Chapter 25

# New Observations at P'ong Tuk and Ongoing Issues with the Conceptualization of Dvāravatī

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The archaeological site of P'ong Tuk, located in Kanchanaburi Province, west-central Thailand, was subject to field investigations by George Cœdès in 1927 and H. G. Quaritch Wales in 1936. Both investigations uncovered substantial material remains, including ritual objects and architecture, used to help define an early Buddhist " Dvāravatī" cultural expression in the region of central Thailand. These early investigations, however, while regularly cited in the scholarly literature, were brief and minimally reported. In 2008 the author initiated a comprehensive reevaluation of the Cœdès and Quaritch Wales data in light of new concepts and comparative evidence for the Dvāravatī phenomenon. This new research benefitted from the "rediscovery" of Quaritch Wales' unpublished field notes for his work at P'ong Tuk, and from a field reconnaissance of P'ong Tuk in January 2008. This re-evaluation and integration of site data resulted in the documentation of new objects and features at P'ong Tuk, and a more in-depth evaluation of older data. It also supported the identification of several new cultural patterns at the site, as well as new avenues for future research, all of which tend to coincide with wider issues extant for the conceptualization of Dvāravatī.

**Keywords**: Dvāravatī, P'ong Tuk, Phong Tuek, Indianization, localization.

## Introduction

The rural hamlets of Tambon P'ong Tuk reside on the right (westward) bank of the Mae Klong River in southern Kanchanaburi Province, western Thailand (Figures 25.1-25.3).[1] During short investigations by George Cœdès in 1927 and H. G. Quaritch Wales in 1936, P'ong Tuk yielded Buddha figures of various sizes and materials, molded "votive" tablets and other ritual artefacts, some domestic items, ritual architecture, figural stucco and terracotta, and limited information on at least thirteen inhumation burials. These finds were briefly described and discussed in several articles, including "Excavations at P'ong Tuk and Their Importance for the Ancient History of Siam" (Cœdès 1928a), "New Archaeological Discoveries in Siam" (Cœdès 1928b), "Further Excavations at P'ong Tuk (Siam)" (Quaritch Wales 1936), "Some Ancient Human Skeletons Excavated in Siam" (Quaritch Wales 1937), and "Some Ancient Human Skeletons Excavated in Siam: A Correction" (Quaritch Wales 1964). These finds over a nine year period occurred while Dvāravatī as a material and archaeological concept was germinating, and P'ong Tuk was established as a key representation of this early historic culture. This legacy continues as P'ong Tuk is referenced to the present day in nearly every general scholarly discussion of Dvāravatī. Nonetheless, an objective reading of the Cœdès and Quaritch Wales reports makes clear that neither their field work nor data analysis were exhaustive; indeed, their combined information leaves even general site boundaries and internal organization unresolved.

This combination of substantial content, limited systematic investigation and analysis, and rural land-use continuing to the present-day (Figure 25.3) suggested that a reconsideration of P'ong Tuk's existing material record, and of the site's potential to add new information to the record for Dvāravatī culture, was

[1] The spelling originally used by George Cœdès, and in much of the subsequent literature on the site - "P'ong Tuk" - is repeated here, even though a variety of more recent transliterations exist. At the time of the Cœdès investigation in 1927, P'ong Tuk was in "Ratburi" (Ratchaburi) Province.

appropriate, particularly when considered with the substantial comparative site data that has developed in the seventy-five-plus years since Cœdès and Quaritch Wales laboured on the west bank of the Mae Klong. The site's potential to add new information about Dvāravatī culture, in light of new investigative techniques and research questions, could also be evaluated. To this end, the author conducted a week-long field reconnaissance of the existing conditions and surface features at P'ong Tuk in January 2008, as well as an examination and photo-documentation of artefacts from the locality preserved in the collection at Wat Dong Sak. Features previously and newly documented were recorded both photographically and with global positioning system digital coordinates, allowing for comprehensive mapping of the site layout. Work in the field and during subsequent analysis was aided by reference to Quaritch Wales' original field notes, which had been "rediscovered" prior to the field reconnaissance.[2] The 2008 field visit resulted in more detailed information on previously recorded features at P'ong Tuk, and information on new features and artefacts, including architecture and ritual images. Preliminary reports and published articles have subsequently been generated on several aspects of this new data (Clarke 2008a, 2008b, 2009a, 2009b, 2010, 2014; Indorf, Gudur and Clarke 2014; Lavy and Clarke 2015), as well as a summarizing Master's thesis (Clarke 2011).

## The site of P'ong Tuk: geophysical setting

P'ong Tuk has to the present day maintained a rural character, dominated by stands of banana palms and fields of cultivated sugar cane, corn, and chili peppers (Figure 25.3). The circumstance of not being "submerged beneath the accretions of later civilizations" recommended the area to investigators over seventy-five years ago (Quaritch Wales 1936, 43), and continues to distinguish P'ong Tuk from many other Dvāravatī sites in central Thailand which have been impacted by modern urban development. This limited alteration of the land at P'ong Tuk enhances the site's potential to supply additional significant information.

P'ong Tuk resides in a transitional zone between the Central Plain to the east and the Tenasserim Highlands on the west (Figure 25.4). The Plain is a broad lowland area following the Chao Phraya River basin, bordered on the west, north, and east by abrupt highland zones, and on the south by the Gulf of Thailand (Gupta 2005a, Figures 3.1, 3.5; Phienwij and Nutalaya 2005, Figure 21.1).

