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Editor: Karan Singh

# **ONS NEWS**

#### From the Editor

I am glad to report that this summer has seen renewed interest among members, with a flurry of meetings and seminars, two of which are listed in detail in the next few pages. In this issue we have papers on topics ranging from ancient India and Aksum, to medieval Hindu coinage and 20<sup>th</sup> century Middle Eastern currency. Our thanks to Spink who have graciously sponsored the editing of the journal for 2018.

Members can now download pdf copies of earlier issues from our website. Our thanks to Robert Bracey and Jan Lingen for making this possible. Please use this url to access our earlier issues online: http://orientalnumismaticsociety.org/JONS/journals.php.



I am pleased to announce that the Society has instituted the Ashoka Prize for the best paper of the year. The prize is awarded annually by the ONS Council thanks to a generous donation from Shatrughan Saravagi of Classical Numismatic Gallery, Ahmedabad. The inaugural Ashoka Prize for 2017 has been awarded to Govindraya Prabhu Sanoor.

Karan Singh

Ashoka Prize 2017 winner Govindraya Prabhu Sanoor

# Obituary: Gilles P. Hennequin (1934-2018)

French numismatist Gilles Hennequin passed away in May this year at the age of 83. Gilles was an honorary member of our Society, and earlier the General Regional Secretary from 1980 to 1993.

Gilles devoted himself for several years to full-time research in Islamic numismatics at the coin cabinet of the Bibliotheque Nationale in Paris. He

published Volumes 4 and 5 of the library's catalogue of Islamic coins. He was also the editor of *Monnaies de l'Islam et du Proche-Orient* (1988) and *Monnaies d'Asie du sud et du sud-est* (1991). In addition, Gilles wrote many articles on medieval numismatics and money theory.

#### ONS study day in Oxford (11 August, 2018)

Members of the Society met for a study day in August at the Ashmolean Museum, Oxford, hosted by Shailendra Bhandare.

The first talk was given by Gul Rahim Khan, visiting from Peshawar University, on his continued excavations at Hayatabad, to the west of Peshawar. The remaining part of the mound has been partly excavated and this has revealed evidence of workshops. In the previous season, nine copper coins were found in excavated areas, still uncleaned, but including a coin of Jihonika with bull and lion from the first century CE. The new excavation uncovered at least one storage building which seems to have been the victim of fire. A group of seven coins was found in a trial trench some distance from the main excavation, including both Jihonika and possibly a Soter Megas type Kushan issue. The site also yielded a fragment of a steatite toilet tray, similar in type but distinct in subject matter from those found at Taxila.

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Fig. 1. Gul Rahim Khan presenting finds from Hayatabad

Then Joe Cribb presented various interesting notes on the gold coinage of the Kushans. He began with a quarter unit of Huvishka depicting the king seated cross-legged, which sat in between a known coin of Huvishka and a coin of his predecessor Kanishka. The known example of this obverse can be placed in order, based on wear to the surface resulting from striking. This allows the reverse dies to be placed in order, giving us clues as to what the designs mean.

Joe explained how the examination of the dies can help in understanding the transitions in coins. He then moved to an example from the early reign of Kanishka, when Greek inscriptions were replaced by Bactrian. This process indicates both the working procedure at the mint and also that the Kushans equated both the Indian Siva and the Greek god Heracles with their own god Oesho. It also appears from the study of the quarter dinars that the coins featuring the Buddha interrupted the mint's normal production.

After lunch Karan Singh gave a short presentation on the lead coinage of the Mitra kings of ancient Punjab. Their coins are found at Sugh, about 300 km north of Delhi, which is a large mound and was probably once a major city. Nothing is known of the dynasty from other sources and only a handful of coins have been published.



Gilles Hennequin

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Karan showed specimens of two new rulers in his collection: Vishnumitra and Bhumimitra.

Paul Stevens then gave an update on his current work. One of the tasks is revising the work of Stan Goron and J.P. Goenka on Sultanate coins. At the moment his efforts are focused on the Bengal Sultanate, and Paul is working with both Stan and Goenka, as well as Noman Nasir and Iftekhar Alam. However, this is not his only ongoing project.

Paul also presented various new finds in the archives, including further correspondence on the trials and tribulations of mint master Benjamin Roebuck, and some more information about the rare eight real coins partially overstruck by Arcot rupees which connects them to the closure of that mint.

Finally, Paul showed some interesting documentation, suggesting activity at several mints rarely discussed in literature, and thanked correspondents who send him regular updates on new types.



Fig. 2. Shailendra Bhandare introduces the iconic image

Shailendra Bhandare gave a presentation on 'The Life of John Flaxman's Lion and Palm Tree in India', which he developed while explaining the importance of material objects to students.

Beginning with the lion and palm design on the first uniform coinage of British India, attributed to John Flaxman (1755-1826), Shailendra traced how the image of the lion and palm tree was established, its antecedents both immediate and ancient, and the discussions that led to the adoption of the design. Then he explored how the image has been used subsequently and its lasting legacy.

Amol Bankar, Kraay Visiting Scholar, finished the day by presenting a paper on the early medieval period in Maharashtra, focusing on coins associated with the Yadavas and their feudatories. These small silver coins with lion images on the front and reverse inscriptions naming the king, have received only very modest scholarly attention but were an important part of the regional economy from the eleventh to the thirteenth centuries. Amol's research on them continues and is supplemented by his long work on the inscriptions associated with the dynasty.

Robert Bracey

#### Nidhi 2018 seminar in Bangalore (13 July, 2018)

A seminar on South India numismatics was organised in Bangalore by the Falcon Educational Group and co-hosted by the ONS South Asia chapter. About 100 delegates, including ONS members, attended the seminar.



Fig. 1. Amiteshwar Jha discussing pre-Satavahana coins

Amiteshwar Jha began with a presentation on pre-Satavahana coins from central India and their linkages with Satavahana coins. He talked about the post-Mauryan coinage in Vidharba, Tripuri, Kotalingala and Narmada-Beta regions. Based on the coins found, one can establish the chronology of various rulers like the Bhadras and Mitras, some of whom are mentioned in the Puranas. Jha also spoke about the series of coinages where ruler names were initially misread and then subsequently corrected. He went on to talk about coins that carried dynastical names, which at times were assumed to be the names of the rulers themselves.

The next lecture was on Mughal coinage, presented by Prashant Kulkarni. He gave an overview on the beginning of Mughal coinage in India and the changes introduced by subsequent rulers. He explained to the audience the important aspects of Mughal coinage and simplified their identification by highlighting the parts on the flan where the ruler's name and mint were inscribed on the coins. Kulkarni also showed some unique and rare coins in his presentation.

K. Ganesh then spoke about the challenges in the study of south Indian coins. He talked about the various names for coins found in inscriptions, many of which have not been identified. The other problems are reading the legends on coins where there have been debates over the correct reading. Many coin series are uninscribed and they have thus been only tentatively attributed based on find spots.

After this informative morning session it was time for lunch, with a buffet lunch arranged at the venue.



Fig. 2. Arkat rupee with a Latin 'D' on reverse

The afternoon session started with a presentation by Jan Lingen on whether the Arkat rupee with a Latin D was Danish or French. His presentation was replete with images of Alamparai Fort, and he compared the Arkat mint rupee in the name of Ahmad Shah Bahadur, and bearing a Latin D on the reverse, with other specimens of Arkat mint, having a crescent on the reverse, that are issues of the French in India. By showing the similarities in the style of execution and also calligraphy seen on both coins, Lingen deduced that the Latin D on the rupee stands for Joseph Francois Duplex, the governor-general of French India from 14<sup>th</sup> January 1742 to 15<sup>th</sup> October 1754.



Fig. 3. Hoysala tara with a humanoid Gandaberunda on reverse

The next presentation was on the origin and depiction of *Gandaberunda* (a two-headed mythical bird) on south Indian coins. Mohit Kapoor, Pundalik Baliga and Raman Sankaran discussed the *Gandaberunda* in Hinduism. The various forms of *Gandaberunda* seen on temples in India were then compared to the known forms of a two-headed bird seen in other sites across the world. Similarities between the form depicted in India with the one seen in early medieval Islamic coins of Spain were highlighted by Kapoor. An inference was thus drawn that the humanoid form of depicting the

Gandaberunda was indigenous to India, while the other forms may have been influenced by international depictions. A variety of coins were shown, and it was concluded that the Hoysalas were the first to depict the *Gandaberunda* on coins of the Indian subcontinent.



Fig. 4. Delegates attending the seminar

With these presentations covering a wide range of subjects, the seminar succeeded in providing a broad overview of south Indian numismatics.

The Archaeological Survey of India, Bengaluru Circle, presented a display on the Heritage of Karnataka at the venue, showcasing images of select ASI monuments. Keshavamurthy also displayed coins from Karnataka issued by various dynasties.

Mohit Kapoor

#### **New and Recent Publications**

*Coin Hoards of the Bengal Sultanates 1205-1576 AD From West Bengal, Bihar, Jharkhand, Assam and Bangladesh* by Sutapa Sinha, Shubhi Publications, Gurgaon, 2017. ISBN 978-81-8290-408-8, 232 pages.

