The Phanom Surin Shipwreck, a Pahlavi Inscription, and their Significance for the History of Early Lower Central Thailand

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The reporting in September 2013 of the discovery of a shipwreck of stitched construction in the Arab dhow tradition has generated great interest in both Thailand and the wider archaeological community. The accidental discovery was made in a saturated land site of reclaimed mangrove at Wat Klang Khlong, Phan Thai, in Samut Sakhon province (Figure 1).[1] The location is sited between the Tha Chin and Chao Phraya river deltas, some eight kilometres from the present day shoreline of the Gulf of Thailand, a reliable indicator of the rate of coastal expansion since the vessel was lost in the late 1st millennium. The geomorphology of the Gulf has been the subject of recent studies, and the alluvial sedimentary expansion of the coastline, incorporating mangrove regions, is a significant factor in this interpretation.[2]

Figure 1. The Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph Bangkok Post, courtesy of Fine Arts Department.

[1] The results of the first season of excavation were reported in the Silpakorn Journal in 2014, see Preecharpeechacupt 2014.

[2] Trongjai 2014.

Ship identification

The Phanom Surin shipwreck site has been the subject of two excavations to date, in 2014 and 2015, and ongoing conservation treatment and research is being conducted on the artefacts and ship's timbers. The keelson (17.67 m), with square notches to receive the wooden cross-frames, and the two deck masts (max. 17.35 m.), one complete with a wooden pulley fitted at the summit, have been recovered, along with the bulk of the planking timbers, ropes and fibrous materials associated with the ship's construction and rigging (Figures 2, 3, 4). The overall length is estimated at 35 metres. The hull is of stitched construction, the planks drilled at the edges to allow binding together with fibre cord and corked with the addition of wadding to seal the joints. A Chinese source, the *Ling biao lu yi* (Strange Things Noted in the South) dating to the late Tang period, is broadly contemporary with the shipwreck. It describes the ships of foreign merchants [observed in China] having "their [planks] strapped together with the fibre of coir-palms. All seams are caulked with an olive paste".[3] This is the ship construction identified with the Arab dhow, which the early 2nd century *Periplus of the Erythraean Sea* first described, naming Oman as an important supplier of this type of sewn boat to Southern Arabia.[4] The use of hardwoods, sourced in East Africa, in the hull of the Belitung ship found in the Java Sea suggests its origins in a ship building centre on the Arabian Peninsula. The sourcing of East African hardwood for this purpose must have been a significant part of the coastal trade that Arab merchants dominated in the late 1st millennium CE and beyond.

Dhows require continuous maintenance. Vessels of stitched and corked assemblage were especially vulnerable to the vicissitudes of sailing in tropical waters, and no doubt such maintenance was standard for such ships. The fibres and decking materials may thus be of a different regional origin to the ship's hull timbers, having been refurbished with locally procured materials in the course of a long journey. In the case of the Belitung ship, the hull timbers were identified, as noted, as East African hardwoods, whilst the decking materials were sourced in tropical Asia.[5] The early 12th century Chinese commentary, the *Pingzhou ketan* (1119) by Zhu Yu, states that ships arriving at Srivijaya from southern China, and required to wait for the change of the monsoonal winds in order to continue their journey, routinely had repairs carried out during the stopover.[6]

The international complexity of mediaeval dhow construction is further underscored by the account of Ibn Battuta (1304-69), the early 14th century Moroccan traveller. In describing the economic activity of the Maldives, he singled out *qandar*, coconut fibre cord, for special attention. After processing, Battuta informs us, the fibre was spun and then woven into cord "for the sewing [the planks of] boats together. These cords are exported to India, China, and Yemen, and are better than hemp." This latter statement alone conveys the extraordinary inter-connectivity of the mediaeval Indian Ocean trading system, in which Maldives cord was supplied not only to Yemen, long

[3] Wang Gungwu 1958: 99
[4] *Periplus of the Erythraean Sea* 1980: 40, 122, 142.
[5] Flecker 2008.
[6] Wolters 1983: 55.

Figure 2 (top). Stitching of planks. The Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph by Tharapong Srisuchat, courtesy of Fine Arts Department.

Figure 3 (left). Excavation of the ship's mast. The Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph courtesy of Fine Arts Department.

Figure 4 (right). Detail showing wooden pulley in situ. The Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph courtesy of Fine Arts Department.

renowned for its ship building industry, but as far as China, sent no doubt at the behest of West Asian merchants for the maintenance of their dhows in service on the South China routes.

