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Front cover: Photo of the Alexander tetradrachm, no. 68 (see article of Lloyd Taylor Fig 1 page 52)



NUMISMATIC ASSOCIATION OF AUSTRALIA INC

President's Report

With COVID-19 now endemic, the Association has not been able to hold a conference because of the upsurge this year of the virus Australia-wide, but nevertheless the NAA has continued to function with an upgraded website and the publication of this double volume JNAA31, which is available for free download at the NAA website. We plan to hold a conference next year in Adelaide, 19 – 20th October 2023, hosted by the Numismatic Society of South Australia.

I am delighted to announce the award of the Ray Jewell Silver Medal to our Managing Editor, Associate Professor Gillan Davis for his services to the NAA, and his numismatic work both in Australia and overseas for which he has an international reputation. Congratulations Gil from all of us.

The NAA continues to enjoy sponsorship at a sustainable level, with Noble Numismatics (Gold), Coinworks, Downies (Silver), Coins & Collectables Victoria, Drake Sterling, Mowbray Collectables, Sterling & Currency and Vintage Coins & Banknotes (Bronze) all contributing to ensure the Association's continued success. Membership is being maintained, and with the contributions by sponsors and members, the Association can function in these difficult times.

The NAA now has a new Secretary, Bridget McClean, and a new address in Nunawading, Victoria. This is convenient as the NAA is incorporated in Victoria. Much time has been spent changing bank signatories and updating Consumer Affairs Victoria; nothing happens quickly these days!

The Numismatic Association of Australia now has a functioning PayPal account linked to president@numismatics.org.au. This is very convenient for payments coming from overseas and avoids most international bank fees. Like with banking, setting up a PayPal account is not a five-minute exercise, but well worthwhile.

I am impressed with the considerable work our Managing Editor Gil Davis has put into this volume notwithstanding his being extraordinarily busy transferring between universities and setting up new programmes at the Australian Catholic University. Also, I am grateful to Barrie Newman for his on-going work in getting the journal set up and printed, taking on the tasks of both layout and copy editor.

Council continues to meet by ZOOM, hosted by David Galt at Mowbray Collectables.

Finally, the Association cannot function without the dedication of its secretary and its treasurer (Lyn Bloom); thank you both Bridget and Lyn.

Professor Walter R. Bloom

President, NAA

www.numismatics.org.au

3rd August 2022

Editor's note

This volume has been a long time in the making. Usually, an issue is based around the NAA annual conference, but COVID-19 made that impossible. More importantly, as the peak body for numismatics in the country, we are focussed on making each volume wide ranging, interesting and impactful. So, we waited on the completion of a couple of key contributions and have brought out a combined two-year issue which I have dubbed 'the professors' volume' on account of the academic attainment of most of the authors. I trust you will agree that the results justify the decision, because here we offer a splendid collection of eleven articles on an eclectic range of topics with some of the best numismatic analysis and writing I have read. Personally, I have learnt a lot, and I expect that you will too. The collection is rounded out by an obituary by NAA stalwart Peter Lane of the late Maurice B Keain, a real character on the Australian scene.

There are two articles on Australian topics. Vincent Verheyen offers a forensic scrutiny of 'proofs' and 'specimens' from the Melbourne and Perth mints issued in just two years, 1955 and 1956 and seeks to differentiate between them. Walter Bloom provides an interesting study of Western Australian numismatic medallions and badges with an emphasis on the Castellorizian Brotherhood which represented the émigrés from that Greek island.

Lloyd Taylor gives us a Hellenistic trilogy which is a tour de force in numismatic analysis. He starts with a brief but compelling argument correcting one of Hersh's additions to Price's Alexander typology showing that it was already in the corpus. Next, he reattributes Macedonian imperial coinage attributed to Berytos to Byblos. Finally, he shows that an issue of tetradrachms struck in the name of Philip III was in fact a posthumous issue of Seleukos.

There are four articles on a Roman theme:

- Bruce Marshall moves us into the turbulent period of the late Roman Republic with a study of 'labels' on a small number of denarii which he contends fed into the contemporary political discourse.
- Graeme Stephens and John McDonald offer us something unusual and valuable. They document and analyse an unpublished hoard of fourth and fifth centuries AD Roman coins and local imitations from Sri Lanka.
- Andrew Chugg explores the veracity of commemorative medallions of Antinous, paramour of the emperor Hadrian who was deified after his death in the Nile, arguing that there are ways of distinguishing between genuine and fake examples.
- John Melville-Jones offers us a magnificent work listing the names of Roman coins as used by the Romans themselves and sometimes just by modern numismatists.

Written in John's inimitable style, this is an invaluable reference for collectors, students and scholars.

The next article by Emy Kim and Cristiana Zaccagnino takes us into the fascinating world of a numismatic collection of some 600 Greek and Roman coins housed at Queen's University in Canada that is being used in teaching and research. They show just how valuable coins can be when treated as artefacts used to inform historical and scientific understanding. This represents a welcome trend in modern scholarship to integrate numismatics into cross-disciplinary studies.

Finally, we publish a long autobiographical article by Maria Caltabiano. This is justified by the profound impact which she has made on numismatics in a lifetime as professor of numismatics at the University of Messina in Sicily. Along the way, she describes many of her projects with a particularly fascinating exposition of an example of iconic programmatic minting in late fifth century BC Kamarina in the period of the 'signing masters' – some of the most exquisite ancient coinage ever struck. Sadly, we tend not to know enough about numismatics in early Europe, and this article goes some way towards filling the gap.

I sincerely thank the many diligent anonymous reviewers who have done so much to improve the papers. Likewise, I thank the members of the editorial board who stand ready and willing to help when called upon, and John Melville-Jones who happily proofreads the articles. Above all, I pay tribute to Barrie Newman without whose tireless efforts across the years, these volumes would not see the light of day.

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Articles must comprise original research on numismatic material including but not limited to Australasian numismatics (coins, tokens, medals, banknotes) or ancient or mediaeval numismatics. Manuscripts can be emailed to any member of the Editorial Board in your area of research, along with a copy to the Managing Editor.

An unpublished hoard of bronze Roman coins and local imitations found in Sri Lanka

Graeme Stephens and John McDonald

Abstract

This paper describes an unpublished hoard of 121 small bronze Roman coins and locally produced imitations found in Sri Lanka about 50 years ago near the coastal town of Galle. Roman coins make up 68% of the hoard and date from the 4th and 5th centuries. They were probably introduced to Sri Lanka as a result of indirect trade with the Romans through intermediaries, using the ancient maritime trade route through the Red Sea and Alexandria. All of the Roman hoard coins were very worn, indicating long circulation and hindering attribution. The distribution of the 71 attributable Roman coins in the hoard was: 21% Constantinian dynasty (c. 317-363CE), 10% Valentinian dynasty (c. 363-392CE) and 69% Theodosian dynasty (c. 379-450CE), which corresponds well with reported date distributions for other hoards of Roman coins found in Sri Lanka and in southern India. Crude local imitations minted and found in considerable numbers in hoards in the south of the island, known as 'Naimana' coins, made up 28% of the total hoard. The Naimana coins could be divided into two groups which showed a significant difference in average weight, suggesting a decline over a considerable period of production in parallel with degeneration of reverse designs with repeated copying.

