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Ancient lead coins, amulets and artifacts depicting turtles from Akurugoda, Southeastern Sri Lanka

Abstract

Coins, tokens or possibly amulets depicting turtles, terrapins and tortoises discovered from fields around Tissamaharama, Southeastern Sri Lanka are discussed. The bad status of preservation of these objects could probably be due to the main metal used is lead, and the close proximity to the sea of the location where these objects were unearthed. The Brāhmī letters refer to a person and not the ruling monarchy which leads to the assumption that most of these coins are in reality amulets. Depicting turtles could perhaps be due to the lucrative trade in marine turtle scutes (scales of the carapace) and their products around south-east of the country from 2nd century BCE.

Abbreviations: AdS= Anslem de Silva, ID = Indraneil Das, KR = Kavan Ratnatunga, OB = Osmand Boppearachchi, RW = Rajha Wickramasinghe, SM = Siri Munasinghe

Introduction

Recovery of ancient coins and seals, particularly of foreign origins from ancient sea ports, provide substantial evidence of trade and commerce, and consequently are of great archaeological importance. It is also evidence of active international trade and administrative systems that existed from ancient times between these par-

ticular countries. In Sri Lanka, early forms of currency have been in circulation for monetary transactions from circa 3rd century BCE (PARKER 1909, CODRINGTON 1921, GEIGER 1912, JAYASINGHE 1996, BOPEARACHCHI & WICKREMESINHE 1999, DE SILVA 2009). However, the ancient chronicle, *Mahavamsa*, shows the existence of a monetary system a few centuries earlier than the



Fig. 1. Greek turtle coin, the silver stater. (Image courtesy: CNG https://en.wikipedia.org/wiki/Silver_stater_with_a_turtle#/media/File:Aegina_Stater_achaic.jpg)



Fig. 2. Tin money of the Malacca Empire, 1400 CE
(Photo: CHIEW).



Fig. 3. Tin money of the Malacca Empire, 1400 CE
(Photo: CHIEW).

3rd century BCE during the time of King Vijaya in the 5th century BCE (GEIGER 1912). In the last few decades, numerous discoveries of numismatic objects of archaeological and historical significance have been made from Ruhuna, in the southeastern part of the island (WEISSHAR & WIJEYPALA, 1993). These comprise of lead coins, tokens, coin moulds, sealings and money boxes, all suggesting that monetary transactions were well established in the ancient kingdom of Ruhuna, founded around 3rd century BCE and was in existence till at least 2nd century CE. These objects were found in the villages of Akurugoda, Minigodana and Tiki-rigodana, in the vicinity of Tissamaharama (BOPEARACHCHI & WICKREMESINHE 1999). Additionally, on the basis of the paleography, they state that the Akurugoda inscribed lead coins 'can be fixed without much of a risk' to be between the 2nd century BCE and 2nd century CE. It is of interest to note here that CHANDRIKA JAYASINGHE too reported of this in 1996. In the ancient coins of India and Sri Lanka, only a few bear inscriptions, while the rest are marked with symbols or motifs. Indian coins with motifs were found in Sri Lanka, such as the silver punch marked coins of the Magadha Empire that lasted between 684 BCE to the 7th century CE (GUPTA & HARDARKAR 1985). There is archaeological evidence that ancient maritime route passed via Sri Lanka on the return passage from south-east Asia, probably

due to favourable monsoon winds (TRIPATI 2011). Over 500 motifs were used, and over 600 types of coins were issued during a period of 400 years (DUTTA 2012).

There are also global representatives of pre-Christian coins, tokens and other metal objects that depict turtle, terrapin and tortoise (hereafter, 'turtle') figures on the obverse. A famous example is the Greek turtle coin, the symbol on the earliest accepted coinage of Greece, the Stater, minted in silver (SMITH 1881, Fig. 1). The theory in respect with those coins from Aegina was that the turtle symbol represented the island's marine power and trading success (KROLL & WAGGONER 1984, LOPEZ 1996), and even competed with the arguably more famous Athenian (silver) owl coins (starting second half of the 5th century BCE, WEBER 2000). Additional examples from several centuries later originating in south-east Asia, include tin and lead (in approximately 3:1 ratio) money widely used in the southern Malaya (SHAW AND ALI 1970, NGE 2005), such as the crudely produced tin and lead money between the 13th and 14th Centuries, depicted marine or aquatic-related objects (such as fish, shellfish, star fish, frogs, turtles and crocodiles) or other items highly valued (including roosters and buffaloes). Tin and lead animal money, reportedly influenced by magic and folklore, was minted by the *Pawang*s (traditional medicine men), with the ingots in the shape of animals to appea-