Ibn Battuta also proclaimed the merits of the dhow's unique assembly and its resulting resilience over a hull of rigid construction: "The Indian and Yemenite ships are sewn together with them [*qandar*], for the Indian Ocean is full of reefs, and if a ship is nailed with iron nails, it breaks up on striking the rocks, whereas if it is sewn together with cords, it is given a certain resilience and does not fall to pieces".[7]

Taken together these ship features described by mediaeval Arab and Chinese geographers allow a secure identification of the Phanom Surin ship's architecture as being that of an Arab dhow. We await the analysis of the timber and fibre samples recovered by Thai archaeologists to establish a more nuanced understanding of its place of manufacture and journeying. A fully rigged Arab dhow employed in the India Ocean trade is faithfully depicted in a *Maqāmāt al-Harīrī* manuscript painting, dated to the 13th century (Figure 5). The scene is of a vessel in distress, with a broken mast, a reminder of the constant perils of sea journeying. Together with another illustrated edition of the same manuscript, dated 1237, we have a reliable visual record of the Arabian Peninsula mediaeval dhow.[8] The Phanom Surin vessel can reasonably be assumed to have resembled these depictions.

Figure 5. Arab dhow in a distressed state; from an illustrated edition of Al-Hirari's Maqamat, 13th century. Folio 26.5×20 cm. Institute of Oriental Manuscripts, Russian Academy of Sciences, Saint Petersburg.

The shipwreck's location on a coastal mangrove plain that is saturated all of the year has ensured the good survival of not only the ship's timbers, but also ropes and wadding materials, along with other organic matter, including rattan basketry, an ivory tusk and deer antlers. The latter items were likely sourced locally as part of exchange transactions. Thailand had long been renowned for the supply of such forest products to East Asia.[9] This is the earliest maritime trade context for such finds.

[7] Gibbs 1929: 243. For Arabic sources for Southeast Asia, see Tibbetts 1979.
[8] Guy 2017: 166.
[9] As witnessed a millennium later by the Dutch East India Company's (VOC) highly profitable trade in deerskins and antlers to Japan.

Ceramic typologies and dating

The ceramic typologies represented on board allow preliminary dating of the Phanom Surin shipwreck. They are readily identifiable as belonging to three distinct traditions: Chinese, Mon and Persian Gulf. Whilst the range of ceramics is a barometer of the long-distance network in which this ship participated, the quantities recovered are small, suggesting that most of the wares on board were for the use of the crew, or as containers for goods already traded. Neither the quantities, nor the types represented, suggest that ceramics were a commodity in their own right, as was clearly the case in the many later shipwreck environments, including the spectacular Belitung cargo.[10]

Guangdong glazed stonewares

The Chinese wares recovered from the Phanom Surin are represented by rudimentary storage jars, associated with Guangdong province of the late Tang period (Figure 6). The earliest dated Yue-type storage jars recorded are from the tomb of poet Zhang Jiuling (d. 740) in Shaoguan, Guangdong province, a district capital connected to Guangzhou by the Zhu (Zhujiang or Pearl) River.[11] They are confirmed in international trade by the excavation of the foundations of the Friday Mosque of Siraf, in Bushehr province, Iran. The mosque, built some sixty years after the Chinese poet's death, was found to contain fragments of Dusan jars in the habitation backfill used in its construction, demonstrating that these Guangdong jars were an integral part of long-distance trade by the early 9th century.[12] Some of the jars have pseudo-Arabic inscriptions incised into the wet clay during manufacture, indicating that they were expressly produced for the use of Gulf clients, or for goods destined for them.[13] Similar jars from the 9th century are recorded from Central Java.[14] Siraf served as one of the major termini for the China-Persian Gulf trade until its collapse around 970, attributed to a major earthquake. Similar jars have been recovered in considerable quantities from the Zhu River at Guangzhou, confirming that they were used for the loading of goods to be shipped from there, many destined for the rich markets of Java and West Asia.[15]