This low basin is deeply filled with sediment eroded from the surrounding uplands (Gupta 2005a, 51). The gulf seas have repeatedly transgressed and regressed across the southern end of this basin, moving the shoreline and creating generally marshy conditions that presented obstacles to human traversal, settlement and agricultural development; with adequate drainage and management, however, these fluvial soils can support dense cropping and human occupation (Ibid.; Dudal 2005, 95-96).[3] The outermost beach-line of the embayment is approximately 16 km. east of P'ong Tuk (Teeyaphan et al. 1990, Figure 2-26).

The P'ong Tuk locale is specifically positioned on the narrow Marginal Plains zone, residing between the Central Plain to the east and the Western Mountains region to the west (Kaida and Surarerks 1983, Figures 1, 2, 6). This geophysical sector is in the rain shadow of the mountains, creating "one of the two driest zones" in Thailand (Op. cit., 235, 248-249). Rainfall is unreliable even during the main growing season, and temporary periods of drought are a continuing problem (Op. cit., 237; Murata and Matsumoto 1974, 283). The climate in this marginal zone is described as "tropical monsoon with a long dry season" (Kaida and Surarerks 1983, Figure 2).

The land surface at P'ong Tuk is level to moderately undulating, criss-crossed by numerous small streams most of which now appear to have been artificially channelized. This high valley floor along the Mae Klong channel is situated on the Mae Klong Fan,[4] a Late Pleistocene delta that resides around three

[2] These notes were located at the archives of the Royal Asiatic Society, London, having been donated by H. G. Quaritch Wales' widow, Dorothy, circa 1995. The author is grateful to the RAS staff for permission to photocopy these documents.

[3] While some archaeological references assert that the gulf coastline was as much as 130 kilometers inland in the Dvāravatī period, placing the major settlements on or much closer to the sea margin, modern geological studies indicate that the Dvāravatī coastline was only marginally inland from the present-day boundary (Sin Sinsakul 2000, 424; Kanjanajuntorn 2006, 101; Trongjai Hutangkura 2011 & 2014, 62).

[4] The Mae Klong Fan is reported to have begun forming before 8000 years ago, and reached its final form approximately 4000 years ago (Tanabe et al. 2003, Figure 8).

meters above the Central Plain surface, and more-or-less on the foot of the adjacent uplands (Tanabe et al. 2003, 790, Figure 1; Fukui 1976, Figures 1-2). Given P'ong Tuk's location well downstream from the Mae Klong's upland headwaters, it is likely that the terrace here consists of relatively thin older sediments overlying lateritic soil (c.f. Murata and Matsumoto 1974, 282 and Figure 25.4). The Mae Klong River course at P'ong Tuk evidences steep high banks that are typical of streams originating in uplands, with the resulting coarse-grained sediment carving abrupt channels (Gupta 2005b, 68-69). Even so, inundation of the surrounding valley floor can occur, as high-flow periods may see changes in water level of 10-20 meters (Op. cit., 72).

The soils and their geophysical setting at P'ong Tuk bear on the cultural history of the locality. These factors are not generally suited for growing wet rice, and may have been utilized through time for a dryland farming regime geared to crops such as millet and dry rice (c.f. Mudar 1995, 163). Dryland agricultural practices were probably more extensive and important to past subsistence on mainland Southeast Asia than has generally been recognized, and site survey strategies in fact appear to have been biased toward wet rice production zones (Op. cit., 160-163). Such strategies can "lead to erroneous conclusions about the development of agricultural systems in the region" (Op. cit., 160). Sites like P'ong Tuk, located outside wet-rice production zones, can help improve the record for agricultural strategies through time on mainland Southeast Asia, particularly if research includes the recovery of ethnobotanical and related information. Such information for Dvāravatī is presently very limited.

## The P'ong Tuk reconnaissance

The information that is recorded for P'ong Tuk is an accretion of investigations and analyses over the past eight decades, beginning with the field work of George Cœdès and H. G. Quaritch Wales, adding several finds and analyses since that time, including the present analyst's reconnaissance in January 2008. Some aspects of the site record have undergone relatively extensive discussion by scholars (e.g. the "Mediterranean lamp" recovered by Cœdès – c.f. Brown and MacDonnell 1989, Borell 2008), while others have been largely ignored (e.g. the extended burials excavated by Quaritch Wales). Some categories that received extensive initial attention (e.g. the Buddha figures reported by Cœdès) have faded from prominence, while the site's architectural remains have retained their status as among the better examples of Dvāravatī construction. A principal result of the 2008 reconnaissance evaluation, which has examined the accumulated site information through a series of interrelated categories (Clarke 2011), is the recognition that P'ong Tuk has yielded only a small portion of its potential information, an assertion made with some irony, given the prominent place this site has occupied in the literature and scholarly discussion regarding Dvāravatī. Already treated as a seminal resource, P'ong Tuk may have a great deal more to tell us regarding Dvāravatī culture and chronology.