se spirits (DAS 2014). The coins of pre-Malacca and Malacca Sultanate period, between the 13th to 18th Centuries, on the other hand, barring a few exceptions, depicted ornate lettering and minted in sub-circular shapes (NGE 2005, Figs. 2–3). The historic arrival of Admiral ZHENG HE (1371–1433 or 1435) of the Ming Dynasty Period of China, described as a “court eunuch, mariner, explorer, diplomat, and fleet admiral” was during the early part of the 15th Century. This period is credited with the introduction of tin cash coins, minted in copper and produced in China (NGE 2005, SEN 2006). In time, when copper coins ran out, the local Chinese turned to tin that was found in abundance in the Malay Peninsula. Tin, although softer than copper, was considered to bring good luck, prosperity as well as ward off evil spirits. The choice of metal was logical: tin is malleable and thus easily shaped, and mined in large quantities from quarries in the Malay Peninsula. Additional examples from the southeast are the beautifully engraved tin coins with tortoises (Figures 2, 3) that were used in the days of the Malacca Empire around 1400 CE (CHIEW 2001).

Accounts of ancient coins have been reported for Sri Lanka (PARKER 1909, CODRINGTON 1921, BOPEARACHCHI 1985, WALBURG 1993, WEISSHAR & WIJEYPALA 1993). However, none of these authors refer to coins that depict turtles in detail like in the present communication. Some of the first accounts which referred to turtle coins were by JAYASINGHE (1996), SEYONE (1998) and BOPEARACHCHI & WICKREMESINHE (1999). CHANDRIKA JAYASINGHE reported coin number 20a below and correctly state what is depicted as a turtle (see her figure 20). SEYONE (1998) reported of Indian coins (of the kingdoms of the Pallava, 3rd to 9th Centuries, and Chola, 9th to 13th Centuries) that were mainly discovered in Jaffna, Mannar and few other localities in the country around the 1890’s, and says these coins were minted around 5th century BCE. This suggests trade connections between India and Sri Lanka for over two millennia. SEYONE (1998) illustrated and recorded details of

12 coins of Indian origin, most of which depict a hard-shelled turtle (a member of the family Bataguridae, reported as “tortoise”) in a pond. The ancient custom of keeping turtles in temple ponds remains till date in Sri Lanka and the rest of the Indian Sub-continent, as well as countries in south-east Asia. Aquatic species such as *Melanochelys* and *Lissemys* species are kept in Buddhist and Hindu temple ponds and occasionally in private wells in Sri Lanka. Although SEYONE (1998) listed a number of coins in which he describes them as turtles and tortoises, we have no access to these coins and the published image resolutions are too low to confirm species identifications.

The ancient coins from Sri Lanka had various figures such as humans, animals (elephants, bulls, lions, horses, fish and turtles), floral and geometrical figures, struck on the obverse and on the reverse in some, legends in Brāhmī script (an ancient writing system from the Indian sub-continent and in Central Asia between ca. 4th century BCE to ca. 5th century CE). Additionally, the discovery of Indian, Persian, Roman and Greek coins in the country from ancient times indicate flourishing maritime trade between Sri Lanka and those countries (CODRINGTON 1921, BOPEARACHCHI & WICKREMESINHE 1999). Furthermore, BOPEARACHCHI & WICKREMESINHE (1999) report that the iconography of these coins from Akurugoda is another important revelation compared to known issues such as elephant, lion, bull and horse in Sri Lanka, but some animals such as turtle, donkey, shark etc show very little in common with the known coinage of Sri Lanka. The present communication is on the lead ‘coins’ belonging to around 2nd century BCE to 2nd century CE, which were struck in the country, mainly in Akurugoda, Minigodana and Tikirigodana, south-eastern Sri Lanka.

Material

‘Coins’ in the collections of four authors (mostly from the collections of KR, SM, FM and AdS) depicting marine turtles and tortoises of the country are the basis for this

communication. Additionally, Akurugoda turtle coins from RAJA WICKREMESINHE's earlier collection comprising of one of the most comprehensive specimens of Akurugoda lead coins depicting turtles, including tortoise shape coins in the country, were examined. Measurements were taken using a vernier caliper. Additional data on Greek coins and tin money from Malacca (current spelling: Melaka) were obtained from publications, both print and online, and from the private collection of one of the authors (ID).

Confusions

Confusion exists as to whether some of these materials are actually ancient lead coins, as alluded to in earlier literature (see BOPEARACHCHI & WICKREMESINHE 1999, SEYONE 1998). However, we know that all of these so called lead turtle coins have been discovered as single pieces which had a specific Brāhmī inscription referring to a single individual. BOPEARACHCHI & WICKREMESINHE (1999) reported these as issued by individuals such as landlords and householders. MUNASINGHE refer to



Fig. 4. Marine turtle (*Chelonia mydas*) with broad flat flippers (AdS).