Keywords

[hoard] [Sri Lanka] [Roman coins] [imitations] [Naimana]

1. Introduction

This paper describes a previously unpublished small hoard of Roman coins and local imitations of Roman coins found in Sri Lanka as well as briefly reviewing the known history of this coinage in the island. The detailed origin and usage of these coins in Sri Lanka has been comprehensively covered by previous authors, most recently by Walburg.¹ The objective of this paper is to document the hoard.

The hoard consists of 121 coins of which 82 (68%) are considered Roman coins, 4 (3%) are considered contemporary Roman imitations, 34 (28%) are considered local 'Naimana' imitations, and 1 coin is of indeterminate origin. The coins were sold about 50 years ago by an established local coin dealer in Colombo. They were claimed by the

¹ Walburg, 2008.

dealer to have come from a single small hoard unearthed by a farmer in the Ruhuna district, near the town of Galle on the south west coast of the island (Map 3). The dealer also claimed that it represented the complete hoard as delivered to him by the farmer. Due to the passage of time, there is no way to verify the word of the dealer and it is certainly possible that the hoard may have comprised two separate groups, one of Roman coins and one of Naimana coins, which the dealer or the farmer who provided the coins to him could have combined into one lot. However, a number of other small mixed hoards have been found in the region (pers. comm. Dr Kavan Ratnatunga). So, for the purposes of this paper, the authors have accepted the claim of the dealer, but it should be kept in mind that the Roman and the Naimana groups of coins may have been found separately. We can however, be reasonably certain that whether the coins are from one source or two, both groups were found as a hoard or hoards in Sri Lanka near Galle where the farmer lived.

For reference purposes the coins were each given a number from 1 to 121 with numbers 1-82 inclusive applied to the Roman coins, numbers 83-86 inclusive applied to the contemporary Roman copies, numbers 87-120 inclusive applied to the Naimana coins and number 121 applied to the indeterminate coin. These reference numbers are shown beside each coin in the associated Supplement.

2. Brief history of Roman and Naimana coinage in Sri Lanka

Although only a small number of Roman silver and gold coins dating from the first century BCE to the seventh century CE have been found in Sri Lanka, over two hundred thousand small bronze Roman coins of the fourth and fifth centuries CE have been discovered scattered throughout the island in over 50 hoards uncovered by farmers digging in their fields or by archaeologists digging at historic sites, as well as individual finds of single coins at many locations.² Almost all of these small coins are from 11 to 17 mm in diameter and weigh between 1 and 3 gm. Most of the coins are very worn indicating a long period of constant use.

Why are Roman coins found in Sri Lanka at all, which was never part of the Roman Empire, and why in particular are large numbers of small Roman bronze coins from the fourth and fifth centuries found on the island? The reason is that the Romans had purchased commodities from both southern India and Sri Lanka since the first century CE. This commercial link is confirmed by Pliny the Elder who wrote that four ambassadors of Taprobane (the name by which the Greeks and Romans knew Sri Lanka) were sent to Rome during the reign of the Sinhalese King Chandamukha (CE 44-52) while Claudius was the Roman Emperor,³ and it is very likely that one of the main purposes of this embassy was to facilitate trade. This trade is described in

² Walburg, 2008, 231-236.

³ Pliny, *Naturalis Historia*, Book VI, Ch.22.

many references,⁴ and confirmed by archaeological finds and ancient writings, and was intermittent in the early centuries of the first millennium but gathered momentum after the establishment of the Eastern Roman empire based at Constantinople from CE 324. From that time onwards, both India and Sri Lanka provided an increased volume of trade goods for the Romans with Sri Lanka particularly important for its gemstones (sapphire, ruby, zircon, topaz and beryl), pearls, ivory, tortoise shell, muslin cloth, and spices, which included turmeric, cardamom, cinnamon, pepper, cloves and ginger.⁵

This trading link with the Romans was never direct but was normally routed through southern India and on to the Mediterranean via the ancient maritime route (Map 1) using Indian, Arab and Greek merchants acting as middlemen.⁶ Consequently, it is concluded that all of the small Roman bronzes which ended up in Sri Lanka were delivered to Sri Lankan merchants mainly in the 4th and 5th centuries by merchants from southern India during their negotiations for Sri Lankan trade commodities which were eventually bound for Rome or Constantinople. Codrington (1924) states that indirect trade between the Romans and Sri Lanka finally came to an end with the fall of Alexandria in 638,⁷ and this is borne out by the frequency and dates of the coins found.



Map 1 – Ancient sea and land trade routes

4 Walburg, 2008, 319-343; Weerakkody, 1995, 16, 27; Sudharnawathie, 2017.

5 Walburg, 2008, 319-343; Weerakkody, 1995, 27.

6 Walburg, 2008, 319-343.

7 Codrington, 1924, 33.



Map 2 – Location of mints represented in the hoard
(Base maps for Map 1 & Map 2: Wikipedia Commons)

Prior to the commencement of indirect trade with the Romans, Sri Lanka had used an indigenous coinage comprising a number of coinage types which dated back at least to the third century BCE. A detailed discussion of this indigenous coinage is outside the scope of this paper, but it included the well-known silver punch marked coins known as ‘Puranas’ (or ‘Eldlings’) which had been in wide use in Sri Lanka since at least the beginning of the third century BCE,⁸ and which were still in circulation at the beginning of the influx of Roman bronze coinage early in the 4th century CE.

Puranas are flat pieces of silver cut from sheets or thin bars, trimmed to the correct weight and then stamped with various punch marks. These punch-marked coins were initially imported during very early trade with India and were later supplemented by some local cast copies in Sri Lanka.⁹ The Roman bronze coinage obtained via southern India from the early 4th century was of too low a value to ever be used as a general trade currency but was used to supplement the Purana currency for small local transactions, particularly in the Ruhuna area in the south of the island.

⁸ Walburg, 2008, 43, 46.

⁹ Walburg, 2008, 44.