Mon earthenwares

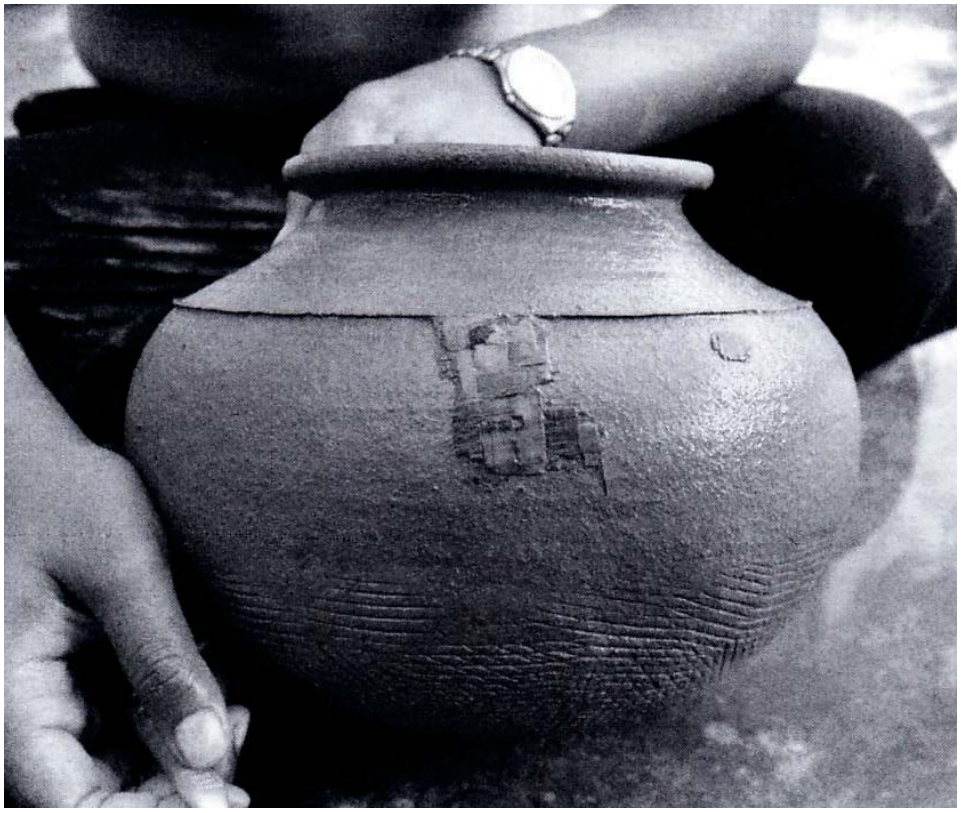
The presence of locally produced earthenware ceramics confirms the ship's intercourse with the Mon-speaking territories of Thailand. A number of cord-marked and incised decoration earthenware vessels were recovered on board, of types widely associated with the Mon culture of lower Central Thailand in the later 1st millennium.[16] It is likely that they were brought on-board the vessel as containers for foodstuffs, and some show evidence of use for cooking. One has traces of woven rattan basketry

[10] Guy 2003.
[11] CPAM (Chinese) 1981: 43-7
[12] Whitehouse 1973.
[13] Guy 2010: 21, Fig. 13.
[14] Adhyatman 1983.
[15] Displayed in the Guangdong Provincial Museum, Guangzhou.
[16] Indrawooth 1985.

Figure 6 (left). Storage jar, Guangdong, China, 8th century. Yue-glazed stoneware. Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph John Guy, courtesy of Fine Arts Department.

Figure 7 (below). Food storage vessel, Mon, Central Thailand, 8th century. Earthenware, with traces of basketry attached. Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph courtesy of Fine Arts Department.

Figure 8 (right). Double-handled storage jar, Persian Gulf, 8th century. Turquoise glazed earthenware. Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph John Guy, courtesy of Fine Arts Department.



fused to the exterior, indicating that it was stored or carried in a basket (Figure 7). One displays impressed basketry pattern designs on the body, another a simple cross-hatching decoration on the lower body. None has the stamped medallions associated with elite and temple wares: rather, these are simple utilitarian pots for food storage and cooking. They were undoubtedly intended for the use of the crew and traders aboard.

Persian Gulf wares – turquoise glazed earthenware

Most significant for this study were the remains of a turquoise glazed double-handled jar of Persian Gulf origin (Figure 8). This type has been recorded at numerous land sites in mainland and peninsula Southeast Asia, and is represented on both the Belitung shipwreck and at the Chau Tan wreck site.[17] Examples of blue-cum-turquoise glazed ware have been reported from both urban centres in late 1st millennium Southeast Asia and from coastal entrepot-trading settlements, such as that recently reported at Phu Khao Thong, Ranong province, a peninsular site overlooking the Andaman Sea.[18] They are reported along the length of the Gulf-China maritime route, including such key entrepots as Mantai in northern Sri Lanka, and feature in excavations in the Tang-era harbour area of Yangzhou, affirming the activity of Gulf merchants at this major Tang city port.[19] Those recorded at the Gulf port of Siraf, at its commercial peak in the 9th century, have been linked petrographically to clay bodies associated with the kilns at Basra, Iraq.[20] The ubiquitous presence of these turquoise wares across the long-distance trade routes, from Basra to southern China, signals the pivotal role that Basra, the premier port of Abbasid Baghdad, had assumed by the 9th century as an important source of the glazed ceramics that the Gulf contributed to this long-distance exchange.