The 2008 field reconnaissance included the inspection and digital recordation of preserved architectural features, observation of surface and subsurface cultural content, photographic documentation of artifacts recovered in the locality, and the interview of local residents regarding cultural features and objects. By integrating the multiple sources and types of information for P'ong Tuk during the subsequent analyses, the present study anticipated that new material patterns might be tentatively observed, leading to the formation of new questions about the social and material content of the site. Such questions, applied at the local site level, can generate comparative information that supports analysis at regional and trans-regional scales. The potential for these broader comparisons was fortuitously demonstrated by the discovery of Dvāravatī-era architecture with human remains in proximity at the site of Dong Mae Nang Muang.[5] These discoveries occurred at the same time that such patterns were being scrutinized in the P'ong Tuk record, and were the subject of communication between Ohio and the archaeologists in the field at Dong Mae Nang Muang. These concurrent events have resulted in discussions at conferences and in the literature of potential

[5] Dong Mae Nang Muang is characterized as "one of the northernmost settlements of the Dvāravatī culture," located in Nakorn Sawan Province, north-central Thailand (Murphy and Pongkasetkan 2010, 49). It is an oblong-shaped settlement surrounded by a moat and a wall. Absolute dates have not been published yet, but the site is generally dated, based on artefact styles, to the 8th-12th centuries (Op. cit., 57).

new material patterns for Dvāravatī culture (Clarke 2009b; Glover 2010; Murphy and Pongkasetkan 2010; Pongkasetkan and Murphy 2012; Clarke 2014), and have suggested a new line of inquiry at Dvāravatī sites. Such developments illuminate the potential to obtain new insights from both old and new information, while also reflecting the incomplete nature of the existing characterization of Dvāravatī.

## P'ong Tuk's cultural content and its implications

Based on the items and structures discovered in 1927, George Cœdès described P'ong Tuk as a Buddhist occupation perhaps beginning as early as the 2nd century CE, but focused on the 6th century (1928a, 207). H. G. Quaritch Wales generally agreed with this temporal attribution (1936, 42-43), but by asserting that the burials he found at P'ong Tuk predated the Dvāravatī occupation, he implied a pre-Buddhist component at the site which, however, he never substantially discussed. Cœdès and Quaritch Wales also both initially characterized P'ong Tuk as a "city," and treated it as an exclusively Buddhist occupation.

The re-evaluation of P'ong Tuk, drawing on additional information for the site and comparative information from other sites developed since the work of Cœdès and Quaritch Wales, suggests that P'ong Tuk was a settlement of longer duration and greater social complexity than has been previously ascribed, probably operating at an intermediate level in the Dvāravatī settlement hierarchy or heterarchy. Settlement data compiled by Matthew Gallon indicates that of 28 settlements attributed to the Dvāravatī culture and having their general layout described, only three – including P'ong Tuk – are documented as non-moated (Murphy and Pongkasetkan 2010, Figure 1). This could indicate that P'ong Tuk represents a rare Dvāravatī settlement type, or more likely, a type more difficult to identify in the field due to minimal above-ground remains and the masking of cultural deposits under alluvium. Certainly, differences in site size, distribution across the landscape, and internal layout reflect socio-political organization, an important aspect of Dvāravatī culture which remains poorly understood. The nature of Dvāravatī socio-political organization through time continues to be debated by scholars, with a wide range of conceptualization that includes a unitary kingdom (Cœdès 1929; H.R.H. Prince Damrong Rajanubhab 1973 [1926]), a confederation of regional polities (Quaritch Wales 1969), a complex chiefdom (Wheatley 1983), bicameral organisation with a western Buddhist polity and an eastern Hindu polity (Srisakra Vallibhotoma 1986), and an oscillating *mandala* (Brown 1996; Wolters 1999).

Addressing questions about Dvāravatī settlement function and chronological placement requires a broad base of detailed information excavated from many site types. This sort of data will permit the identification and comparison of both local material distinctiveness and patterns of general similarity across Dvāravatī territory, helping to trace social and political relationships among settlements and regions. The on-going systematic excavation of Dvāravatī era sites is working to document the broad range of sites needed to obtain a clearer view of Dvāravatī socio-political organization (c.f. Mudar 1999, 22-23).

Cœdès' dating of the ritual figures and fragments retrieved from P'ong Tuk to circa the 6th century CE (1928a, 198) placed them within an "early Dvāravatī" context, based on a generalized, non-absolute chronology. Later analysts have tended to shift the temporal attribution of the P'ong Tuk finds to the 8th-9th centuries (Griswold 1966, 71; Quaritch Wales 1969, 65). Most of a series of newly described Buddha figures from the Wat Dong Sak collection of local artefact finds repeat the stylistic forms and temporal attributions of the Cœdès specimens, but an adorned Buddha image (Figure 25.5) exhibits traits generally attributed to an early 2nd millennium tradition centered in Haripunchai to the far north (Stratton 2004, 121-126, 260-262; Clarke 2011, 73-75). This crowned specimen also raises the possibility of practices at P'ong Tuk sometimes labelled with the highly general terms "Mahayana" or "Vajrayana," as are also the bodhisattva figures and mandalic arrangement of elements found on some moulded sealings ("votive tablets") from the site (Op. cit., 90-96). Fragments of two "Banaspati tablets" (Figure 25.6) have also been added to the list of ritual types from P'ong Tuk (Op. cit., 65-68), as well as a stone pillar (Figure 25.7). Altogether, the total assemblage of Buddhist objects ascribed to P'ong Tuk suggests a greater complexity of styles, practices, and temporal range than was previously recognized. This is no doubt a reflection of the dynamic nature of trans-cultural adoption and adaptation during the 1st millennium CE (c.f. Prapod Assavavirulhakarn 2010, 63).