Fig. 5. A tortoise (*Geochelone elegans*) with stumpy and more or less cylindrical limbs (AdS).



Fig. 6.
A terrapin
(*Melanochelys
trijuga thermalis*)
(AdS).



Fig. 7.
Soft shelled
turtle (*Lissemys
ceylonensis*), note
the pointed head
(AdS).

them as “coin-like objects” (sirimunasiha.wordpress.com srilankan coins). However, coin image 16 perhaps issued in the name of King Cinathi, possibly a provincial king who ruled at Tissamahrama, Akurugoda. Thus, we consider some of these to be *Nidan wasthu* or amulets that are buried before constructing a house, believing that such practice brings protection and prosperity. The custom of burying coins and religious medals along with precious stones, effigies of various gods before the foundation stone is laid, continue to modern-day practice in Sri Lanka. Thus, some of these discoveries excavated from Akurugoda and

environs, south-eastern Sri Lanka are suspected to be amulets, specially made for a specific individual for a clearly defined purpose. Furthermore, most of these artifacts were not discovered by using archaeological procedures, but by the villagers of Akurugoda and those from adjacent areas and sold to a dealer in a nearby village. Thus, important archaeological data, such as location, stratum of discovery, etc, are unrecorded. BOPEARACHCHI & WICKREMSINHE (1999) report that the original discoveries of coins were made serendipitously in 1989, when a villager was digging a pit in his garden.

We see that the term ‘turtle’ and ‘tortoise’ have been interchangeably used in some earlier literature on coins (see BOPEARACHCHI & WICKREMESINHE 1999, SEYONE 1998). The term ‘turtle’ mainly refers to marine turtles that have distinctly elongate and flattened forelimbs in the shape of flippers (Fig. 4), these are distinctly different to the limbs of a terrapin (a hard-shelled turtle), a soft-shelled turtle or a tortoise (Figs. 5-7). Thus, these ‘coins’ with distinct broad flat flippers should be considered marine turtle, and images without such flippers should be interpreted as a terrapin, soft-shelled turtle or tortoise, all denizens of non-marine environments.

Significance of Akurugoda marine turtle coins and amulets

Akurugoda, Minigodana and Tikirigodana villages are situated close to the ancient seaport of Godavaya, in south-east Sri Lanka. According to SIRIWEERA (2013), Godavaya port is the only known port during the early Anuradhapura Kingdom and an important one in international trade. The primary goal of this paper is to highlight the herpetological significance of turtles depicted on the obverse of some of these ‘coins’. Though these lead ‘coins’ were discovered in villagers around Tissamaharama they are presently referred to as ‘Akurugoda lead coins’. We consider that some of the Akurugoda lead artifacts in this paper could be amulets depicting turtles. Turtles could symbolize the area’s geopolitical importance and trading success (mainly marine turtle shell products), as in the case of Aegina in Greece. Additionally, we also assume that the significance of depicting turtles on the obverse of these ‘coins’ may be due to the following:

The sixteen auspicious symbols or the *sodasamangala* had been referred to in inscriptions. One of the auspicious symbols is a terrapin. Similarly the *astamangala* (eight auspicious symbols) too have a terrapin.

According to traditional house-building science (*Vastu Shastra*, the traditional

Hindu system of architecture, akin to the Chinese *Feng Shui*), to build a house on a mound like that of a carapace of tortoise is considered to bring luck (KAK 2006).

The Hindu god of preservation, Vishnu, takes the form of a turtle (*Kurma*) in the second of his 10th incarnations (WILSON 1840).

Various parts of the viscera and shell of the Black Turtle (*Melanochelys trijuga thermalis*), Sri Lankan Soft-shell Turtle (*Lissemys ceylonensis*), Star Tortoise (*Geochelone elegans*) and the Green Turtle (*Chelonia mydas*) are widely used in traditional medicine in the country.

According to palmistry beliefs, if one has a symbol like that of a turtle on the palm, it is considered lucky since it is an indicator of wealth and longevity and terrapins are used in witchcraft in the country (DE SILVA 2011).

The south-east coast of Sri Lanka has several marine turtle rookeries (from Bundala, Amaduwa, Palatupana, Godawaya, Rekawa), where five of the seven marine turtle species of the world come to these beaches to nest (DE SILVA 2006, DERANIYAGALA 1939 KAPURUSINGHE 2006).

Exporting various products of the Hawksbill Turtle (*Eretmochelys imbricata*) scutes (or scales of the carapace, popularly known as ‘tortoiseshell’) to both Rome and India has been a lucrative cottage industry in Sri Lanka since ancient times (DE SILVA 2011, 2011a, GRENIER 1958, WEERAKKODY 1992). Turtle scutes that were imported from Sri Lanka were used to decorate household furniture of the wealthy in ancient Rome. The availability of a variety of objects turned out from turtle scutes were used by men and women in daily life and for export, suggests that the marine turtle shell cottage industry would have been a popular cottage industry (DE SILVA 2011, 2011a, GRENIER 1958, WEERAKKODY 1992).