It should also be noted here that there is convincing archaeological evidence that the common medium of commerce in Sri Lanka from the third century BCE to at least the influx of Roman coinage in the 4th and 5th centuries was the barter system. It is also established, however, that during this long period physical coinage continued to be widely used in Sri Lanka as a supplementary local currency for village and inter-village transactions.¹⁰

Although rare finds of individual Roman bronze coins have been made in Sri Lanka dating back to Augustus (BCE 43 – CE 14),¹¹ the vast majority are Late Roman coins, predominantly of the Eastern Roman Empire, from the period CE 317-450.

In addition, crude copies of Roman coins minted in Sri Lanka and originally called Indo-Roman coins by Codrington, have also been found in large numbers in hoards, almost all of them in a limited coastal region in the south of the island known in ancient times as Ruhunu (Map 3). In this paper the modern name of Ruhuna has been used for the area.

Codrington, in 1924, originally divided these imitation coins into two classes which he called Type 1 and Naimana Type.¹² More recently, authors such as Walburg,¹³ with considerably more archaeological and numismatic evidence available to them, have not recognised this classification and have considered that all of the imitation Roman coins which were minted in Sri Lanka are of Naimana type. We also consider that the few coins which would have been called Type 1 Indo-Roman by Codrington are in fact contemporary imitations produced elsewhere and imported to Sri Lanka along with the genuine Roman coins. In this paper they have been grouped with the Roman coins, and all locally minted coins imitating Roman prototypes are called Naimana coins.



Map 3 – Ancient Ruhuna

¹⁰ Walburg, 2008, 311.

¹¹ Codrington, 1924, 37.

¹² Codrington, 1924, 33.

¹³ Walburg, 2008.

Walburg has studied the occurrence of these Naimana coins in some detail and has concluded that they were struck only in the ancient dominion of Ruhuna and possibly only in one minting centre located at Matara (Map 3).¹⁴ While some large coin hoards from the Ruhuna region have contained coins of only one type (i.e. all Roman or all Naimana), Codrington and others have also recorded a number of hoards outside of Ruhuna in which the two types are mixed.¹⁵ As mentioned above, no proof exists that the Roman and Naimana coins examined in this paper did originate from the same hoard. Consequently, the physical composition of the hoard cannot in itself support any conclusion as to whether or not the two groups of coins circulated at the same time.

Walburg has concluded that much of the storage of both the Roman and the Naimana coins at the time was undertaken by the numerous Buddhist monasteries with coins offered to the monks either for safe haven or as temple offerings and donations,¹⁶ and this is where many of the hoards have been found.

Because the supply of Roman bronze coins decreased significantly in the mid-fifth century, Walburg concluded that minting of the local Naimana coinage probably began soon after to gradually replace this dwindling supply and was then itself ended prior to the close of the fifth century. According to Codrington, these Roman and Naimana coins, as well as the silver punch-mark Puranas, continued to be used for local village currency in the island until about the middle of the seventh century, which would explain the excessive wear shown on many of the Roman coins. After that time, the Pallava Kings of southern India started to exert their control in Sri Lanka through a series of puppet Sinhalese Kings, and examples of early Pallava coinage are found in the island.¹⁷

In general, the local Naimana coins in the hoard were readily distinguished due to their crude workmanship. In respect of the Roman coins, in one or two cases, due to wear, it was difficult to decide if a coin was a Late Roman piece or a relatively well-made contemporary imitation from outside Sri Lanka. The authors have photographed, indexed and described all 121 coins and have classified the main Roman and Naimana groups into various subgroups as described below. Only representative coins are illustrated in this paper. Full descriptions and photographs of all coins are presented in a supplement available from the authors on request.

3. Description and attribution of the Roman coins

All 82 Roman coins were very worn, and had obviously circulated for a very long time, probably centuries in most cases.

¹⁴ Walburg, 2008, 67.

¹⁵ Codrington, 1924, 33; Weerakkody, 1995, 22.

¹⁶ Walburg, 2008, 312-313.

¹⁷ Codrington, 1924, 50; Lakdiva Coins Collection (<http://coins.lakdiva.org/>).

Attribution frequently depended on fragmentary readings of legends combined with identification of reverse types to varying degrees of confidence depending on the extent of wear. In some cases, attribution to a specific emperor was possible, but in many cases, where the crucial parts of obverse legends were illegible, coins could only be attributed to two or more emperors who shared a reverse type.

Where references differed regarding dates, the most recently published dates were preferred.¹⁸

Overall, attribution was hindered by the fact that during the Late Roman period coin portraits no longer showed the realism and individuality that characterised portraits on the Roman imperial coinage for most of the first three centuries CE. In general, emperors of this later period cannot be individually identified from their portraits alone and the obverses of their coins are generally very similar. Consequently, in the first instance the coins were grouped according to reverse types.

Attribution was also complicated by the multiplicity of emperors during the 4th and 5th centuries CE. For most of the period over which the hoard coins extend, there were at least two emperors in power, sometimes as many as four, with co-emperors ruling in both the east and the west (Table 3).

Names used for Late Roman denominations have varied over the years. We have used a combination of denomination names applied by Sear¹⁹ and the old AE4 (<17 mm), AE3 (17-21 mm), AE2 (21-25 mm) and AE1 (>25 mm) system, based purely on flan diameter, which avoids the value question altogether.

Even though most of the coins are badly worn, we have been able to identify 15 different reverse types among the Roman coins, involving some 95% of their total. These are summarised in Table 1. However, because decipherable obverse legends were generally fragmentary at best, fewer than half of these could be attributed to a specific emperor with any degree of confidence.

The earliest identifiable Roman coin in the hoard is a reduced follis (AE3) of Constantine II, a son of Constantine the Great, as Caesar under his father, dated to CE 317-318. The latest is a *centenionalis* (AE4) of Theodosius II, probably issued prior to CE 425. A very similar date frequency of bronze Roman coins in most of the other reported hoards suggests that indirect trading activity with the Romans probably peaked during this date range of around a century from 317 to 425 but the coins continued to be used locally until the early seventh century.²⁰

¹⁸ Sear, 2014.

¹⁹ Sear, 2014.

²⁰ Codrington, 1924, 33.

A moderate number of the Roman coins can be attributed to the late Constantinian dynasty which consisted of the sons of Constantine the Great after they became joint emperors following his death in CE 337, and a few other more distant relatives such as their cousin Julian II. These coins make up approximately 20% of the attributable total and include two examples of a posthumous commemorative of Constantine the Great issued in about CE 342-348, most likely by Constantius II.

Coins attributable to emperors of the Valentinian dynasty, the most important of whom were Valentinian I, Gratian and Valentinian II in the west, and Valens in the east, make up only about 10%.

By far the greatest proportion of attributable coins are from the Theodosian dynasty, which consisted mainly of Theodosius I, Arcadius and Theodosius II in the east and Honorius in the west. These make up almost 70% (Table 2).

