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‘The Holy Footprints of the Venerable Gautama’

A New Translation of the Pasir Panjang Inscription¹

This article is the result of a visit in August 1990 by the first-named author to the island of Karimun Besar in the Riau archipelago. The purpose of the visit was to photograph a Sanskrit inscription at Pasir Panjang, on the north-west coast of the island. On inspection of the inscription, it was evident that the translation published by Dr. J. Brandes in the *Notulen van de algemeene en bestuurs-vergaderingen van het Bataviaasch Genootschap van Kunsten en Wetenschappen* (Minutes of the general and executive meetings of the Batavian Society for Arts and Sciences) (hereafter referred to as *Notulen*) of 1887, pp. 148-52, was open to question, and that a fresh attempt at translation and interpretation was called for. This article traces the history of the discovery of the inscription by European scholars and the subsequent scholarship on it, then offers a new translation and makes an attempt to understand the inscription in its physical setting.

The island of Karimun Besar is approximately twenty kilometres in length and five kilometres in breadth, and lies some fifty kilometres west-south-west of Singapore. It is the larger of the two Karimun islands that guard the eastern entrance of the Straits of Malacca (the other is Karimun

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The granite headland at Pasir Panjang. The inscription is just to the left of the jetty.
(Photograph by courtesy of P.T. Karimun Granite.)

Kecil). The island of Karimun Besar, more simply called Karimun, is composed largely of granite, with scattered hills, some rising to 500 metres in the north, short rivers and sandy clayey loam soils.

Karimun does not appear ever to have been the seat of an important political power. The sixteenth-century Portuguese apothecary Tomé Pires stated that the island was inhabited (Cortêsão 1944:156), most likely by groups of semi-nomadic, boat-dwelling *orang laut*, or sea people. In the eighteenth and nineteenth centuries the island lay on the edge of the Bugis-Malay kingdom of Riau, and Raffles briefly considered Karimun as a suitable place for establishing a trading centre before founding modern Singapore (Vlekke 1959:281).

The Sanskrit inscription that forms the subject of this article consists of seventeen characters written in three lines in the *nāgarī* script. It is carved into the side of a granite promontory facing the open sea on the stretch of coast known as Pasir Panjang, on the north-west coast of the island. Today the inscription lies within a large granite quarry owned by PT Karimun Granite, an Indonesian-registered company with an office in Singapore. Until recently the inscription could only be reached on foot at low tide, but now it can be reached by a road (Photo 1).

The first mention of the Pasir Panjang inscription is found in a letter sent to the Bataviaasch Genootschap van Kunsten en Wetenschappen (hereafter referred to as 'the Society' or 'Bataviaasch Genootschap') by the Dutch planter K.F. Holle, dated 19th July 1873 (*Notulen* 1873:97). In his letter Holle reported that he had been informed of the existence of an inscription on Karimun, and the *Notulen* record that the Society wrote to the Resident of Riau to request a copy of the inscription. In September 1874 a sketch (*teekening*) of the inscription was sent to the Society by the Resident of Riau, which was forwarded to Holle (*Notulen* 1874:107). Two months later, Holle reported back to the Society that the sketch was difficult to decipher and that it would be helpful if a draftsman were sent to obtain a better copy. This request was forwarded to the Resident of Riau, but there is no record of a reply (*Notulen* 1874:133).²

Nothing more was heard of the inscription until 1887, when it was reported in a Singapore newspaper, the *Straits Times*, that:

'About two months ago it was brought to the notice of the Straits Branch of the Royal Asiatic Society that an old inscription existed on a granite rock on the seaside on one of the Carimon Islands. On Saturday last a party, consisting of the Hon'ble A.M. Skinner, Lieut. Ashworth, and Mr. Haughton, went to the Carimons and succeeded in getting some good squeezes of the characters. Lieut. Ashworth made a sketch of the rock, and a photograph was taken of the characters. If the inscription

² Both the Resident and Holle refer to 'Klein Karimun' (Karimun Kecil) in their letters, which suggests that neither was aware of the exact location of the inscription.

cannot be deciphered here, it is intended to send the squeezes, sketch and photo to the British Museum.' (*Straits Times*, Wednesday, 3rd August, 1887, page 2, column 6.)

Instead, the photograph and a squeeze were sent via the Dutch Consul-General in Singapore to the secretary of the Bataviaasch Genootschap in Batavia (*Notulen* 1888:41). The sketch made by Lieutenant Ashworth, which depicted the inscription in its physical setting, is not reported to have been forwarded, however. In Batavia the photograph came to the attention of Dr. J. Brandes, who later the same year published a transcription and translation of the inscription (*Notulen* 1887:148-52). On the basis of the script, 'a somewhat antique Nāgarī-type', Brandes dated the inscription to the ninth or tenth century A.D. This date, he pointed out in a letter of thanks to the Secretary of the Straits Branch of the Royal Asiatic Society dated 13th October 1887 (Brandes 1932:21), was in keeping with the then accepted dates of the few other inscriptions in *nāgarī* script found in the archipelago.

