Gold Coins from Khlong Thom

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ABSTRACT—The starting point of this paper is an unusual type of gold coin found at Khlong Thom in southern peninsular Thailand. At present, three examples of this coin type are known. One side shows a head in profile, the other side is inscribed in Indian Brāhmī script. Previously misidentified as Roman or Indo-Roman, this coin type is discussed in detail and set into context with other small gold coins with conch motif, also found at Khlong Thom. These appear to be linked to the coins with profile head, representing lower denominations of the same weight standard. It is argued here that these coins with the conch motif, as well as those with the profile head and Brāhmī inscription, are a locally produced coinage. They throw a new light on the role of the ancient site of Khlong Thom, and might contribute to a re-evaluation of the site as an influential centre for trade in the early historic period.

Introduction

The gold coins discussed here were found at Khlong Thom, Krabi Province, on the western coast of the Thai-Malay Peninsula, about 240 kilometres south of the Isthmus of Kra. The ancient site near Wat Khlong Thom, at the southern outskirts of the modern town of Khlong Thom, is known as Khuan Lukpad ("Bead Mound")¹ because of the thousands of glass and stone beads that have been found there. They are one of the reasons why the site has been looted for more than half a century. An extensive collection of finds from the site is in the former Wat Khlong Thom Museum, now renamed Khlong Thom Museum and under municipal administration. The origins of this museum go back to Phra Kru Arthorn Sangworakij, the late abbot of the Khlong Thom monastery, who from 1966 collected and preserved the artefacts found at the site.

A number of archaeological investigations of the site have been carried out from the 1960s onwards. The Fine Arts Department of the Thai Ministry of Culture conducted surveys in 1967, 1969, 1973 and 1979. Systematic archaeological excavations, in combination with surveys, took place in 1980, 1983 and 2008.

The ancient site is situated about twenty kilometres inland from the coast, and is

¹ See Veraprasert 1987. Vallibhotama 1988. Bronson 1990. Veraprasert 1992. Glover 1996a: 374-5. Srisuchat 1998: 103, 104, 107-10. Glover and Bellina 2001: 199. Jacq-Hergoualc'h 2002: 84-9. Manguin 2004: 285-6. Chaisuwan and Naiyawat 2009: 95-96, 103. Pongpanich 2009: 138-53. Noonsuk 2009: 45-8. Chaisuwan 2011: 84-6. Additional information on the history of the site's archaeological exploration is displayed in the Wat Khlong Thom Museum.

connected to the Andaman Sea by the Khlong Thom river. The natural mound of the Khuan Lukpad site is about ten metres above sea level. The artefact-producing area covers about 150 hectares, with the Khlong Thom river flowing through it. Among other finds, the excavations brought to light an abundance of manufacturing refuse, representing evidence for a production centre that specialised in the working of tin, semi-precious stones, and glass. The excavator in 1983, Mayuree Veraprasert of Silpakorn University, suggested a chronology for the site, with an early phase from the 1st century BCE to the 2nd century CE, and a later phase from the 3rd to 5th centuries CE. The more recent excavations in 2008, conducted by Captain Boonyarit Chaisuwan then of the 15th Regional Office of the Fine Arts Department, Phuket, confirmed the character of the settlement as a habitation and industrial site, as well as the importance of the site as a port well connected to maritime trade networks of the Indian Ocean. The ancient site, situated on the Khlong Thom river, was an ideal location for a settlement engaged both in sea-borne trade and in specialised manufacturing activities.

Finds from the site include evidence of far-reaching connections to Western countries, for example, Indian bronze coins, Indian, Sasanian and Roman style engraved gems, seals with inscriptions in Indian script, gold pendants imitating Roman coins, but also to Eastern regions as evidenced by the fragment of a Chinese mirror dated to the Eastern Han period (25-220 CE).²

Coins with head in profile

One of the three coins, A1-A3 (see catalogue below), discussed here is in the local Wat Khlong Thom Museum, the two others – in fact one complete coin and the chopped off half of another such coin – are kept in the Suthiratana Foundation, Bangkok (Figures 1-4). All three were found at Khlong Thom, however, not being retrieved from controlled excavations they lack an archaeological context. The three coins are made of gold of pale colour that might possibly be electrum, a natural alloy of gold and silver. So far, no metallurgical analysis of the coins has been carried out. The coins have similar measurements, about 9.8 to 10.0 millimetres in diameter. The weight can only be specified for two coins, A2 and A3 in the Suthiratana Foundation (Figures 2-4): 0.94 gramme for the complete coin A2, and 0.42 gramme for the half coin A3. They were struck between two dies. On the obverse, struck with the upper die, they show a head in profile to the right and, on the reverse, an inscription of letters in relief in a circular arrangement.

The coin A1 in the Wat Khlong Thom Museum (Figures 1a-c) has been known for some time. To my knowledge, the earliest published reference to it comes from Mayuree Veraprasert in 1987, who erroneously identified it as a Roman coin.³ The obverse (Figures 1a and b) shows a head in profile with short neck and a small curved bust. The face details are slightly blurred, but eye, nose and a clean-shaven chin are

² See Bellina 1998: 97-98. Bellina and Glover 2004. Borell et al. 2014: 100. Borell 2014. For the Chinese mirror, see Peronnet 2013: 162-165 fig. 13.19a,b.

³ Veraprasert 1987: 328. Veraprasert 1992: 157.

clearly discernible. Some spiky strands of hair appear on top of the head, in particular two longer ones above the forehead. Two ribbons of a diadem fly behind the head.

Such a head in profile wearing a diadem recalls the coin images of Roman emperors and explains the initial misidentification as a Roman coin.⁴ However, a Roman gold coin of such small dimensions is unknown, and – apart from the differing style – a Roman imperial coin would have an inscription with the name and title of the emperor surrounding its portrait head. In a 1992 publication, Robert S. Wicks mentions the coin A1 in the Wat Khlong Thom Museum as a "local copy of a Roman gold coin".⁵ In a more recent 2010 article, Jan Bouzek and Iva Ondřejová⁶ erroneously connected the coin A1 in the Wat Khlong Thom Museum to the so-called Indo-Roman class of coins known from Sri Lanka. These are small copper coins locally produced in Sri Lanka mainly in the 4th and 5th centuries CE. However, they differ in many aspects, whether in regards to material, design or motifs.⁷

The profile head on the obverse of the two examples A2 and A3 in the Suthiratana Foundation (Figures 2-4) is similar, although differing in some details. The head is set within a beaded circle, it is smaller and apparently less detailed. The bust extends horizontally in both directions. Some spiky strands of hair are seen on top of the head, in particular two longer ones – forming a "V" – above the forehead. Obviously, the obverse of the two coins in the Suthiratana Foundation (Figure 4a) were struck with the same die, whereas a different die was used for the coin A1 in the Wat Khlong Thom Museum.