DERANIYAGALA (1939) reported that Hawksbill Turtle scute products were sent abroad as gifts by the Sinhala kings during ancient times.

There are many historical records on exploitation of marine turtles for their scutes, one of the earliest is that of STRABO (64 BCE – 21 CE) the Greek historian and geographer. He reported that large quantities of “tortoise-shells” along with ivory and other merchandise were exported to India from Sri Lanka implying that turtles, especially *Eretmochelys imbricata* (Hawksbill turtle) were exploited in Sri Lanka from Pre-Christian times. The Romans knew that large quantities of “tortoiseshell” came from Taprobane, as Sri Lanka was then known. This is evident from the writings of GAIUS PLINIUS SECUNDUS, commonly abbreviated as PLINY (23–79 CE), who reported that “catching large tortoises formed the chief object of fishing in Sri Lanka (is) pursued with great pleasure”.

Some Akurugoda lead ‘coins’ that depict turtles, terrapins and tortoises

Following are details of seventeen ancient lead ‘coins’ from Akurugoda depicting turtles and a few are molded in the shape of a terrapin/tortoise. Most of these coins were found in Akurugoda and were cataloged in 1999 by OSMUND BOPEARACHCHI and RAJAH WICKRAMASINHE in their book *Ruhuna, An Ancient Civilization Re-visited*. For detailed accounts of the Brāhmī letters, please refer the above work. The samples in this paper

are grouped under numismatic type order: Inscribed lead casts (coins) (samples 1-10) and turtle shape lead casts (samples 11-17). Within each group, the samples are listed under marine turtles, terrapins and land tortoises.

Sample 1 – inscribed cast of a marine turtle

The turtle in the above cast figured on the obverse is shown in lateral aspect (Fig. 8). This is unique, as in all Akurugoda ‘coins’ the dorsal view of the turtle is depicted. There is an indistinct circular border of triangles within a frame of lines. On the reverse within a thick line are Brāhmī letters (Fig. 9) which read as *Tisa Mate* = minister Tisa. The cast weighs 2.09 g and is 14 mm wide. This was presented to AdS by FM.

Sample 2 – inscribed cast of a marine turtle

The marine turtle in the above lead cast is figured on obverse in dorsal view (Fig. 10). Virtually half the coin is broken. There are two circular borders of triangles within a frame of double lines. There are slightly similar coins depicted below. On the reverse are Brāhmī letters (Fig. 11) of which some characters would have been in the missing part. The coin weighs 1.47 g and is 16 mm wide. This was presented by RW to AdS.



Fig. 8. Sample 1, obverse depicting the lateral view of a turtle (AdS).

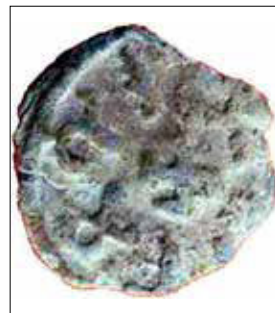


Fig. 9. Sample 1, reverse with Brāhmī letters (AdS).



Fig. 10. Sample 2, obverse depicting a turtle (Photo: AdS).



Fig. 11. Sample 2, reverse with Brāhmī letters (Photo: AdS).

Sample 3 – inscribed cast of a marine turtles

According to BOPEARACHCHI & RATNATUNGA 2004, the above lead cast (diameter 18 mm) from Akurugoda has four marine turtle figures and five dolphins on the obverse in a dorsal view (Figs. 12-12a). It is of interest to note that figures of the turtles are larger than those of the dolphins, and shown swimming in a clockwise direction around the chakra, while the five dolphins are swimming towards the chakra. The turtle and dolphin figures are set within a circular border of triangles within a frame of lines. The reverse has a figure of Lakshmi with elephants on either side (Fig. 13-13a). The 15 characters in text are *ga ha pa ti sa ma na sa pu ta sa da ga ta ha* Joining into words *gahapati samanasa puta sada ga-*

taha. The words translate from Sinhala as (Householder Samanasa Son made got) i.e Got made (by) Householder Samana's Son. The words *gahapati*, *puta* and *gataha* occur frequently on these lead tokens found in Sri Lanka. This coin is from collection of KR. Two additional similar coins have been discovered from Akurugoda (Sample 4 below and coin fragment Fig. 214 page 198. WALBURG 2008 - Coins and Tokens from ancient Ceylon).