Brandes' transcription and transliteration read as follows:

महायानिक	<i>mahāyānika</i>
गोलयण्डिताश्री	<i>golayanṭritaśrī</i>
गौतमश्रीपादा (:)	<i>gautamaśrīpādā(h)</i>

Brandes then offered the following translation:

'De luisterrijke voeten van den luisterrijken Gautama, den Mahāyānist, die in het bezit was van een armillarium'.

'The illustrious feet of the illustrious Gautama, the Mahāyānist, who possessed an armillary sphere' (*Notulen* 1887:15).

The most striking element of Brandes' translation is the armillary sphere, which Brandes reconstructed from the word *gola*, 'sphere', plus the meaningless complex *yanṭrita*. To arrive at 'armillary sphere', however, Brandes equated *golayanṭrita* with the word *golayantra*, which is found listed in Sir Monier-Williams' great Sanskrit dictionary (Monier-Williams 1899). Here, under the entry *gola* (p. 368, col. C), we find *gola-yantra* defined as 'a kind of astronomical instrument'.³ But to justify Brandes' translation 'the illustrious Gautama, the Mahāyānist, who possessed an armillary sphere', one would expect to find the form *golayantravā*, 'the possession of a *golayantra*'.⁴

³ Monier-Williams cites only one text, which would normally indicate one known occurrence of the word.

⁴ The complex *yanṭrita* has the form of a past participle and corresponds more

An armillary sphere is an astronomical instrument used to predict eclipses and to chart the movement of planets. It is a skeleton celestial globe or sphere consisting in the most elaborate instruments of metal rings or hoops representing the equator, ecliptic, tropics, arctic and antarctic circles revolving on an axis within a wooden horizon. There were two forms: a small hand-held instrument used to demonstrate the basic ideas of spherical astronomy, and a larger, observational model with graduated circles, used to determine the equatorial and ecliptic co-ordinates of the celestial bodies (Pedersen and Pihl 1974:291, 298).

No armillary sphere has ever been found in the Malay archipelago, and there is no known reference to one in other Indonesian epigraphic or literary sources. Nevertheless, Brandes showed little hesitation in identifying Monier-Williams' 'astronomical instrument' as an armillary sphere. In his letter of 1887, Brandes remarked:

'Golayantra is the Sanskrit name of the armillary sphere, an astronomical instrument formerly in common use. In his essay on Indian and Arab divisions of the "Zodiac" by the only Colebrooke⁵ (cf. his Essays, II, 345 sqq.) this master of us all gives a description of the Hindu-form of the armillarium, and of other forms of this instrument.' (Brandes 1932.)

Colebrooke's description is as follows:

'The astronomical instruments employed by the Hindus of which Bhāskara [in the *Vāsanā-bhāshya*] describes nine, including one of his own invention, and comprehending the quadrant, semicircle and entire circle, besides the armillary sphere, hoary ring, gnomon and clepsydra, were too rudely executed, whatever may be thought of their design, to enable the astronomers to make very delicate observations; and they were not assisted, as in the precession of equinoxes, by the memory of a former position recorded in their ancient writings' (Colebrooke 1873: 363).

We may hazard a guess that Brandes' interpretation of Monier-Williams' 'astronomical instrument' as an 'armillary sphere' was suggested by the

closely to the Buddhist hybrid Sanskrit term *yantrita*, 'made to go, set in motion, impelled', the past participle of *yantrayati*, 'engineered in the sense of set in motion' (Edgerton 1953:444). A variant, *yanṭita*, 'made to go, set in motion', is listed in the Pali Text Society's *Pali-English Dictionary* (Rhys Davids and Stede 1952:550).

⁵ The distinguished Sanskrit scholar and Indian High Court Judge, Henry Thomas Colebrooke (1769-1837). Colebrooke combined a profound knowledge of Sanskrit with a fondness for mathematical pursuits, especially astronomy, which 'led him to inquire what degree of proficiency the Hindus had obtained in science' (Stephen and Lee 1917:739). Brandes' source is Colebrooke's essay 'On the notions of the Hindu astronomers concerning the precession of the equinoxes and motions of the planets', which was originally published in *Asiatic Researches*, Vol. XII, pp. 209-50, Calcutta, 1816.

The inscription.

Sanskrit word *gola*, 'sphere', and by the lack of any mention of the more portable astrolabe by Colebrooke.

Before turning our attention to subsequent scholarship on the Pasir Panjang inscription, it is worth noting that Brandes' translation is a clause, not a sentence, and requires the addition of a verb to complete its meaning. If we add the words 'These are', or 'Here are' at the beginning of the translation, this makes the 'feet' (which are in apposition to 'These' or 'Here') the grammatical subject of the inscription. This reading of Brandes' translation is supported by the addition in his transliteration of *h* (:) to *śrīpādā*, to form the nominative *śrīpādāh*.⁶

Yet no sooner had Brandes established the inscription's 'feet' as its grammatical subject than he dismissed them in favour of their possessor. The word *pādā* was, argued Brandes, an honorific, a term of address used by an inferior to a superior, as in the Malay expressions '*kebawah duli yang dipertuan*' and '*paduka sri maharaja*'. Thus the subject of the inscription was not 'feet', but Gautama the Mahayanist, who owned an armillary sphere.