The presence of molded sealings, or "votive tablets," at P'ong Tuk was only briefly mentioned by Cœdès, but nine examples have been newly described from the Wat Dong Sak collection (Clarke 2011, 90-96). These mostly appear to be Dvāravatī-era types, but two wider, arch-shaped tablets appear to have Khmer-influenced elements, again suggesting a later, possibly "post- Dvāravatī" occupation at the site.

Other material types documented for the P'ong Tuk locality in 2008 include a series of stucco and terracotta specimens that are probably all or mostly architectural details. These resemble the distinctive set of forms and decorative motifs that Dupont felt were localized to P'ong Tuk (Dupont 2006, 84). Along with unusual elements observed on a small limestone Buddha plaque (Figure 25.8) and a large Visnu image from the site (Lavy and Clarke 2015), it may be that a local artistic idiom or idioms can be associated with P'ong Tuk. Since the late 1970s, as excavated site data has accumulated, there has been increasing recognition that a localized diversity of social practices and material assemblages has been typical among prehistoric and protohistoric settlements on the Southeast Asian mainland. This is certainly the case in Thailand, where "one of the most interesting outcomes of surveys and excavations of the past few years is the recognition of regional variability; that what is true for the northeast does not hold for central, west or southern Thailand" (Glover 1991, 352). Distinctive assemblages are often observable even among sites in proximity to one another (Glover 1980, 19). Piriya Krairiksh discerns 15 regional sub-traditions within a general "Mon Style" across Thailand during the Dvāravatī era (1977, 38, 50-51), and Skilling asserts that religious practices also show socio-geographic variation, stating that "the Buddhisms of the Mon, Burmese, Central Thai, Shan, Lanna Tai, Lao, and Khmer are each quite distinctive" (2003, 103/f.n. 39). For Dvāravatī specifically, Srisakra Vallibhotama sees polities organised along individual river valleys that, while sharing certain elements diagnostic of Dvāravatī culture, are otherwise not "well integrated" (1986, 233-234).

Quaritch Wales recognized west-central Thailand as one of five sub-traditions in Dvāravatī (1969, 20-67). His "Western Dvāravatī" includes U Thong, Nakhon Pathom, Khu Bua, and P'ong Tuk – a complex of settlements that has been termed the Dvāravatī "heartland" (Skilling 2003, 105). Within this group, Guillon (1999, 89) sees distinctive traits in the art of Nakhon Pathom (squarer, heavier facial features), U Thong (rounder facial features), and Khu Bua (with an "indigenous style . . . almost anecdotal"). Clearly, there is substantial evidence for local and regional styles and practices within the Dvāravatī cultural tradition. This "constant renegotiation" of foreign and indigenous cultural elements on a geographically and socially local scale (Polkinghorne 2011, 334), producing cultural hybrids that vary significantly in their details, while still operating within broader material and social traditions, is perhaps the fundamental pattern of trans-regional cultural amalgamation in Southeast Asia during the 1st millennium CE (Op. cit., 334-337). Our knowledge of these patterns among Dvāravatī sites can be expanded via research designs that explicitly address the phenomenon of localization.

The discovery of a major Visnu image at P'ong Tuk in the early 1950s documented a Brahmanical element at the site that has, however, only recently been analyzed in detail (Lavy and Clarke 2015). Uncovered during road construction activities, the fragmented image was reconstructed by monks to a height of approximately 80 cm and placed on display in the local wat. The general find-spot of this Visnu image was ascertained from local informants and digitally recorded by the 2008 reconnaissance (Clarke 2011, 121 and Figure 52), noting that this location is close to a smaller rubble-mound mapped by Cœdès (but not excavated), raising the possibility that this Visnu was originally contained in a small shrine structure. Additionally, the Visnu find-spot is close to an old cross-roads location and thus may have resided originally at an important place in the settlement layout.

At the southern Ban Nai Ma structural group excavated by Cœdès (Figure 25.9), a laterite foundation six meters square, interpreted at the time to represent a "small temple," included a square image pedestal near its center (Cœdès 1928a, 198-199). Both in the illustrations published by Cœdès, and in its present state at the Ban Nai Ma location (Figure 25.10), this pedestal displays a broad, shallow channel on one side that suggests it is a *yonī* or *snānadroṇī* type platform associated with Saivite practices. In contradiction, then, to the treatment of P'ong Tuk by Cœdès and Quaritch Wales as a purely Buddhist site, there are also multiple indications of Brahmanical content.