The observed proportions are consistent with general remarks made by Codrington who reported:

...Imperial bronzes in large quantities of most of the
Emperors from Constantine the Great to Marcian, the order
of frequency being (i.) Arcadius, (ii.) Theodosius I or II, (iii.)
Honorius, (iv.) Constantius II, (v.) Valentinian II, and (vi.)
Constans; the coins are, with few exceptions, 'third brass'.²¹

The observed proportions are similar to the date distribution reported by Walburg for a total of 1,430 Roman coins found in Sri Lanka.²² The comparison is made less apparent by the fact that we have assigned coins by dynasty, while Walburg used approximate date alone, and there are some date overlaps between the dynasties. However, the general patterns of distribution in relation to date are clearly similar, as shown in Figure 1.

²¹ Codrington, 1924, 32.

²² Walburg, 2008, 53.

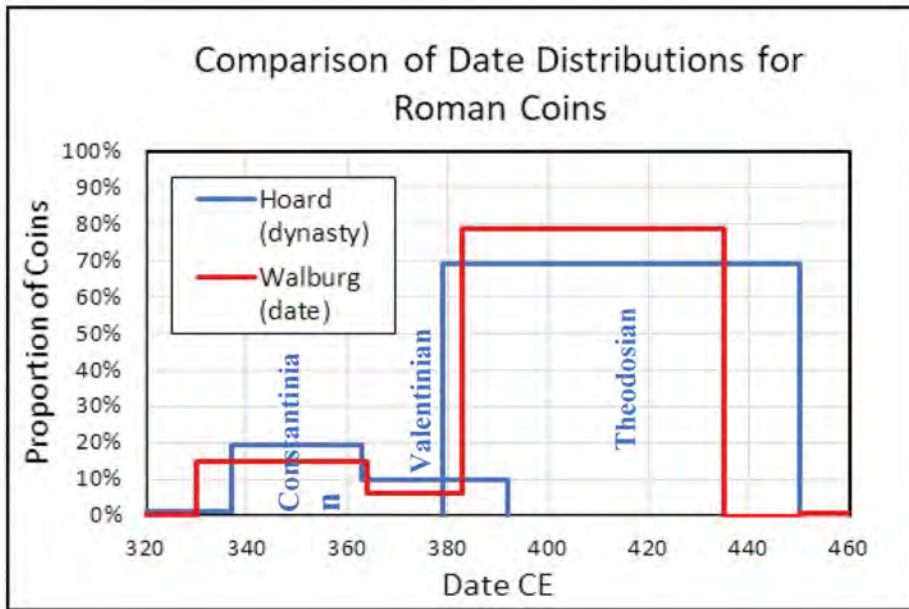


Figure 1

In addition to the dominance of the Theodosian dynasty this hoard shows a strong bias towards coins of emperors who ruled in the Eastern part of the empire (Table 3). This is hardly surprising given the geographical factors involved.

In the few cases where legible or partly legible mintmarks survive, the mints of Antioch (10), Constantinople (4), Cyzicus (3), Alexandria (3) and Thessalonica (2) could be identified with reasonable confidence, if not certainty in every case. These are all ports on coastal trading routes around the easternmost Mediterranean that would have linked with the maritime trading route to India and Sri Lanka via the Red Sea (Map 2). Antioch was also well placed as a terminus for land routes from Byzantium to India, Sri Lanka and northern China via the ancient Silk Road (Map 2).

4. Representative examples of the Roman coins

Listed below are photographs and descriptions of representative examples of the main types of Roman coins in the hoard as summarised in Table 1, grouped by reverse type. It should be noted that most of the coins are more worn than the examples shown.

4.1 Reverse of standing emperor with spear and shield being crowned by Victory (12 coins).

This reverse was only used for Arcadius and Honorius over the period CE 395-401.²³

Coin 9



AE4 / Centenionalis. Arcadius, CE 395-402. Mint: Uncertain

Diameter: 14 mm Weight: 2.17 gm

Description: Obverse – Diademed and draped bust right. Legend [DN A]RCADIVS P[F AVG]. Reverse – Emperor standing on left holding spear and shield being crowned by Victory. Legend [VIR]TVS [EXERCITI]. No mintmark visible.

4.2 Reverse of Victory advancing left with wreath and palm (6 coins).

This reverse type was used by multiple emperors, with a range of reverse legends. Consequently, it does not help much with attribution in the absence of a decipherable emperor's name in the obverse legend or a reasonably complete reverse legend.

Coin 13



AE4 / Centenionalis, uncertain emperor, probably c. CE 340-460. Mint: Alexandria?

Diameter: 14 mm Weight: 1.58 gm

Description: Obverse – Diademed and draped bust right. Legend worn and unreadable. Reverse – Winged Victory advancing left holding wreath and palm. Legend not readable. Uncertain mintmark in exergue, possibly AL[?].

4.3 Reverse of 2 standing emperors holding spears (6 coins).

The emperors are also holding either a shield each or a globe between them. The reverse legend should be GLORIA ROMANORVM. The reverse type restricts possible emperors to Honorius or Theodosius II, over the period CE 406-423.²⁴

²³ Pina and Marin, 2008-2019.

²⁴ Pina and Marin, 2008-2019.

Coin 20



AE4 / Centenionalis, Honorius or Theodosius II, CE 406-423. Mint: Uncertain
Diameter: 14 mm Weight: 1.37 gm
Description: Obverse – Diademed and draped bust right. Star(?) in left field. Legend unreadable. Reverse – Two emperors standing holding spears and shields. Legend [G]LORI[A ROMANORVM]. Mintmark off flan.

4.4 Reverse of emperor standing holding spear and globe (5 coins).

This reverse was used by Julian II, Constantius II, rarely on posthumous commemoratives of Constantine I (struck under Constantius II or Constans) and Valentinian III. Without attribution to a specific emperor they cover a wide date range of c. CE 357-455. The reverse legend would be SPES REPVBLICE for Julian I and Constantius II, SECVRITAS REIPVB for Procopius and VICTORIA AVG for Valentinian III.

A variation with the emperor holding a spear and a figure of Victory was used by Arcadius, Honorius and Theodosius II around CE 402-408.

Coin 28



AE4 / Reduced Maiorina, Constantius II, CE 358-361. Mint: Antioch?
Diameter: 14 mm Weight; 2.13 gm
Description: Obverse – Diademed and draped bust right. Legend [D]N CONS[TANTIVS PF AVG]. Reverse – Emperor standing left holding spear and globe. Legend [SPES REIP]VBLICE. Mintmark possibly ANT in exergue.

4.5 Reverse of 3 standing emperors (8 coins).

This reverse type was issued by the emperors Arcadius, Honorius and Theodosius II, in AD 406-408.²⁵ The central figure is usually smaller and is thought to represent Theodosius. The reverse legend is GLORIA ROMANORVM.