Who was Gautama? According to Brandes, he was 'naturally not' Gautama Buddha, the founder of the Buddhist religion – the Buddhist religion antedates the invention of the armillary sphere by a millennium – but 'a *mahāyānika*, that is, a Mahāyānist, or a Mahāyānist monk' (*Notulen* 1887:151). Such an identification is historically plausible. We know from the memoirs of the Chinese pilgrim I Ching that in the late seventh century more than a thousand Buddhist monks lived and studied in the capital of Śrīvijaya, which is believed to have been located at Palembang. For several centuries Palembang was second only to Nālandā in India as a centre of Buddhist learning. According to a Tibetan source, Dīpankara Aśīsa, co-architect of the 'second introduction' of Buddhism in Tibet, studied at Palembang between 1011 and 1023 (Coedès 1968:144). As Coedès observed:

'the persistence of Mahayana Buddhism in Sumatra is evidenced at Tapanuli on the west coast, by the casting in 1024 of a statue inscribed to Lokanātha, that is, the Bodhisattva Lokeśvara [...] and a Nepalese iconographic manuscript from the beginning of the eleventh century attests to the popularity enjoyed in the Buddhist world by a certain statue of Lokanātha in Śrīvijayapura' (Coedès 1968:144).

⁶ This seems a reasonable conjecture. One may recall Chhabra's remarks concerning the gold signet ring found in Perak around 1930, on which is inscribed the name Śrī-Visṇuvarman: 'The word being *varman* and not *varma* like *dharma*, its correct genitive singular is *varmaṇah*; but in the present case, grammar has been disregarded. Such grammatical slips do often occur in epigraphical records' (Chhabra 1965:36).

We may further note that, when sending the customary tribute to China in 1003, the ruler of Śrīvijaya announced that he had erected a Buddhist temple for the offering of prayers for the health of the emperor (Tan 1965); about two years later, the same ruler had a Buddhist temple bearing his name built at Negapatam on the Coromandel coast of India (Hall 1981:66). There seems little doubt that the high position held by Śrīvijaya as a centre of Buddhist learning in the Straits region continued into the eleventh century, and that at the time of the Pasir Panjang inscription, perhaps a century or two earlier, Buddhist monks travelled regularly between Palembang and Nālandā, in modern-day Bihār, India.

Brandes' first conjecture, that the 'feet' of the inscription represented an honorific, was, it will be argued, his most important mistake. But his attention, and that of other scholars, was quickly drawn to the putative armillary sphere. Subsequent discussion of the inscription has focused on the likelihood of such an object finding its way to the archipelago, and on the identity of its owner.

Brandes was the first to question the accuracy of his translation. In his letter of thanks to the Straits Branch of the Royal Asiatic Society of 13th October 1887, in which he acknowledged receipt of the photograph – the squeeze is not mentioned – he cast doubt upon his translation of *golayanṭrita* as 'armillary sphere'. He stated: 'Even now it would be a phenomenon if someone in the Archipelago possessed such an armillarium, and used it to define an *eelijes* [eclipse], for instance' (Brandes 1932:21). Yet Brandes remained willing to admit the possibility, for in the very next line he called Gautama 'the astronomer of the Kerimun [sic] Islands'. In his letter, Brandes further supported his dismissal of the 'feet' as the rightful subject of the inscription by citing both the Malay expressions quoted previously and other examples from Old and Modern Javanese.

The following year, the Dutch scholar H. Kern challenged Brandes' translation and interpretation of the inscription. Kern was sceptical of Brandes' translation of *golayanṭrita* as 'armillary sphere', and suggested instead 'world-globe', a term that he interpreted as a synonym of 'Buddha'. He disagreed with Brandes' identification of the inscription's Gautama as a Buddhist monk, and argued that it must refer to Gautama Buddha, the founder of the Buddhist religion, on the basis of the fact that he knew of no Buddhist who 'dared to take the name Gautama' (*Notulen* 1888:155). Here Kern was wrong: there are many thousands of people with that name in India, as a glance at an Indian telephone directory will show.⁷ It should be noted, however, that Kern implicitly accepted Brandes' reading of *śrīpādāh* 'illustrious feet' as an honorific, for

⁷ The name Gautama was originally the name of a clan tracing its descent back to the *ṛṣi* ('seer') Gotama; the Buddha's personal name, according to tradition, was Siddhārtha (Pali: Sidhattha), 'he whose aim is accomplished'.

nowhere in his discussion does he mention Brandes' dismissal of the inscription's grammatical subject. Like Brandes, Kern believed the subject of the inscription to be the feet's possessor, Gautama. Although Kern did not set his corrected translation out in full, it must have read something like: 'The Mahayanist, the noble one, the illustrious Gautama, the Buddha'. Kern's identification, however, prompts the difficult question of why the Buddha should have been called a *mahāyānika*, 'adherent of Mahayana doctrine' (tantamount to calling Christ a Calvinist!), when the word would normally have been used to describe a Buddhist monk or layman belonging to the Mahayanist sect.

