arlo Griffiths, one of the authors of this study |
| ASB | Report of the Superintendent/Director, Archaeological Survey of Burma. Rangoon, Office of the Superintendent, Government Printing, 1906–1965 |
| ASI | Annual Report of the Archaeological Survey of India, Manager of Publications, Calcutta then Delhi, 1902–1936 |
| AWB | Report on Archaeological Work in Burma. Rangoon, Office of the Superintendent, Government Printing, 1901–1905 |
| BH | Bob Hudson, one of the authors of this study |
| BL | British Library, Archaeological Survey of India Collections, Burma Circle, 1907–1913. Digital photo set 1004/2: 1907–1913 (.jpg format) at http://doi.org/10.5281/zenodo.835588 |
| DHR | Department of Historical Research, Yangon, Myanmar |
| EB | <i>Epigraphia Birmanica</i> |
| EFEO | École française d’Extrême-Orient, Paris, France |
| EI | <i>Epigraphia Indica</i> |
| IB | <i>Inscriptions of Burma</i> (Luce & Pe Maung Tin 1934–1956) |
| IMP | <i>Inventory of Monuments at Pagan</i> (Pichard 1992–2001) |
| JBRs | <i>Journal of the Burma Research Society</i> |
| JKW | Julian K. Wheatley, one of the authors of this study |
| JM | James Miles, archaeological photographer who joined our team in the field in 2016 |
| MHRJ | <i>Myanmar Historical Research Journal</i> |
| OBEP | <i>Old Burma-Early Pagan</i> (Luce & Ba Shin 1979–1970) |
| PPPB | <i>Phases of Pre-Pagan Burma</i> (Luce 1985) |
| PR | <i>Pyu Reader</i> (Tha Myat 1963, 2011) |
| RTI | Reflectance Transformation Imaging |

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