

Dvaravati Period *Sema* Stones: Shifting Meanings and Definitions in Archaeology, Epigraphy, Texts and Religious Re-use¹

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Abstract

Sema stones, or Buddhist boundary markers as they are commonly known in English, are a well attested phenomenon in the religious landscape of Southeast Asia. In modern day Theravada Buddhism they demarcate the sacred precinct of the *ubosot*, either in groups of eight or sixteen. The earliest archaeological evidence for these objects dates back to the Dvaravati Period (6th-11th century CE) where they are found at numerous sites and settlements throughout northeast Thailand and central and southern Laos, an area geographically defined as the Khorat Plateau. In scholarship to date, however, explanations regarding the function of Dvaravati *sema* have largely relied on modern analogies and comparisons and textual sources. Therefore, is it presumed

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that *sema* in the Dvaravati period functioned more or less in the same way as they do today, being set up in groups of eight or sixteen to demarcate the *ubosot* alone. Archaeological and epigraphic evidence, however, paints a somewhat different picture, illustrating that in some cases *sema* were placed around stupas, Buddha images and rock shelters, and that the numbers used could vary between eight and twenty-four. The epigraphic evidence further illustrates that *sema* fulfilled important social functions as objects of patronage and merit donated by local elites. Additionally, *sema*'s re-use today in Buddhist contexts illustrates their continual sacred appeal and alternative functions. This article re-evaluates the function, use and definition of Dvaravati *sema* by drawing on archaeological, textual, epigraphic, typological and contemporary evidence. Finally this article acts as a cautionary tale, highlighting the pitfalls and problems inherent in projecting modern religious beliefs and practice onto the past.

Origins of the term '*sema*'

Sema stones are essentially objects placed in a given pattern or formation to demarcate certain types of Buddhist ritual space. These areas can be a whole monastery, a particular building within the monastery or other religious areas, such as a forest dwelling. Today, they are common throughout the majority of Theravada Buddhist countries of Southeast Asia, including Thailand, Laos, Burma and Cambodia, and in particular, at numerous sites and settlements throughout northeast Thailand and central and southern Laos, an area

geographically defined as the Khorat Plateau.³ It is common practice for *sema* to be set up in groups of eight or sixteen. However, in the Dvaravati period there appears to have been no fixed number, with some sites setting up as many as twenty-four *sema*. Also, manuscripts from the 19th century Wat Suthat Dhepvararam temple in Bangkok show *semas* set up in groups of three, four or seven to demarcate the sacred space.⁴ Therefore, while today the most common practice is to use *sema* stones in sets of eight, this has not been the only accepted method to create sacred space.

The term *sema* comes from the Pali word, *sima*, meaning boundary and as Paknam points out, in Thai the term *sema* [เสมา] is a vulgarisation of the Pali word *sima*.⁵ In Thai, therefore, *sema* stones are called *baisema* [ใบเสมา], with *bai*, meaning 'leaf'. This generally refers to the shape of the predominant slab type *sema*, particularly from the Ayutthaya period onwards. In Burma, however, the word *sima* refers to both a boundary and an ordination hall (pronounced in Burmese as *thein*), as in the Kalyani Sima at Thaton, for example.⁶

³ For detailed accounts of the locations and distribution of *sema* throughout the region see Srisakra Vallibhotama [ศรีศักร วัลลิโภดม], "Sema Isan [เสมาอีสาน]," (*Muang Boran Journal* No. 1, Part 2, 2518 [1975]) (in Thai); Stephen A. Murphy [สตีเฟน เมอร์ฟี], "An Analysis of the Distribution of Dvaravati Period *Sema* Stones in the Khorat Plateau" (การแพร่กระจายของใบเสมาสมัยทวารวดีในที่ราบสูงโคราช) (*Muang Boran Journal* No. 36, Part 2, 2553 [2010]), (In Thai); Stephen A. Murphy, "The Distribution of *Sema* Stones throughout the Khorat Plateau during the Dvaravati Period" (*Proceedings of the 12th International Conference of the European Association of Southeast Asian Archaeologists (EurASEAA12), Leiden, The Netherlands 1-5 September 2008*, Leiden, The Netherlands: International Institute for Asian Studies, (forthcoming 2010)).

⁴ No Na Paknam [น. ณ ปากน้ำ], *Manuscript of Wat Suthat Dhepvararam* (สมุดข่อยวัดสุทัศนเทพวราราม) (Bangkok: Muang Boran Publishing House, 2540 [1997]) (in Thai).

⁵ No Na Paknam [น. ณ ปากน้ำ], *The Buddhist Boundary Markers of Thailand* (ศิลปะบนใบเสมา) (Bangkok: Muang Boran Publishing House, 2524 [1981]) (in Thai and English).