In the following decades little use was made by historians of either Brandes' or Kern's translation. The likely reason for this neglect is that most of the scholarship on the Pasir Panjang inscription is in Dutch, in the difficult-to-obtain *Notulen*. The only use of the inscription of which we are aware was by Dr. J. Miksic in his archaeological study of Fort Canning in Singapore (Miksic 1985). Miksic used Brandes' translation, but made a fresh attempt at identifying the owner of the armillary sphere. His point of departure was his observation that the Karimun islands occupy a doubly strategic position in the Straits of Malacca. Thus:

'besides commanding the southern entrance of the Straits, with only 9 kilometers of water separating it from the southwest tip of Johor and 20 kilometers from Pulau Rangsang on the western side of the Straits, Karimun lies directly north of the Kampar river, which leads into the Minangkabau heartland in west Sumatra' (Miksic 1985:10).

Miksic pointed out that several archaeological sites lie along the course of the Kampar river, some possibly dating from the tenth or eleventh century. He also cited Tomé Pires' observation in the early sixteenth century that the population of Karimun consisted of 'Celates', Pires' word for the boat-dwelling, Malay-speaking populations of the Straits of Malacca. Miksic pointed out that:

'The history and geographical distribution of these people have been studied by Prof. David Sopher, who notes that in the late nineteenth century the population of Karimun consisted largely of descendants of these boat dwellers, or "Sea Nomads", termed *orang laut* in Malay, who had only recently become semi-sedentary but were not yet Muslim' (Miksic 1985:12).

Drawing these facts together, Miksic concluded:

'This Gautama, who is otherwise historically anonymous, may have been a chief of the *orang laut* of Karimun in the late period of Srivijaya's ascendancy, who acknowledged Srivijaya's authority and in return received an armillary sphere as part of the gift-giving which typified

relations between Malay sovereigns and vassals. In his simple pride in his acquisition he erected the inscription by which we know he existed. Gautama's profession of the Mahayana faith is quite compatible with this supposition, because this was the general religion of both the Srivijayan and Malayu royal houses. In addition to his admission of Srivijayan spiritual authority, Gautama probably rendered other services as well; several authors have noted that there are numerous pieces of evidence to suggest that the boat-dwelling populations formed the very heart of Srivijaya's military, especially naval, power. The loyalty of the boat dwellers of Karimun would have been extremely valuable to any ruler hoping to maintain control over shipping in the Straits of Malacca, over other ports which could have competed with him as the focus of transit trade, and over piracy.' (Miksic 1985:12.)

Miksic's identification of Gautama as an *orang laut* chief is based on evidence that until the nineteenth century the Straits of Malacca was populated largely by Malay-speaking *orang laut*. Chinese and Arab records state that these ferocious 'sea nomads' policed the Straits on behalf of the Malay rulers of Śrīvijaya. The empire of Śrīvijaya seems to have reached its apogee in the late eleventh and twelfth century, and the setting up of such an inscription by an *orang laut* chief could be interpreted as reflecting the voluntary adoption of elements of a 'superior culture' by those on its fringes, a process which Toynbee argued is typical of a growing civilization (Toynbee 1972:234). Yet there are no known Śrīvijayan inscriptions from the ninth to twelfth centuries that might have inspired an *orang laut* chief to set up a similar inscription, and which would have served him as models.

Miksic's identification would further require us to accept Brandes' questionable interpretation of *golayantrita* as 'armillary sphere', the gift of which, Miksic argued, was the motive for setting up the inscription. This brings us to the question of how likely it is that such an instrument ever reached Karimun. The answer is that it is highly unlikely. The minimum practical size for an observational armillary sphere is about a metre in diameter, though many were much larger. Unlike its portable derivative, the astrolabe⁸, an observational armillary sphere is a large and unwieldy instrument, as is evident from the smaller of the two equatorial *armillae* used by the Danish astronomer Tycho Brahe (1546-1601) in his observatory on the island of Hveen in Åresund in the illustrations in Abetti (1954, plate VI) and Needham (1959, figure 155). These instruments were cast in brass and weighed several hundred pounds.

⁸ The astrolabe is probably a Greek invention. The letters of Syneisus to Hypatia (A.D. 370-415) contain the writer's designs for a plane astrolabe (Alic 1986:42). No Chinese examples are known (Needham 1959:268). The Arabs were the first to grasp the potential and elaborate the design of the astrolabe, an instrument of critical importance in Europe's intellectual advance, which by the eleventh century had passed into Latin Christendom from Moslem Spain (Fletcher 1989:53)

Even if such an unlikely object had found its way to Karimun, it seems inconceivable that it would have been used for the purposes for which it was designed. To chart the movement of planets and to predict eclipses, the sphere must be aligned precisely on the celestial pole, so that it may accurately track the heavenly movement of the stars and planets. In the northern hemisphere this is done using as guide the star Polaris, which lies less than one degree from the celestial pole (hence its popular name, the Pole Star). The lower an observer's latitude, the lower Polaris appears to be in the northern sky, and when one reaches the equator, Polaris lies exactly on the horizon. Karimun lies almost one degree below the equator, thus Polaris lies one degree below the horizon and is never visible.