²⁵ Pina and Marin, 2008-2019.

Coin 37



AE4 / Centenionalis, Theodosius II, CE 406-408.

Mint: Uncertain

Diameter: 11 mm Weight: 1.52 gm

Description: Obverse – Diademed and draped bust right. Legend [DN] THEO[DOSIVS PF AVG]. Reverse – Three emperors standing holding spears or staffs. Legend [GLORI]A ROMA[NORVM]. Mintmark not visible.

4.6 Reverse of votive legend within wreath (7 coins).

Reverse legends of 'Vota' (vows) within a wreath were common and issued by a number of emperors. The form of the legend varied by emperor and date. The simplest consisted only of VOT or VOTIS followed by a number (V, X, XV, XX), usually in 2 lines. More complex versions added MVLT followed by a number (X, XX, XXX), all in 3 or more usually 4 lines.

These vows to the gods for the success and continuance of an emperor's reign were issued at the time of an emperor's accession and typically renewed at 10, or sometimes 5, year intervals.

Coin 40



AE4 / Half Centenionalis, Valentinian II, CE 379-388. Mint: Uncertain

Diameter: 14 mm Weight: 0.88 gm

Description: Obverse – Diademed and draped bust right. Legend DN VALENTIN[IANVS PF AVG]. Reverse – VOT X MVLT XX within wreath. Mintmark off flan.

4.7 Reverse of emperor dragging captive (5 coins).

This reverse was used by several emperors. It shows the figure of the emperor advancing left or right, dragging a captive by the hair and usually carrying a labarum (military standard). The legend is usually GLORIA ROMANORVM.

Coin 45



AE4 / Half Centenionalis, probably Theodosius I, CE c. 383-392. Mint: Uncertain

Diameter: 12 mm Weight: 0.86 gm

Description: Obverse – Diademed and draped bust right. Legend: [DN THEO]DOSIVS PF AVG. Reverse – Worn but probably emperor advancing left dragging captive. Legend mostly unreadable. No legible mintmark.

4.8 Reverse of Victory dragging captive (11 coins).

Victory advancing left, dragging a captive by the hair, carrying a trophy over her shoulder. The legend should be SALVS REIPVBLICAE, except for some coins of Valentinian III who also used VICTORIA AVGG. This reverse combined with a cross in the field limits possible emperors to Valentinian II, Theodosius I, Arcadius, Honorius, Theodosius II, Johannes or Valentinian III.²⁶

Coin 50



AE4 / Half Centenionalis, probably Arcadius, Honorius, Theodosius II or Valentinian II, c. CE 383-392. Mint: Uncertain

Diameter: 10 mm Weight: 1.23 gm

Description: Obverse – Diademed and draped bust right. Legend off flan. Reverse – Victory advancing left dragging captive. Cross in left field. Legend: probably [SALV]S REP[VBLICAE]. Mintmark off flan.

4.9 Constantine I posthumous commemoratives (2 coins).

In the years immediately following the death of Constantine the Great in CE 337 his sons issued several types of coins in his memory and commemorating his deification. Two examples of one of the most common types were present in the hoard. The reverse legend VN MR is generally considered to be an extreme abbreviation of VENERANDAE MEMORIAE (to his venerated memory).

²⁶ Pina and Marin, 2008-2019.

Coin 62



AE4 / Reduced Centenionalis, posthumous commemorative of Constantine I, CE 342-348. Mint: Antioch?

Diameter: 14 mm Weight: 1.32 gm

Description: Obverse – A posthumous veiled head of Constantine I facing right. Legend: probably [DV CONSTAN]TINVS [PT AVG]. Reverse – Togate figure standing, VN MR in fields. Mintmark in exergue possibly SMAN.

4.10 Seated Constantinopolis reverse with helmeted three-quarter facing bust on obverse (6 coins).

Even when badly worn, the distinctive three quarter facing, helmeted and cuirassed bust type combined with the reverse of Constantinopolis seated, holding a sceptre and a Victory on a globe, makes these coins recognisable.

The reverse legend should be CONCORDIA AVGGG. This obverse and reverse combination was only used for the emperors Arcadius, Honorius or Theodosius II over the brief period AD 401-403²⁷. Sear dates them all to AD 402.²⁸

Coin 68



AE4 / Centenionalis, Theodosius II, CE 402. Mint: Antioch

Diameter: 15 mm Weight: 2.29 gm

Description: Obverse – Helmeted and cuirassed forward three-quarter facing bust with spear over shoulder and shield. Legend: DN THEODOSI[VS PF AVG]. Reverse – Constantinopolis seated holding sceptre and Victory on globe. Legend: probably [CONCORDIA] AVGGG. Mintmark ANT[?] in exergue

4.11 Reverse of soldier spearing fallen horseman (3 coins)

The reverse type of a soldier spearing a fallen horseman was used on AE3/AE4 coins by Constantius II, Constantius Gallus and Julian II during the period CE 348-358²⁹. The reverse legend is FEL TEMP REPARATIO. Because Constantius Gallus was never

²⁷ Pina and Marin, 2008-2019.

²⁸ Sear, 2014.

²⁹ Pina and Marin, 2008-2019.

raised to the rank of Augustus any diademed busts must represent one of the others. The weight of these coins reduced quickly over time.

Coin 70



AE4 / Reduced Maiorina, Julian II, c. CE 356-358.

Mint: Uncertain

Diameter: 16 mm Weight: 1.76

Description: Obverse – Bare draped bust right. Legend: DN IVLIANVS [PF AVG]. Reverse – Soldier spearing fallen horseman. Legend [FEL TEMP] REPARATIO. Mintmark illegible.

4.12 Reverse of 2 soldiers with standard (3 coins).

Two soldiers with spears and shields standing either side of 1 or 2 military standards was a common reverse type on small bronzes of the later years of the Constantinian dynasty, in c. CE 330-342. It appeared on coins of Constantine I, Constantine II, Constantius II, Constans and Dalmatius, with the legend GLORIA EXERCITVS.

Coin 73



AE4 / Reduced Centenionalis, probably Constantine II, Constantius II, Constans or Dalmatius. c. CE 336-342. Mint: Uncertain

Diameter: 14 mm Weight: 1.61 gm

Description: Obverse – Diademed and draped bust right. Legend illegible. Reverse – Two soldiers holding spears with one standard between. Legend: [GLORIA] EXER[CITVS]. Mintmark in exergue is obscure [???]Δ.