⁶ G. H. Luce, *Old Burma-Early Pagan* (New York: J.J. Augustin, Locust Valley, 1969) 252-253.

The Dvaravati Period

An in depth discussion surrounding the competing definitions of what Dvaravati represents and encompasses is beyond the scope of this paper. Most scholars, however, agree that as a political entity, be it a kingdom, an early state or group of loosely unified polities, it existed in central Thailand, particularly in the area of the Chao Phraya Basin, between the 6th-9th centuries CE.⁷ Dvaravati art and culture however, had a much wider geographical reach and chronological span. Dvaravati art and material culture lasted from the 6th-11th centuries and can be found not only in central Thailand, but also to the north and northeast. The Dvaravati period is considered to span the 6th-11th centuries and this, therefore, is the chronological timeframe employed in this paper regarding *sema*.

Textual Evidence

The canonical rationale for creating a *sima* is found in the *Mahavagga* of the *Vinaya Pitika*.⁸ This text states that a *sima* (boundary) must be created in order for certain rituals, such as the *patimokkha*⁹ and *uposatha* (ordination), to take place. This boundary is to be created by *nimitta* or boundary marks. However, as Indorf points out, this text does not state specifically what these *nimitta* are to

⁷ For detailed accounts and discussion regarding Dvaravati see Phasook Indrawooth [ผาสุก อินทรวู้ธ], *Dvaravati, A Critical Study Based on the Archaeological Evidence* (ทวารวดี การศึกษาเชิงวิเคราะห์จากหลักฐานทางโบราณคดี) (Bangkok: Silpakorn University, 2543 [1999]) (in Thai); Robert Brown, *The Dvaravati Wheels of the Law and the Indianization of Southeast Asia* (Leiden: Brill, 1996) 3-68; Peter Skilling "Dvaravati: Recent Revelations and Research," *Dedications to Her Royal Highness Princess Galyani Vadhana Krom Luang Naradhiwas Rajanagarindra on her 80th birthday*, Ed. Chris Baker (Bangkok: The Siam Society, 2003).

⁸ I. B. Horner *The Book of The Discipline (Vinaya Pitaka)* (6 Vols. London, 1951) *Mahavagga* II 5. 4-15. 2.

⁹ This ceremony, which consists of the recitation of the rules of the order, is performed twice a month, on the full and new moon, and once a year at the end of the rainy season on the *pavara* day.

consist of.¹⁰ The text provides a few possibilities, stating that natural features, such as rocks, trees and hillsides, can be used, but rivers and lakes are not suitable.¹¹ The decision to use *sema* stones as *nimitta* to create a *sima* appears to be a specific Southeast Asian response to this need and the archaeological evidence points towards this tradition arising in the Khorat Plateau during the Dvaravati period. It is possible that at this time other areas of Southeast Asia, such as central Thailand, Cambodia or Burma, were using other forms of *nimitta*, perhaps out of perishable materials, but if so, no evidence survives today.

In the modern Theravada Buddhism of Southeast Asia, the *sima* can be subdivided into the *mahasima* and the *khandasima*.¹² The *mahasima* refers to the entire monastery, while the *khandasima* refers to a specific area within it where rituals take place. The *khandasima* is the area in the monastery demarcated by *sema* stones, usually incorporating the *ubosot* (ordination hall). Whether this division existed in the Dvaravati period or not is impossible to say due to insufficient evidence; however, it appears that in certain cases *sema* not only demarcated the *ubosot* and *khandasima*, but also stupas. The large quantity of stones found at certain sites further suggests that in some instances they perhaps demarcated the *mahasima* as well; however, there is no *in situ* archaeological evidence to confirm this hypothesis.

The two most important rituals to take place within the *khandasima* are the *patimokkha* and *uposatha* ceremonies. The *Vinaya Pitaka* states that these rituals must be carried out in the presence of other monks within the *ubosot*.¹³ In Thailand today, the ordination ceremony often holds a more significant meaning in the lay-believer's

¹⁰ Pinna Indorf, "The Precinct of the Thai Uposatha Hall [BOT], A Southeast Asian Spirit World Domain," *Journal of the Siam Society* 82 (1994): 19.

¹¹ Horner, *Mahavagga* II. 4-5, 12. 6-7.

¹² Madeleine Giteau, *Le bornage rituel des temples bouddhiques au Cambodge*, (Paris : Ecole Française d'Extrême-Orient, 1969) 6-7 (in French); Petra Kieffer-Pülz, *Die Sima: Vorschriften zur Regelung der buddhistischen Gemeindegrenze in älteren buddhistischen Texten* (Berlin: Reimer, 1993) 242-258 (in German).