While it is just possible to align an equatorial telescope mount (the armillary sphere's modern descendant) using a pair of stars lying on the same celestial latitude (for example, the third magnitude stars Eta Pegasi and Zeta Cygni), this can only be done if the observer's vertical declination (the longitudinal axis of the celestial sphere) is known, so that the mount can be accurately aligned in the vertical axis before one attempts to align it to the celestial pole. The degree by which the equatorial head fails to align with the second of the pair of stars as it travels through its arc is a measure of the error of polar alignment. To set up an equatorial mount knowing neither the celestial pole nor the observer's vertical declination is a task of Herculean proportions. Karimun's latitude could, of course, be worked out through a series of careful solar observations requiring a knowledge of sidereal geometry, trigonometry and some mathematics, but the likelihood of anyone doing this in the tenth century stretches credulity. We are thus compelled to agree with Brandes' statement that 'even today, it would be a phenomenon if someone in the Archipelago possessed such an armillarium, and used it to define an *eclipse*'.

It is important at this point to recall that neither Brandes nor Kern had actually seen the inscription *in situ*.⁹ Nor does Brandes seem to have been sent the sketch of the rock face on which the inscription occurs, made by Lieutenant Ashworth in 1887. This is an important point, because the physical location of the inscription is crucial to its interpretation. Running almost vertically up the steeply sloping cliff, to the left of the inscription, is a series of deep indentations (Photo 3). These indentations, we would argue, are the 'illustrious feet' of the inscription.

These indentations were first described by Dr. Virginia Hooker (Matheson 1985) following a visit to Karimun in 1984. Hooker was unable to reach the summit of the cliff, and felt unable to say for certain whether the

⁹ Dr. Miksic visited the site in 1985, after the publication of his book on the excavations at Fort Canning (Miksic 1985). The National Museum, to which he is an adviser, has constructed a model of the rock face and its inscription, which is now on display in the Southern Rotunda Gallery.

The inscription in its protective concrete box, and the 'footprints' it refers to.

'illustrious feet' referred to in the inscription were the indentations running vertically up it, or whether they were yet unidentified indentations in the grassy scrub edging the cliff. Following her visit, Hooker wrote to the eminent epigraphist Professor J.G. de Casparis, who replied that 'the riddle of the inscription and the footprints cannot be solved until we have identified the footprints and found whether they can be used for astronomical or astrological observations' (Matheson 1985:7).

In August 1990, the first-named author of the present article inspected the granite outcrop on which the inscription is carved but found no trace of a depression or any other feature on the summit that could be reasonably interpreted as a footprint. It seems almost certain that the 'feet' or 'footprints' mentioned in the inscription are indeed the indentations observed by Hooker. As one would expect, the inscription is placed below the lowest 'footprint', as a sign of respect. It is a well-known fact that in early Buddhist art, before the first century A.D., the Buddha was never depicted in human form. Instead, his presence was suggested by aniconic, or imageless, symbols such as a throne, the Bo tree under which he achieved enlightenment, a *stūpa*, or a footprint. The representation of Gautama Buddha by a pair of footprints, or by a single footprint, was an iconographic device of considerable importance in early Buddhism, and may be found as far east as Nara in Japan, where a large stone in the Yakushi-ji temple bears an inscribed representation of the 'footprints of Śākyamuni' (Miller 1975:1). Perhaps the most famous 'Buddha's footprint' is that on the summit of Mt. Sumanakuta, popularly known as Adam's Peak, in Sri Lanka, which is visited by thousands of Buddhist pilgrims annually. Evidence of a knowledge of this widespread association in the archipelago is provided by the *buddhapad* from Rejang Lebong, Bengkulu, reproduced in McKinnon (1985:35).

The origin of the 'footprints' on the rock face at Pasir Panjang is not difficult to establish. Granite rock is composed basically of silica and feldspar. It is a plutonic rock that cools slowly underground, with the result that the silica forms largish crystals. Granite is not a weather-resistant rock. When exposed to the elements, feldspar erodes readily, whereas silica is the most weather-resistant of the commonly occurring minerals. As the feldspar erodes, the silica crystals are exposed. Where the granite surface is horizontal, a protective layer of clay may form on the surface, but where it is not, the particles are washed away by rain water or blown away by the wind. The granite rock at Pasir Panjang is a medium-grade hornblende granite with fairly large grain particles of up to two millimetres in diameter. The rock face is set at an angle of approximately thirty degrees to the vertical and is subject to continuous erosion. The indentations on the rock face that lie to the left of the inscription are not man-made but are natural erosions caused by localized softening in the rock, which has been preferentially weathered, possibly due to a greater concentration of

4. Sediment in a footprint, and the connecting fissure which begins at the top of the rock.

feldspar. The immediate cause of the indentations is rain-water running along a fissure which has its origin on the summit of the rock and continues down the face. This fissure channels water down the rock face via the indentations, which lie along its course. The abrasive action of small pebbles and particles of sand trapped in some indentations, spun by rainwater, has probably deepened them over several millennia (Photo 4).