Sample 4 – inscribed cast of a marine turtles

This broken cast (Fig. 14) is similar to the cast depicted above (Fig. 12). It has the figures of clockwise swimming turtles and the dolphins on the obverse in a dorsal view pointed towards the chakra (Figs. 14-14a).



Fig. 12. Sample 3, obverse with 4 turtles and 5 dolphins (Scan: KR).



Fig. 12a. Diagrammatic sketch of Fig. 12 (KR).



Fig. 13. Sample 3, reverse with figure of Lakshmi (Scan: KR).



Fig. 13a. Diagrammatic sketch of Fig. 13 (KR).



Fig. 14. Sample 4, obverse with turtles and dolphins (scan and line drawing: KR).

Fig. 14a. Diagrammatic sketch of Fig. 14 (KR).

Fig. 15. Sample 4, reverse with figure of Lakshmi (scan and line drawing: KR)

Fig. 15a. Diagrammatic sketch of Fig. 15 (KR).

The reverse has a figure of Lakshmi with elephants on either side (Fig. 15-15a). This coin is from the collection of SM.

Sample 5 – inscribed cast of a marine turtle

This particular lead cast when compared to other turtle coins is unique as it depicts on the reverse a small turtle in center with Brāhmī characters around the turtle (Fig. 16) which reads as ‘*Rana Cinathi Nama*’ possibly a provincial ruler. The obverse shows a fish facing to the left towards the arc (Fig 17). This coin weighs 2.32 grams. This coin is from the collection of SM.

Sample 6 – inscribed cast of a marine turtle

The above lead cast from Akurugoda has a distinct figure of a marine turtle, encircled with a border of triangles (Figure 18). The forelimbs are larger and flipper shaped which is an accurate form of a marine turtle, but reported as tortoise in BOPEARACHCHI & WICKREMESINHE (1999). On the reverse are indistinct Brāhmī letters (Figure 19). According to BOPEARACHCHI & WICKREMESINHE (1999) the coin weighs 2.69 g and 16 mm in diameter. This is E28 in OBRW and from collection of RW.



Fig. 16. Sample 5, reverse with figure of a turtle (KR).



Fig. 17. Sample 5, obverse with a figure of a fish (KR).



Fig. 18. Sample 6, obverse with a figure of a turtle (AdS).



Fig. 19. Sample 6, reverse with indistinct Brāhmī letters (AdS).

Sample 7 – inscribed cast of a marine turtle

The reverse of the above cast depicts a small turtle in center with four Brāhmī characters (Fig. 20). The obverse depicts a lion with curved tail over back facing to the right (Fig. 21). It weighs 1.72 grams. This is a circular coin with broken fragment. This is perhaps one of the first Akurugoda lead coins where a marine turtle was identified and the inscribed Brāhmī characters read as ‘Na Ka Ti Sa’ (JAYASINGHE 1996). This is from the collection of SM.

Sample 8 – inscribed cast of a marine turtle

This lead cast from Akurugoda weighs 2.51 g and measures 14 x 15 mm. It depicts a marine turtle with distinct flippers in dorsal view (Fig. 22). According to BOPEARACHI & WICKREMESINHE (1999) a transliteration of the Brāhmī letters on the reverse (Fig. 23) is “of the municipal officer Na ? Kati ??”. This is A40 of OBRW is now in collection of KR.



Fig. 20. Sample 7, sketch by CHANDRIKA JAYASINGHE (1998) courtesy Sunday Island news paper.



Fig. 20a. Sample 7, reverse with a figure of a turtle (KR).



Fig. 21. Sample 7, obverse lion with curved tail (KR).



Fig. 22. Sample 8, obverse with a marine turtle (KR).



Fig. 23. Sample 8, reverse with Brāhmī letters (KR).

Sample 9 – inscribed cast of a marine turtle

This lead cast from Akurugoda weighs 2.16 grams and has a diameter of 17 mm. It depicts on the obverse, dorsal view of a marine turtle with distinct flippers set within circle of saw teeth pointing out (Fig. 24). On the reverse (Fig. 25), faint Brāhmī letters are visible. This is from collection of SM.

Sample 10 – inscribed cast of a marine turtle

This lead cast from Akurugoda weighs 2.27 grams with a diameter of 14 mm. The figure on the obverse is a marine turtle as the flipper shape forelimbs limbs, though highly worn-out, the carapace appears

dome-shaped. The turtle figure is set within a circular border of triangles within a frame of double lines (Fig. 26). The reverse has distinct Brāhmī letters (Fig. 27). BOPEARACHCHI & WICKREMESINHE (1999) provide a detailed translation in English of the Brāhmī letters as “of little Sāmanaka” (= younger or *cuda* [= smaller] person known as Sāmanaka). This is A19 in OBRW and now in the collection of KR.