¹³ Horner, *Mahavagga* II 7.1-4.

psyche than does the *patimokkha* due to the merit gained by members of the initiate's family.

There are a number of other factors to be considered when creating a *sima*, some of which are discussed in the third volume of the *Vinayatthakatha*, a commentary on the *Vinaya Pitaka*. In Cambodia, these points were summarised in a booklet published by the Buddhist Institute of Phnom Penh, entitled *Sima-vinicchaya-sankappa* (*Summary of the knowledge on sima*), in 1932 by Brah Visuddhivans Huot That.¹⁴ This booklet included issues, such as the size of the *sima*, stating that the land delimited by the *sema* should not be too small. It must accommodate twenty-four seated monks, but alternatively must also not be too large. This text also deals with setting up the *sima*, stating that the boundary markers should not be interrupted by any other object or structure and they need to be clearly marked. The booklet also discusses the topic of creating a *sima* over a pre-existing, earlier one and what procedures need to be carried out in such circumstances.

The textual evidence illustrates that from the early stages of Buddhism, the demarcation and consecration of the *sima* was an important issue and that the particular rules and regulations concerning it have remained pertinent to this day. However, the *uposatha* did not actually originate with the Buddha, but was a practice already in existence at his time.¹⁵ According to the *Vinaya Pitaka*, the first Buddhist *uposatha* came about at the request of King Bimbisara and, as a result, the issue of where to conduct such a ceremony became an important one among the Buddha's disciples.¹⁶ The Buddha, in order to clarify the matter, answered that such a place must be marked by *nimitta*. This, then, is the origin of the idea of consecrating a sacred space with boundary markers of some kind.

¹⁴ Giteau 6.

¹⁵ Nagasena Bhikkhu, *The significance of the Sima (Buddhist Monastic Boundary) in Burmese Theravada: Authority and Practice*, Ph.D. Dissertation, Department of the Study of Religions, School of Oriental and African Studies, University of London (forthcoming).

¹⁶ Horner, *Mahavagga* II. 11.

From the textual evidence it is clear that from the time of the Buddha onwards, the issue of consecrating and demarcating sacred space was one of considerable importance. This was done by the use of *nimitta* which could be set up in various forms and using various materials, so long as they were clearly marked. In the Dvaravati period this was accomplished by using *sema* stones, however, whether they were used to demarcate both the *mahasima* and the *khandasima*, as well as other religious structures besides the *ubosot*, such as stupas, is a question that cannot be answered by looking at the textual evidence alone. This paper now moves on to inscriptional and archaeological evidence to shed more light on the function and use of *sema*.

Inscriptional Evidence

Inscriptions on *sema* are, unfortunately, the exception and not the norm, with the languages being used including Mon, Khmer and Sanskrit. Adding to the paucity of epigraphic evidence is their rather limited content matter, with the inscriptions that have been read and translated usually being votive in nature and containing little more than the name of the donor and formulaic dedications.¹⁷ However, there are a number of inscriptions that do clearly state the function of *sema* and, therefore, provide welcome evidence in this regard.

One of the most informative inscriptions found to date is K 981 from Wat Si Dhat in Udon Thani province (Figure 1), which was discovered during the Archaeological Salvage Expedition led by W. G. Solheim II and C. Gorman.¹⁸ This *sema* has a Sanskrit inscription in Pallava script translated by Coedès who dated it to the late 7th to early 8th centuries. The importance of this inscription comes from the fact that it clearly states that the *sema* in question had a boundary function. The full translation rendered from French into English is as follows:

¹⁷ Hiram Woodward, *The Art and Architecture of Thailand, From Prehistoric Times through the Thirteenth Century* (Leiden, Boston Brill: 2005) 103-4.

¹⁸ W. G. Solheim and C. Gorman, "Archaeological Salvage Program; Northeast Thailand, First Season," *Journal of the Siam Society* LIV 2 (1966): 159-161.

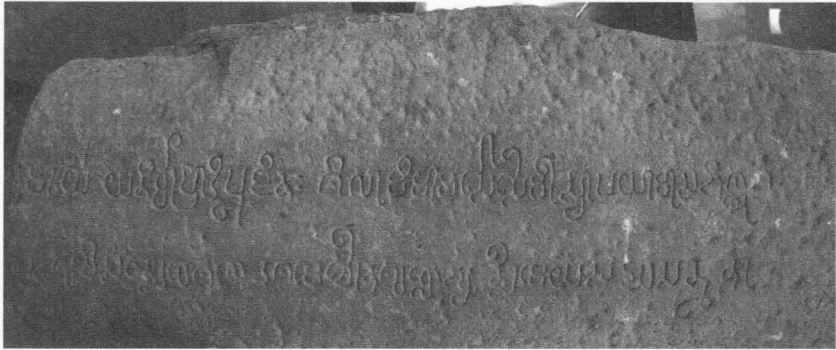


Figure 1

...this ascetic honoured by the Brahmins erected this stone having the function of boundary stone with the Bhikkhus.