More interesting are the inscriptions on the reverse of the three coins. The characters of these inscriptions were recognised by Joe Cribb and Harry Falk⁸ as Indian Brāhmī

⁴ Veraprasert 1987: 328 ("Roman Coin: A round coin made of gold found at the site bears the motif of a human face on the obverse side and some letters on the reverse side, but these motifs are badly worn and blurred."). Veraprasert 1992: 157. Subsequently, the erroneous identification has been repeated by others: Glover 1989: 9 ("a defaced Roman coin, apparently not datable."). Glover 1996a: 374. Glover 1996b: 65 with illustration of the obverse (bottom right), which was for a long time the only published photograph of the coin (erroneously mirror-inverted). Srisuchat 1998: 103. Guy 2014: 33 within the entry for cat. 2 ("and Wat Khlong Thom in Krabi, where another Roman coin has been found".). Even the rare small denomination of Roman imperial gold coins, the half *aureus* (*quinarius aureus*), would have a larger diameter of about 15 mm, and about four times the weight of the Khlong Thom coins.

⁵ Although Wicks gives neither an illustration nor a detailed description, in all likelihood it refers to the coin in the Wat Khlong Thom Museum, which was already known at that time. He mentions it in the context of the coins with conch motif from Khlong Thom, discussed below, and says: "At least one local copy of a Roman gold coin has been found in association with these pieces, attesting to their early date as well as the peninsula's strategic position along international trade routes during the first few centuries of the Christian era" (Wicks 1992a: 256). On the coins with conch motif, see also Wicks 1992b: 221-2.

⁶ Bouzek and Ondřejová 2010: 11 referring to Codrington 1924: 45-48 pl. 2, 33-44. Unfortunately, a photograph of the obverse only was available for their studies.

⁷ On the local imitations of Late Roman *aes* coins from Sri Lanka, see Walburg 1985: 29, 44-50; Walburg 1998: esp. 152-53; Walburg 2008: 57-81; 140 cat. 77.33; 223. The alleged Indo-Roman gold coin in Codrington 1924: 48 pl. II 44 is a modern fake, see Walburg 2008: 155-6 fig. 57 ("a modern fantasy piece"); 221 cat. 239.14 ("a modern fantasy coin").

⁸ I am most grateful to both, Joe Cribb and Harry Falk, for their willingness to devote so much time to the study of the inscription on these coins from the photographs which I sent to them. The results

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script. Owing to the varying state of their preservation, the inscriptions are not easy to read. After meticulous examination of photographs of the coins, Harry Falk arrived at the conclusion that the three reverse sides show the same inscription, which he reads as $\dot{sr}(\bar{\imath})$ -viṣuvagoda, the honorific $\dot{sr}(\bar{\imath})$ followed by the name, thus "Śr($\bar{\imath}$) Viṣuvagoda", a personal name composed of viṣuva, denoting the auspicious day of the (spring) equinox, and goda, a rare term which implies some form of giving. It is also found in the name Upagoda on a unique cast copper piece in the British Museum, inscribed in an older form of Brāhmī. The complete coin A2 in the Suthiratana Foundation (Figures 2b and 4b) correctly shows the six characters of $\dot{sr}(\bar{\imath})$ -viṣuvagoda in a circular arrangement surrounded by a roughly circular line, about one half of this line is seen on the coin. The same inscription can also be reconstructed for the half coin A3 (Figures 3b and 4b) since a careful examination makes it clear that it was struck with the same reverse die as coin A2.

At first glance, the inscription on the coin A1 in the Wat Khlong Thom Museum (Figure 1c) seems to consist of more than six characters. However, Harry Falk observed that two characters and in part a third, namely the three characters for *visuva*, appear twice in an identical arrangement: once in an outer row (hatched characters in Figure 5) and a second time in an inner row placed more centrally and turned at an angle of about 30 degrees. This can only have been generated during the striking process by two successive – somewhat displaced – blows with the same die: the first strike producing the outer row, and the second producing the inner row as well as the three other characters of the inscription.11 If all characters are read, including the three characters for visuva still visible from the first strike, the inscription would be $\dot{s}r(\bar{t})$ -visuva/visuvagoda. But if only the characters of the second blow are read, the inscription is $\dot{s}r(\bar{\imath})$ -vişuvagoda, that is the same as on the two coins A2 and A3 in the Suthiratana Foundation (Figures 2-4). It is interesting to note that, although the inscription reads the same as on the two coins in the Suthiratana Foundation, for the coin in the Wat Khlong Thom Museum (Figure 1) a different reverse die has been used.

On palaeographic grounds, Harry Falk favours a date in the 2nd century CE as the most likely, although a somewhat later date may not be excluded, but certainly not later than the 5th century CE.

Notwithstanding the Brāhmī inscription it seems unlikely that these small gold coins found at Khlong Thom are imports from India. No specimen of their type has

I present here are based on Joe Cribb's and, in particular, Harry Falk's personal communications in numerous emails in 2014 and – with a fresh set of photographs – again in 2016; this turned into fascinating detective work.

⁹ Rapson 1900: 102-3 no. 3; Allan 1936: cxlv-cxlvi, 263, pl. 35,18. The reverse is blank; it may be a coin or a seal. On this unique piece, see also Gupta 1989: 12-13.

¹⁰ The surrounding circular line visible on coin A2 would on the preserved half of coin A3 be just along the edge or beyond.

¹¹ With hindsight, traces of two successive strikes can also be discerned on the obverse of the coin in the Wat Khlong Thom Museum (Figures 1a and 1b). The first blow was placed more towards the right: it left a faint trace of the profile line in front of the head and a trace of the raised relief of the coin rim behind the head.

been reported from India so far. In addition, gold coins are rare in India in the early period; copper or bronze and silver coins are more common. In all likelihood – and this is the argument of this paper – these coins from Khlong Thom are to be considered as locally produced. A local production is also supported by the fact that the three gold coins A1-A3 (Figures 1-5) discussed so far can be linked to other coins found almost exclusively at Khlong Thom, namely a series of small gold coins with conch motif, likewise struck with dies, that appear to be lower denominations based on the same weight standard.