#### **Book Review**

*The Nawabs and Kings of Awadh and their Coinage*, by Mohit Kapoor and Dinesh Master, privately published by the authors, **2018.** Hardcover, ISBN: 978-93-5268-404-5, Introduction 34 p., Catalogue 167 p. + Image Acknowledgments and Bibliography. Price: INR 2,500/ USD 50, available for online ordering at Amazon and Flipkart.com. The book is also available for sale at Spink, UK. For additional information: mohit@planetci.com.



With the shrinking authority of the Mughal empire, the appointed Subadars became effectively independent and often their position, departing from the original Mughal administration, became hereditary as well. The Subah of Awadh was established as one of the twelve original subahs (top-level imperial provinces) under 16th-century Mughal emperor Akbar and became a hereditary tributary polity around 1722 CE, with Faizabad as its initial capital and Sa'adat 'Ali Khan (1722-1739) as its first Subadar Nawab and progenitor of a dynasty of Nawabs of Awadh.

In his foreword, Shailendra Bhandare gives, in his usual well expressed academic way, a comprehensive account of this process of the crumbling Mughal authority and the upcoming Mughal grandees establishing their own kingdoms. The increasing influence of the European trading companies, particularly the British East India Company, as well as of the Marathas and Rohilla Afghans, had no doubt a tremendous effect on politics, commerce and on the circulatory coinage in the 18-19<sup>th</sup> centuries. Despite the crumbling power of the Mughal empire, the titular supremacy and prestige of the Mughal emperor remained and his name was retained on the coins.

The authors, in the Preface and in the chapter of 'Awadh, before the Wazirs and Nawabs', provide a brief history of this period, followed by the 'List of Governors and Rulers of Awadh' and 'Genealogy of the Royal Family of Awadh'.

After this a couple of pages with charts is devoted to 'Legend Types and Arrangements on the Obverse', including transliteration from Persian and translation into English. The next chapter covers the 'Mints of the Coins of Awadh' in which about 22 mints are described which were, for a longer or shorter period of time, active under the Awadh administration. In a summary the dates are given during which those mints were active. Several mints were located in Rohilkhand, which was acquired under Asaf-ud-Daula (1775-1797) and created a major expansion of the state.

After this introduction, a 167-page catalogue of coins starts, beginning with the first Nawab, Wazir Sa'adat 'Ali Khan, followed by 11 more chapters for the following rulers. A short historical description of each ruler proceeds the catalogue, which, for each individual ruler, is arranged alphabetically by mint.

Each entry in the catalogue starts with a reference number, followed by the denomination / date / obv. + symbols / rev. + symbols. The initial illustration for each mint is shown enlarged and the individual coins in their actual size throughout the catalogue. All illustrations are in colour.

This book is a pioneering work. The only earlier publication on this subject was the booklet by Dayal, Rai Bahadur Prayag: *Catalogue of the Coins of the Kings of Oudh*. It was originally published in 1939, and reprinted in New Delhi in 1992 (though, curiously enough, not mentioned in the Bibliography).

This new book provides for the first time a complete overview of all mints which at some time were active under the rulers of Awadh. Some mints changed hands frequently from one authority to another. One may be eager to learn more about the history of the mints concerned, particularly those located in Rohilkhand. No doubt the shifting authority between the Marathas, the Bangas Nawabs, Awadh, and the British East India Company is extremely complex and may still leave space for further scholarly research.

The final chapter covers 'Medals, Medallions and Seals'. For the coronation medal of Ghazi-ud-Din Haider I am missing the historical background and references to earlier publications, viz.: Burn, Richard: 'The coronation medal of the first king of Oudh', *Journal of the Numismatic Society of India*, Vol. III, 1941; Dayal, Rai Bahadur Prayag: *Catalogue of the Coins of the Kings of Oudh*, originally published 1939, repr. New Delhi 1992; Wright, H.N.: 'A coronation medal of the first king of Oudh', Numismatic Supplement No.1, *Journal and Proceedings of the Asiatic Society of Bengal*, 1904, p. 74.

Today much more is known about those responsible for the design of the Coat of Arms adopted by Ghazia-ud-Din Haidar, and about the court artist Jamiyat Rai whose initial in the form of a Persian letter 'Jim' is found on these medals and some coins. A note or reference to this would add to its completeness.

The silver medal in the name of Tajmahal, Queen of Nasir-ud-Din Haidar, has earlier been published by Farid, G.S. 'An unpublished Awadh medal of Queen Nawab Tajmahal', *Numismatic Digest*, Vol. I part II, Bombay, December 1977. This reference is not mentioned in the description of the medal nor in the Bibliography.

One feature of India's copper coinage in the 18 & 19<sup>th</sup> centuries is the (private) counterfeiting of it. For instance, the copper coinage

of Awadh was extensively counterfeited to such an extent that more copper coins should be regarded as counterfeit, or so-called *Kachcha* coins, rather than *Pacca* coins. I am aware that this is a complex problem, but it would have been instructive to have shown some examples of the Awadh type *Kachcha* coins. For now, though, people with such coins may browse in vain through the catalogue and may claim an 'unlisted variety'.

In the catalogue section of the book, the coins are listed by metal, date and denomination. Typologically this looks complete, but for those with an advanced collection there is a fair chance one may find a new date or denomination. This is the fate of almost every pioneering work, but it may stimulate people to work further on it.

We heartily congratulate both authors, Mohit Kapoor and Dinesh Master, for their contribution in publishing this pioneering and comprehensive monograph, professionally edited by Stan Goron. It will be the standard work for years to come and a really valuable addition to the much-neglected series of the post-Mughal/ Princely States coinage. The foundation has now been laid, let us build further on it.

Jan Lingen

# Articles

# A HEAVY KUNINDA BRONZE COIN AND ITS MATERIAL ANALYSIS

# Heinz Gawlik

The independent state of Kuninda was located between the rivers Sutlej and Yamuna in the northern part of today's India. It issued a bi-metallic currency between the first century BCE and first century CE. There are several publications about the coinage of the Kunindas (Kumar 2014; Handa 2001-2002), but there is no detailed information about the material composition of their  $\mathcal{A}$  coins.

When I acquired a large coin in the style of Kuninda coinage in 2000, the seller claimed that the coin contains a small amount of gold. When asked how he knew that, he answered that he had tested it with a touchstone. He showed me the small shiny areas on the coin surface which appeared a pale golden colour. I thought it might well be a brass coin instead. Production of brass by the cementation process was known in the ancient period, but the true nature of a copper-zinc alloy was not understood until the post-medieval period. Coins of brass are rare and one early specimen is known from the Satavahana period (Gogte & Mangalam 1996).



Fig. 1. Kuninda Æ unit (22.5-23.5 mm, 11.15 g)

The Kuninda coin under discussion follows the general design of silver drachms struck in the name of Amoghabhuti. Despite corrosion, all the major symbols and figures of the design are visible. It seems that the coin is of better engraving quality than the coins illustrated in Allan 1936, Handa 2001-2002, and Mitchiner 1976 (7).

One significant difference to all the other  $\mathcal{E}$  coins is the presence of ten-arched hill with a parasol on top. All silver and small  $\mathcal{E}$  coins have a six-arched hill on reverse. The triangle-headed standard left of the hill has a long leg with a cross-bar just below the triangle. The tree-in-railing on the right of the hill stands in a large square box divided in four compartments. Other large  $\mathcal{E}$  coins of Kuninda have a simple square box. The total number of branches on the tree is not visible.

After several years, I have now had the opportunity to get the coin checked with a sophisticated scientific method, using an Energy Dispersive X-Ray Fluorescence Spectrometer (ED-XRF). This technology provides one of the simplest and most accurate analytical methods for the determination of chemical composition of a wide range of materials. It is a non-destructive method and does not require the preparation of a sample. Testing a coin takes about 15 minutes.

The test results did not reveal any traces of gold, but interestingly zinc, the essential element for brass, was also missing. It turned out that the coin is made of bronze, with a high percentage of tin. In total 18 elements were found. The main components are: Copper 62.8%, Tin 18.5%, Silicon 8.0%, Iron 2.7%, Aluminium 2.5%, Magnesium 1.7%, Calcium 1.4% and Chlorine 1.1%. It has to be considered that the result may have been affected by the encrustation and corrosion of the coin, especially in the high amount of silicon, iron and aluminium. The Indian laterite soil is rich in elements like iron and aluminium. The percentage of tin could have been well over 20% if the elements in the encrustation were not considered. The chlorine in the analysis might be an indication of Copper Chloride. It is a compound responsible for a corrosion called 'Bronze Disease' which could completely destroy the object. The surface of the coin shows already heavy pitting caused by corrosion. The Copper Chloride could be also an indication that the coin was unearthed in north-west India (Punjab), because the area faces the problem of an increasing salinization due to intensive irrigation.

To compare the material composition, I also tested a smaller type of  $\mathcal{E}$  coin. Fig. 2 shows an example of a later issue in the name of Amoghabhuti, without a legend on reverse. The material of this specimen turns out to be quite different from the one above – this is made of almost pure copper. It contains 14 elements, but the main ones are: Copper 98.5%, Iron 0.3%, Calcium 0.3%, Arsenic 0.3% and Lead 0.1%.