...In saka...in the first Suci, the tenth day of the crescent moon of Caitra, this boundary stone was fixed by the assembly.¹⁹

Peter Skilling has proposed a revised reading, however, which differs somewhat in the nuance of the meaning. It is as follows:

[Name or epithet] the renunciant venerated by Brahmins and others caused, this stone in the form of a boundary by the monks to be established.

[Year in words] The 10th day of the bright half of Caitra, this boundary was agreed by the Sangha.²⁰

As Piriya Krairiksh states, this inscription leaves no doubt as to the function of *sema*.²¹ Furthermore, in Coedès' reading, it appears

¹⁹ George Coedès, *Inscriptions du Cambodge, Vol. VII*. (Paris: E. de Boccard, 1937-1966, 1964) (in French).

²⁰ Peter Skilling, Personal Communication, March 2010.

²¹ Piriya Krairiksh, "Semas with Scenes from the Mahanipata-Jatakas in the National Museum at Khon Kaen" (*Art and Archaeology in Thailand*, Bangkok: The Fine Arts Department, 1974) 42.

that the ritual was conducted by Brahmins; however, in Skilling's it looks as if Brahmins were present, but perhaps did not, in fact, conduct the consecration. Either way, the inscription does highlight the key positions that the Brahmins may have occupied in the 7th-8th century religious milieu. The inscription also appears to reference the passage in the *Mahavagga* discussed above, which states that a *sima* must be created within the presence of other monks, hence the statement 'fixed by the assembly.'

For further clear epigraphic references to the function of *sema* we must look to 15th century Burma. The Kalyani inscription commissioned by King Dhammaceti in 1477-78 CE outlines quite clearly the preferred arrangement for demarcating a *sima* with *sema* stones, stating that eight *sema* should be set up to form a rectangular or square shape. The relevant passage from Blagen's translation is as follows:

...the extent of the site, where the *sima* was to be made, having been marked (at) the corners (facing) the four quarters these four middle stones...it being an advantage to have eight boundary stones with a view to making (the plan) other than four-sided figure, the middle of each (side) to bulge somewhat (outwards) were planted (there also).²²

This inscription illustrates a number of important points. Firstly, by the 15th century the *sema* tradition had been established not only in the Khorat Plateau, but also in Lower Burma. It also shows that a certain uniformity had arisen by this period, with the number of *sema* seemingly restricted to eight and the boundary shape preferably square. As is shown below, this uniformity did not exist in the Khorat Plateau during the 6th-11th centuries.

Apart from their primary function as boundary markers, the handful of inscriptions that survive reveal that *sema* could also

²² C. O. Blagden, "Mon Inscriptions, Section II-The Mediaeval Mon Records. No. XII. The Inscriptions of The Kalyanisima, Pegu" (*Epigraphia Birmanica*, III, 2, Rangoon, 1928) 247.

function in a votive capacity. A number of the inscriptions indicate that the *sema* could have been dedicated by high-ranking individuals as acts of merit-making and perhaps, more importantly, as a very visible display of power and status.

In Cha-em's reading of Inscription K 404 from Bahn Kaeng in Kaset Somboon District of Chaiyaphum Province, she states that Cudamani, a high-ranking lady or queen, was a person interested in making beneficial karma and was known for her moral integrity and 'dharma-filled wisdom'.²³ Interestingly, according to Cha-em, the inscription goes on to state that the power and glory of the kingdom of King Srijayasimahavarman was based on her support. However, this reading is somewhat problematic and it seems that there is no clear evidence from the inscription to even propose that Cudamani was the name of a person, never mind one of high rank.²⁴

The Hin Khon inscription (K 388) also concerns royalty, being set up by a prince who had become a monk (*rajabhiksu*). He not only dedicated four *sema* of high quality stone, but also gave large donations.²⁵ Inscription K 388, therefore, not only provides us with a tantalising glimpse of society during the period, but also emphasises the importance surrounding the fixing and consecration of a *sima* by the use of *sema* stones.