Sample 11 marine turtle shape lead cast

This lead cast in the shape of a marine turtle, weight 2.68 grams, size 16 x 14 mm, was found in Ruhuna and the head and one leg is broken. The flipper shape fore limbs appear highly worn out and one is broken.



Fig. 24. Sample 9, obverse with a figure of a marine turtle (KR).



Fig. 25. Sample 9, reverse with faint Brāhmī letters (KR).



Fig. 26. Sample 10, obverse with a tortoise figure (KR).



Fig. 27. Sample 10, reverse with Brāhmī letters (KR).

The more or less circular shape and convex carapace suggest that it could be a turtle (Fig. 28). The reverse is nearly flat (Fig. 29). According to SM these coins had been used in Sri Lanka. BOPEARACHCHI & WICK-REMASINGHE (1999) include two of them labeled as A41 and A42, and are inscribed with Brāhmī letters meaning “Of Tina” and “Of Samudda”. This is from the collection of SM.

Sample 12 – terrapin shape lead cast

The above lead cast from Akurugoda in the shape of a terrapin is 12x15 mm and weights 1.19 grams. The virtually oval shape carapace suggests that it could be a soft-shell turtle (*Lissemys ceylonensis*) (Fig. 30). The head is broken, perhaps due

to the nares which form a long narrow proboscis. There is a cross like mark on the reverse (Fig. 31). This is from RW now in collection of KR.

Sample 13 – terrapin shape lead cast

This lead cast from Akurugoda molded into the shape of a chelonian, the flat round and slightly dome shape carapace suggests that it could possibly be a soft-shell turtle (*Lissemys ceylonensis*) (Fig. 32). It is 16 x 18 mm, weights 3.37 grams and is similar to Fig. 28 above. The anterior half of the head is broken including all the limbs are either broken or worn-out. There are Brāhmī letters on the reverse (Fig. 33). This is from RW now in the collection of KR.



Fig. 28. Sample 11, cast of a figure of a turtle (KR).



Fig. 29. Sample 11, reverse indistinct (KR).



Fig. 30. Sample 12, observe a figure of a soft-shell terrapin (KR).



Fig. 31. Sample 12, reverse with a cross mark (KR).

Sample 14 – tortoise shape lead cast

This lead cast in the shape of a tortoise (Fig. 34) from Akurugoda, Tissamaharama, measures 24 x 25 mm, is 2.7 mm thick and weights 2.49 grams. The star tortoise (*Geochelone elegans*) is common in south west of the country. According to RATNATUNGA (http://coins.lakdiva.org/ruhuna/OBRW_E30_tortoise.html) this token is probably from the same era as the dolphin-shaped coins of Greece. Small bronze casts depicting dolphins were made as sacrificial objects for Apollo-Delphinium and first appeared in Olbia between 550-525 BCE. Subsequently, they were used as currency, with a flat inscribed side, employed by the Milesian settlers as a primitive form of money, circulating around 430-410 BCE ([http://](http://www.wildwinds.com/coins/greece/sarmatia/olbia/t.html)

www.wildwinds.com/coins/greece/sarmatia/olbia/t.html). The Brāhmī Script on reverse is indistinct (Fig. 35). This is E30 in OBRW and now in the collection of KR.

Sample 15 – tortoise shape lead cast

The above lead cast from Akurugoda is in the shape of possibly a Star Tortoise (*Geochelone elegans*), identifiable as such on account of the columnar limbs and dome-shaped carapace (Fig. 36). The reverse has distinct Brāhmī letters (Fig. 37). This is from the collection of RW.

Sample 16 – tortoise shape lead cast

This lead cast in the shape of possibly the tortoise (*Geochelone elegans*) is highly worn out and broken. It measures 14 x 18



Fig. 32. Sample 13, lead cast in the form of a turtle (KR).

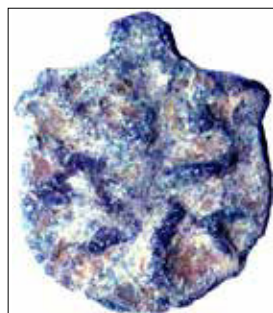


Fig. 33. Sample 13, reverse with Brāhmī letters (KR).



Fig. 34. Sample 14, lead cast in the shape of a tortoise (KR).



Fig. 35. Sample 14, Reverse indistinct Brāhmī letters (KR).

mm and weights 2.93 grams. If there were Brāhmī letters they have completely worn out. The metal is 1.3 mm thick but the feet have been bent in about 1 mm. This is from the collection of KR.

Sample 17– tortoise shape lead cast

This lead tortoise shape artifact from Akurugoda weights 3.29 grams. It depicts the figure of a tortoise (Fig. 40), however, the eroding of limbs and head has given a blunt and round appearance, and possibly a part of body and one leg broken. The obverse surface is convex. The reverse is a nearly flat surface with indistinct Brāhmī characters (Fig. 41). This is from the collection of SM.