Coins with conch motif

Some of the coins with conch motif from Khlong Thom have already been published by Michael Mitchiner in 1985 (Figure 6)¹² and included by Robert Wicks in his studies on Southeast Asian coinage published in 1992.¹³ They are said to come from a hoard found by locals at the Khuan Lukpad site, however, as they were not found in controlled excavations, neither the precise find spot of the hoard is known nor its archaeological context. Mitchiner reports that the main constituents of the hoard were, in fact, gold beads. Allegedly, the small gold coins were rather numerous as well. According to Wicks, "they have been recovered by the hundreds and have been sold by dealers in Bangkok and the United States".¹⁴ Mitchiner knew about "some fifteen" of these coins that were dispatched during 1981 from Bangkok to a dealer in New Orleans; nine of these came into Mitchiner's possession and were promptly published by him (Figure 6). Two more were included with illustrations and brief descriptions by Michiner in his 1998 publication on the history and coinage of South East Asia.¹⁵

At least one such gold coin is kept in the Wat Khlong Thom Museum (Figure 9). Two other such coins from Khlong Thom found their way, presumably also in the 1980s, into the Thaksin Folklore Museum of the Institute for Southern Thai Studies at Thaksin University, Koh Yo, Songkhla Province (Figures 10a-d). Since 2005, Bunchar Pongpanich has succeeded in acquiring some twenty small gold coins from Khlong Thom for the Suthiratana Foundation, including the two with profile heads discussed above (Figures 2-5, 7-8, 10e-m, 11-13). All the coins with conch motif from Khlong Thom that came to my knowledge are listed in the catalogue below, comprising a total of 32 gold coins.

They may roughly be divided into two groups: one group of uniface coins with conch on the obverse and a blank reverse, the other group with conch on the obverse and either a $\dot{srivatsa}$ or - less frequently - a svastika on the reverse. The majority measures between seven and eight millimeters in diameter and has weights between 0.44 and 0.55 grammes.

Mitchiner submitted the nine coins in his possession to metallurgical analysis (see

¹² Mitchiner 1985. See also, Mitchiner and Pollard 1990: nos. 23-31. Mitchiner 1998: 165-8, nos. 572-82 (with two additional coins of this kind).

¹³ Wicks 1992a: 270. Wicks 1992b: 221 fig. 7.2.

¹⁴ Wicks 1992b: 221 footnote 5.

¹⁵ Mitchiner 1998: 168 nos. 576-7.

table below). This revealed a gold content between 77.8 and 56 per cent and a silver content between 22.1 and 43.7 per cent, suggesting the use of electrum, a natural alloy of gold and silver. In addition, the coins contained some copper, with levels between 0.24 and 0.49 per cent, as a natural impurity. Based on their style and metallurgy, Mitchiner proposed that they represent "sequential issues over a period of time" in a deteriorating order – the conch/śrīvatsa and conch/svastika coins respectively being earlier than the uniface coins – and assumed an intentional addition of silver for those coins he regarded as being produced later. However, the gold and silver content of natural electrum can vary widely, therefore, a higher silver content may not necessarily mean a debasement by intentionally added silver.

Table 1. Results of the X-ray fluorescence analyses (after Mitchiner 1985; Mitchiner and Pollard 1990)

No.	Weight	Gold wt%	Silver wt%	Copper wt%
1 (here Ba1)	0.50 g	66.9	32.8	0.33
2 (here Ba2)	0.395 g	77.8	22.1	< 0.1
3 (here Ba3)	0.395 g	67.9	31.9	0.24
4 (here Bb1)	0.410 g	69.0	30.8	0.30
5 (here Cc1)	0.50 g	70.5	29.2	0.34
6 (here Cd1)	0.50 g	58.1	41.7	0.26
7 (here Ce1)	0.35 g	58.3	41.3	0.36
8 (here Cf1)	0.485 g	58.6	40.9	0.49
9 (here Cf2)	0.51 g	56.0	43.7	0.31

In the catalogue below, the groups B and C with conch (Figures 6-13) are basically arranged in the order established by Mitchiner and Wicks. However, this order should not automatically be understood as a chronological sequence as proposed by Mitchiner. As yet, we have no reliable clues for their chronology nor for the length of time over which these coins were produced. Group B comprises the coins with conch/śrīvatsa (subgroup Ba) and conch/svastika (subgroup Bb), whereas the very large Group C comprises the numerous uniface coins with conch and a blank reverse, subdivided in seven subgroups Ca to Cg, according to the various stylisations of the conch motif. The more detailed ones have a round dot for the conch apex, followed by two or three parallel or curved lines for the coiled spirals of the bulging shell. The

¹⁶ Mitchiner 1985: 327. Mitchiner and Pollard 1990: 26. The X-ray fluorescence analyses were performed by Mark Pollard at the Research Laboratory for Archaeology and the History of Art, University of Oxford.

¹⁷ Bennett 2009.

¹⁸ Mitchiner allocated them to three groups: the first with "good quality design and a gold purity around 70%", his early group; the second consisting of the uniface coins with the conch design "of intermediate form"; and the third, his late group, with formalised conch design and a gold purity around 60%, Mitchiner and Pollard 1990: 26. On the basis of the same nine coins, Wicks distinguished three basic varieties: the conch/śrīvatsa (his number 12), the conch/svastika (his number 13), and the uniface conch type (his number 14), Wicks 1992a: 263 table 5, 270.

lower part ends in a drawn-out pointed tip. The opening in the lower part of the conch is variously stylised: a volute-like element above combined with straight lines below (Figures 6a-b; 7a,c; 8a; 9), or a line curved like a question mark (Figure 6c), or a rather straight line. Some uniface coins have smooth and plain reverse sides, others show irregular striations (Figures 6h-i; 10d,f; 12b,d) generated by the underlying material used during the minting process.

The majority was struck in an irregular flan. However, a few others seem to have been struck in a flan of circular shape. This applies to a few conch coins of subgroups Cc, Cd, Ce and Cf (Figures 10, 11 and 13), as well as to the coins of Group A (Figures 1-4). Coin A2 features two small nipples on opposite sides, on the half coin A3 the remains of at least one such nipple can be discerned. These nipples were presumably already present on the pre-formed flan. Similar nipples appear also on the coin Ce1 (Figure 6g).