One final inscription worth noting is from Kaset Somboon province, which is now kept at the Phimai National Museum. The inscription is in the Sanskrit language in Khmer script and mentions a *sugataprati-mavuddhasima*, which has been interpreted as referring to a Buddha image being set up within a *sima* demarcated by *sema* stones.²⁶ Interestingly, it appears that in this case the *sima* was not created as a place for monks to assemble, but as a sacred space within which to place a Buddha image. This further points to the fact that

²³ Cha-em Kaeokhlai [ชะเอม แก้วคล้าย], "Sila Charuek Phu Khio An lae Plae Mai [ศิลาจารึกภูเขา อำเภอลำปลายมาศ]" (*Silpakorn* 33, No 3, 2532 [1989]): 65, (in Thai).

²⁴ Peter Skilling, Personal Communication March 2010 [date].

²⁵ Woodward 104; Jean Filliozat, *Sur le Çivaïsme et le Bouddhisme du Cambodge* (BEFEO 70 Paris 1981) 84 (in French).

²⁶ Cha-em Kaeokhlai [ชะเอม แก้วคล้าย], "Charuek Kaset Sombun [จารึกเกษตรสมบูรณ์]" (*Silpakorn* 37 No. 3, 2537 [1994]): 59-66 (in Thai); Woodward 104.

during this period, the function of *sema* was not restricted solely to demarcating the *ubosot*, as it primarily was in later periods.

Woodward argues that the inscriptions can also cast a small degree of light on the religious persuasions at the time.²⁷ For example, he points out that the *dharma*-filled wisdom (*prajna*) mentioned in K 404 is of a Mahayana quality. However, he also notes that inscription K 965 mentions the *Abhidharma* and this could be seen as a Theravada, rather than a Mahayana feature. While it is tempting to make proposals upon such issues, reading religious persuasions off one or two isolated terms is problematic and speculative at best. It should also be kept in mind that the *sema* tradition during the Dvaravati period stretches over a large geographic area and a time span of over 400 years. It is not surprising, therefore, to find both Theravada and Mahayana influence arising within the tradition at different times and locations and we should not assume that the Buddhism being practiced at this time was homogenous.

The inscriptional evidence on *sema*, while sparse, does provide a number of important insights. Inscription K 981 clearly indicates that *semas*' primary function were as boundary markers. Inscriptions K 404 and K 388, on the other hand, may indicate that they also played an important role in patronage and social display, providing a medium for influential individuals to not only exhibit their religious piety, but to also flex their temporal power. When considered in conjunction with the textual evidence, an increasingly clear picture as to the ways and means in which the *sema* tradition functioned during the Dvaravati period begins to arise.

Archaeological Evidence

Evidence for the function of *sema* is also provided by archaeological excavations and survey reports. Excavations that have taken place where *sema* are still *in situ* have, to a large extent, confirmed the textual and inscriptional evidence in regard to the function of these objects; however, there have also been certain discoveries that show deviation from the canonical norms. At the

²⁷ Woodward 104.

moated site of Muang Fa Daed in Kamalasai District, Kalasin Province, for example, *sema* were not only excavated around a Dvaravati period *ubosot*, but also discovered on three sides of a stupa, indicating that they may have been used to demarcate a variety of religious buildings.²⁸ Furthermore, at Phu Phra Baht Historic Park in Bahn Pheu District, Udon Thani Province, *sema* have been placed around pre-historic rock shelters suggesting that they were used to convert a pre-Buddhist sacred space into a Buddhist one.²⁹

Muang Fa Daed as one of the largest Dvaravati Period settlements in the Khorat Plateau, possesses the largest amount of *sema* stones, and is a key site in regard to the study of these objects providing some of the most important evidence in regard to their development and function. It is a large moated site, measuring 171 hectares in total. Situated on the Pao River, a tributary of the Chi, it was not only placed close to a steady and reliable water supply, it also occupied an advantageous position in terms of trade and transportation along this river system, facilitating access to the Sakon Nakhon Basin to the north and the Chi river system to the south.

In 1968, a series of archaeological excavations was carried out by the Fine Arts Department. These excavations uncovered fourteen monuments, including foundations of an *ubosot* dating from the Dvaravati period with a number of *in situ sema* placed around it (Figure 2). Furthermore, excavations at the Dhatu Ya Gu Stupa near the centre of the site revealed Dvaravati foundations and also three more *in situ sema*.³⁰ These *sema* were placed on three separate sides of the stupa suggesting that they could have either been reused at a later date or that at this period *sema* may also have functioned as sacred boundary markers around stupas as well as around *ubosots*. By analysing evidence such as the style of bricks, the pottery record and

²⁸ Fine Arts Department of Thailand (กรมศิลปากร), *Concluding Report of the Survey and Excavations of Ancient Monuments at Muang Fa Daed Sung Yang* (รายงานการสำรวจและขุดแต่ง วัดอุสถานเมืองฟ้าแดดสงยาง), (Unpublished departmental report dated March 13, 2514 [1971]) (in Thai).