4.13 Reverse of camp gate (1 coin).

A camp gate, usually with 2 turrets, was a common reverse type on small bronzes of the Constantinian period, during the lifetime of Constantine I, mainly from c. CE 316-329. At that time the most common reverse legends were PROVIDENTIA AVGG or PROVIDENTIA CAESS, although other variants exist. However, it also subsequently appeared much less frequently on small bronzes up to as late as about CE 455 with several different reverse legends.

Coin 75



AE4 / Centenionalis, probably Arcadius, c. CE 388.

Mint: Thessalonica

Diameter: 13 mm Weight: 1.48 gm

Description: Obverse – Diademed and draped bust right. Legend very blurred due to wear, but probably DN ARCADIUS PF AVG (the legend seems to have only 8 letters between DN and PF AVG indicating Arcadius). Reverse – Camp gate with 2 turrets. Legend: [GLORIA REI]PVBLICE. Mintmark TES in exergue. This reverse design and legend combination was restricted to Theodosius I, Valentinian II and Arcadius in CE 383-388.³⁰

4.14 Reverse of 2 facing Victories with wreath(s) (2 coins).

Two facing winged Victories holding a single wreath, or each holding a wreath, was a reverse type on small bronzes of Constantius II and Constans in c. CE 342-348. It reappeared later on coins of Valentinian II, Theodosius I and Arcadius in c. AD 383-388 and finally on coins of Valentinian III around CE 430-437. The reverse legend was usually VICTORIA AVGG or AVGGG.

Coin 76



AE4 / Half Centenionalis, Arcadius, mainly CE 383-388 but possibly as late as CE 395. Mint: Uncertain.

Diameter: 14 mm Weight: 1.38 gm

Description: Obverse – Diademed and draped bust right. Legend DN AR[CADIV]S PF AVG. Reverse – Two facing Victories holding single wreath, unidentified object at feet between. No legend or mintmark visible.

4.15 Reverse of Sol standing (1 coin)

Sol standing was a very common reverse design in the Constantinian period, during the lifetime of Constantine the Great, most often with the reverse legend SOLI INVICTO COMITI. Sol no longer appeared after about CE 317-318, when Constantine came under the influence of Christianity and stopped celebrating the old pagan gods.

³⁰ Pina and Marin, 2008-2019.

Coin 78



AE3 / Reduced Follis, Constantine II as Caesar, CE 317-318. Mint: Thessalonica

Diameter: 20 mm Weight: 3.11 gm

Description: Obverse – Bare, draped juvenile bust right. Legend: CONSTANTINVS IVN NOB CAES. Reverse – Sol standing left wearing chlamys, holding globe, right hand raised. Legend: CLARITAS R[EIPVBLICAE]. Mintmark TSB in exergue.

4.16 Contemporary Roman imitations

The 4 examples that we placed into this category are presumed to be contemporary imitations and all show considerable wear. So-called 'barbarous imitations' were produced in many regions fringing the borders of the Roman empire and it is probable that they were imported into Sri Lanka along with the genuine coins. Indeed, there would have been a distinct incentive for Roman traders to offload as many imitations and counterfeits as they could. Of these 4 coins, one imitates two emperors standing, one the soldier spearing a fallen horseman type and 2 imitate Victory with wreath and palm. Refer to the Supplement for details.

5. Classification and description of the Naimana coins

The Naimana moneyers made no serious attempt to produce exact replicas of the genuine coins and the crude representations of the Roman emperors shown on these coins are sometimes only rough outlines.

They were originally named Naimana coins, after the town in the Ruhuna district where a large hoard was found (circa 1912).

There appeared to be no master design for the Naimana coins; instead, there was a persistent, but unskilled attempt to imitate the Roman coinage. Consequently, most of these coins show a crude human bust of varying quality on the obverse and commonly show a poor copy of various pre-existing Roman designs on the reverse.

Although Walburg concludes that only one central mint based in Matara was used for the Naimana coins,³¹ many different dies have been used and the quality of both the design and the strike varies considerably from coin to coin. This leads to the conclusion that the coin dies were made by a large number of different moneyers, possibly in more than one mint, and that the quality of the dies varied from reasonable to very poor depending on the engraving skill of the individual, with successive moneyers

³¹ Walburg, 2008, 77.

simply copying as best they could the designs of previous moneyers. This in turn led to a gradual deterioration of the reverse designs over time so that they eventually bore little resemblance to their earlier starting points. Some examples of this deterioration of design are shown below. Progressive degeneration of the design is particularly clear for the ‘Vota in a wreath’ reverse types.

6. Representative examples of the Naimana coins

The Naimana coin descriptions below are grouped based on the Roman reverse design that the engraver was apparently trying to emulate. Also included below are some examples of Naimana reverse designs which bear no obvious relationship to any Roman prototype.

6.1 Roman reverse designs recognisably imitated

In this hoard the most common Roman reverses imitated on the Naimana coins were:

- Two soldiers with a standard (8 examples)
- Vota within a wreath (5 examples; 11 examples if ‘wheel’ derivatives are included)

Note that none of the Roman prototype examples shown in the comparative images that follow, and labelled ‘Roman Example’, were part of the hoard.

6.1.1 Reverse of votive legend within a wreath (5 coins).

The four images below, going from left to right, illustrate the progressive deterioration of this reverse design with repeated imitation, which we believe ultimately resulted in Codrington’s wheel type.³²



Roman Example.
Constantius II,
AE4, CE 347-348
(Collection of an author)



Naimana
Coin 87



Naimana
Coin 89



Naimana
Coin 113

The first Naimana example (Coin 87) shows an obvious, if clumsy, attempt to imitate the Roman prototype. The wreath is crudely represented by short, radial lines between two circles, although there is a faint attempt to reproduce the binding at the base of the wreath. However, the Latin letters of the legend within the wreath were obviously incomprehensible to the local engraver who simply substituted some random marks.

³² Codrington, 1924, 34.

The second example (Coin 89) still has some marks within the inner circle emulating lettering, but the inner circle has become smaller and the two circles with radiating lines between, originally representing the wreath, have become the dominant feature. Ultimately, the circles and radiating lines were the only part of the design to survive repeated copying (Coin 113).

While we are convinced that the wheel type evolved from this Roman prototype, in our grouping of the Naimana coins we have only placed coins into this group where they show some attempt to emulate lettering within an inner circle.

Coin 87



AE4, uncertain date. Uncertain local mint
Diameter: 13 mm Weight: 1.32 gm
Description: Obverse – Crude bust facing right. No legend visible. Reverse – Random small shapes and strokes within two concentric circles with ‘spokes’ between forming a border. Imitating votive legend within wreath reverse type.

Coin 89



AE4, uncertain date. Uncertain local mint
Diameter: 15 mm Weight: 2.27 gm
Description: Obverse – Extremely worn bust facing right. Reverse – Two concentric circles with spokes radiating outwards between the two circles. Some small random marks in centre probably imitating lettering. Probably derived from votive legend within wreath type.