Persian Gulf wares – torpedo stoneware jars

Equally compelling in terms of a Gulf connection are the nine large fragments of wide-mouthed cylindrical storage jars with pointed bases, the so-called 'torpedo jars' (Figures 9, 10). Produced in the Gulf in the later 1st millennium, they typically measure 70–80 cm. in height, and 45–50 cm. in diameter, and some are sealed on the interior, likely with bitumen. They are the first such jars to be reported in Southeast Asia. It is doubly rewarding that they have been recovered in a controlled excavation.

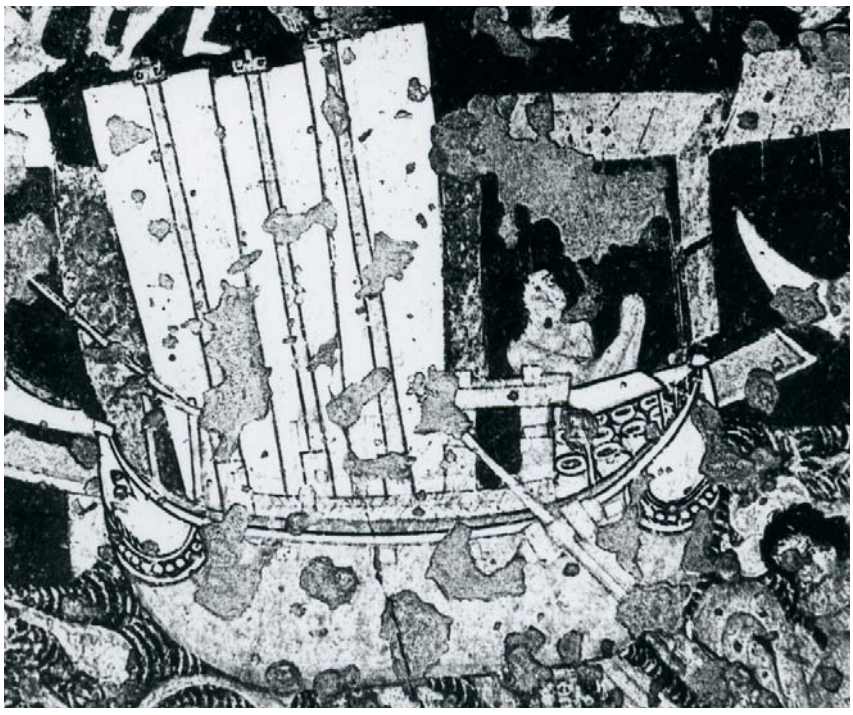
Torpedo jars are widely recorded at West Asian sites, including the Great Mosque foundation excavation at Siraf (pre-803-04), and from Bushehr in southern Iran, an important Sasanian-period port largely abandoned in the early Islamic period.[21] Torpedo jars, of similar dimensions to those of the Phanom Surin cargo, have been excavated at the residence of the Caliphal palace complex of *Dar Al-Amma* at Samarra, Iraq,

[17] Guy 2017: 167-8.
[18] Bellina et al. 2014: 83.
[19] Gu Yunguan 1988; Ho Chumei 1995. For the Mantai finds, see Carswell et al. 2013. The excavations were conducted between 1980 and 1984.
[20] Mason and Keall 1991, Fig. 3, petrofabric 2.
[21] Whitehouse 1972; Whitehouse and Williamson, 1973: 42.

Figure 9 (left). Torpedo jar, Persian Gulf, 8th century. Earthenware. Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph John Guy, courtesy of Fine Arts Department.

Figure 10 (right). Interior of torpedo jar, lined with a sealant, probably bitumen. Persian Gulf, 8th century. Earthenware. Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand.. Photograph courtesy of Fine Arts Department.