²⁹ Nandana Chutiwongs, "Phu Phra Bat: A Remarkable Archaeological site in Northeast Thailand," *Journal of the Siam Society*, 88 (2000): 42-52.

³⁰ Fine Arts Department of Thailand, 2514.

the stylistic traits of the artwork and architecture found, this excavation concluded that the Dvaravati period chronology of the site stretched from the 7th-11th centuries CE. Comparisons with other sites in the area and their artwork, particularly on *sema*, provide further evidence to support this proposed chronology.



Figure 2

In 1991, further excavations were undertaken by Dr. Phasook Indrawooth of Silpakorn University and the Fine Arts Department.³¹ This excavation succeeded in illustrating the close cultural links between the Dvaravati culture that flourished in the Chao Phraya Valley at the same period as that of Muang Fa Daed.

Further excavations in 2000 by the Fine Arts Department again found *sema* associated with a stupa located just outside the moat, further pointing towards the fact that at this period *sema* were used to demarcate stupa as well as other religious structures.³² The site of Muang Fa Daed, therefore, provides substantial evidence for the function of *sema* stones during the Dvaravati period.

³¹ P. Indrawooth, S. Krabuansang and P. Narkwake, "Muang Fa Daed Song Yang: new archaeological discoveries" (*Universite Silpakorn, editor, Récentes Recherches en Archéologie en Thaïlande: Deuxième Symposium Franco-Thai*. Bangkok: Silpakorn University, 1991).

³² Sukanya Baonoed [สุกัญญา บาโนเอ็ด], "A Newly Found Sima Stone in the Ancient Town of Fa Daed Song Yang (ใบเสมพบใหม่บริเวณเจดีย์ในมณฑลเมืองโบราณฟ้าแดดสงยาง)" (*Silpakorn Journal*, Vol. 45, No. 6. 2543 [2000]) (in Thai): 53-74.

The other major Dvaravati period settlement in the Khorat Plateau is Muang Sema, located on the Lam Ta Khong River in Nakhon Ratchasima Province and covers an area of over 150 hectares.³³ While the site was clearly important during the Dvaravati period, as is indicated by its size and findings, such as a *dhamracakra* and a sandstone Buddha image in *mahaparinirvana* posture, 11 metres in length, this fact is not particularly represented in the *sema* present. First of all, they are relatively few in number, seventeen in total and, furthermore, none bear any trace of narrative art or motifs, with the *sema* being either badly eroded or plain in appearance. The site does, however, possess some *sema* which are still *in situ* around a Dvaravati period structure which may have been an *ubosot*. The site, therefore, provides much welcome *in situ* evidence with the *sema* matching the canonical descriptions of their use.

The more versatile usage of *sema* stones during the Dvaravati period is attested to by the site of Phu Phra Baht Historic Park. This site, which straddles the Phu Phan mountain range in modern day Udon Thani Province, shows occupation from pre-historic times, evidenced by rock shelters and rock painting. However, with the subsequent arrival of Buddhism during the Dvaravati period, the location became favoured by forest monks looking for a place of retreat and meditation. Consequently, the pre-Buddhist 'animistic' rock shelters were ringed by *sema* stones, usually eight in number in order to convert the space to sacred Buddhist space (Figure 3). There are over sixteen such rock shelters on the site, with the majority of them surrounded by *sema*. The site, therefore, not only provides evidence for *in situ* *sema*, it also illustrates how these objects could be used in a variety of ways, depending on the specific religious needs that presented themselves.

³³ Elizabeth Moore, *Moated Sites in Early North East Thailand* (BAR International Series 400 1988) 9.



Figure 3

Other excavations carried out in Thailand show more differing practices. The sites of Bahn Nong Kluem and Bahn Pailom in Bahn Phue District of Udon Thani Province were excavated in 1998 by the Fine Arts Department.³⁴ Their excavations showed that at both locations the *sema* had been set up in a regular pattern to clearly demarcate sacred space. At Bahn Nong Kluem the *sema* were erected in a rectangular pattern numbering twenty-two in all, however, it is unclear if all are still *in situ*. At Bahn Pailom, on the other hand, the *sema* were again placed in a rectangular pattern, but this time in three concentric rows which expanded in size from the centre outwards. The *sema* at this site numbered twenty-four in total. These two sites illustrate that the number of *sema* used could total over twenty in some cases. Furthermore, no evidence for a structure was found in the centre of the areas demarcated by the *sema*, suggesting that it was either built of perishable materials or that there was no actual structure present.