Could the indentations be used for astronomical or astrological observation, as Professor de Casparis has suggested? The answer is almost certainly no. The top of the outcrop, where there are no footprints, would have provided a sounder foothold and a much better view of the sky. Even when standing on the highest footprint, the sky is partially obscured by the outcrop. A better point from which to make astronomical observations would be the summit of Bukit Betina, the hill to the rear of the headland on which the inscription is found (Photo 1). We may also recall that to take astronomical readings a large astrolabe is required, and the sturdy base of such an instrument would not fit in the indentations.

Hooker does not comment on a small body of water that is set into the neighbouring rock face about ten metres north of the inscription (Photo 5). This appears at first sight to be a pool of water that has collected in a large indentation, but it is in fact a fresh-water well, now badly silted with quarry debris. The back of the rock outcrop on which the well lies has been removed by blasting, and this has probably reduced the amount of water flowing into it. Nevertheless, the water remains sweet. We will return to this well in a later part of this article and argue that it is an important element in the history of the inscription, to which we now turn.

The Pasir Panjang inscription is carved in outline and its *nāgarī* characters are of an unusually large size for an Indonesian inscription. The characters penetrate the surface of the rock only a few millimetres, and, considering the ease with which the surface of the rock at Pasir Panjang can be scratched with an iron tool, it is tempting to consider the inscription a graffito. However, the characters are carefully shaped and skilfully laid out, and the lines of script are level. Care, planning and time went into its production, and it is still perfectly readable after several centuries of exposure to the elements on a relatively poor-weathering rock. We may surmise that the inscription was originally deeper and that it had a more refined appearance. It seems possible, too, that the characters, which are carved in outline, were once coloured, and that the inscription was visible from some distance off shore.

Having surveyed the inscription and its location, let us now re-examine Brandes' transcription of 1883. The accuracy of this transcription has not been questioned, even though Brandes had not visited the site and was

The well to the north (left) of the inscription.

working with a black-and-white photograph of indifferent quality.¹⁰ The inscription is difficult to read even from a modern colour slide taken with a camera with a good-quality lens and enlarged many times (Photo 2). How much more difficult it must have been for Brandes to make out the characters of the inscription.

The first line of the inscription is unequivocal and Brandes' reading of this as *mahāyānika* is clearly correct. But the second line does not correspond with Brandes' transcription. The first two characters are correct, namely गो (go) and ल (la), producing the word *gola* (Sk. 'sphere'). But the third character, which Brandes transcribed as य (ya), is different from the character य (ya) in the first line of the inscription. The latter has a downward hook on the curve to the left of the vertical stroke, while the former does not (Photo 6). It would therefore appear that the third character of the second line is not य (ya) but प (pa), which has a similar shape but no hook. The fourth character of the third line is also different from Brandes' transcription. Brandes transcribed this as ण्र (ṇṛ), which has a hook descending from it in an anti-clockwise direction. But the hook of the character in the inscription descends in a clockwise direction; nor is there any sign of the upside-down 'v' joined to the bottom of the hook of ण्र. (It is, however, just possible to misread the top of the vowel ई (ī) in the third line, which lies immediately below the hook, as this upside-down 'v'.) The fourth character therefore is not ण्र (ṇṛ) but ण्ड (ṇḍ). The tail (which is tightly curved to avoid the top stroke of the ई (ī) in the third line) and its clockwise descent is plain to see (Photo 6). The fourth and fifth characters, ता (tā) and श्री (śrī), pose no problems; neither does the last line of the inscription, which Brandes transcribes as *gautamaśrīpādā*.

These two re-readings in the second line, प (pa) for य (ya) and ण्ड (ṇḍ) for ण्र, produce the well-known word पण्डिता *paṇḍitā*, 'pundit'. This does away once and for all with the meaningless complex *yaṇṭrita* and the spurious armillary sphere which has distracted so much of our attention.

The second line thus reads: गोलपण्डिताश्री *golapaṇḍitāśrī*.

How should this be translated? 'Globe teacher' (Sanskrit *gola*, 'globe, sphere') plainly makes little sense. Is it possible that the latter word is a contraction of Sk. *golava*, 'teacher', and that the line should read 'the pundit teacher'? This seems doubtful, as there is no supporting evidence from other inscriptions for such a contraction. Dr. Tissa Rajapatirana of the Australian National University has suggested that the *gola* of the inscription is the Sinhalese word *gola*, 'pupil', and that the line should be

¹⁰ Nowhere does Brandes mention the squeeze sent through the Dutch consul, which is described in the *Notulen* (1888:41) as *een calque op vloeipapier*, 'an impression on blotting-paper'. The surface of the rock is too irregular to make a conventional paper rubbing possible.

6. The well or spring.

read as 'the learned pupil' (Tissa Rajapatirana, personal communication). But Sri Lanka was not on the sailing route between Indonesia and India, and its predominantly Buddhist culture has had little historical influence on Indonesia.

Professor de Casparis has put forward the argument that *gola* stands for Sanskrit *gauḍa*, an established term for Bengal (modern Bangladesh and part of north-east India). He points out that in Indonesian inscriptions Sanskrit ॐ (au) is regularly replaced by ॐ (o) and ॐ (d) by ॐ (l), a development that is illustrated by the Indonesian word for sugar, *gula*, which is almost certainly derived from Sanskrit *guḍa*, sugar.¹¹ The compound word *golapaṇḍitā* might therefore be read as *gauḍapaṇḍitā*, 'The pundit from Bengal' (J.G. de Casparis, personal communication).