Fig. 2. Kuninda Æ unit (15.1-16.8 mm, 2.28 g)

It is assumed that there was an intention to produce such a golden coloured bronze for the large  $\mathcal{E}$  coins, instead of the almost pure copper used in smaller  $\mathcal{E}$  units. Bronze is an expensive material compared to pure copper. The tin required for the melting process of bronze came at that time from places in Central Asia located in Afghanistan or more far away in today's Uzbekistan or Tajikistan. The use of expensive tin increases the minting cost and therefore also the material value of a coin. The golden colour of the material might have been another reason to express the value of the coin, and it could even be debated whether this piece was used as a regular coin or was an object for special occasions.

In numismatic literature the description and classification of coins is largely based on visual observation. A scientific analysis of coins can reveal certain new aspects and should become an essential part of an interdisciplinary study of numismatic questions.

#### Acknowledgements

I am grateful to Siemens AG-Energy Berlin, and in particular to Vicentius Hartanto, for the opportunity to have the coins tested by the ED-XRF spectrometer of SPECTRO Analytical Instruments GmbH.

#### Bibliography

Allan, John, 1936, Catalogue of the Coins of Ancient India, London.

Gogte, Vishwas D., S.J. Mangalam, 1996, 'Brass Coinage: An Early Evidence from the Satavahana Period', *Numismatic Studies*, Vol. 4, New Delhi, pp. 25-29.

Handa, Devendra, 2001-2002, 'Some interesting Varieties of Kuninda Coins', *Numismatic Digest*, pp. 25-42.

Kumar, Sanjeev, 2014, 'A Comprehensive Catalogue and Classification of Silver Coins of the Kuninda Dynasty', *JONS* 218, pp. 16-24.

Mitchiner, Michael, 1976, Indo-Greek and Indo-Scythian Coinage, Volumes 4 & 7, London.

# THE INTERACTION OF AKSUMITE AND ROMAN GOLD COINS IN SOUTH ARABIA IN THE 6<sup>TH</sup> CENTURY CE

# Amelia Dowler

The al-Madhāriba hoard, published by Munro-Hay (1989a), demonstrated that Aksumite and Roman gold coins were hoarded and possibly circulated in Yemen at some point in the 6<sup>th</sup> century CE. However, the publication of the hoard, and other work dealing with finds of Aksumite and Roman gold coins in Yemen, fail to analyse the Roman coins properly. This is due to the greater interest in the much scarcer Aksumite material, and the research interests of the scholars. An opportunity has been missed thus far to examine the condition and context of joint groups of Aksumite and Roman gold coins, which this paper seeks to address. Unfortunately, apart from a brief listing, little data is available for the Roman coins of the al-Madhāriba hoard: there were not even images of them in the publication. Similar material does exist, however, and I will use this to discuss wider questions of the use of Aksumite and Roman gold coins in Yemen. The evidence so far indicates that although Aksumite and Roman coins were hoarded together in Yemen, their circulation and use beforehand were very different.

My paper therefore sets out the nature of the evidence so far for the connection (or lack thereof) between the two states' gold coins, through both weight standard and find spot. I will then present new evidence for the interaction of gold coins in Yemen, building on Munro-Hay, with further information on coins donated to the British Museum in 1904, and the publication of coins brought to the British Museum for identification in 2007. These groups will also be compared to the Aksumite and Roman gold coins from Yemen in the Kunsthistorisches Museum from DH Müller's 1898/99 expedition (cf. Hahn 2000: 285). I will then conclude by discussing the function of gold coins in Yemen in the 6<sup>th</sup> century CE, and the possible uses for Aksumite and Roman gold in this system. I will also explore links to similar coins found in India to enhance the picture of gold coin movement and use throughout the Indian Ocean area in the 6<sup>th</sup> century CE.

I will firstly outline the theory that there was a relationship between Aksumite and Roman gold coins, which has been widely accepted, especially in dating the beginnings of Aksumite coinage (see below). There are a number of aspects of the argument which do not stand up to scrutiny. It has been assumed that Aksumite gold coins initially followed a Roman gold coin weight standard, but it has never been clearly demonstrated nor why the Aksumite administration might have done so. I will summarise the arguments below and then take a fresh approach to the practicalities of such a linked system.

Aksumite and Roman gold coins have been linked through their joint find spots. There is a variety of evidence concerning coin finds from Yemen, including unpublished material. An examination of find spots for Aksumite gold coins in general, and Roman gold coins in Ethiopia, Eritrea, and India, as well as Yemen, will lead into a discussion of mixed groups of Aksumite and Roman coins. Here I will publish a catalogue of joint Aksumite and Roman gold coin finds from a private collection (Private 2007), the British Museum (BM 1904), and the Kunsthistorisches Museum (KHM 1904).

My presentation of the coin evidence will lead into a discussion of the clearly different treatment of Aksumite and Roman coins in Yemen. The history of coin use in Yemen indicates an unusual relationship with coinage. In the 6<sup>th</sup> century CE, this includes imitation coins and graffiti (or scratch-marks). The use of graffiti/scratching is peculiar: the evidence shows that there is something methodical occurring probably in the area around modern Aden at this period. There is also one example of deliberate defacement, possibly in connection with the invasion of the Aksumite king Kaleb in defence of Christians in the area in 520 CE. All of this unusual activity is restricted to the Roman and Aksumite gold coins in India become clearer in this context, as events in 6<sup>th</sup> century Yemen are likely to have had a causal effect on the number of these coins coming to India.

Finally, I will argue that although there is an association in find spot for Aksumite and Roman gold coins, this does not mean that there is a political (or economic) connection through weight standard or circulation. In fact, the demonstrably different treatment of Aksumite and Roman coins in Yemen indicates that their circulation and use were distinct until the upheavals of the 6<sup>th</sup> century CE. At this point, the Aksumite and Roman gold coins were united in hoards. There are difficulties in sourcing information about Aksumite and Roman coins from Yemen, and it is likely that hoards have been broken up and sold internationally. My paper looks in detail at the condition of coins with a known Yemeni provenance, and a group which I attribute to Yemen. The methods which I use can be used in future to analyse possible Yemeni provenances for coins which currently lack context.

**Note:** I will use Munro-Hay/Juel-Jensen 1995a references throughout the catalogue, hereafter 'MH'. Although there have been a number of changes to the attribution and chronologies of Aksumite coins (cf. Hahn 2000 for another numbering system; Hahn/West 2016: 17 for a concordance of MH and Hahn 2000 numbers), the purpose of this article is to examine joint finds of Aksumite and Roman coins in Yemen, their possible circulation there, and treatment. I will not therefore comment further on chronology or attribution since any questions on these aspects do not affect the conclusions of my study.

#### The Weight Standards of Aksumite and Roman Gold Coins

Munro-Hay is the strongest proponent of a link between Aksumite and Roman weight standards, which has been influential in thinking about the production of Aksumite coinage and its relationship with Roman coinages (MH: 36-37; cf. Phillipson 2012: 283). More recently however, Hahn (2000: 289-291) has modified and questioned the weight standard argument. Phillipson (2012: 183) has also cast some doubt on precise moments of standard change in Aksumite coins, suggesting that 'the inferences drawn are best regarded as hypothetical pending further evidence' (Phillipson 2012: 183 n10). Modifications have centred on the moments of change in the weight standard of Aksumite coins, rather than questioning the central point that the Aksumites drew inspiration from Roman coins. The same presumption that Aksumite coinage is initially based on Roman weight standards has continued to apply in publications up to the present day (cf. Hahn/West 2016).

The only scholar to suggest that the link between Aksumite and Roman weight standards be questioned is Darley in her unpublished thesis (2013). In particular, Darley (2013: 191) suggests that given the proprietary approach the Romans took to gold coinage, the fact that Aksum minted in gold from the beginning suggests that they were not as politically or economically close to Rome as some have suggested. Further, Darley cautions against seeing Aksumite coinage purely in relation to Rome (192). This is a wise starting point to look at the supposed links afresh.

There are two separate questions to consider: 1) Did the Aksumites start out with the same weight standard as contemporary Roman coinage? 2) Did the Aksumites shift their weight standard to reflect Roman changes? These questions are not necessarily connected. The exact weight standard for gold coins at different periods in Aksum is difficult to pin down due to the paucity of examples for many of the kings (see estimates in Hahn 2000: 288-289).



[Note: I have excluded MH numbers 6 (1.41 g) and 7 (0.66 g) as these appear to represent smaller denominations of Aphilas' main gold coin (MH 4-5, 2.4-2.76 g). This appears to be the only moment when more than one denomination of gold coin was struck.]

MH only publishes the maximum and minimum weights, so it is not possible to give more statistical data. However, it is clear that the weight for the gold coin declines. It should be noted that MH has over-estimated the number of types – Hahn (2000: 289) criticises MH for giving type numbers to die variants – but this does not affect the overall picture of the decline in weight standard.