Weight standard

A decisive point is that the coins of Group A (Figures 1-5) are linked by their weight to the coins with conch motif of Groups B and C (Figures 6-13). A check of the Group B and C coins reveals that most of them weigh just a little less than half a gramme, the average weight of those listed in the catalogue is 0.46 gramme. This is just about half the weight of the gold coin A2 with head in profile (Figure 2) weighing 0.94 gramme. Likewise, it correlates nicely to the weight of 0.42 gramme for the half coin A3 (Figure 3). Obviously, the coins of Group A (Figures 1-5) follow the same weight standard as the coins with conch motif of Groups B and C (Figures 6-13), the latter representing a lower denomination of just half the weight. Mitchiner¹⁹ convincingly identified the weight standard of the conch coins as multiples of the Indian rattī (from Sanskrit raktikā), a weight unit based on the seed of the climber plant Abrus precatorius, the guñja seed in Sanskrit. These seeds are very consistent in weight and were used in India since ancient times to weigh precious metals. When investigating the weight of the guñja seed, Harry Falk arrived at an average of 0.114 based on twenty guñja seeds he had received from a jeweller in Kathmandu.²⁰ The rattī has been standardised in modern times: $1 ratt\bar{i} = 0.12125$ gramme.

Evidently, the gold coins from Khlong Thom follow this weight standard, the coins with conch motif of Groups B and C corresponding to a weight of four *rattī*, the coins with profile head of Group A with twice the weight corresponding to a weight of eight *rattī*. Possibly, another uniface gold coin from Khlong Thom, now in the Suthiratana Foundation KLP 089.5 (Figure 14), measuring 9 mm x 7.5 mm also belongs to this coinage. It features a crescent and a disc inscribed with a cross, and has a weight of 0.90 gramme, that would correspond to the weight of a full size coin of eight *rattī*.

¹⁹ Mitchiner 1998: 47-8, 167-8. On the weight, see Falk 2015: esp. 100-3.

²⁰ Falk 2015: 101-2 note 32, with further references.





Figure 1. Wat Khlong Thom Museum. Gold coin A1 from Khlong Thom. Photos: Boonyarit Chaisuwan and Wat Khlong Thom Museum.





Figure 2. Suthiratana Foundation, KLP 089.1. Gold coin A2 from Khlong Thom. Photos: Brigitte Borell.





Figure 3. Suthiratana Foundation, KLP 512. Half of a gold coin A3 from Khlong Thom. Photo: Brigitte Borell.





Figure 4. Suthiratana Foundation, KLP 512 and KLP 089.1. Coins A2 and A3. Photos: Brigitte Borell.



Figure 5. Reverse of coin A1 in the Wat Khlong Thom Museum. Hatched: characters from the first strike. Based on the photo of the Wat Khlong Thom Museum.

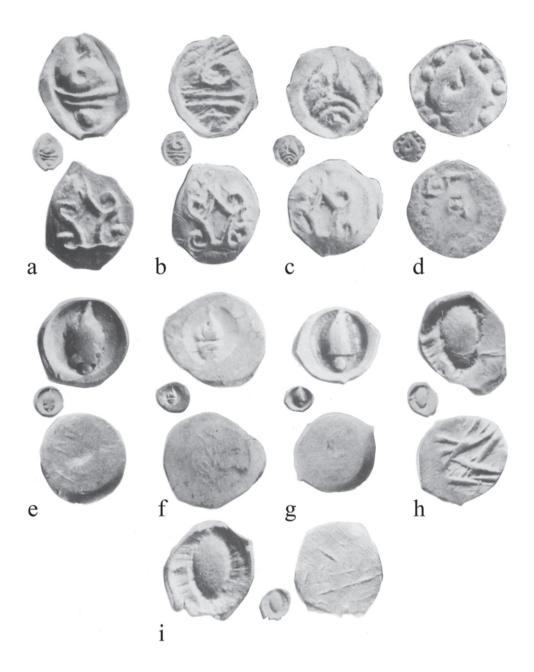


Figure 6. Nine gold coins with conch motif from Khlong Thom (enlarged three times, with the obverse also shown in natural size). After Mitchiner 1985, reproduced with kind permission of the Royal Numismatic Society.



Figure 7. Gold coins with conch motif from Khlong Thom in the Suthiratana Foundation: a-b, KLP 166 (Ba4); c-d, KLP 585 (Ba5); e-f, KLP 541.2 (Ba6); g-h: KLP 89.4 (Ba7). Photos: Brigitte Borell.





Figure 8. Suthiratana Foundation KLP 409. Gold coin Bb2 with conch motif from Khlong Thom. Photos: Brigitte Borell.



Figure 9. Wat Khlong Thom Museum. Gold coin Ca2 with conch motif from Khlong Thom. Photo: Wat Khlong Thom Museum.



Figure 10 (a-d). Gold coins with conch motif from Khlong Thom: a-d two coins (Cc2 and Cc3) in The Thaksin Folklore Museum. Photos: Ekkasit Phromsathit.



Figure 10 (e-m). Gold coins with conch motif from Khlong Thom: four coins in the Suthiratana Foundation; e-f, KLP 064 (Cc4); g-h, KLP 089.2 (Cc5); i-k, KLP 541.1 (Cc6); l-m, KLP 293.1 (Cc7). Photos: Brigitte Borell.

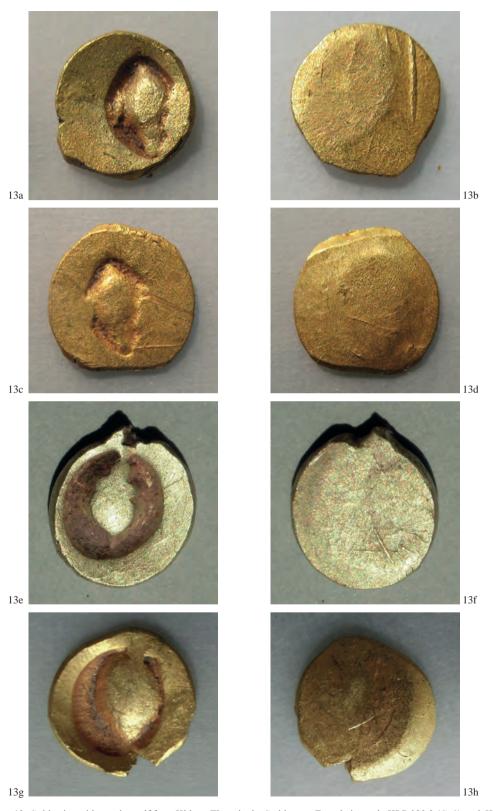




Figure 11. Suthiratana Foundation KLP 258. Gold coin Cd2 with conch motif from Khlong Thom. Photos: Brigitte Borell.