Figure 11 (below). Mural painting depicting a 6th century ocean-sailing ship, with open-necked jars at stern. Scene from the Buddhist *Pūrnavadāna* legend, Ajanta, Cave 2, Maharasthra, western India. Photograph courtesy of John Guy.



built in 836 by Al-Mu'tasim, where they likely served as wine containers in private quarters.[22] Did the Phanom Surin torpedo jars also serve this function? It is unlikely that residue traces in the jars are sufficient to answer this question: certainly bitumen-lined jars were used for the transportation of wine and oils in Roman and post-Roman Mediterranean trade.[23] Further examples have recently been reported from Swahili coastal settlements in East Africa in an 8th century context, which is notable for having Guangdong Yue-type storage jars but an almost total absence of Chinese Changsha and Samarra-type white wares, a barometer line that appears reliably to separate sites dating to the 8th century from those of the 9th century.[24]

The Phanom Surin torpedo jars have a dark residue on the interior surface, likely a bitumen tar used to seal the interior (Figure 10). This is a feature shared with a high percentage of the torpedo jars recorded elsewhere. Analysis of similar jars excavated at the citadel of Anuradhapura, Sri Lanka, confirmed the use of bitumen from Iran, consistent with the jar's presumed place of manufacture.[25] A provenance complication associated with these jars is that, unlike most other ceramic imports that can be reliably used for dating purposes, the torpedo jars seem widely prone to reuse over an extended period. The largest category of foreign ceramics recorded at the Anuradhapura citadel was torpedo jars, and a significant proportion of these had a bitumen coating on the interior.[26] Excavations at the Tissamaharama citadel, the capital of the Ruhuna territories of southern Sri Lanka and a major port through to the 6th century, revealed a major cache of twenty-six torpedo jar shards, which must be similarly assigned to the Gulf trade.[27]

The types of jars recorded in mid- and late 1st millennium India and Sri Lanka, and now in the Gulf of Thailand, approximate what is depicted, as best we can judge, in a 6th century mural at the Buddhist rock-cut site of Ajanta, in western India. Cave No. 2 provides what may be the earliest depiction of this jar type in a maritime context (Figure 11). The mural depicts a triple-masted ocean sailing vessel with wide-mouthed jars stacked edge to edge (supporting each other) on the stern deck, beneath a protective canopy. This is a unique 'ship portrait' from this time, and could well be depicting this type of handleless amphora, which emerged in the Gulf world as a general-purpose storage shipping container. The narrative of this scene concerns the adventures of a virtuous sandalwood merchant, as recounted in the Buddhist *Pūrnavadāna*. Other murals at Ajanta, a prosperous trading junction in the Deccan as well as a major Buddhist monastic centre, depict foreigners in scenes of devotees witnessing Buddha miracles, including some in West Asian dress and headgear.[28] These purveyors of West Asian goods were a familiar sight in the western Deccan, even leaving three Pahlavi inscriptions at the Buddhist cave complex of Kanheri, west of Mumbai, in the early

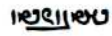
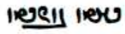
[22] Dahmani 2014: 95, 97. Excavated in 1913 by Ernst Herzfield.
[23] Stern et al. 2008: 425.
[24] Horton et al., in press.
[25] Stern et al. 2008.
[26] Stern et al. 2008: 411. The lining was analysed as bitumen.
[27] Weisshaar and Wijeyapala, 2001, cited in Tomber 2007: 980.
[28] Brancaccio 2011: figs. 110, 112.

11th century, witness to the international trade networks enjoyed by such Buddhist establishments.[29]

The inscriptions

Two inscriptions on ceramics belonging to the vessel have been recovered to date. One is a two-character ink inscription on the base of a Guangdong Yue-type green glazed storage jar, of which only the second character is legible (Figure 12). It is provisionally read as “branch office”presumably the illegible character once identified with office.[30] These jars were mass-produced at kilns on the Zhu River upstream from Guangzhou, and were exported in volume, principally as containers for other commodities.

The second inscription, chiselled into the fired body of a section of a torpedo jar, potentially transforms our understanding of the site and its significance (Figure 13). Professor Prods Oktor Skjærvø of Harvard University has identified the inscription as being in Pahlavi, the Middle Persian language and script used by Persian, Zoroastrian and Christian communities in Sasanian Iran.[31] His reading and commentary is given in full:

> The inscription is written very clearly in a regular late Pahlavi ductus and reads <y’tbwcyt’>, i.e., Yazd-bōzēd, which in regular Pahlavi would be  . This is a proper name, the literal meaning of which is “god delivers” (or “god saves”). It is written as one word and without the “final stroke” after the first component as we would expect if it were a phrase: <y’t’ bwcyt’>  . Proper names ending in –bōzēd “delivers” are well attested, e.g., Mihr-bōzēd “Mihr delivers” and Ādur-bōzēd “the Fire delivers” on seals, and Kay-Ādur-bōzēd is the name of a famous Zoroastrian commentator from the Sasanian period.[32]

‘Yazd-bōzēd’ appears then to be the name of a person, presumably either the merchant aboard the ship, or the owner of the jars, that is, the ship-owner or merchant-investor, who helped finance this trading expedition. Either way, we can be confident that he was an Iranian or someone conducting business from there, for whom Pahlavi was the preferred language of commerce.