6.1.2 Reverse of 2 soldiers with a standard (8 coins)

Coin 92



AE4, uncertain date. Uncertain local mint
Diameter: 12 mm Weight: 1.05 gm
Description: Obverse – Crude helmeted bust facing right. No visible legend. Reverse – Two crude ‘stick’ figures standing on either side of an unidentified vertical object between them. Naimana issue, imitating ‘2 soldiers with standard’ type.



Roman example: Constantius II, AE4,
CE 347-348
(Collection of an author)

6.1.3 Reverse of 2 facing Victories with wreath(s) (1 coin).

Coin 100



AE4, uncertain date. Uncertain local mint
Diameter: 13 x 16 mm Weight: 1.90 gm
Description: Obverse – An extremely crude representation of a bust facing right. Short strokes around margin imitating a legend. Reverse – Two stick like figures facing each other with arms raised to centre. Reverse imitating two facing Victories type.



Roman example: Theodosius II, AE4.
c. CE 402-450
(Collection of an author)

6.1.4 Large Star within a Wreath (1 coin).

Coin 101



AE4, uncertain date. Uncertain local mint
Diameter: 13 mm Weight: 1.36 gm
Description: Obverse – Very crude bust facing right. No legend. Reverse – Very worn, but apparently a 7-pointed star within a circle. Possibly imitating a large star within wreath type (late Constantinian period – eg: Helena and Fausta)



Roman example: Helena, AE4.
c. CE 318-319
(Image courtesy of Classical Numismatic Group)

6.1.5 Large cross within a wreath (2 coins).

Coin 102



AE4, uncertain date. Uncertain local mint
Diameter: 14 mm Weight: 1.46 gm

Description: Obverse – Very crude bust facing right. Legend represented by a few vertical strokes. Reverse – Design appears to be a large 'X' or cross inside a circle with dots in quadrants. Possibly imitating 'large cross' type of Arcadius / Honorius / Theodosius II / Valentinian III.



Roman example: Theodosius II, AE4.

c. CE 402-450

(Image courtesy of Classical Numismatic Group)

6.2 Other reverse designs (18 coins).

Coin 113



AE4, uncertain date. Uncertain local mint
Diameter: 13 mm Weight: 1.07 gm

Description: Obverse – A very crude Roman Emperor bust facing right with rough diadem and crude drapery. No legend. Reverse – A crude 'spoked wheel'. Not obviously imitating a Roman prototype, but probably ultimately derived from votive legend within wreath type.

Coin 105



AE4, uncertain date. Uncertain local mint
Diameter: 13 mm Weight: 1.07 gm

Description: Obverse – Worn, crude bust facing left. Reverse – Three concentric circles linked by radiating spokes. No indication of imitation lettering in centre. Probably a degenerate version of votive legend within wreath type.

Coin 114



AE4, uncertain date. Uncertain local mint
Diameter: 13 mm Weight: 0.85 gm

Description: The obverse has a very worn primitive bust probably facing right, with a rough headdress and necklace. A legend is imitated by some complex but meaningless combinations of strokes. Reverse has a number of lines which are indistinct. Not obviously imitating a Roman prototype.

Coin 120



AE4, uncertain date. Uncertain local mint
Diameter: 13 mm Weight: 0.84 gm

Description: Obverse – Crude bust facing right. No legend. Reverse – A left-handed swastika fills all of field inside an outer circle and does not imitate a Roman prototype. The swastika symbol has been used on ancient Sri Lankan coins since at least 100 BC, but this is the only example in the hoard on a Naimana issue.

6.3 Coin of indeterminate origin

One non-Roman coin was of indeterminate origin, possibly from somewhere outside Sri Lanka. Details are provided in the Supplement.

7. Statistical analysis of hoard coin weights

Weights and diameters of all hoard coins were tabulated and analysed. This revealed some significant differences between the main coin groups.

The mean weight of Naimana imitative coins (1.43 gm) is about 13% lower than that of the Roman coins (1.64 gm after excluding 1 larger, pre-337 CE coin). Due to the small number of Naimana coins this difference is not necessarily statistically significant. The 95% confidence limits about the means overlap considerably. However, the severely worn condition of the Roman coins means that they would have lost a significant amount of weight (probably 10-15% or more). So, the difference between as-struck weights may have been more significant.

The mean weight of the other Naimana coins that do not seem to imitate Roman prototypes (1.00 gm) is about 39% lower than that of the Roman coins and 30% lower than the Naimana imitative group. This is statistically significant relative to both the Roman coins and the Naimana imitatives. The frequency distribution chart below shows the differences clearly.

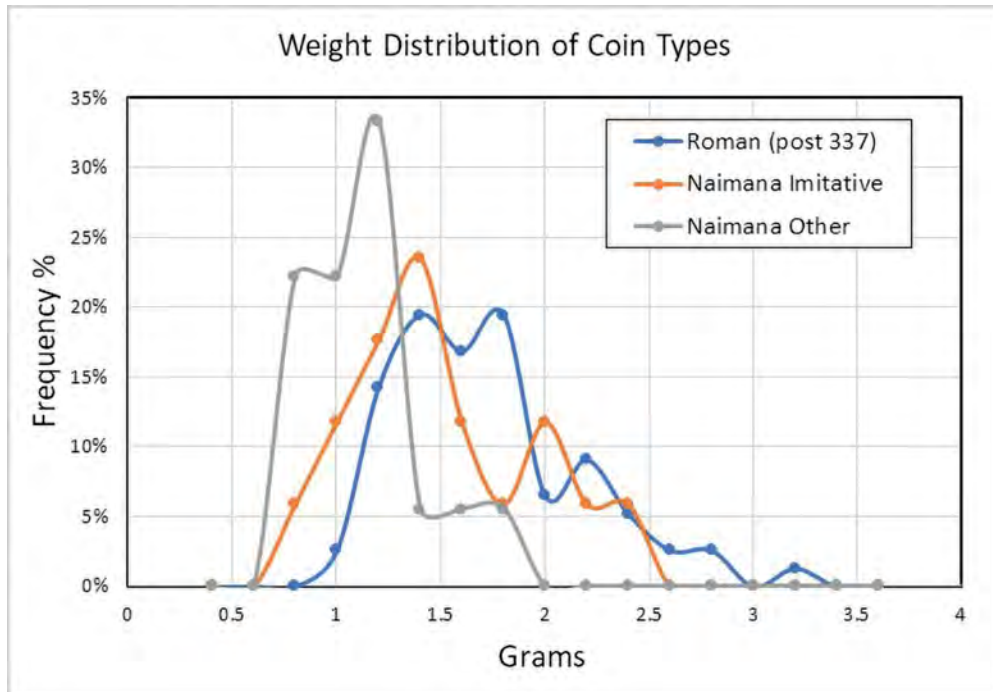


Figure 2

The significant difference between the two Naimana groups strongly suggests that they were not produced at the same time and possibly not in the same mint. It suggests a decline in weight over a considerable period of time in parallel with degeneration of reverse designs with repeated imitation of previous imitations.