Figure 12. Gold coins with conch motif from Khlong Thom in the Suthiratana Foundation: a-b, KLP 137 (Cf3); c-e (from left:) KLP 144.1, KLP 144.2, and KLP 144.3 (Cf4, Cf5, and Cf6). Photos: Brigitte Borell.



Figure~13.~Gold~coins~with~conch~motif~from~Khlong~Thom~in~the~Suthiratana~Foundation:~a-b,~KLP~089.3~(Cg1);~c-d,~KLP~581~(Cg2);~e-f,~KLP~185~(Cg3);~g-h,~KLP~436.2~(Cg4).~Photos:~Brigitte~Borell.





Figure 14. Suthiratana Foundation KLP 089.5. Gold coin from Khlong Thom. Photos: Brigitte Borell.

Die matches

It has already been noted above that in Group A the two coins A2 and A3 were struck with the same pair of dies (Figures 2-4). Such die matches can also be observed in Groups B and C. For example, the coins Ba1 (Figure 6a) and Ba4 (Figure 7a-b) appear to have been struck with the same pair of dies. The two coins Ba2 (Figure 6b) and Ba5 (Figure 7c-d) share at least the same die for their obverse. Judging from the arrangement of the dots around the conch, reminiscent of a beaded circle, the obverse of the two coins Bb1 (Figure 6d) and Bb2 (Figure 8) – both with *svastika* on the reverse – and the two uniface coins, Ca1 and Ca2 (Figure 9),²¹ were struck with the same die. In subgroup Cd, the strongly stylised conch motif on the two coins Cd1 (Figure 6f) and Cd2 (Figure 11) look as if struck with the same die. In subgroup Cf, apparently all six coins (Figures 6h-i, 12) were produced with the same die featuring a conch of rather indistinct oval shape. In subgroup Cg, the coins Cg1 and Cg2 (Figures 13a-d) seem to share the same die.

Given the great variety of conch designs in Groups B and C, it is surprising that so many die matches can be found. Of special importance is the die link between the conch/svastika coins of subgroup Bb and the uniface coins of subgroup Ca that share the same die for the conch motif. It demonstrates – at least in this case – a close connection between coins struck on both sides and those struck on one side only. It makes it unlikely to assume a long chronological gap between these coin series. In view of the fact that all the coins were found at the same place, it is a noteworthy phenomenon to find so many die matches among a limited number of coins. It certainly supports the interpretation as a local coinage as already assumed by Mitchiner and Wicks.²²

²¹ The reverse of coin Ca2 in the Wat Khlong Thom Museum was not available. Since it has not been photographed, it is presumably plain. Therefore, the coin is here listed among the uniface coins. ²² Wicks 1992b: 221. Mitchiner 1998: 166-8.

Dating of the coins

In his 1985 and 1990 publications, Mitchiner suggested a date for the conch coins from Khlong Thom within the time bracket from the 1st/2nd century to the 6th century CE,²³ the period of what he called 'Funan-related' culture. He compared two of the coins from Khlong Thom in his possession (here coins Cf1 and Cf2, Figures 6h-i) to two small uniface gold coins found in southern Vietnam at Oc Eo,²⁴ an important urban centre of the polity Funan known from Chinese sources. In fact, as far as a judgment is possible on the basis of the not very satisfactory illustrations given in Malleret's publication, one of the Oc Eo coins²⁵ rather resembles the coin Cg4 (Figure 13g-h), the other²⁶ might possibly be similar to coins such as Cd1 and Cd2 (Figure 6f and Figure 11) in contrast to the comparisons suggested by Mitchiner. In any case, the two gold coins from Oc Eo are certainly similar in appearance and measurements – although no individual weights can be elicited from the publication – to the Khlong Thom coins.

Wicks, in his tentative chronology for early coinage from mainland Southeast Asia, proposed a time span from about 450 to 500 CE for the Khlong Thom coins known to him.²⁷ Wicks regarded them as copies of series of silver coins with conch/śrīvatsa primarily known from the Pegu area in southern Burma, which he assigned to the first half of the 5th century CE.28 These silver coins are much larger and heavier, with diameters about 24 mm and weights between 9.4 to 10.1 grammes. Wicks posited that these large silver coins were the prototype on which the small gold coins from Khlong Thom were based; accordingly, he proposed for the gold coins a somewhat later date in the second half of the 5th century. However, such a derivation of the designs on the Khlong Thom gold coins is hypothetical and may not necessarily be compelling for the date of the Khlong Thom coins. Conch and śrīvatsa are common Indian motifs. To quote Pamela Gutman, these "symbols, recognised in Indian numismatics as dynastic emblems and religious and auspicious motifs, generally derive from the ancient collection of signs denoting fertility and prosperity". 29 Such auspicious motifs could have derived directly from South Asian prototypes. A similarly stylised conch motif appears on a seal from Khlong Thom with a Brāhmī inscription that can be dated on palaeographic grounds to the early centuries CE.30

In his 1998 publication, Mitchiner revised the time frame, now dating his early

²³ Mitchiner 1985: 327. Mitchiner and Pollard 1990: 25-6, 'Funan-related' culture, c. 2nd to 6th century CE; see also Mitchiner 1988: 182.

²⁴ Malleret 1962: 11, 125 no. 945 pl. 5. Mitchiner 1998: 168 no. 583.

²⁵ Malleret 1962: no. 945 pl. 5 bottom row left. Mitchiner 1998: 168 no. 583 left.

²⁶ Malleret 1962: no. 945 pl. 5 top row right. Mitchiner 1998: 168 no. 583 right.

²⁷ Wicks 1992a: 363 table 5.

 ²⁸ Gutman 1978. Mitchiner 1988: 184-188 pl. 38-39. Mitchiner and Pollard 1990: 24-5 pl. I, 22.
 Wicks 1992a: 256, 266 class A. Wicks 1992b: 111-14 class A fig. 4.2. Mitchiner 1998: 147-56.
 Mahlo 2012: 60 no. 15, 64-5, 71 (dating them to the second half of the 4th century CE).