The co-existence of Buddhist and Brahmanical objects and practices at sites labeled Dvāravatī has long been recognized and discussed (e.g. Quaritch Wales 1969, 90; Srisakra Vallibhotoma 1986, 231-235; Brown 1996, 48, 51, 56-61; Ray 1997, 43; Phasook Indrawooth 1999, 233; Dupont 2006, 11 and 93), yet the manner in which these religious components functioned and interacted through time across Dvāravatī territory and within Dvāravatī settlements remains unclear. The presence of both Buddhist and Brahmanical components at P'ong Tuk, and perhaps of multiple approaches to Buddhist practice, speaks to general questions about the early adoption of Indic religious practices, including the relationship of these religious traditions to each other and to the indigenous beliefs they encountered in Southeast Asia

Certain Dvāravatī ritual forms (e.g. repetition of the *mudra* on both hands of an image, the prevalence of the *vitarka mudra*, the monumental *cakra* wheels, and the "Banaspati" iconography) indicate a new synthesis of Buddhist practice distinct from forms in South Asia. Most of these new forms have been documented at P'ong Tuk, and additional patterns at the site, such as the close spatial positioning of inhumation burials and ritual architecture (Clarke 2014), may further describe an early Southeast Asian admixture of Indic and indigenous practices. The combination of Buddhist and Brahmanical elements, as well as non-local and indigenous ritual elements, is typical of Dvāravatī settlements, but these cultural patterns have not been analyzed in sufficient detail across a broad range of sites. Previous models have tended to segregate religions and sects into geographically, temporally, and/or socially discrete units, whereas the potentially contemporaneous presence of various practices at sites like P'ong Tuk suggests that co-existence and integration may have been more typical (c.f. Brown 1996 48, 56-61; Skilling 2011, 371, 373; Revire forthcoming).

The architectural features uncovered by Cœdès and Quaritch Wales at P'ong Tuk have received considerable scholarly attention over the years, particularly in their preservation of formal details and range of functional types (originally interpreted to be assembly halls, shrines, and *stupas*). This preservation of the lower structural courses can be ascribed largely to the protective accumulation of flood-deposited alluvium at the site.

The 2011 evaluation has noted that the architectural features fall into three materially and geographically discrete groups (Figure 25.9), with structural remains composed of laterite-only at the Ban Nai Mai area in the south, a group of brick-only features in the area of Quaritch Wales' stupa and *vihara*, and structural remains combining brick and laterite at the San Chao/"Banana Garden" complex in the north (Clarke 2011, 166-174). This patterning may simply be fortuitous, but the discrete clustering of building materials raises the possibility that these groups represent a progression of construction techniques through time. It would not be unusual for P'ong Tuk to have some time depth of occupation, a possibility already suggested by the artistic styles present at the site. The earliest permanent ritual construction in Southeast Asia consists of brick-only structures, and it may be that the earliest architectural features at P'ong Tuk are brick-only. These are also where burials were found close to the structural foundations, a phenomenon that might represent the persistence of indigenous mortuary traits early in the process of adapting Indic religious practices in the region of central Thailand. Such observations at P'ong Tuk are provisional in nature, but point to another line of investigation that should be pursued at this and other Dvāravatī sites.

The potential seriation of architectural features at P'ong Tuk relates to the issue of chronology for Dvāravatī. While many analysts agree that a "Dvāravatī culture," or groups utilizing the Dvāravatī art style, operated for a period of circa 500 years (6$^{th}$ or 7$^{th}$ century to the 10$^{th}$ or 11$^{th}$ century CE – e.g. Quaritch Wales 1969, 1; Lyons 1979, 352; 1; M. C. S. Diskul 1979, 360; Wheatley 1983, 199; Brown 1996, xxi; Phasook Indrawooth 2002, 37), this is another much debated area within Dvāravatī studies. The difficulty in identifying a temporal period rests with two conditions: a lack of consensus on how to generally define the Dvāravatī entity – an anthropological culture? ethnic tradition? art style? cross-cultural polity? – and the relatively small number of absolute dates so far generated for Dvāravatī components. Obviously, the general conceptualization of Dvāravatī influences where an analyst looks for the beginning and end points of a "Dvāravatī period." If the concept is relegated to the era when monumental sculpture was produced, then Dvāravatī may be reduced to two or three centuries duration, perhaps from the 7$^{th}$ to 8$^{th}$ or 9$^{th}$ centuries CE (c.f. Brown 1996, 136-137). If, however, it is conceived as a continuum of cultural development, with

roots in antecedent traditions and influences projected into succeeding cultural entities, then a "Dvāravatī period" becomes much longer, its beginning perhaps now extending into the earlier 1st millennium CE and including a "proto" era when new Indic ideas encountered receptive Southeast Asian societies (Clarke 2012). This approach to defining Dvāravatī, including the recognition of a "proto-Dvāravatī" phase in a long continuum of cultural development, seems to have recently gained wider acceptance, as reflected in reports of field work such as the 2009 excavations at Hor-Ek, Nakhon Pathom (Saritpong Khunsong et al. 2011).

Gallon (2013, Appendix A) has compiled the radiocarbon and thermoluminescence dates reported for Dvāravatī contexts at eight sites in Thailand. These consist of 35 dates to which some variation of the label "Dvāravatī" is attached (e.g. in some cases "Proto- Dvāravatī" or "Early Dvāravatī"). The range of this group, from the 1st to the 13th centuries CE, reflects the continuing ambivalence regarding the concept of Dvāravatī. Bringing the definition and dating of Dvāravatī into better focus will require interaction between proposed conceptualizations and data collection in the field, with both arenas supplying mutual feedback.