Conclusion

The Akurugoda lead coins, tokens, amulets and other monetary artifacts discovered are struck or molded from lead. Lead is not a metal found as a natural resource in Sri Lanka and was probably imported from India or other countries that had trade relations with Sri Lanka. The poor state of preservation of most of the Akurugoda lead coins unearthed has been documented (BOPEARACHCHI & WICKREMESINHE 1999). Lead being a soft metal corrodes over time more easy than many other metals used in minting coins, especially when buried in soils with high salt content.

The south-east coast of Sri Lanka has several marine turtle rookeries (from Bunda-



Fig. 36. Sample 15, obverse of a tortoise cast (KR).



Fig. 37. Sample 15, reverse with Brāhmī letters (AdS).



Fig. 38. Sample 16, Lead cast in the form of a tortoise (KR).



Fig. 39. Sample 16, reverse with indistinct Brāhmī letters (KR).

la, Amaduwa, Palatupana, Godawaya, Re-kawa), where five of the seven known species of marine turtles in the world nest. In most of these beaches, the Hawksbill Turtle (*Eretmochelys imbricata*) was captured for its scutes or horny scales covering the carapace to fashion a variety of turtle shell ornaments and other artifacts to be used by men and women in their daily lives, as well as to decorate household furniture for over two thousand years (DE SILVA 2011, 2015). These scutes, either as finished products or unprocessed, were exported to India and Rome from pre Christian times. Finally we assume that, depicting a turtle motif in coins used for monetary transactions would have been a method of advertisement providing

a ‘sales advantage’ for turtle shell products of the country during that period. Also the people involved in the turtle shell productions would have been proud to have coins, tokens and amulets depicting the main animal used in their trade. We see an example of this during recent past when coins (token) were mainly struck in the prosperous times of coffee cultivation in what was formerly known as Ceylon (= Sri Lanka) (DE SILVA, 2009).

According to LOWSLEY (1895), Captain C.E.H. Symons of the Ceylon Artillery Volunteers designed three tokens for *K. D. & Co (Keir, Dundas & Co.)*, one of which was the tortoise token for Uplands Mills, Mutuwall, Colombo, where the celebrated tortoise



Fig. 40. Sample 17, lead ‘coin’ in the figure of a chelonian (KR).



Fig. 41. Sample 17, reverse side (KR).

is said to have been living for centuries. This tortoise token depicts *K. D. & Co.* in monogram within a beaded circle on the obverse and a tortoise within a beaded circle on the reverse. The token is bored for suspension, and weights approximately 6.9 g.

It is clear that the Akurugoda 'coins' would have been used for trade only in the Ruhuna Kingdom, since extensive archaeological explorations in the main kingdoms such as Anuradhapura, Polonnaruwa and Sigiriya, which were directly under the ruling monarchy of the country have not led to the discovery of similar coinage (Bopearachchi and Wickremesinhe 1999). Finally, we recommend that further systematic archaeological excavations should be conducted in order to obtain data on these artifacts from Akurugoda and villagers around Tissamaharama, in south-eastern Sri Lanka, and careful comparisons should be made with similar material from other coastal areas where maritime trade and other contacts existed in former times.

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Literature cited

BOPEARACHCHI, O. & R. WICKREMESINHE (1999): Ruhuna an ancient civilization re-visited. R. M. Wickremesinhe (publisher), Tharanjee Printers. 145 pp + 43 plates. (OBRW)

BOPEARACHCHI, O. & K. U. RATNATUNGA (2004): Oriental Numismatic Society Newsletter 178: 20-21.

CHIEW, B. (2001): Tin Animal Money from Malacca.

CODRINGTON, H. W. (1921): Combs – uses and users. The Ceylon Antiquary and Literary Register, London 6 (3): 154.

DAS, I. (2014): The money frog. *Majalah untuk Numismatik dan Philatelic Wanglamma* (2): 4.

DE SILVA, A. (2006): An annotated bibliography of publications on marine turtles of Sri Lanka. *Indian Ocean Turtle Newsletter*. 3: 12-26.

DE SILVA, A. (2009): An account of a Mauritian giant tortoise on a 19th century Sri Lankan coin. *Radiata*, 18 (1): 16-20.

DE SILVA, A. (2011): Turtle and tortoise in folklore, proverbs, witchcraft and traditional medicine in Sri Lanka. *Radiata*, 20 (1): 57-63.

DE SILVA, A. (2011a): Marine turtle shell industry: an ancient cottage craft in Sri Lanka *Radiata* 20 (2): 2-17.

DE SILVA, A. (2015): Marine turtle shell head ornaments in Sri Lanka. *Wildlanka* 3 (1): 49-57.