Aksumite coinage started under Endubis (c. 270/290 CE) at which point gold coins were struck at around 2.4-2.8 g. The final gold coins were struck under Gersem (c. 600 CE) by which point the weight had settled to around 1.4-1.5 g. The initial weight is around half that of the contemporary Roman aureus at 5.45 g (cf. Abdy 2012; Kent 1956). This supposed metrological connection to the half aureus of Diocletian is usually used to date the beginning of Aksumite coinage (MH: 36; Hahn 2000: 294; Hahn/West 2016: 16). From the time of Ousanas (suggested by Hahn 2000: 290) or Ezana (suggested by MH: 36 and 45), the gold weight standard started to decline. By the end of Ezana's reign (c. 340 CE), gold coins weighed around 1.60 g. The clear decline in the Aksumite weight standard has been used to 'confirm' the notion that Aksumite gold coins were 'pegged' to the Roman weight standard. In 308-324 CE Roman reforms to the gold coinage nominally made 9 siliquae c. 1.65 g (MH: 36). MH in particular note this as confirmation that the Aksumite kings were tracking the changes in Roman weight standard (cf. Hahn/West 2016: 16). However, Aksumite gold coins did not track the subsequent reform of Roman gold in c. 383 CE, retaining their weight (cf. Munro-Hay 1999: 12; MH: 36-37). This failure has been explained by suggesting that the Aksumite kings did not further follow Roman changes in weight standard as the metal purity of Aksumite gold coins was in a steady decline by this period (cf. Oddy/Munro-Hay 1980; Munro-Hay/Oddy/Cowell 1988; Atkins/Juel-Jensen 1988). Specific gravity testing reveals that while the gold coins of Endubis had a gold content of between 92.4-98.2%, by the time of Kaleb (c. 520 CE) this was between 64.2-77.9% (Munro-Hay/Oddy/Cowell 1988: 11).

The supposed shift in the Aksumite weight standard is particularly problematic: it is unclear when the shift happens and, practically speaking, the supposed match in the weight standards is neither exact nor particularly useful. Firstly, it is clear from the weight data available that the gold standard began to decline under Ousanas and continued under Ezana, thereafter levelling off. There is therefore no abrupt change to the weight standard, which one might expect if the Aksumite kings were following a Roman policy (cf. Hahn 2000: 290). Secondly, the final coin minted under the Christian Ezana is the coin that corresponds to the '9 *siliqua* piece' identified by Munro-Hay/Juel-Jensen (MH: 36). The shift to a lighter weight standard under Ezana is, however, linked to a theoretical weight only – the '9 *siliqua* piece' – and not a Roman coin actually produced. The average weight of c. 1.60 g for Aksumite gold is

therefore compared to a theoretical weight of 1.65 g for 9 siliquae. However, the Roman coins which were actually produced were solidi with a weight of 4.5 g under Constantine. There were 24 siliquae in a solidus and therefore, theoretically, 9 siliquae were 1.65 g. This does not seem so far off the average Aksumite gold coin of 1.60g. However, multiplied up to make a full Aksumite solidus the Aksumite weight standard would deliver a coin of around 4.26g. There also would not be a full number of Aksumite coins to make a solidus' worth - it would be 2 2/3 coins. This looks much further away from a usable (and comparable) exchange in the weight standard. If the 9 siliquae equivalence had been chosen deliberately then it is hard to see why as for practical use it is most inconvenient. It would certainly not make Aksumite coins 'freely convertible' against Roman coins (cf. Finneran 2007: 205). If the equivalence was deliberately chosen for reasons other than practical ones it would have been extremely obscure and unclear who the intended audience was. To make the coins comparable they would have to be weighed so it is hard to see the reason for the same theoretical weight standard. I think it is therefore clear that Aksumite gold coins did not track the weight standard of Roman gold coins, though the issue of the initial weight standard needs more data to be resolved.

We do not know much about the internal affairs of the Aksumite kingdom. However, the final settling of the reduced weight standard comes towards the end of Ezana's reign. We certainly know that this was a period of change in the kingdom as the state adopted Christianity as the official religion (cf. Phillipson 2012: 111-118). It is therefore possible that other administrative reforms took place at this time, possibly due to additional expenses involved in the changeover of the state's apparatus with the new religion. The reduction in weight standard does not appear to be linked, directly at least, to the reduction in gold content of the coins. The decline of gold content in Aksumite coins was steady throughout their production and is indeed one of the methods used to determine the chronology of that production. Whether the Aksumite administration began their coinage at the same weight standard as Roman coinage or not, they do not appear to have used weight standard as part of any joint economic system. It remains possible that Aksumite and Roman coins operated together in some way other than simply as bullion: whether these factors are postproduction or by design remains unclear.

#### **Coin Evidence**

The most influential of joint Aksumite and Roman coin finds is the al-Madhāriba hoard (Munro-Hay 1989), but there are also individual finds of Aksumite gold coins in Yemen, and other finds of Aksumite and Roman coins together in Yemeni contexts. In the early 6<sup>th</sup> century CE Yemen was not under Roman or Aksumite control. Brief Aksumite control only came after King Kaleb's invasion of c. 520 CE and continued under his viceroy for only about five years. If one sets aside the assumption that the coins must be operating on the same weight standard and so likely to be circulating together, then joint finds should be re-assessed to see what can be said about the association of Roman and Aksumite coins at this period.

I shall present here the find spots for Aksumite gold coins and how the discovery of the al-Madhāriba hoard has affected our view of the circulation of these coins. I shall present an overview of the evidence for Roman gold coins in Ethiopia, Eritrea, Yemen, and further east in order to frame the context for the movement of gold coins in this region. I will also present here mixed coin groups from Yemeni contexts: firstly those which were donated to the British Museum in 1904 (BM 1904), only briefly and partially published by Munro-Hay (1989a: 83-84); the coins acquired in Aden by DH Müller during an expedition of the Austrian Academy of Sciences to Yemen in 1898/99 and sold to the Kunsthistorisches Museum in 1904 (KHM 1904) (cf. Hahn 2000: 285 incl. note 12); and finally, coins brought for identification to the British Museum in 2007 (Private 2007), hitherto unpublished.

# Find Spots of Aksumite and Roman Gold Coins

At first glance there are significant differences between the production and circulation of Aksumite gold coins and that of Aksumite silver and bronze coins. Firstly, although all Aksumite coins were first inscribed in Greek, under subsequent kings Greek was used on the gold coins alone while Ge'ez (the local language of Aksum) was used on silver and bronze coins. Ge'ez was only finally used on gold coins under the reign of Gersem (c. 600 CE), the last Aksumite king to strike in gold. Secondly, the find spots for gold coins are mainly outside Ethiopia and predominantly in Yemen. Silver and bronze coins are mainly found in northern Ethiopia, Eritrea, and Egypt. Together these differences have been used to demonstrate that Aksumite gold coins were produced specifically for trade purposes, unlike the more locally circulating silver and bronze coins (cf. Finneran 2007: 205; Phillipson: 2012: 74).

This picture of Aksumite gold coins today is heavily influenced by the discovery of the al-Madhāriba hoard in Yemen (Munro-Hay 1989a). Before the discovery of this hoard, the find spots for Aksumite gold coins were fairly evenly spread between Ethiopia/Eritrea and South Arabia.

A good way to illustrate this point is to look at the find spots described by Anzani (1926) and to see what effect the al-Madhāriba hoard has on the picture. Of the 157 gold coins listed by Anzani, 115 have find spots. All of these find spots are either in South Arabia or in areas once part of the Aksumite kingdom (Ethiopia and Eritrea).



Fig. 2. Distribution of find spots of Aksumite gold coins according to Anzani (1926)

The split between find spots recorded in Anzani is roughly equal. Of the 115 gold coins with find spots listed by Anzani (1926), 53 were found in Ethiopia or Eritrea, while 62 had Arabian, mostly Yemeni, provenances. This even split was drastically altered by the discovery of the al-Madhāriba hoard. The 868 Aksumite gold coins in the hoard now give the impression, as Munro-Hay himself stated, 'all gold Aksumite coins with any provenance come from South Arabia' (1991c: 411). This statement is far too sweeping – it is not clear whether the al-Madhāriba hoard was an anomaly or whether larger gold finds might be made in Ethiopia or Eritrea. Over the last hundred years or so there has been a more regular discovery of gold coins in Ethiopia or Eritrea: for example, the excavations by Paribeni in 1908 at Adulis which uncovered 42 Aksumite gold coins (Casson 1981: 114).

The weight given by the al-Madhāriba hoard to a predominantly Yemeni origin for Aksumite gold coin finds also appears to be supported by the provenance of gold coins in major public collections. Find spots are recorded for a number of Aksumite bronze and gold coins in the British Museum collection, for example:

Table 1: Find spots of Aksumite bronze coins in the British Museum

BM Registration Number	Authority/ Metal	Findspot	BM Catalogue Number (Munro-Hay 1999)
1915,0205.1	Ioel AE	Aden	452
1925,0902.2	Hataz AE	Eritrea	529
1869,0101.1	Armah AE	Ethiopia	572
1933,0106.85	Anon AE	Dalmatia	-
1934,0903.60	Anon AE	Gaza	-
1869,0101.3	Ousanas AE	Ethiopia	41
G.2156	Aphilas AE	Ethiopia	20
1926,0108.82	Ezanas AE	Qaw el- Kebir (Upper Egypt)	68
1926,0108.83	Anon (time of Ezana) AE	Qaw el- Kebir (Upper Egypt)	91 (mistakenly listed as 83 in catalogue)
1868,1242.1	Anon (time of Ezana) AE	Lake Ashangi (Ethiopia)	90
1868,1219.1	Ouazebas AE	Adulis	247
1925,0902.1	MHDYS AE	Eritrea	293
1869,0101.2	Anon (time of Ebana) AE	Ethiopia	323 (mistakenly listed as 1896,0101.2)

Table 2: Find spots of Aksumite gold coins in the British Museum

BM Registration Number	Authority/ Metal	Findspot	BM Catalogue Number (Munro-Hay 1999)
1915,0108.81	Ezana AV	Aden (300 km north of)	75
1915,0108.78	Eon AV	Aden	290
1908,1006.6	Eon AV	Aden	291
1904,0404.1	Ebana AV	Aden (200-300 miles north of)	303
1870,0301.1	Ebana AV	Aden	304
1915,0108.79	Ebana AV	Aden	305
1872,0507.1	Ebana AV	Aden	306
1925,0805.1	Ebana AV	Aden	307
1915,0108.80	Kaleb AV	Aden	408

There are historic links between the United Kingdom and Yemen and it is highly likely that these links distort the picture of find spots of coins held in the British Museum. Similarly, Oxford's connection to Ethiopia, through the charity Oxfam, is made clear by the gold coin of Endubis found at Aksum in the Ashmolean collection. This was donated by Ras Mengesha Seyoum, governor-general of Tigray Province, to Oxfam and subsequently lent to the Ashmolean in 1968 (West 2002: 10 no 1; 28). Therefore it is essential not to treat a single source of information as a random sample. The picture is further affected by the interrupted nature of excavations in Ethiopia, Eritrea, and Yemen due to regional instability.