²⁹ Gutman 1978: 12.

³⁰ Wat Khlong Thom Museum, see Klinphoklap 2007: 42 fig. 2; according to Harry Falk who reads the inscription as *māpasa*, "of Māpa", the Brāhmī characters agree with a date in the early centuries CE, personal communications, July 2014 and August 2016.

series of conch/śrīvatsa and conch/svastika coins to 425-500 CE and his late series of uniface coins with conch to 500-575 CE,³¹ thus spreading the minting of these coins over about 150 years, which seems to be a very long period. The number of die matches, in particular those linking coins of subgroup Bb closely to the uniface coins of subgroup Ca, rather appear to support a narrower chronological frame for the production of these small gold coins. A production period of about 50 years, as suggested by Wicks, seems a more likely estimate. As long as external evidence for the chronology of the coins is lacking, it is not even certain that the uniface coins are generally to be dated later. A parallel production of at least some two-faced and uniface coins is indicated by the die links between subgroups Bb and Ca discussed above.

On palaeographic grounds, Harry Falk prefers a date of about 200 CE for the Brāhmī inscription of the Group A coins, though not excluding a somewhat later date within the period from the early 3rd up to the 5th century CE at the latest. Given the close links of the Group A coins to those of Groups B and C, a similar date might be assigned to the latter. Thus, the coins with conch motif from Khlong Thom may belong to an earlier period than hitherto proposed by Mitchiner or Wicks. Possibly, the Group A coins with Brāhmī inscription might date as early as about 200 CE, the conch coins of Groups B and C as early as the 3rd century CE.

Concluding remarks

Inspirations from different cultural traditions were used to create the coinage from Khlong Thom. The Brāhmī script, the weight standard, and the symbolic imagery of conch, *śrīvatsa*, and *svastika* are clearly borrowed from India. The concept of a profile head on coins has its origins in the Graeco-Roman world, and Roman imperial coins, in particular those dating from the 1st and 2nd centuries CE, have been imported in their thousands to India in trade transactions. Some might have arrived in Southeast Asia, either directly or indirectly via India. The cast gold and tin pendants found at Khlong Thom imitating Roman coins demonstrate that people there were familiar with such designs,³² although, at present, the only Roman coin find in Thailand is the Victorinus coin found at U Thong.

However, India may also have transmitted the idea for such a coin design displaying the ruler's portrait and name. Such coins, inspired by the Graeco-Bactrian

³¹ Mitchiner 1998: 165-8, see also ib. 147, labelled as the "local coinage of Tun-sun", "Tun-sun gold coins", "Tun-sun coinage", or "Tun-sun currency" and assigned to the "isthmian kingdom of Tun-sun". The kingdom Dunsun (= Tun-sun) is known from Chinese sources; it is one of the kingdoms that became a vassal to Funan as a result of Funan's southern and western expansion along the coast of the Gulf of Siam in the early 3rd century CE. Scholars agree to place Dunsun on the Thai-Malay Peninsula, but where precisely it was situated is far from clear. The identification presented by Mitchiner, for example, of Khlong Thom as a "site in Tun-sun", is purely hypothetical and as yet not substantiated. A detailed discussion of Dunsun is beyond the scope of this paper, however, usually, a more northern part of the peninsula for Dunsun has been suggested, Wheatley 1961: 15-21, 286-9 fig. 46. Wicks 1992b: 112, 220-1 fig. 7.1. Jacq-Hergoualc'h 2002: 101-3. Vickery 2003–2004: 107-8 n.34, 112, 119, 136.

³² Borell et al. 2014. Borell 2014.

or Indo-Greek coins of the Hellenistic tradition and respectively by Roman imperial coins, are not only known from northern India, but also from South Indian silver coinages. Uniface silver coins assigned to the Chera dynasty, with a suggested date of 1st to early 2nd century CE, feature the clean-shaven profile head of the king with his name written above in Tamil-Brāhmī script.³³ Sātavāhana silver coins of the 2nd century CE with bilingual inscriptions have the portrait of the king on the obverse – also clean-shaven but adorned with heavy ear ornaments and a big jewel on the forehead – surrounded by a Prakrit legend in Brāhmī script giving the king's name, and on the reverse various dynastic emblems surrounded by the same legend in Tamil in Tamil-Brāhmī script.³⁴

Given the suggested time frame of the Khlong Thom coinage, the use of śrī as a 'honorific' prefix, which seems to have its origins in southern India where the Sātavāhanas already used it in c. 120 CE, may point to the involvement of individuals from peninsular India in creating the Khlong Thom coinage.³⁵ The śrīvatsa motif appears on southern Indian lead coins of the Sātavāhana period in very similar form as on the Khlong Thom coins.³⁶ Indian presence at Khlong Thom is attested by other finds, including personal seals inscribed in Brāhmī script dating from the early centuries CE, if not earlier.³⁷ Another prominent find is a stone inscribed in Tamil-Brāhmī script. The inscription has been read as *perumpatan kal*, "the stone of Perumpatan" and dated to the 3rd or 4th century CE. The object has been interpreted as the touchstone of an Indian goldsmith.³⁸

³³ Rajan 1996: 102 fig. 6, pl. IIA. Krishnamurthy 1997: 97-105 pl. 13-14. Mahadevan 2003: 57 fig. 1.22 D-E, 63 table 1.6 nos. 11-12, 118; Mahadevan 2014: 64 Catalogue A II fig. 4-5; 154 (suggesting a date in the 3rd century CE on palaeographic grounds).

³⁴ Mahadevan 2003: 199-205. Mahadevan 2014: 237-43. On the Sātavāhana silver coins, which were die-struck, see also Ray 1986: 149-51.

³⁵ It seems not to be known in northern India before c. 320 CE. Aman ur Rahman and Falk 2011: 20. See also Rapson 1901: 99-100.

³⁶ Gutman 1978: 13-14 fig. 1,3-4. See also Rapson 1908: 53 nos. 206-208 pl. 8.