A number of other archaeological sites, however, show patterns that become more familiar in later periods, that of demarcating a *sima*

³⁴ Fine Arts Department of Thailand (กรมศิลปากร), *The Bai Sema at Prapottabaht-buabahn, Ampore Ban Pheu, Udon Thani Province* (ใบเสมากลุ่มพระพุทธรูปบ้านอำเภอบ้านผือ จังหวัดอุดรธานี), 2541 [1998], (in Thai).

with eight *sema* stones. Bahn Na Ngam in Kalasin Province and Bahn Ilai in Vientiane Province of Laos, both possess *in situ sema* placed in a circle, illustrating that the configuration of a *sima* as square/rectangular was not the only acceptable shape in this period. In both cases it is unclear if there is a structure present at the centre as no excavations have taken place at either of these sites. Once again, it could be that the religious structure was made from perishable materials and no longer survives or perhaps, as epigraphic evidence illustrates, the space was used to place a Buddha image within. *Ubosots* constructed from perishable materials continued up until the recent present, with Thai examples often consisting of a wooden superstructure with walls built of either brick or, in less wealthy monasteries, woven bamboo strips.³⁵

Alternatively, both Krairiksh³⁶ and Matics³⁷ have suggested that perhaps in a number of cases there was no building present and the ceremonies took place in the open air. If this is the case, then the function of *sema* to create the *sima* becomes even more essential. Perhaps this goes some way to explaining *semas*' monumentality. In the absence of imposing religious architecture the *semas* could have functioned as a clear marker indicating the sacred nature of the space they enclosed. *Sema*, therefore, would have had a vital function in defining and shaping the visual religious landscape of the time.

Mention should also be made of the modern tradition of *luk nimit*, which is an integral part of the consecration ceremony today.³⁸ *Luk nimit* are round stones, approximately 30 cm in diameter, set up in sets of nine, eight of which are buried directly under the *sema* stones, with the ninth placed in the centre of the *ubosot*. However, *luk nimit* have never been found in association with Dvaravati period *sema* from the Khorat Plateau. It seems, therefore, that this tradition came later, perhaps as early as the Sukhothai period, and may represent a 'Thai' addition to the means by which sacred space is demarcated.

³⁵ K. I. Matics, *Introduction to the Thai Temple* (Bangkok: White Lotus Press, 1992) 23-24.

³⁶ Krairiksh 42.

³⁷ Matics 25.

³⁸ Matics 29.

The archaeological evidence for the function and use of *sema* paints a more varied picture than that given by the textual and epigraphic evidence. While it is clear that from the Ayutthaya and Sukhothai periods onwards, the *sema* tradition becomes more uniform, usually being restricted to eight or sixteen in number and placed only around an *ubosot* to create a *khandasima*, during the Dvaravati period the archaeological evidence illustrates that the *sema* tradition was less fixed and more fluid. It appears that *sema* were not only used to fix the *khandasima*, but also were set up to create other forms of Buddhist sacred space. It also seems clear from the evidence at Muang Fa Daed that they surrounded stupas as well as *ubosots*. The archaeology, therefore, shows that while *sema* were used to fulfill the doctrinal requirements laid down in the *Mahavagga*, they were also employed in more flexible ways, and it seems that they provided a ready solution at any time Buddhist sacred space needed to be clearly demarcated.

Typological and Artistic Evidence

Dvaravati period *sema* stones come in four main types, slab type, pillar type, octagonal type and unfashioned type.³⁹ Dvaravati period *sema* are also well known for their artistic quality. During this period relief sculpture was carved on a large amount of these objects depicting either scenes from *jatakas* or the Life of the Buddha, or alternatively a number of Buddhist motifs, such as stupas and lotus petals. In general it is agreed that this art style belongs to that of the Dvaravati period and shows affinities with the art of central Thailand. That a certain uniformity of design and a definable art style existed in regard to *sema* points towards a degree of homogeneity in the tradition. It suggests that the tradition originated within the region and spread out along the trade routes and settlements it encountered.

Identifying *sema* on typological grounds is also an essential method for the study of these objects. By comparing *sema* from *in situ* locations and those with secure provenance or inscriptions, we can then use this information to identify *sema* that have less secure

³⁹ Krairiksh 38-40.

archaeological contexts. In other words, by analysing the form, dimensions and style of *sema* we can then conclude whether stones are Dvaravati period *sema* or not. Typological evidence, therefore, allows us to recognise and record *sema* that may otherwise have been unidentifiable. It also enables us to distinguish between Dvaravati period *sema* and those of later periods, such as Sukhothai and Ayutthaya, where the form and design changed considerably.

Modern Worship and Re-use

One characteristic of Thai Buddhism is the re-use of ancient sacred objects, with *sema* being no exception. At a number of sites and locations, Dvaravati period *sema* have been re-used and are worshiped as sacred Buddhist objects in their own right. Therefore, in one sense they cease to be *sema* stones and take on other religious functions. A number of examples of this are discussed to emphasise how a *sema's* meaning can either change or stay the same depending on the context within which it is used.