A Pahlavi-Chinese bilingual inscription, dated 874, is known from a tomb excavated in Tumen, Xi’an, Shaanxi province, north-west China. It marked the burial of a woman of the House of Ma, likely a translation of a Persian name, Mahanos.[33] Persians were an important minority in the émigré communities of Tang China, mostly enterprising traders, many of whom settled in China securing rank and position, often through bribery. They included many ethnic groups, including Turkic-speakers and Sogdians.

[29] The Pahlavi inscriptions name the Iranian visitors and the dates of their visits, in 1009 and 1021; West 1880.

[30] Jason Sun, November 2015.

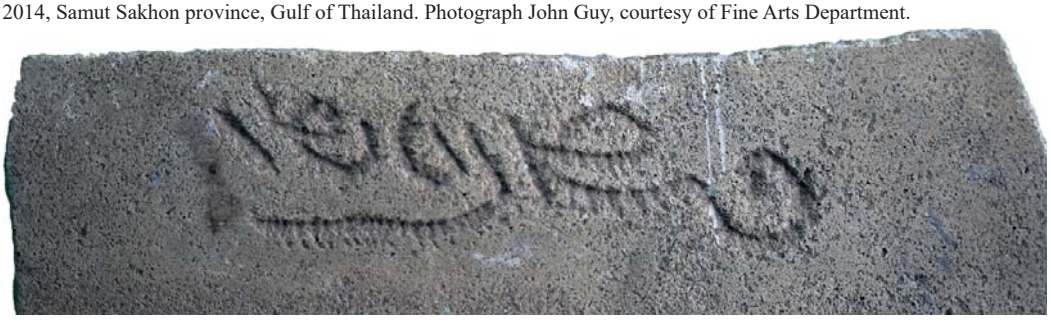
[31] Oktor Skjærvø, personal communication 2016.

[32] cf. Gignoux 1986, nos. 41 and 637.

[33] Humbach 1988.

Figure 12 (above). Chinese ink character provisionally read as "branch office", on the base of a Guangdong storage jar, 8th century; first character illegible. Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. . Photograph John Guy, courtesy of Fine Arts Department.

Figure 13 (below). Inscribed ceramic fragment written in regular Pahlavi language and script, reading Yazd-bōzēd, a proper name presumably identifying ownership. Persian Gulf, 8th century. Earthenware. Phanom Surin shipwreck excavation, 2014, Samut Sakhon province, Gulf of Thailand. Photograph John Guy, courtesy of Fine Arts Department.



Pahlavi appears to have continued in use in Iran beyond the Sasanian period, until being replaced in the course of the 9th century by Arabic script for the writing of Persian, as witnessed by the numerous Iranian tombstones written in Arabic script Persian,[34] preserved at Song and Yuan period Quanzhou in Fujian province.

Pahlavi inscriptions belonging to the later 9th century also appear in south-western India. The Quilon (Kollam) copper plate inscriptions record the trading privileges extended by a local Malayalam ruler to an international community of merchants in the 880s.[35] The grant is written in Tamil, and witnessed with names written in Arabic, Pahlavi, and Judaeo-Persian. This record of a Pahlavi-speaking Iranian merchant community operating under state privileges on the Malabar Coast of southwest India in the same time frame as the Phanom Surin vessel confirms the wider network in which this shipwreck discovery must be seen.[36]

Figure 14. Seal ring engraved in Pahlavi script with the word *āfrīn*, "blessing". Garnet set in a gold finger ring. Reportedly found in Palembang, Sumatra, 7th to 9th century. Private collection, Hong Kong.