³⁷ For those of early date, see a carnelian seal, now in the Suthiratana Foundation KLP 288, Srisuchat 1996: 269 (colour illustration, second from top); Klinphoklap 2007: 38 fig. 1; Pongpanich 2009: 147 top right ("of Brahmadinna"; Harry Falk, in a personal communication, suggests a date from the 2nd century BCE to the 1st century CE); another seal in the Wat Khlong Thom Museum, Klinphoklap 2007: 42 fig. 2, displays three Brāhmī characters and a conch motif ("of Māpa" read by Harry Falk, personal communicaton, July 2014) and may date from the early centuries CE (see here footnote 30). See also Jacq-Hergoualc'h 2002: 85-6.

³⁸ The inscription was read in 1991 by Yellava Subbarayalu, at that time professor in the Department of Epigraphy and Archaeology at Tamil University, Tanjavur, as *Perumpadan Kal*, meaning "stone of (Mr.) Perumpadan (Big Feet)" and dated to the 3rd century CE, see Srisuchat 1996b: 250, 269 (colour illustration). Jacq-Hergoualc'h 2002: 87. Chaisuwan 2011: 86 fig. 4.4. A different reading and interpretation of the meaning of Perumpatan has been presented by P. Sanmugam, Iravatham Mahadevan, and Noburu Karashima, the latter having seen the stone in the Wat Khlong Thom Museum in 1992. They read *perumpatan kal* as meaning "the (touch) stone of Perumpatan" and explaining *perum* as "big" and *patan (pattan)* as "goldsmith", and, therefore, Perumpatan as either the title or the name of a goldsmith who possessed this touch-stone; for dating on palaeographic grounds, the 3rd or 4th century CE are suggested, see Mahadevan 1994: 140-1 pl. 6 (here still with a date in the 2nd or 3rd century CE). Karashima 2002: 10 pl. 1.1. Mahadevan 2003: 51, 59 fig. 1.24 E, 64 table 1.7 no.5. Rajan 2011: 190. Mahadevan 2014: 46 fig. 1.21. The reading given above in

The gold coins from Khlong Thom have been interpreted here as full and half value denominations based on the same weight standard. This clearly indicates their use as a medium of exchange. Additional support for such a use is the full value coin A3 (Figures 3-4), cut in half to create such a half denomination. The evidence available suggests a local production of the coins. In this case, the profile head presumably represents the portrait of the local ruler and the inscription gives the Indianised name adopted by him. Khlong Thom, as a place minting its own coinage, gains a new prominence. Its role as an important trading site has already been established on the evidence of artefacts from distant lands found at the site. The notion that Khlong Thom issued in this period its own gold coinage adds a new quality to its character as a trading centre.

The coins were in all likelihood intended for use in trade transactions. Given that the two gold coins found at Oc Eo can be assigned to the Khlong Thom series, they would provide evidence for trade links across the Gulf of Thailand. Such a link between the two places is indicated also by the gold pendants imitating Roman imperial coins. In particular, the uniface gold pendant from Oc Eo imitating the obverse of a coin of Commodus (r. 180-192 CE) – previously misidentified as his father Marcus Aurelius (r. 161-180 CE) – shares special technical details with pendants from Khlong Thom. ³⁹ Most likely, these pendants were made at the same place, which might have been Khlong Thom. The dates of the Roman prototypes point to the early 3rd century CE as the earliest possible date for the production of these gold pendants.⁴⁰

Within the maritime networks of the first half of the first millennium CE, Khlong Thom seems to have been a hub for maritime trade and intercultural contact. Its role as a trading place and a regional, or perhaps supra-regional, centre might have been of greater importance than hitherto has been assumed. Michel Jacq-Hergoualc'h⁴¹ discussed a complex of possible transpeninsular routes in the region, between the Tenasserim and the Nakhon Si Thammarat Ranges. One route would connect Khlong Thom northwards, following in its northern part the course of the Menam Tapi, to the Bay of Bandon of the Gulf of Thailand. An eastern branch of this route, halfway up to the north, crossing the Nakhon Si Thammarat Range, would connect it to the Gulf of Thailand in the region of present-day Nakhon Si Thammarat. Interestingly, the site of Tha Chana,⁴² a short distance north of the Bay of Bandon, yielded numerous finds of Chinese, Indian and Mediterranean origin, attesting to its role as a way station along the maritime and transpeninsular trade networks in the early centuries CE. Oc Eo, across the Gulf of Thailand on its eastern coast, could be easily reached from both terminal points of these transpeninsular routes.

the text follows the transcription by Iravatham Mahadevan 2003, which was kindly brought to my attention by Harry Falk.

³⁹ Borell 2014: 13-7 fig. 4.

⁴⁰ In particular, the hybrid based on a coin obverse of Antoninus Pius (r. 138–161 CE) and a reverse of Septimius Severus (r. 193–211 CE), see Borell 2014: 17-20, 26 fig. 11. See also Borell et al. 2014: 107-10.

⁴¹ Jacq-Hergoualc'h 2002: 45-6 doc. 3, 8, and 35.

⁴² Nunsook 2009: 43-5. Pongpanich 2009: 104-15.

Postscript

While this article was going to press, twenty-three more coins from Khlong Thom came to my knowledge. All are of the kind with a conch motif. Eleven coins are published in Ronachai Krisadaolarn, *Wiwatthanakan kasap thai chak anachak boran / The Evolution of Thai Money from Its Origins in Ancient Kingdoms* (Bangkok: River Books, 2016), 39 (reproduced below, courtesy of Ronachai Krisadaolarn). Two others (of the Cf subgroup) are kept in a private collection in Bangkok, which I had a chance to see in March 2017. Ten more, kept in a private collection in Krabi Province, are known to me only through photographs.



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Catalogue of coins from Khlong Thom

(d. = diameter; th. = thickness; n.a. = not available)

A. Coins with head in profile (fig. 1-5)

Obv.: Head to right Rev.: Brāhmī inscription

śr(ī)-viṣuvagoda "Śr(ī) Visuvagoda"

A1. Wat Khlong Thom Museum; d. circa 10 mm (fig. 1a-c, 5) weight n.a.

A2. Suthiratana Foundation KLP 089.1; d. 10 mm (fig. 2a-b, 4a-b) 0.94 gramme

A3. Suthiratana Foundation KLP 512, half of coin; d. 9.8 mm, th. 1 mm

0.42 gramme (half)

(fig. 3a-b and 4a-b)

The coins A2 and A3 were struck with the same pair of dies.