Roman gold coins have been found in Ethiopia, Yemen, and India. In Ethiopia, Roman coins have been found separately from Aksumite coins and the date of their deposition is unclear (see MH: 34). Coins from the Antonines to Theodosius II are found in 'several places in Aksumite Ethiopia and Aksum-dominated southern Arabia' (cf. Phillipson 1998: 63-64 and 71). Roman coins have been found in Yemen, but as with other 'foreign' coins, the reported finds are few and far between (cf. Munro-Hay 1991c: 411; Potts 2010: 66-68). The best and largest known exception is the al-Madhāriba hoard. This is a mixed Aksumite and Roman gold hoard and the groups I will discuss below have similar compositions. There are other hints, however, that more Roman (and Aksumite) gold coins were found in Yemen, but not recorded as local finds. For example, Kaiky Muncherjee (or Muncharjee) (1873-1955) was an Indian trader resident in Aden who built up a large collection of South Arabian antiquities, most of which eventually went to the Aden Museum, Sidebotham (1986: 19 n18: cf. Jamme 1955) reports that there are Roman gold coins in the Muncherjee collection: four coins of Constantius II, coins of Jovian and Valentinian, and one smaller unidentifiable gold coin, which is probably an aureus of the 1st century CE. Anzani (1926) lists Aksumite coins from the Muncherjee collection - exclusively gold and from the reigns of Ezana-Kaleb (see Anzani 1926: nos. 43, 102, 106, 121, 126, 129, 188, 190). Although Anzani only lists one coin (no. 43, Ezana) as from 'Arabia Meridionale', it is probable that Muncherjee formed his collection in Aden from local finds given the nature of his broader collection.

Roman gold coins are found in India. The peaks of Roman gold coin finds in India are in the 1st-2nd centuries CE, tailing off by the time of Caracalla (died 217 CE) and resuming again from the mid-4th century CE (cf. Falk 2015:109). Although this general pattern of finds has not changed since Sewell's listing (1904), further finds have been reported to fill out the picture. Turner (1989) lists all the finds up to the emperors of the 3<sup>rd</sup> century CE known up to the 1980s and the late Roman coins are listed by Darley (2013: Appendix 1). The late Roman coins in the Akki Alur hoard and held at the Madras Government Museum are particularly significant (cf. Darley 2013: 281-284), as is the joint late Roman and Aksumite 'Mangalore' hoard (Nawartmal 1998).

I will now summarise the evidence for mixed Aksumite and Roman gold coin finds in Yemen. The al-Madhāriba hoard has already been fully published, although details of the Roman coins are not as full as those of the Aksumite coins in the hoard. A catalogue is available in Munro-Hay (1989a) and will not be repeated here. I will however catalogue the Aksumite and Roman groups in the collection of the British Museum (BM 1904) and recorded there (Private 2007), and in the Kunsthistorisches Museum, Vienna (KHM 1904). This will facilitate a full discussion of these joint finds following the catalogue. The evidence I will present below offers a more nuanced approach to Aksumite gold coins. The idea that they were purely for the 'export market' can be challenged if the context of their movement and association with Roman gold coins is fully understood.

#### The al-Madhāriba Hoard

The al-Madhāriba hoard, published by Munro-Hay (1989a), contained a mixture of Aksumite gold and Roman *solidi*, totalling 1,194 coins: 868 Aksumite and 326 Roman coins. It was found approximately 70 km west of Aden, supposedly in a clay pot which was not preserved, and the hoard was deposited at the National Museum in Aden. Munro-Hay describes it as the first recorded joint find of Aksumite and Roman coins together (1989a: 83). The composition of the hoard ranged from Ezana (c. 340 CE) to Kaleb (c. 520 CE) and Constantius II as Caesar (from 324 CE) to Theodosius II (408-450 CE). Of particular note are the 538 coins of Ebana (c. 450 CE), which vastly increased the number of examples known of this king.

The hoard represents the largest number of Aksumite gold coins found together and its scale changed the picture of gold findspots presented by Anzani (1926), as noted above. The al-Madhāriba hoard means that the roughly equal split between African and Arabian provenances is now very heavily skewed to Yemen. It is not clear how representative this single find is, especially since reporting of hoards may not be reliable under present political circumstances in Yemen. Hahn (2000:285) notes that the large numbers of later Aksumite gold coins appearing on the market in recent years may well have come from hoards like the al-Madhāriba hoard. The extraordinary number of Aksumite coins in the al-Madhāriba hoard has meant that commentary focuses on the Aksumite coins and not on the Roman *solidi*. Unfortunately, Munro-Hay only published a brief listing of the Roman coins without any photographs. However, it is useful to look at the coins as a group as this may offer some information about why such coins were hoarded together.

Munro-Hay was not correct to state that the al-Madhāriba hoard was the first recorded find of Aksumite and Roman coins together. He acknowledged himself later in the publication (1989a: 87) that DH Müller sold a similar group to the Kunsthistorisches Museum in 1904 (cf. Hahn 2000: 285). Similarly, Munro-Hay's reference to the coins donated to the British Museum in 1904 (1989a: 83-84) is only partially correct as he missed the *solidus* of Constantius II from the group. In the following sections I shall present the previously known two groups of Aksumite and Roman gold coins at the British Museum and Kunsthistorisches Museum, and add another group recorded in recent years at the British Museum. These three groups of associated Aksumite and Roman gold coins will then be discussed in the context of the al-Madhāriba hoard.

#### Coins Donated to the British Museum by Ali Farah in 1904 (BM 1904)

In 1904 Ali Farah, of the Eastern Telegraph Company, Aden, donated three gold coins to the British Museum: one Aksumite coin of Ebana, one imitation of a *solidus* of Constantius II, and a *solidus* of Constantius II minted in Arles. On 2<sup>nd</sup> May 1904, Barclay V Head recorded Ali Farah's donation of April 1904 and this was marked out for 'Special Thanks'. The archive of Cable and Wireless is held at the Telegraph Museum, Porthcurno, and contains the records of companies, including the Eastern Telegraph Company, which were subsumed into Cable and Wireless. According to the archive an 'A Farrah' entered service at Aden in December 1890, attaining a senior role in December 1892, and remained employed until his death in June 1909 (details supplied by Dr Jenny Lee, Collections Manager). Although there is a discrepancy in the spelling of 'Farah/Farrah' it is probable that it is the same individual.

All three coins were said to come from Yemen: the registers state that the Aksumite coin (1904,0404.1) was from '200-300 miles north of Aden', and the other two (1904,0404.2-3) were 'from the hinterland of Aden'. Confusingly there is also a note on the ticket with 1904,0404.3 stating that the coin was found in the 'same district as Aksumite coin from same donor'. It is therefore likely that all three coins came from the same area, but were not necessarily part of a hoard when Ali Farah acquired them. Munro-Hay (1989a: 83-84) only refers to the coin of Ebana and the imitation: I cannot find a publication reference for the genuine coin of Constantius II. It is probable that the coins, separated into the Greek and Roman series on arrival in the British Museum, became disassociated and the connection was overlooked. They are recorded in two separate registers (Ebana and imitation in the Greek register; Constantius II in the Roman register). Munro-Hay appears unaware of the coin of Constantius II when discussing the association of Aksumite and Roman gold coins in South Arabia.

# Ebana 450-500 CE

#### *Type: MH 71*

Obverse:Bust of Ebana right, crowned with a triple tiara and<br/>robed; in right hand, sceptre or fly whisk; the whole<br/>flanked by two wheat-stalks, in a beaded circle.<br/>Greek legend all round interspersed with crosses<br/>+CIN+CAX+ACA+CACReverse:Bust of Ebana, right, wearing head-cloth and robed;<br/>in right hand, fly whisk; the whole flanked by two<br/>wheat stalks, in a beaded circle. Greek legend all<br/>round interspersed with crosses<br/>+ANA+BAC+ACA+CEB



1

AV, BM 1904,0404.1, 1.58 g, 12.00, 17 mm (obv. Ebana holds sceptre; in inscription, Ge'ez N; above head, H (South Arabian letter Z); BMCAK 303)

# Constantius II 337-361 CE

Imitation of Mint: Constantinople (15<sup>th</sup> March 351-6<sup>th</sup> November 355) Type: RIC VIII 96?