The potential for cultural features wholly unmarked on the present land surface was not substantially discussed in the published Cœdès and Quaritch Wales reports. Unpublished details provided by Quaritch Wales' field notes, however, and new information gathered on site in 2008, indicate that such features are present at the P'ong Tuk locality. Among other features encountered by Quaritch Wales in 1936, he noted the subsurface presence of "Dvaravati kilns" in his field notes. Buried cultural features have also been encountered by local residents while digging for domestic purposes, and perhaps most significantly, there is evidence for a buried Dvāravatī-era occupational stratum across a broad area of the locality (Clarke 2011, 28-31). Present information indicates that the accumulation of alluvium over time has buried earlier living surfaces, placing the Dvāravatī-era deposits at P'ong Tuk up to 1.1 meters below the modern surface.

These observations indicate the potential at P'ong Tuk to yield new information from *in situ* archaeological contexts. It also suggests that a substantial body of Dvāravatī occupation here and elsewhere may be buried on alluvial terraces and plains, masking a segment of the era's settlement system and social organization. The alluviated burial of Dvāravatī cultural remains has been noted in other localities, and it is incumbent on fieldworkers to include these buried components in their research strategies. Much attention has been given to the large walled and moated sites with surface architectural remains, but other types of Dvāravatī-era sites exist that are not readily apparent at ground-surface. These sites are not as easy to locate, and may require the application of geophysical techniques such as ground-penetrating radar. Buried sites in general present good spatial integrity and preservation for a wide range of material remains, not least of which is the botanical content that has received less attention in the exploration and discussion of Dvāravatī cultural remains.

The record for P'ong Tuk now includes information on a variety of human skeletal remains accounting for up to eighteen individuals. Seven of these – the "giant" reported to Cœdès, the looted inhumation at Quaritch Wales' "*vihara,*" and five skulls described in 2008 – are based on "hearsay" reports, but tentatively indicate spatial proximity to three structural locations (Clarke 2011, 179-183; Clarke 2014). The extended inhumations of eleven individuals are known in much more detail through published reports (1937, 1964) and the field notes of H. G. Quaritch Wales. These are within or adjacent to two ritual structures: the "*stupa"* and "*vihara*" excavated by Quaritch Wales. Although Quaritch Wales asserted that these inhumations were not Dvāravatī in age, the recent analysis perceives strong vertical and horizontal spatial evidence for the direct association of these burials with Dvāravatī architecture at P'ong Tuk (Clarke 2014, 323). It is also the case that of the six structural locations systematically excavated at P'ong Tuk, contiguous human remains were encountered at the two locations where digging proceeded beyond the foundation level. This raises the possibility that the association of remains and architecture at P'ong Tuk may have been more consistent than is presently documented, given that excavation depths were at several locations too shallow to intercept burials, and given the "hearsay" reports of additional human remains close to some structural locations.

The potential association of extended inhumations with Dvāravatī architecture contrasts with suggestions that Buddhism and the exclusive use of cremation arrived concurrently in Southeast Asia,

and relates to issues concerning the nature of so-called "Indianization" and the persistence of indigenous practices. The current information from P'ong Tuk is not definitive, but strongly suggestive of new concepts to be explored by future research. The potential of this line of inquiry is further emphasized by the recognition of inhumation burials at several other Dvāravatī sites, including Dong Mae Nang Muang (Pimchanok Pongkasetkan and Murphy 2012), the Wat Chom Chuen and Chaliang areas of Si Sisatchanalai (FAD 1997; Hein et al. 1988), and at Muang Fa Daed (Phasook Indrawooth et al. 1991; Phasook Indrawooth 1994, 2001). Clearly, the appearance of exogamous ritual practices in the Dvāravatī era does not present a wholesale replacement of indigenous traditions, but the current sample and analysis of human remains from Dvāravatī-era components is not adequate to trace detailed patterns of mortuary practice across the region.

The intentional combination of human remains with ritual architecture, if this occurred at P'ong Tuk, would have affinity with practices in the Pyu culture region of Myanmar. Human remains, primarily as cremations in jars but also as extended articulations or secondary bundles, occur in the foundation layers of Buddhist halls and *stupas* at Pyu sites (Stargardt 1990, 153, 206-207, 214; Moore 2007, 241). Affinities between Dvāravatī and Pyu artistic styles are also apparent (Brown 2001, 35; Hudson and Lustig 2007, 274; Galloway 2010), and P'ong Tuk's location in the Mae Klong River valley places it on the main conduit to the Three Pagodas entry into the Myanmar region (Figure 25.2). It seems likely, then, that the settlement of P'ong Tuk was a participant in first millennium interactions between Dvāravatī and culture areas to the northwest. The Visnu figure uncovered at P'ong Tuk also exhibits elements that appear to have connections to the northwest, and also to Khmer and Cham sculpture to the east (Lavy and Clarke 2015).

The Three Pagodas passage connects to extensive inland trade routes, including elements of the "Southern Silk Road" extending out of southwest China and Central Asia (Clarke 2012a). Discussions of Dvāravatī trade connections in particular, and mainland connections in general, have tended to focus on maritime routes, with overland connections receiving less attention (Frank 1998, 101; Phasook Indrawooth 2004, Figure 6.3). Certainly, however, the inland routes extending from Dvāravatī territory were important,[6] connecting not only to southwestern China and Central Asia but also to the intermediate Arakan, Pyu, Tennasserim, and Cambodian regions, as well as the preeminent commercial and trade centers of Bengal in northeastern India (Kuo Tsung-fei 1941; Stargardt 1971; Zhu Changli 1993; Chowdhury 1996; Dhida Saraya 1999, 59; Frank 1998, 86-104; Revire 2011).