B. Coins with conch

Ba. Subgroup conch/*śrīvatsa* (fig. 6a-c and 7)

Obv.: Conch Rev.: *śrīvatsa*

 Ba1. Mitchiner 1985 no. 1; circa 10 mm x 8 mm (fig. 6a)
 0.50 gramme

 Ba2. Mitchiner 1985 no. 2; circa 9 mm x 8 mm (fig. 6b)
 0.395 gramme

 Ba3. Mitchiner 1985 no. 3; circa 8 mm x 8 mm (fig. 6c)
 0.395 gramme

 Ba4. Suthiratana Foundation KLP 166; 9 mm x 8 mm (fig. 7a-b)
 0.42 gramme

 Ba5. Suthiratana Foundation KLP 585; d. 8.5 mm, th. 0.7-0.7 mm (fig. 7c-d)
 0.36 gramme

Ba6. Suthiratana Foundation KLP 541.2; 8 mm x 8.5 mm, th. 0.7 mm (fig. 7e-f) 0.38 gramme Ba7. Suthiratana Foundation KLP 89.4; 8 mm x 8.5 mm, th. 1 mm (fig. 7g-h) 0.46 gramme The coins Ba1 and Ba4 are obviously struck with the same pair of dies. Another pair of dies was used for Ba2 and Ba5.

Bb. Subgroup conch/svastika (fig. 6d and fig. 8)

Obv.: Conch surrounded by some dots

Rev.: svastika

Bb1. Mitchiner 1985 no. 4; circa 8.5 mm x 8.5 mm (fig. 6d)

0.41 gramme

Bb2. Suthiratana Foundation KLP 409; 8 mm x 7.5 mm, th. 1 mm (fig. 8a-b)

0.50 gramme

C. Uniface coins with conch (fig. 6e-i and fig. 9-13)

Obv.: Conch Rev.: Plain

This is the largest group among the surviving examples known to the present writer. The conch motif is variously stylised. The coins are here assigned to subgroups according to their visual appearance.

Ca. Subgroup (fig. 9)

Ca1. Mitchiner 1998 no. 576; diameter 9 mm (not illustrated here)

Ca2. Wat Khlong Thom Museum; diameter circa 9 mm

(reverse not available, but presumably plain) (fig. 9)

0.33 gramme weight n.a.

Cb. Subgroup

Cb1. Mitchiner 1998 no. 577; diameter 9 mm (not illustrated here) 0.50 gramme

The two subgroups Ca and Cb may be understood as intermediates to Groups B and C with the only difference that their reverse sides are plain. The two coins Ca1 and Ca2 with the conch motif surrounded by dots are closely related to the two examples Bb1 and Bb2. In fact, they appear to have been struck with the same obverse die as these.

The conch on Cb1 seems to be related to the conch on the obverse of Ba1 and Ba4.

Cc. Subgroup (fig. 6e and fig. 10)

Cc1. Mitchiner 1985: no. 5; d. circa 8 mm (fig. 6e)	0.50 gramme
Cc2. The Thaksin Folklore Museum; circa 7mm x 7.5 mm (fig. 10a-b)	weight n.a.
Cc3. The Thaksin Folklore Museum; circa 8 mm x 8 mm (fig. 10c-d)	weight n.a.
Cc4. Suthiratana Foundation KLP 064; 7 mm x 8 mm, th. 1 mm (fig. 10e-f)	0.48 gramme
Cc5. Suthiratana Foundation KLP 089.2; 7 mm x 8 mm, th. 1.1 mm (fig. 10g-h)	0.55 gramme
Cc6. Suthiratana Foundation KLP 541.1; d. 7 mm, th. 1 mm (fig. 10i-k)	0.50 gramme
Cc7. Suthiratana Foundation KLP 293.1; d. 7 mm (fig. 10l-m)	0.58 gramme

Cd. Subgroup (Figure 6f and Figure 11)

Cd1. Mitchiner 1985 no. 6; circa 8 mm x 9 mm (fig. 6f) 0.50 gramme

Cd2. Suthiratana Foundation KLP 258; 7.4 mm x 7.5 mm, th. 0.7 mm 0.48 gramme (fig. 11a-b)

The conch motif on the obverse of Cd1 and Cd2 may have been struck with the same die.

Ce. Subgroup (fig. 6g)

Ce1. Mitchiner 1985 no. 7; circa 7 mm x 8 mm (fig. 6g) 0.35 gramme

The obverse shows a schematic conch assembled of two rather geometric shapes: a globular dot and a cone.

Cf. Subgroup (fig. 6h-i and fig. 12)

Cf1. Mitchiner 1985 no. 8; circa 8 mm x 10 mm (fig. 6h)	0.485 gramme
Cf2. Mitchiner 1985 no. 9; circa 8 mm x 9 mm (fig. 6i)	0.51 gramme
Cf3. Suthiratana Foundation KLP 137; 7.5 x 8 mm, th. 1 mm (fig. 12a-b)	0.45 gramme
Cf4. Suthiratana Foundation KLP 144.1; 7 mm x 8 mm (fig. 12c-d left)	0.42 gramme
Cf5. Suthiratana Foundation KLP 144.2; 7.5 mm x 8.2 mm (fig. 12c-d centre)	0.44 gramme
Cf6. Suthiratana Foundation KLP 144.3; diameter 8.5 mm (fig. 12c-d right)	0.53 gramme
Each obverse with conch motif could have been struck with the same die	

Cg. Subgroup (fig. 13)

Cg1. Suthiratana Foundation KLP 089.3; 7 mm x 7.5 mm, th. 1 mm (fig. 13a-b)	0.47 gramme
Cg2. Suthiratana Foundation KLP 581; d. 8 mm, th. 0.6 mm (fig. 13c-d)	0.44 gramme
Cg3. Suthiratana Foundation KLP 185; 7 mm x 8 mm, th. 1 mm (fig. 13e-f)	0.50 gramme
Cg4. Suthiratana Foundation KLP 436.2; d. 8 mm, th. 1 mm (fig. 13g-h)	0.49 gramme
The coins $C \circ 1$ and $C \circ 2$ appear to have been struck with the same die	

The coins Cg1 and Cg2 appear to have been struck with the same die.

A piece very similar to Cg4 was found at Oc Eo (Malleret 1962: 125 no. 945 pl. 5 bottom left; Mitchiner 1998: 168 no. 583 left). Judging from the published illustration, it seems even possible that it has been struck with the same die as Cg4. However, this needs to be verified. At present, no better photographs nor precise measurements are available for the Oc Eo piece.

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