The most common form of re-use encountered throughout the Khorat Plateau is employing Dvaravati *sema*, sometimes fragmentary ones, to create a new *sima*. This usually occurs when a temple builds a new *ubosot*. Instead of carving new *sema* from new stone, they gather Dvaravati *sema* and place them around the *ubosot*, usually eight in number (Figure 4). Sometimes gold leaf, paint or candles are placed on these *sema* as part of modern ceremony, ritual and belief. In these instances, therefore, *sema* retain their original use and meaning.

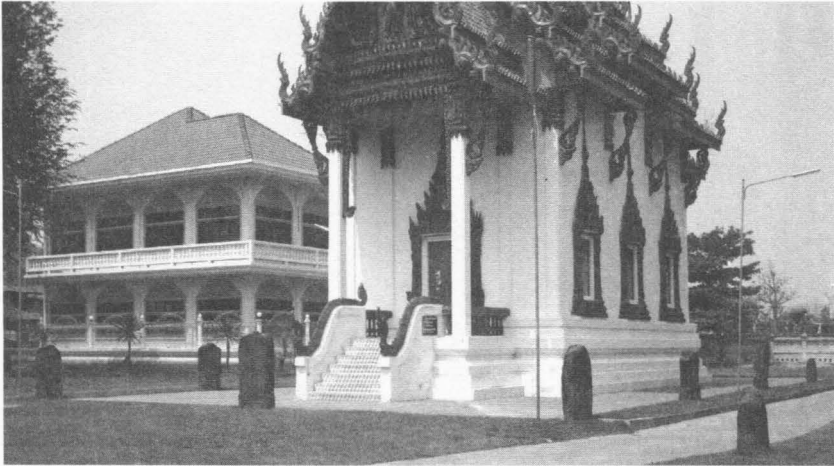


Figure 4

Another type of re-use which can occur is that a *sema* will be carved with a modern inscription, sometimes recording the year and month that the new *sima* was created. Some inscriptions can be older, however, and contain horoscopes or spells of an apotropaic nature. In these cases, the antiquity of the stone presumably adds to its sacredness. In these examples, we begin to see the meaning of *sema* start to shift.

Other common forms of re-use include Dvaravati *semas* being set up in *viharas* alongside Buddha images or in shrines of their own, and worshipped as sacred objects in their own right (Figure 5). The stone can sometimes be covered in gold-leaf or candles may be placed on top as an offering. There is also usually an incense stand placed in front of the stone and a mat for devotees to kneel and pray. Here, therefore, the stones are no longer *sema* as they are not being used to demarcate sacred space. Their meaning has shifted to that of an object of religious devotion.



Figure 5

In two particular instances, at Wang Sapung in Loei Province and Kalasin town in Kalasin Province, Dvaravati *sema* have taken on another usage altogether and have been set up as town pillars (*lak muang*). In Thailand, cities and town usually possess a town pillar that marks the centre of the settlement and these shrines are regarded as extremely sacred areas housing the local guardian spirits. That *sema* stones were chosen as town pillars once again illustrates the lasting sacred resonance that these objects possess.

One last example is worth mentioning, in Bahn Bua Semaram, Chumpair District, Khon Kaen Province, a *sema* is used to mark the boundary of the village and is placed directly under a modern road sign. This example reveals the ingenuity present among the local villagers and, in a certain sense, the *sema* is now used to form a *sima* demarcating the village's boundary.

The re-use of Dvaravati period *sema* stones illustrates the latent sacred power still possessed by these objects. It reminds us that Buddhism is a living tradition in Thailand and that the meanings of religious objects are not fixed, but constantly shifting to serve a specific religious community's needs. While *sema* may be considered by certain sections of the academic community as objects that should not be re-used but only stored or displayed in museums, with their

meanings fixed and static, we must also consider that if the past is not relevant to the present and the local communities whose heritage it is, then does it have any relevance at all?

Conclusion

This article has challenged the view that *sema* have a fixed meaning and function, an assumption based largely on textual sources and modern ceremonies regarding the consecration of the *ubosot*. Instead, this article has illustrated that *sema* during the Dvaravati period had many more uses and functions, ranging from demarcating the *khandasima* to being placed around stupa, rock shelters and Buddha images. They also played an important social role, acting as agents of political design and patronage. Finally, the re-use of *sema* today in a variety of situations, ranging from town pillars to apotropaic objects, reminds us that meaning is never fixed or static, but is constantly shifting depending on context and intention of use.

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