P'ong Tuk's location within the Mae Klong river corridor provides connections both with these interior regions and to the sea routes accessed on the Gulf of Thailand. Indeed, Dhida Saraya (1999, 59) depicts the Mae Klong valley as the main western entry conduit into Dvāravatī territory. Dvāravatī participation in the overland aspects of the "Southern Silk Road" has not been sufficiently investigated, and may be a key element in understanding the spread of new cultural elements among all these regions. P'ong Tuk is famous for the Mediterranean-style lamp found there (Brown and McDonnell 1989; Borell 2008), but a more systematic record of artistic styles, religious practices, pottery and bead types, and other social patterning at the site may be more revealing of important trade and socio-political relationships. Located intermediate to the Dvāravatī-era centers at U Thong, Nakhon Pathom, and Khu Bua (Figure 25.4), archaeological deposits at P'ong Tuk are likely to reflect the movement of ideas and commodities from both inland and maritime sources during a period that was critical to the formulation of significant new concepts and institutions across mainland Southeast Asia.

Existing data on trade content from sites attributed to the Dvāravatī culture is difficult to translate into quantitative values. A tabulation of non-local types reported at 30 site components labeled "Dvāravatī" in five regions of Thailand may provide a preliminary indication of proportional trade values at foreign, regional, and local scales (Clarke 2012a). Of 66 instances where these scalar categories were applied to objects, 58 (87.9%) were said to be regional products, 8 (12.1%) were identified as items from foreign sources, and no objects were identified as local trade items (i.e. exchanged among adjacent communities within a region). These distributions tentatively suggest that the foreign objects so often emphasized in the

[6] An unpublished study by Sun Laichen (1994) of 13th to 18th century CE trade records for Myanmar, as an example from a later period, indicates that overland trade values accounted for at least one-fourth to one-third of all foreign exchange (Frank 1998, 102).

literature for Dvāravatī may have had a very secondary role in the era's trade milieu, with interactions on a regional scale taking precedence. This tabulation also raises a concern, however, for the absence of local networks in the discussion of Dvāravatī trade. These data patterns may reflect research preferences and analytical choices more than the reality on the ground, but in any event they suggest that a reassessment of how Dvāravatī trade has been described and discussed may be needed.

## Conclusion

As has been indicated in the preceding comments, the accumulated body of information for the site of P'ong Tuk presents a combination of frustrating insufficiencies and interesting potentialities that in many cases parallel the questions and issues extant for the Dvāravatī phenomenon in general. In the 130 years since a socio-political entity named "Dvāravatī" was recognized in the region of Thailand, scholarly work toward documenting and conceptualizing Dvāravatī has provided a solid base from which future research can proceed. Yet despite these efforts, fundamental questions remain concerning the material content, chronology, socio-political structure, ritual practices, and geographical reach of Dvāravatī. Reexamining known Dvāravatī sites such as P'ong Tuk with new field methods and research questions is one aspect of on-going research. Combined with the discovery and examination of new sites, further insights regarding the Dvāravatī phenomenon can be developed, based on the systematic collection of data oriented explicitly to the questions that persist.

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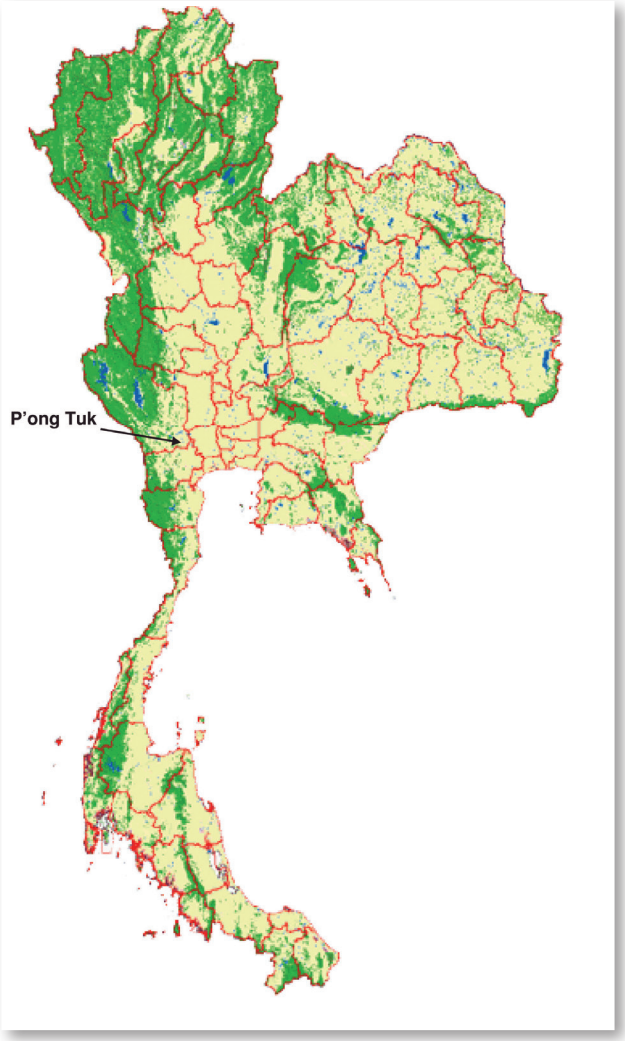