Following this reading, and using the conventional terminology for addressing the Buddha, and putting the inscription in the passive voice, we arrive at the following translation:

The holy footprints of
The Venerable Gautama [Buddha]¹²
[Are revered by]
The pundit from Bengal,
The Mahayanist.

Gone is our ancient astronomer with his cumbersome and useless armillary sphere; in his place stands a religious scholar, the subject of lines three and four. The grammatical subject of the inscription, *pādāh*, 'feet' or 'footprints', is restored to its rightful place, and now makes excellent sense within the physical location of the inscription. The footprints – the indentations running up the cliff – thus are claimed by the inscription to be those of Gautama Buddha, the founder of the Buddhist religion.

¹¹ This is the basis of the name *gauḍa*, literally 'sugar-cane country', which denotes part or the whole of Bengal.

¹² It might be objected that there is no known example of the expression *śrīgautama* in reference to the historical Buddha. In India, the honorific *śrī*, which we translate as 'illustrious', now means 'Mr.', a drop in status which can be traced back to the early medieval period (personal communication, J.G. de Casparis). But in Java and in the Malay kingdoms of Sumatra and the Malay peninsula the title has retained its prestige up to the present day and continues to be restricted to royalty, as, for example, in the title of the previous sultan of Yogyakarta, Almarhum Sri Sultan Hamengkubuwono, and in the title of the reigning king of Malaysia, Sri Paduka Baginda Yang Dipertuan. It may also be recalled that the kings of Śrīvijaya had the title Śrī Maharaja; indeed, the very name Śrīvijaya ('illustrious victory') and an inscription which records in A.D. 684 the foundation of a public park, Śrīkṣetra, by a Śrīvijayan ruler point to the high status of this title and its consequent royal monopoly. Regarding Miksic's hypothesis, it seems unlikely that an *orang laut* chief would immortalize himself in writing with this title within the territory of the 'Maharaja of the Isles'.

7. The characters य (ya) प (pa) and ण्ड (ṇḍ).

Now that we have established the correct transcription and a reasonable translation of the Pasir Panjang inscription, let us draw together the various pieces of evidence presented above to see what conclusions we can draw regarding its origin, the date of its inscription, the identity of its creator, and the reason for its location on a remote beach in a historically unimportant part of the Riau archipelago, far from a known centre of political power.

Let us deal with the last question first. In an earlier section it was remarked that not far from the inscription is a fresh-water spring, in the form of a natural 'well' set into the rock (Photo 5). This, we would argue, is the most significant natural feature of the Pasir Panjang site. Such an unusual feature – fresh water that issues from solid rock and which, though sprayed by the sea at high tide, remains sweet – would certainly draw the attention of anyone living near Pasir Panjang. It is likely that the well would have been regarded as *keramat* (miracle-working) by local people, who would have come to take its water for ritual and medicinal purposes. Today the settlements nearest to Pasir Panjang are the neighbouring villages of Teluk Paku and Teluk Setimbul, which lie five kilometres south of the quarry. The inhabitants of Desa Teluk Paku are Muslims, but the inhabitants of Desa Teluk Setimbul are nominal Christians and Buddhists who hold regular animistic, *adat*-based religious ceremonies on the first and fifteenth day of the lunar month. Until P.T. Karimun Granite began quarrying the site in 1971, the villagers of Desa Teluk Setimbul visited the well at Pasir Panjang at dark moon and full moon. There they would pray at the inscription. But the main object of the visit was to draw water from the well to take back to their village to be used for ritual purposes, which included the bathing of infants, children and the sick (personal communication, Pak Ewa Bekuk, Teluk Setimbul).¹³

The settlement at Teluk Setimbul does not appear to be particularly old, but the association of unusual natural phenomena with supernatural powers, and water from such sites with healing, is part of ancient Indonesian belief. Over the centuries, as a result of similar visits, various legends have grown up around the rocky headland on which the well and the inscription are found. Among the present-day legends is the tradition that the 'footprints' are those of Badang, the legendary *orang laut* strongman mentioned in the 'Sejarah Melayu' (Brown 1952). While it is not possible to date the origin of such traditions, it seems evident that the well has drawn people to the granite headland, to which rituals and beliefs – and the inscription – have subsequently become attached.

¹³ Today the villagers draw the water for their ceremonies from a spring about 300 metres from the village. Ceremonies on the first and fifteenth day of the lunar month are held at a large *balai* (public pavilion) in Desa Teluk Setimbul. Occasional ceremonies are still carried out at the Pasir Panjang inscription.