A second example of Pahlavi script has come to light in a private collection of early intaglio seals and gemstones from 1st millennium Southeast Asia, reportedly having been found in Sumatra.[37] A gemstone in an early Javanese-style gold ring setting is engraved, in an elegant standard Pahlavi script, with the word *āfrīn*, usually translated as "blessing" (Figure 14).[38] The circulation of Pahlavi-engraved gemstones is unlikely

[34] Chen Dasheng 1984; Guy 2010.
[35] Cereti 2009: 31.
[36] That these networks persisted later among the Iranian Zoroastrian merchant communities is confirmed by the cluster of early 11th century Pahlavi inscriptions at the Kanheri Buddhist caves, western India; West 1880.
[37] I am indebted to Professor Arlo Griffiths, EFEO, for bringing this ring to my attention.
[38] Reading by Professor Oktor Skjærvø, Harvard University, March 2017, acknowledged with appreciation.

to have occurred outside their community, and so this discovery may be accepted, prima facie, as evidence of Pahlavi-speaking Iranian merchants active in the region of Palembang, the location of the historic entrepot of Srivjaya. Thus, the Phanom Surin shipwreck can be seen as part of a wider pattern of engagement by Iranian merchants in Southeast Asian trade. The conventional view of Persian traders being concerned only with rewards of long haul trade with the port cities of China must be reviewed in the light of these finds.

This vessel was working a trade route that extended from the Persian Gulf to Southeast Asia and southern China. Its discovery suggests that Gulf merchant participation in long-distance trade was a far more pervasive phenomenon than formerly recognised. Further, the wreck site is not located on the known long-distance routes, but rather in coastal lower central Thailand, from where the merchants could readily access several major urban Mon cities flourishing in this period. The most immediately accessible was Nakhon Pathom, a large moated urban centre (*muang*) that marks a mature phase of early urbanization in mainland Southeast Asia.[39] It was in close proximity to a number of other centres that supported significant Buddhist establishments, such Khu Bua and Ratchaburi.

The wreck is strategically situated between the Tha Chin and Chao Phraya rivers, the two most important river systems of Central Thailand. The Tha Chin provides the ancient Mon cities of Petchaburi, Kha Bua, Ratchaburi, Nakhon Pathom and Pong Tuek with access to the Gulf and, hence, to international trade. The Chao Phraya connects numerous other centres, including Lopburi, U Thong and, via the Pa Sak tributary, Si Thep. Each of these urban centres likely served as capitals in their respective spheres of influence. To the east and connected via the river systems flowing from the Mekong, are such important early urban centres as Dong Si Mahasot in Prachinburi, where Gulf turquoise glazed jars have been reported.[40] This shipwreck is contemporary to these cities in their heyday, and bears witness to the cosmopolitan nature of these urban centres and their elite clientele, served by foreign merchants.

Visual evidence in stucco and terracotta on 8th century monuments at a number of Mon cities confirm the presence of West Asian merchants. Buddhist monument decoration at both Khu Bua and Nakhon Pathom include depictions of foreign merchants, including a significant number whose mode of dress and physiognomy suggest that they are of Sogdian origin. A contemporary caricature of one such Western foreigner, bearded and wearing the characteristic peaked cap associated with Sogdian traders known from Central Asia, was discovered at the Buddhist monument of Chedi Chula Pathon, Nakhon Pathom. It is preserved as graffiti on a building brick, incised into the wet clay, and presumably sketched from direct observation (Figure 15).[41] Other representations of Westerners appear in the terracotta reliefs that adorned the circumambulation terraces of stupas at Khu Bua (Figure 16). In all probability, such traders journeyed to Southeast Asia on a ship such as the Phanom Surin, leasing space for

[39] Guy 2014: 19-20.
[40] Guy 2017: 174, fig. 19.
[41] For a discussion of this depiction, see Guy 2014: cat. no. 11.

Figure 15. Graffiti-caricature of a West Asian merchant, inscribed on a building brick, Chedi Chula Pathon, Nakhon Pathom, central Thailand, early 8th century. Phra Pathom Chedi National Museum, Nakhon Pathom (609/2519). Photograph courtesy of Fine Arts Department.

themselves and their cargo of West Asian goods. Of the Iranian whose name is chiselled into the torpedo jar aboard the ship, we only know that he was a Pahlavi speaker, and from his name form, likely a Zoroastrian.

The discovery of the Pahlavi inscription on a torpedo jar, found in association with Guangdong Yue-glazed stoneware ceramics, locates this cargo in the second half of the 8th century. This can be further refined by the initial series of radiocarbon 14 results, which place the timbers and fibres most comfortably in the mid-8th century.[42]

Two final points may be made in appraising the shipwreck's significance. This is the first archaeological evidence that ships originating in the Gulf, and understood to be the leading participants in the Gulf-China trade, were also engaged in regional trading networks of which we have almost no prior knowledge. Up until this shipwreck's discovery, intra-regional trade has been associated with Southeast Asian ships displaying a different ship building tradition, as witnessed by the 10th century Cirebon and Intan shipwrecks in the Java Sea, both vessels of local origin engaged in

[42] Preliminary reporting by the Thai Fine Arts Department, 2016, publication pending.