Fig 25.1

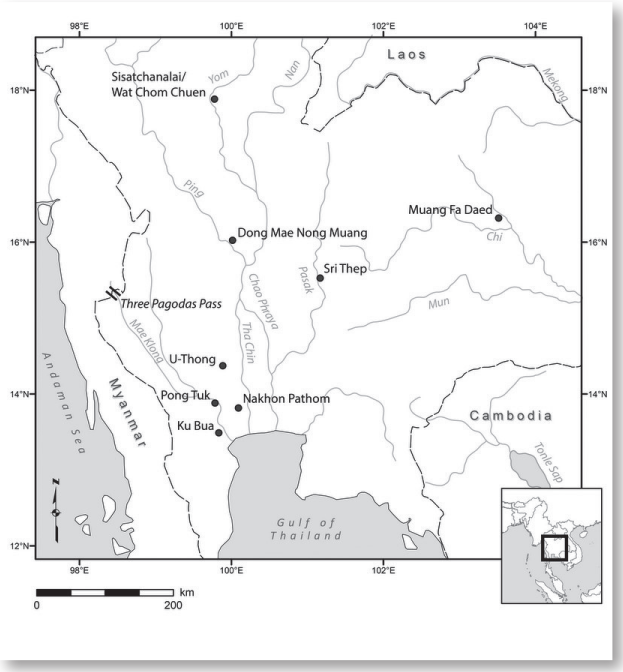


Fig 25.2

Fig 25.3

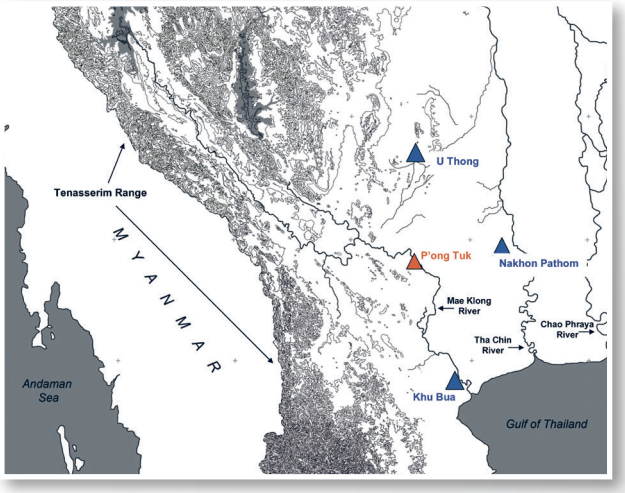


Fig 25.4

*Fig 25.5*

*Fig 25.6*

*Fig 25.7*

*Fig 25.8*

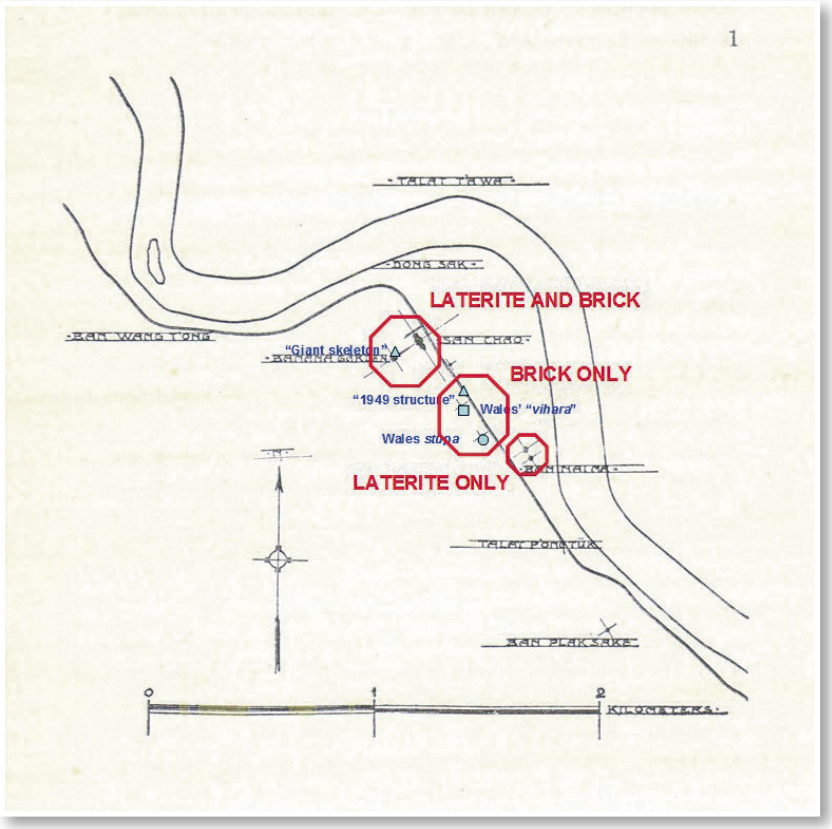


*Fig 25.9*

*Fig 25.10*