- Obverse: FL IVL CONSTAN-TIVS PERP AVGV. Constantius II facing and cuirassed; wearing crested and diademed helmet, spear diagonally over right shoulder; on left arm shield decorated with horseman riding down enemy
- Reverse: [GLORIA REI PVBLICAE CONS]. Roma and Constantinopolis enthroned, the former facing, the latter turned to the left. Between them they support a shield inscribed [VOT/XXX/MVLT/XXXX]. Roma holds spear in left hand; Constantinopolis holds sceptre in left hand and rests right foot on a prow



2 AV, BM 1904,0404.2, 3.66 g, 6.00, 20 mm (obverse inscription scrambled; reverse inscriptions scrambled)

# Mint: Arles 233 (6<sup>th</sup> November 355-Spring 360) Type: RICVIII 233

- Obverse: FL IVL CONSTAN-TIVS PERP AVG. Constantius II facing and cuirassed; wearing crested and diademed helmet, spear diagonally over right shoulder; on left arm shield decorated with horseman riding down enemy
- Reverse: GLORIA REI PVBLICAE KONSAV. Roma and Constantinopolis enthroned, the former facing, the latter turned to the left. Between them they support a wreath inscribed VOT/XXX/MVLT/XXXX. Roma holds spear in left hand; Constantinopolis holds sceptre in left hand and rests right foot on a prow



AV, BM 1904,0404.3, 3.67 g, 11.00, 20 mm (11 scratches on obverse)

# Coins Sold by DH Müller to the Kunsthistorisches Museum in 1904 (KHM 1904)

DH Müller led an expedition of the Austrian Academy of Sciences to Yemen in 1898/1899 (cf. Sturm 2015; Macro 1993) and acquired a group of 35 gold Aksumite and Roman coins in Aden. He subsequently sold the coins to the Kunsthistorisches Museum in 1904. The 31 Aksumite coins have been noted previously, particularly in comparison to the al-Madhāriba hoard. Munro-Hay (1989a: 87) mentions this group as part of a hoard, but only mentions the Aksumite coins and notes the similarity of composition of the Aksumite material to the al-Madhāriba hoard. Munro-Hay uses the KHM 1904 group to support the idea that the al-Madhāriba hoard was probably buried in the mid-6th century during the upheavals of Kaleb's invasion. Similarly Hahn (1984: 131) only refers to the 31 Aksumite coins in the group and later (2000: 285) notes the Aksumite coins while comparing the composition to the al-Madhāriba hoard and only mentions the four Roman coins in a footnote (n. 12).

Although there are only four Roman coins in this group, they are important for analysing the use of Roman coins in Yemen. Two of the coins are less worn than other examples and display fewer scratch-marks, while one example is heavily scratched and the images defaced. Looking at the Roman material of the KHM 1904 group adds much to the understanding of gold coin use and circulation. Many of the Aksumite coins are illustrated in Munro-Hay/Juel-Jensen (1995a) but there are a few misplaced images in their plates. I have noted this in the catalogue below where relevant.

# Ezana c. 340-360 CE

# Туре: МН 49

Obverse: Bust of Ezana, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +HZA+NAB+ACI+ΛEV

Reverse:

4

Bust of Ezana, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses  $+A\Lambda HN+A\Sigma W+$ MITB+ICI



AV, KHM GR 31277, 1.54 g, 12.00, 16.9 mm (obv. Ezana holds sceptre)

# Eon c. 400 CE

# Туре: МН 59

Obverse: Bust of Eon, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +CAC+CIN+CAX+ACA

Reverse: Bust of Eon, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses +EWN+BIC+ IAN+AA $\Phi$ 

3



Bust of Ebana, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses +ANA+BAC+ ACA+CEB



AV, KHM GR 31259, 1.53g, 11.00, 17.1 mm



AV, KHM GR 31261, 1.50 g, 11.00, 16.5 mm



AV, KHM GR 31262, 1.57 g, 12.00, 16 mm



2 AV, KHM GR 31267, 1.61 g, 12.00, 16.8 mm



AV, KHM GR 31274, 1.50 g, 11.00, 15.6 mm

AV, KHM GR 31257, 1.5 g, 1.00, 16.9 mm (This KHM accession number used for an example of Kaleb MH 107)

# Ebana c. 450 CE

# Туре: МН 71

Obverse: Bust of Ebana, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +CIN+CAX+ACA+CAC 13



14 AV, KHM GR 31275, 1.57 g, 12.00, 16.3 mm



**15** AV, KHM GR 31276, 1.58 g, 12.00, 16.6 mm illustrated in MH as 31278



16 AV, KHM GR 31278, 1.56 g, 11.00, 16.8 mm illustrated in MH as 31282



17 AV, KHM GR 31281, 1.57 g, 11.00, 15.7 mm



**18** AV, KHM GR 31282, 1.60 g, 11.00, 15.7 mm illustrated in MH as 31276

# Anonymous (under Ebana) c. 450 CE

# Туре: МН 73

Obverse: Bust of an Aksumite king, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +CIN+CAX+ACA+CAC

Bust of an Aksumite king, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses +ANA+CAC+ACA+CAC



AV, KHM GR 31258, 1.04g, 1.00, 16.4mm listed under MH type 71 as a possible imitation – and listed as no 51 in MH list of forgeries but with a '?' presumably indicating that this is uncertain. Cf. Hahn 2000: 304, where he treats it as a definite imitation of Ebana

# Anonymous c. 450 CE

# Туре: МН 81

Obverse:

19

Reverse:

- Bust of an Aksumite king, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +CNI+CAX+ACA+CAC
- Reverse: Bust of an Aksumite king, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses +CYN+CAX+ACA+CAC



**20** AV, KHM GR 31255, 1.56 g, 12.00, 17 mm

# Nezool c. 450 CE

# Type: MH 82

- Obverse: Bust of Nezool, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +@EOYE YXAPICTIA
- Reverse: Bust of Nezool, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses +BACILEYCNEZOWΛ



21 AV, KHM GR 31268, 1.58 g, 1.00, 17 mm

# Ousas c. 500 CE

#### Туре: МН 85

- Obverse: Bust of Ousas, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +OYCACB+ACIAEYC
- Reverse: Bust of Ousas, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses +@EOYEYXAPICTIA



22 AV, KHM GR 31254, 1.61 g, 11.00, 17.1 mm



23 AV, KHM GR 31266, 1.63 g, 11.00, 18.3 mm



24 AV, KHM GR 31279, 1.61 g, 12.00, 17 mm

# Ousanas c. 500 CE

#### Type: MH 87

Obverse: Bust of Ousanas, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +OYCANACBACIAEYC Reverse:

25

Bust of Ousanas, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses +@EOYEYXAPICTIA



# AV, KHM GR 31256, 1.62 g, 12.00, 17.5 mm

# Kaleb c. 500-520 CE

Types: MH 92-106

- Obverse: Bust of Kaleb, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses XAAHBBACIAEYC (variants of)
- Reverse: Bust of Kaleb, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses YIOC@EZENA (variants of)



AV, KHM GR 31252, 1.51 g, 1.00, 17.2 mm, MH 92





28

26

AV, KHM GR 31253, 1.54 g, 12.00, 16.7 mm, MH 93



AV, KHM GR 31263, 1.54 g, 1.00, 16.1 mm, MH 106



AV, KHM GR 31264, 1.58 g, 1.00, 16.8 mm, MH 103? 29



30 AV, KHM GR 31265, 1.56 g, 12.00, 16.9 mm, MH 100



AV, KHM GR 31269, 1.56 g, 12.00, 17.1 mm, MH 99 31



32 AV, KHM GR 31270, 1.57 g, 11.00, 17.2 mm, MH 106



33

AV, KHM GR 31271, 1.5 g, 11.00, 17.3 mm, MH 99



AV, KHM GR 31273, 1.55 g, 11.00, 17.3 mm, MH 106 34

# Constantius II 337-361 CE

Mint: Antioch (Late 347-6th November 355) Type: RIC VIII 83

Obverse: FL

IVL CONSTAN—TIVS PERP AVG. Constantius II draped and cuirassed, pearl diademed

GLORIA - REI - PVBLICAE - SMANS/SMANH. Reverse: Roma and Constantinopolis enthroned, the former facing, the latter turned to the left. Between them they support a wreath inscribed VOT/XXX/ MVLT/XXXX. Roma holds spear in left hand; Constantinopolis holds sceptre in left hand and rests right foot on a prow



35 AV, KHM RÖ 35946, 4.55 g, 11.00, 21.6 mm (SMANS) NB This coin is not the original Müller coin, but is believed to be the same type (K Vondrovec, pers comm). The state of wear or scratching on the original coin is not known: it was exchanged for the coin which is now in the KHM RÖ 35946 with the Bachofen collection in the early 20<sup>th</sup> century.