In addition to the self-identification of the author of the inscription as a Mahayanist *paṇḍitā* (scholar) from Bengal, evidence for his identity as a Buddhist monk is provided by the early *nāgarī* script of the inscription. The script, which is of north Indian origin, is known in Indonesia from only a few inscriptions. According to Bosch (1928:13) it probably evolved in Buddhist monasteries in Indonesia over several centuries before being used in inscriptions. De Casparis, while reserving final judgement on Bosch's conclusion, agrees that the *nāgarī* script in the western part of the archipelago is firmly linked with Mahayana Buddhism, and 'is no doubt connected with the activities of Buddhist monks from centres such as Nālandā' (De Casparis 1975:36), the famous monastery in Bihār which was the centre of the Mahayanist world in the centuries preceding the downfall of Buddhism in India proper.

On the basis of similar inscriptions from Bengal and Java, Professor J.G. de Casparis and Professor J. Wisseman Christie have independently suggested that the Pasir Panjang is of a later date than that suggested by Brandes, and should most probably be placed in the eleventh or twelfth century (personal communications to the authors). This would place it within the heyday of both Śrīvijaya and the important Buddhist university of Nālandā, which flourished from the middle of the eighth century until its destruction by Muslim invaders in the early thirteenth century (Nilakanta Sastri 1941:166). The great importance of this centre of Buddhist culture for the Malay archipelago was first pointed out by Dr. W.F. Stutterheim in 1924 (Bernet Kempers 1933:3) and its influence on Buddhist kingdoms such as Śrīvijaya is now widely recognized. Pilgrims, especially scholars, from the entire Buddhist world, which included South Sumatra and the Straits region, came to Nālandā to study and to translate Buddhist works into other Asian languages. The Chinese monk I Ching, who reached India in 673, studied there for ten years. He states in his *Record of the Buddhist religion* that there were more than three thousand monks in the monastery, maintained by the tax revenues from more than two hundred villages. He gives descriptions of the curriculum, which, besides the Buddhist scriptures, included logic, metaphysics and an extensive study of Sanskrit grammar (I Ching 1896:65, 154).

In another work I Ching provided the biographies of some sixty Chinese Buddhist pilgrims who set out for India during the second half of the seventh century A.D., thirty-seven of whom travelled by sea. Many of these pilgrims must have been compelled by the rhythm of the monsoons to break their journey on the coast of Sumatra. By the ninth century, but probably much earlier, Sumatran pilgrims and scholars were making the sea journey to Nālandā. A copper-plate inscription of King Devapāla (circa 810-850) records that, in response to a request by Maharaja Bālaputradeva of Suvarṇadvīpa (Sumatra), the king was granting the tax revenues from five villages near Patna for the maintenance of monks and

the copying of manuscripts in the monastery building established by the Sumatran king. Nor was the traffic between Nālandā and the archipelago one-way: Dharmapāla, a teacher of Nālandā, stayed in ancient Indonesia for a while, and Kumāraghoṣa, Vajrabodhi and his disciple Amoghavajra halted for some time at Śrīvijaya on their way to China (Mullick 1991:109). Finally – and significantly, in the light of the apparent identity of the inscription's author – we know of a Bengalese monk, Kumāraghoṣa from Gauḍadvīpa (the 'island' of Bengal), who performed the ceremony of consecration of a Mañjuśrī image, as is recorded in the Javanese Kēlurak inscription of A.D. 782 (Bosch 1928:18-9, 21, 29-30).

If we are right in reading the inscription's *golapaṇḍitā* as *gaudapaṇḍitā*, 'the teacher from Bengal', can we therefore conclude that the author of the Pasir Panjang inscription was a Bengali monk who hailed from Nālandā? A number of things argue against our doing so. While there is no difficulty in envisaging a Bengali monk calling at Karimun en route to Sumatra or Java and being shown the well and the footprints by local people, it is difficult to conceive of a motive for his carving the inscription. The well is of purely local significance, and for a scholar familiar with the norms for the representation of the *buddhapad* – *śrīpādā* is a technical term indicating the ornamental version of the Buddha's footprint, with all toes of equal length, a wheel on the sole, and other ornaments – the crude natural indentations in the rock face would have been difficult to visualize as such. A motive may be found closer to home, however, in that whoever controlled access to the well may have derived both prestige and material benefit from this, as do the keepers of *keramat* in Indonesia today. It has also been noted above that our re-reading is based partly on the assumption of an Indonesianized spelling of the term Gauda for Bengal. This spelling – Gola – is not one which a Bengali would have used, but it is common in Javanese inscriptions issued, or re-issued, after the tenth century (personal communication, J. Wisseman Christie). It therefore seems likely that the author of the inscription was of local extraction.

We shall never know for certain who carved the Pasir Panjang inscription, or why. Several mysteries remain, such as the notable absence of a conventional *buddhapad*, and the relationship between the natural indentations in the rock face and the fresh-water well. Our best guess is that the inscription was carved during a late phase of Śrīvijaya's existence by a local religious scholar who may have studied in Bengal and was an adherent of the Bengali-influenced Tantric cult popular in the Straits and in Java at that time. It was carved in the rock face at Pasir Panjang in order to enhance a *keramat* centred on the fresh-water well and refers to the natural indentations running up the rock as the footprints of the Buddha. This reconstruction, while speculative, has the virtue of making sense of the inscription and its location and fits comfortably into the history of the Straits region in the tenth to thirteenth centuries.

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