DERANIYAGALA, P. E. P. 1939. The tetrapod reptiles of Ceylon. Vol. I. Testudines and Crocodylians. Colombo Museum, Colombo and Dulau & Co., London, 412 pp.

DUTTA, D. (2012): History and antiquity of punch-mark coin in Indian Subcontinent. *The Journal of Social Science Research*, 1 (1): 1-16.

GEIGER, W. (1912): The Mahavamsa or the Great Chronicle of Ceylon. London, Pali Text Society, 300 pp.

GRENIER, J.A.R. (1958): An old island craft. *Ceylon Observer Pictorial*, Colombo. 2 unnumbered pages.

GUPTA, P. L. & T. R. HARDARKAR (1985): Ancient Indian silver punch-marked coins of the Magadha - Maurya Karshapana Series. Nasik: Indian Institute of Research in Numismatics Studies.

JAYASINGHE, CHANDRIKE, N. (1996): New discovery of inscribed coins from Akurugoda, Tissamaharama. *The Island, Features*. Sunday, September, 22, 1996

JONES, A. L. (1917-1932): The geography of Strabo with English translation I-VIII. Loeb Classical Library, London and New York.

KAK, S. (2006): Art and cosmology in India. Patanjali Lecture, Centre for Indic Studies, University of Massachusetts, Dartmouth. (2006): 1-15.

KAPURUSINGHE, T. (2006): Status and conservation of marine turtles in Sri Lan-

ka. In: CHOUDHURY, B. C. & K. SHANKER (eds.) *Marine turtles of the Indian subcontinent*. University Press, Hyderabad, India, pp. 173–187.

KROLL, J.H. & N.M. WAGGONER (1984): Dating the earliest coins of Athens, Corinth and Aegina. *American Journal of Archaeology*, 88 (3): 325–340.

LOPEZ, F.D. (1996): Marine turtles on coins and paper money: a checklist. *Marine Turtle Newsletter* (74): 17–19.

NGE, T. L. F. (2005): The collection of Malacca coinage (13th to 18th century). Privately published, Kuala Lumpur. xx + 326 pp.

PARKER, H. (1909): *Ancient Ceylon*. London, Luzac & Co. 695 pp.

SHAW, W. & M. K. HAJI ALI. (1970): *Malacca coins*. Department of Museums Malaysia, Kuala Lumpur. 21 pp.

SEN, T. (2006): The formation of Chinese maritime networks to southern Asia, 1200–1450. *Journal of the Economic and Social History of the Orient*, 49: 421–453.

SEYONE, K.N.V. (1998): *Some old coins found in early Ceylon (Sri Lanka)*. Privately published, Colombo. 142 p.

SMITH, W. (1891): *A dictionary of Greek and Roman antiquities*. J. Murray, London. I, 121 pp.

TRIPATI, S. (2011): Ancient maritime trade of the eastern Indian littoral. *Current Science*, 100 (7): 1076–1086.

WALBURG, R. (2008): *Coins and Tokens from Ancient Ceylon*. Wiesbaden: Reichert Verlag, pp. 198.

WEBER, E. J. (2000): Pre-industrial bi-metallism: the index coin hypothesis. Discussion Paper 09.12. The University of Western Australia, Canberra. 27 pp.

WEERAKKODY, D. P. M. (1992): Sri Lanka as known to Strabo. *The Sri Lanka Journal of Humanities, Peradeniya*, 15 (1–2): 55–64.

WEISSHAAR, H. J. & W. WIJEYAPALA (1993): *Ancient Ruhuna (Sri Lanka), The Tissamaharama Project: Excavations at Akurugoda 1992–1993*. Beiträge zur Allgemeinen und Vergleichenden Archäologie. 13, 127–166.

WILSON, H. H. (1840): *The Vishnu Purana*. Translated from the original Sanskrit, and illustrated by notes derived chiefly from other Puranas. John Murray, London. lxxii, 562 pp.

Ratnatunga K. U. coins.lakdiva.org
http://coins.lakdiva.org/ruhuna/OBRW_E30_tortoise.html
<http://coins.lakdiva.org/ruhuna1/lakshmipbtoken.html>
http://coins.lakdiva.org/OBRW/OBRW_A19_tortoise_brahami.html
http://coins.lakdiva.org/OBRW/OBRW_A40_tortoise_brahami.html
http://coins.lakdiva.org/OBRW/RW_a41_tortoise_brahami.html
http://coins.lakdiva.org/OBRW/RW_a42_tortoise_brahami.html

Other Internet sources

<http://www.fleur-de-coin.com/currency/greekcoinshistory.asp>

Tin cash coins from Malacca ('Admiral Zheng He's cash')

<http://www.charm.ru/coins/misc/zhenghetincoins.shtml>

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