36 AV, KHM RÖ 35947, 4.41 g, 5.00, 20.9 mm (obverse: 11 scratches) (SMANH)

# *Mint: Antioch (6<sup>th</sup> November 355-3<sup>rd</sup> November 361)* Type: RIC VIII 162

- IVL CONSTAN-TIVS PERP AVG. Obverse: FL Constantius II facing and cuirassed; wearing crested and diademed helmet, spear diagonally over right shoulder; on left arm shield decorated with horseman riding down enemy
- GLORIA REI PVBLICAE SMANH. Roma Reverse: and Constantinopolis enthroned, the former facing, the latter turned to the left. Between them they support a wreath inscribed VOT/XXX/ MVLT/XXXX. Roma holds spear in left hand; Constantinopolis holds sceptre in left hand and rests right foot on a prow



AV, KHM RÖ 35945, 4.25 g, 6.00, 20.7 mm (obverse: at least 15 scratches)

37

#### Valens 364-378 CE

# Mint: Nicomedia (24<sup>th</sup> August 367-17<sup>th</sup> November 375) Type: RIC IX 16b

Obverse:

e: DN VALENS—PF AVG. Valens draped and pearldiademed, left; holding *mappa* and sceptre

Reverse: VOTA PV—BLICA – SNI. Two emperors, nimbate, seated facing, each holding *mappa* and short sceptre; the emperor on left raising his *mappa*; between letters in exergue, captives



38 AV, KHM RÖ 35948, 4.3 g, 6.00, 21 mm (obverse: 4 scratches; reverse: XP scratched across each torso, heavy scratching across each face, heavy scratching either side of and in between heads)

# Coins Shown at the British Museum in 2007 (Private 2007)

On 26<sup>th</sup> April 2007 a group of nine Aksumite and Roman gold coins was brought to the Department of Coins and Medals for identification. The group consisted of two coins of the Aksumite king Ebana (c. 450-500 CE) and seven *solidi* of Constantius II (337-361 CE). Although rather worn they were of good condition and appearance. Die axes and weights were recorded at the time and the coins were photographed. The coins were from a private collection and no provenance was given. The catalogue and images published here are from brief notes and images I found in the British Museum when I joined the Department of Coins and Medals.

# Ebana 450-500 CE

*Type: MH 71* 

- Obverse: Bust of Ebana, right, crowned with a triple tiara and robed; in right hand, sceptre or fly whisk; the whole flanked by two wheat-stalks, in a beaded circle. Greek legend all round interspersed with crosses +CIN+CAX+ACA+CAC
- Reverse: Bust of Ebana, right, wearing head-cloth and robed; in right hand, fly whisk; the whole flanked by two wheat stalks, in a beaded circle. Greek legend all round interspersed with crosses +ANA+BAC+ ACA+CEB



(obv. Ebana holds sceptre; in inscription, Ge'ez N)

39





(obv. Ebana holds fly whisk; retrograde inscription; unclear symbol above head)

# Constantius II 337-361 CE

# Mint: Thessalonica (25<sup>th</sup> December 350-6<sup>th</sup> November 355) Type: RIC VIII 150

- Obverse: D N CONSTANTIVS MAX AVGUSTVS. Constantius II draped and cuirassed, pearl diademed
- Reverse: GLORIA REI PVBLICAE TES. Roma and Constantinopolis enthroned, the former facing, the latter turned to the left. Between them they support a wreath inscribed VOT/XXX/MVLT/XXXX. Roma holds spear in left hand; Constantinopolis holds sceptre in left hand and rests right foot on a prow



41 AV, 5.00, 4.15 g (obverse: at least 12 scratches)

#### Mint: Constantinople (15<sup>th</sup> March 351-6<sup>th</sup> November 355) Type: RIC VIII 96

- Obverse: FL IVL CONSTAN TIVS PERP AVGV. Constantius II facing and cuirassed; wearing crested and diademed helmet, spear diagonally over right shoulder; on left arm shield decorated with horseman riding down enemy
- Reverse: GLORIA REI PVBLICAE CONS. Roma and Constantinopolis enthroned, the former facing, the latter turned to the left. Between them they support a shield inscribed VOT/XXX/MVLT/XXXX. Roma holds spear in left hand; Constantinopolis holds sceptre in left hand and rests right foot on a prow



42

AV, 12.00, 4.37 g (obverse: at least 5 scratches)



43 AV, 7.00, 4.12 g (obverse: at least 7 scratches)

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44 AV, 12.00, 4.26 g (obverse: multiple scratches)

Mint: Lyons (18<sup>th</sup> August 353—6<sup>th</sup> November 355) Type: RIC VIII 178

- Obverse: FL IVL CONSTAN—TIVS PERP AVG. Constantius II facing and cuirassed; wearing crested and diademed helmet, spear diagonally over right shoulder; on left arm shield decorated with horseman riding down enemy
- Reverse: GLORIA REI PVBLICAE SMLVG. Roma and Constantinopolis enthroned, the former facing, the latter turned to the left. Between them they support a wreath inscribed VOT/XXX/MVLT/ XXXX. Roma holds spear in left hand; Constantinopolis holds sceptre in left hand and rests right foot on a prow



45

AV, 6.00, 3.99 g (obverse: at least 10 scratches)



46 AV, 6.00, 4.21 g (obverse: 2 scratches)



47 AV, 6.00, 4.23 g (obverse: multiple scratches)

# Discussion

The catalogue of material presented above forms a good body of material to compare to the al-Madhāriba hoard. The composition of these groups of coins show a similar profile to the al-Madhāriba hoard and this is the basis for further discussion of the state of wear and scratching on the Roman coins, and the lack of these features on the Aksumite coins. There is a clear distinction between the treatment of the Roman and Aksumite coins and this allows a further discussion of the use of gold coins in Yemen at this period. The only other place which has hoards or groups of coins with similar wear and scratching is in India and so my discussion of the catalogue above will bring in examples from Indian contexts to

examine possible links between finds of Aksumite and Roman gold coins in the two countries.

# Composition

Although the groups from the British Museum and the Kunsthistorisches Museum are much smaller than the al-Madhāriba hoard, it is clear that they have a similar composition. Coins of Ebana and Constantius II are the most common in the al-Madhāriba hoard, and this pattern is repeated in the BM 1904, KHM 1904, and Private 2007 groupings. The KHM 1904 group is large enough to look at the range of dates involved against those of the al-Madhāriba hoard. Both groups contained Aksumite coins from Ezana to Kaleb, and both contained Roman coins from Constantius II onwards. The KHM 1904 group however only contained coins of Constantius II and Valens (364-378 CE) whereas the much larger al-Madhāriba hoard contained 326 Roman coins from Constantius II to Theodosius II (408-450 CE). The smaller groups (BM 1904 and Private 2007) emphasise the frequency of coins of Ebana and Constantius II:



Fig. 3. Aksumite Coins in the KHM 1904, BM 1904, and Private 2007 Groups



Fig. 4. Aksumite Coins in the al-Madhāriba Hoard





Fig. 5. Roman Coins in the KHM 1904, BM 1904, and Private 2007 Groups



Fig. 6. Roman Coins in the al-Madhāriba Hoard

The similarities of the profiles of the three smaller groups with the al-Madhāriba hoard are striking. This is particularly the case with the profile of the KHM 1904 group. The only anomaly is the large number of Kaleb coins in the KHM 1904 group: this is likely to be due to the period when the coins were buried. The main focus otherwise is clearly around the coins of Ebana (450-500 CE) and Constantius II (337-361 CE). It is possible that the KHM 1904, BM 1904, and Private 2007 groups come from much larger hoards and the similarity of their profiles to the al-Madhariba hoard are due to the high number of coins of Ebana and Constantius II in these lost hoards. As noted above, Hahn (2000: 285) suggests that unreported hoards are likely to have been broken up for sale from his observations of the number of Aksumite coins of the Christian series from Ezana to Kaleb, which have appeared on the market in recent years. It is possible therefore that hoards generally did include a larger number of coins of Kaleb, just like the KHM 1904 group.

The al-Madhāriba hoard is probably comprised of coins gathered at the time of the Aksumite Kaleb's expedition to Southern Arabia in c. 520 CE. Kaleb's conquest of parts of South Arabia at this period and his imposition of a viceroy, Abreha, followed many years of close contact and trade if not direct control (cf. Phillipson 2012: 203-206). The clear differences in condition demonstrated by the three other groups, however, suggest that the Aksumite coins hoarded probably came over to Yemen actually at the time of Kaleb's expedition, rather than over a long period of time. Unlike the worn and scratched Roman coins, the Aksumite coins appear relatively fresh. This may suggest that they were gathered in Aksum - perhaps for some time given the range of dates - and brought over to Yemen together. It is noteworthy that the Aksumite coins are all from the Christian period in Aksum and all from Ezana to Kaleb. The coins from this period are all on the final weight standard of Aksum. Their similarity in style and weight may mean that they were stockpiled together before their shipment to Yemen. Since there is no other contextual evidence it is not possible to say whether this constituted an official treasury stock, or privately held stored wealth.

#### Wear and Scratch-marks

In almost all examples, the Roman coins in the three groups are very worn and scratched. Munro-Hay (1989a) does not comment on the state of wear of the Roman coins in the al-Madhāriba hoard (and they do not appear in the plates), but given the similarity of composition of all the groups it is likely that these Roman coins too were worn and scratched. There has been little focus in scholarship so far on these rather battered coins, but their condition offers strong indications about the use of Roman and Aksumite coins in Yemen in the 6<sup>th</sup> century. I shall outline and interpret these key differences below to facilitate a final discussion of coin use in Yemen.