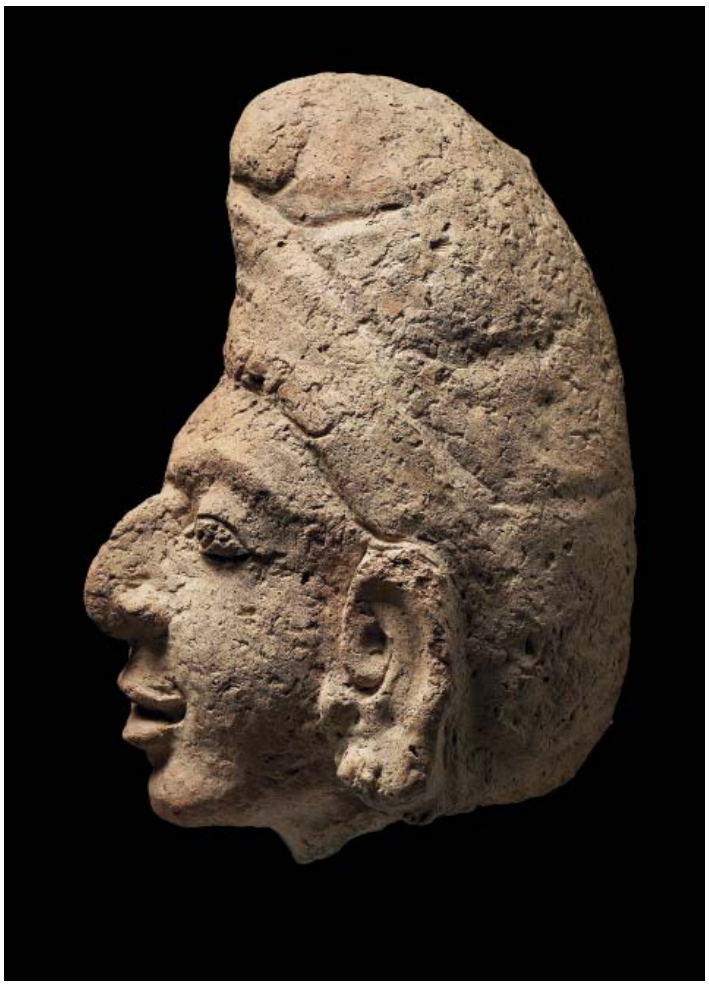


Figure 16. Portrait of a West Asian merchant, formerly in situ at Buddhist stupa site, Khu Bua, Ratchaburi province, central Thailand, 8th century. Terracotta, ht. 23 cm. National Museum, Bangkok. Photograph courtesy of Fine Arts Department.

the secondary distribution of international goods.[43] The Malay shipbuilding tradition is characterised by edge-to-edge pegged hull construction with internal lashed lug tension bracing, as opposed to the Arab tradition, which is essentially an edge-to-edge stitched and corked assembly. The Phanom Surin shipwreck belongs to the latter tradition, and was likely engaged in supplying international goods to local elite markets. Such international trade was no doubt a significant factor in the growth and prosperity of these urban centres and emerging polities.

Finally, it should be noted that the ship appears to have already visited Guangzhou, as suggested by the presence of the Guongdong Yue ceramics on board. Its discovery in the Gulf of Thailand raises the possibility that it was engaged in a trading practice long known to the Chinese, that of product substitution. Persian merchants discovered early in their maritime engagement with China that they could source many of the exotic goods prized by the Chinese elite during the journey and pass them off in China as "Persian goods", so commanding higher prices. Hence, such exotic commodities as pearls, gemstones and coral from Sri Lanka, animal hides, horn, ivory and feathers from

[43] Leibner 2014; Guy 2004.

mainland Southeast Asia, and aromatic woods and resins from insular Southeast Asia, were routinely secured en route for the China market.[44] Being located on a regional network, the Phnom Surin traders were undoubtedly sourcing as well as selling goods.

The inscribed Gulf jar is the first secure evidence of the presence of West Asians hinted at by the architectural décor of Mon Buddhist stupas, and the shipwreck the earliest demonstration, to date, of the prominent role of Gulf traders in late 1st millennium long-distance trade in Southeast Asia.

Acknowledgement

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