Initial obvious attempts to imitate Roman prototypes suggest that Roman coins were still readily available and familiar when production of Naimana coins began, possibly necessitated by new supplies of Roman coins into the local economy being cut off or severely restricted. Circulation losses, perhaps combined with increased demand, would have resulted in the need for production of some additional, local 'small change' coinage. It seems likely that both the Roman and Naimana coins were circulating currency and that they circulated together in the local economy, at least for some initial period during the early phase of Naimana coin production.

8. Tables

Table 1 – Summary of Roman coins in the hoard grouped by reverse type and emperor.

Reverse Type	Legend or probable legend	Emperor(s)	Date	Reference numbers	Number of coins
Sol standing	CLARITAS REIPVBLICAE	Constantine II as Caesar	317-318	78	1
Standing emperor with spear and shield being crowned by Victory	VIRTUS EXERCITI	Arcadius	395-402	3, 8, 9, 10	4
		Honorius		2, 11	2
		Arcadius or Honorius		1, 4, 5, 6, 7, 12	6
Victory advancing left with wreath and palm	SECVRITAS REIPVBLICAE	Gratian, Valens or Valentinian I or II	364-392	15	1
	GLORIA ROMANORVM	Uncertain	c. 340-460	17	1
	Uncertain	Valentinian I or II	364-379	14	1
Two standing emperors with spears & shields or spears & globe between	GLORIA ROMANORVM	Uncertain	c. 340-460	13, 16, 18	3
		Honorius or Theodosius II	406-423	19, 20, 21, 22, 23, 24	6
		Constantius II	358-361	25, 28	2
Emperor standing holding spear and globe.	SPES REIPVBLICE	Julian II	358-360	27	1
		Julian II or Constantius II	358-361	26	1
	Uncertain	Honorius	402-408	29	1

Reverse Type	Legend or probable legend	Emperor(s)	Date	Reference numbers	Number of coins
Three standing emperors	GLORIA ROMANORVM	Arcadius	406-408	31, 32	2
		Honorius	406-408	30	1
		Theodosius II	406-408	37	1
Votive legend within wreath	GLORIA ROMANORVM	Arcadius, Honorius or Theodosius II	406-408	33, 34, 35, 36	4
		Arcadius	383-384	38	1
	VOT V	Theodosius I	379-383	39, 43, 44	3
		Valentinian II	379-388	40	1
	VOT X MVLT XX	Gratian, Valentinian II, Theodosius I or Arcadius	c. 378-388	42	1
		Constantius II or Constans	342-348	41	1
Emperor dragging captive	GLORIA ROMANORVM	Theodosius I?	383-392	45	1
		Valentinian I	365-375	49	1
		Uncertain	?	46, 47, 48	3

Table 1 – continued.

Reverse Type	Legend or probable legend	Emperor(s)	Date	Reference numbers	Number of coins
Victory dragging captive	SALVS REIPVBLICAE	Arcadius	388-402	51, 60	2
		Arcadius, Honorius, Theodosius II or Valentinian II	c. 383-392	50	1
		Theodosius I or II	388-425	53, 55, 56, 58, 59	5
		Valentinian II	388-392	54, 57	2
		Uncertain	c.383-430	52	1
Standing togate figure	VN MR	Posthumous Constantine I, probably issued by Constantius II	342-348	61, 62	2
Constantinopolis seated with sceptre & Victory on globe (3/4 facing helmeted & cuirassed bust on obverse)	CONCORDIA AVGG	Arcadius	402	66	1
		Theodosius II	402	65, 67, 68	3
		Arcadius, Honorius or Theodosius II	402	63, 64	2
Soldier spearing fallen horseman	FEL TEMP REPARATIO	Julian II	356-358	70	1
		Constantius II or Julian II	356-358	69, 71	2
Two soldiers with standard	GLORIA EXERCITVS	Constantine II, Constantius II, Constans or Delmatius	c. 336-342	72, 73, 74	3
Camp gate	GLORIA REIPVBLICE	Arcadius?	c. 388	75	1

Two facing victories with wreath(s)	VICTORIA AVGG (or AVGGG)	Arcadius	383-388	76	1
		Uncertain	?	77	1
Unidentified reverse design	Uncertain	Constantine I, Constantine II as Caesar or Constantius II as Caesar	c. 324-329	81	1
		Honorius	393-423	80	1
		Uncertain	?	79, 82	2
TOTAL					82
“Barbarous imitations” of Roman Coins (not included above)					
					4

Table 2- Distribution of attributable Roman coins by dynasty

Period	Principal Emperors	Approximate date range	Number of coins	Proportion of coins
Lifetime of Constantine the Great	Constantine II as Caesar	Before 337	1	1%
Constantinian dynasty (after Constantine the Great)	Constantine II, Constantius II, Constans, Julian II	337-363	14	20%
Valentinian dynasty	Valentinian I & II, Gratian, Valens	363-392	7	10%
Theodosian dynasty	Theodosius I, Arcadius, Honorius, Theodosius II	379-450	49	69%
TOTAL			71	100%

Table 3 - Distribution of attributable Roman coins by emperor and by Eastern and Western Empires

Emperor	Geographical control	Date range	Number of coins	Proportion of coins
Constantine II as Caesar	East & West (father)	317-337	1	3%
Constantius II	East	337-361	2	5%
Julian II	East	332-363	2	5%
Valentinian I or II	West	321-392	5	13%
Arcadius	East	377-408	11	28%
Honorius	West	384-423	5	13%
Theodosius I or II	East	346-450	13	33%
Subtotals	East		28.5	73%
	West		10.5	27%

Table 4 - Distribution of Naimana Coins by Type

Codrington type	Group	Reverse design sub-group	Coin reference numbers	Number of coins
Naimana	Reverses recognisably imitating Roman types	Votive legend within wreath	87, 88, 89, 90, 91	5
		Two soldiers with standard	92, 93, 98, 94, 95, 96, 97, 99	8
		Two facing victories with wreath(s)	100	1
		Large star within wreath	101	1
		Large cross within wreath	103, 102	2
	Other reverse designs or illegible		113, 114, 104, 112, 105, 106, 107, 108, 115, 116, 109, 110, 117, 111, 118, 119, 120	17
Coin of indeterminate origin			121	1
SUBTOTAL				36

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