The presence of Aksumite coins into the reign of Kaleb in Yemen has long been associated with Kaleb's invasion in c. 520 CE (cf. Phillipson 1998: 112; 124; Phillipson 2012: 203-206). This is by far the most plausible explanation, particularly since there have so far been no gold coins after the reign of Kaleb found in Yemen. The presence of Roman gold coins alongside the Aksumite coins has not been discussed very deeply, especially differences in the state of wear. Munro-Hay (1989a: 86), for example, states in relation to the

al-Madhāriba hoard: 'the most that can be said is that the Roman coins do not contradict the dating of the Aksumite coins in the hoard to the period c. 330 to c. 550'. We have no further information about the wear or condition of the Roman coins in this hoard, but we do have the three similar groups of material above. The wear and the scratches which appear on the Roman coins in the three groups indicate that they were in frequent use. This is unlike the Aksumite coins in the same groups and in the al-Madhāriba hoard. The difference in patterns of wear strongly indicates that the coins were not all treated in the same way. The relative freshness of the Aksumite coins, no matter their date, suggests that these coins had not been frequently circulated by the time of their arrival in Yemen (see in particular the plates of Munro-Hay 1989a). The majority of the Roman coins on the other hand show extensive wear and this indicates either that they were circulated widely on their way to Yemen, circulated extensively while in Yemen, or both. The evidence of the wear combined with the scratching most of the examples show convinces me that the coins were circulated extensively in Yemen. The overlaying of the scratch-marks demonstrates that this practice was of long duration. It is therefore possible that the Aksumite coins were not actually in use in Yemen for any long period and were hoarded alongside the circulating Roman coins following the crisis of Kaleb's invasion. Since the coins came from two different sources - already circulating Roman coins and newly arrived Aksumite coins - the hoards were probably buried a short time after Kaleb's invasion rather than as an immediate reaction to it. The period following Kaleb's invasion was one of considerable unrest, which would account for the hoarding activity.

Almost all the Roman coins in the three groups have extensive scratch-marks, which are made across the fields of each obverse, particularly the right field. The only two examples which have no scratch-marks are no. 35 from the KHM 1904 group, and no. 2 from the BM 1904 group. The latter however is an imitation of a Constantius II solidus whereas all the other examples catalogued are genuine. No. 35, although listed as part of the 1904 group, is in fact an exchanged coin with the Bachofen collection. The location of the original coin from this group is unknown - and neither is its condition. Unfortunately, Munro-Hay does not record whether the al-Madhāriba hoard Roman coins bore scratch-marks. None of the Aksumite coins bear similar scratching. This may be because the Aksumite coins came from an area politically connected to South Arabia and so may have been more familiar. The Roman coins are usually heavily worn and so had clearly been in circulation more frequently or for much longer than the Aksumite coins. Only one example (no. 38) displays a different pattern of scratch-marks, on the reverse, and this will be explored further below.

While a few of the scratches on the Roman coins might be accidental – or through the general wear a coin might experience in circulation – the majority of the scratches are gouged deeply enough to be deliberate. On a couple of examples (nos. 41 and 45), the scratches appear to be letters. However, after comparing the possible letters to regional scripts, the scratches are not recognisably South Arabian letters. None of the scratches which look like they might be letters are repeated on other examples. Where scratches intersect therefore it appears that this is a random occurrence. For this reason I use the term 'scratch-marks' rather than 'graffiti', as I cannot see any attempt to scratch lettering into the coins. The only similar marking which I have seen is on a coin from the Madras Government Museum (Darley 2013: 284) where the scratches intersect in a similar pattern. Here too, this appears to be a random intersection of the scratches rather than a letter.

The sheer number of scratches also does not suggest an accounting or validation system. It suggests circulation, use, and constant checking for gold content. This supposition is supported by the increased number of scratch-marks observed the more worn a coin is. It is unlikely that the scratches represent a counting or accounting method as many of the coins bear multiple scratches and their order is not clear. Such an order would no doubt be necessary for any successful accounting method.

The scratches most likely represent gold testing where the gold has been scratched with a needle or other sharp implement and the resulting gold then tested on a touchstone. This would represent an unusual practice as normally a coin's edge would be scraped directly on a touchstone. The find spots for these coins are all in the Aden area and so this may be a practice peculiar to a limited area of Yemen. It is possible that the Roman coins were being checked as they are of higher gold content than the Aksumite coins and may have been measured by their bullion value. The one imitation (no. 2) in the BM 1904 group indicates that contemporary copies (probably in more debased gold) were circulating which might have necessitated checks.

The separate case of deliberate defacement of the reverse of no. 38 does not display the same pattern of scratching as on the other coins. Here deliberate and methodical effort has been made to scratch out the faces and bodies of the two seated emperors on the reverse. The scratching is directed at the images, unlike the other examples where scratching occurs in the field(s). Additionally, the scratching occurs on the reverse rather than the obverse. It appears that the scratched crosses on the bodies are a representation of *chi rho* although the upper part of the *rho* is not clear. This probably indicates the religious turmoil in Yemen at this period: Kaleb invaded Yemen supposedly to protect Christians in c. 520 CE and, since the *terminus post quem* for both the al-Madhāriba hoard and the KHM 1904 group is the reign of Kaleb, it is highly likely that the defacement is linked to this period (cf. Yule (2013) for Christian rulers in Zafar, north of Aden).

Seeing the Roman coins of the al-Madhāriba hoard would offer a wealth of data if the scratching is indeed a practice peculiar to the Aden area. Unfortunately, I have not been able to secure any of the photographs and the coins themselves are currently inaccessible in Yemen. The evidence gathered so far makes strong progress however in outlining a practice specific to the Aden area in the 5<sup>th</sup>-6<sup>th</sup> centuries CE. Although the exact nature – or purpose – of this practice is still not entirely clear, the existence of this type of scratching on Roman gold coins from Constantius II-Theodosius II in association with Aksumite material is diagnostic in determining the original find spots for these coins.

#### Coin use and Imitation in Yemen and India

There is a long history of the production of imitation coins in Yemen. Imitation began with the production of a local coinage based on 5th century BCE Athenian coins depicting the head of Athena on the obverse and an owl on the reverse (cf. Munro-Hay 2003: 29-30). The production of imitation coinages in Yemen and elsewhere is a phenomenon which should not be associated with forgery. The differences between imitation and forgery in the ancient world are firstly that imitations are produced of solid metal (e.g. silver or gold) and are not plated with precious metal over a base core (as ancient forgeries are), and secondly (and perhaps most importantly) that imitations were not produced with intent to deceive. They were produced to form part of an existing circulating currency or to form a new one. In Yemen it was the latter. The imitation Athenian coinage was on a different weight standard and denominational system from the outset, and differences in design the inclusion of denominational markers in local lettering, for example - make the coinage distinct. It was often the case that on the periphery of the coin using world that areas which began to mint their own coinages tried to make their initial types at least look like what a coin ought to look like. The very concept of coinage was caught up in the idea of what a coin should look like, despite the fact that these were precious metal coinages and therefore the value was in the weight of precious metal in the coin. Conceptually, a coin had to look like a coin for it to be acceptable. Inherent conservatism in coin design is an effect commonly seen throughout the production and use of coinage and innovation, even at the inception of a coinage, is not generally something easily accepted.

The appearance of an imitation Roman gold coin (no. 2) amongst the coins found in Yemen initially suggests that this practice may have continued. The imitation appears to be a Constantius II Constantinople type, but much of the inscription on both obverse and reverse is scrambled. It is clearly imitating Constantius II Constantinople RIC VIII 96 or similar. There are indications that other imitations might have been produced in Yemen. Munro-Hay

(1995b) published an unusual 'Aksumite' coin with a Yemeni provenance from the Museum Fünf Kontinente in Munich. The obverse shows an unprecedented full standing figure of an Aksumite king while the reverse imitates the winged Victory reverses of a Theodosius II solidus. It is triple pierced, at 1 and 11 o'clock and at 6 o'clock. Munro-Hay believed that this was a genuine coin of MHDYS (and published it as such in Munro-Hay/Juel-Jensen 1995a: type 67; cf. Phillipson 2012: 188-189). Given its provenance however, and the available templates for late Roman gold in Yemen – rather than in Aksum – it is more likely that it was produced in Yemen or further east in India, where imitation was also prevalent (cf. Darley 2013: 267-272; Day 2011). Both Aksumite and Roman gold coins have been found in India, frequently with double piercing at 1 and 11 o'clock (cf. double piercing on Roman and Aksumite coins in the 'Mangalore' hoard: Nawartmal 1998; on Aksumite coins with an Indian provenance: Nawartmal 1999). Additionally, in parts of India there is a practice of melding two different cultural styles in Indian (Kushan) and Roman medallion combinations (cf. Göbl 1999, Errington/Cribb 1992.146; Gupta 1976; Göbl 1976; cf. Tomber 2012:139-40, 163-4 for general description of finds).

Yemen was not producing its own coins in the 6<sup>th</sup> century CE. The use of precious metal coins from other regions, and possibly the creation of imitation pieces to supplement the supply would make sense in this context. The wear and scratch-marks evident on the Roman coins above demonstrate their use and circulation in the Aden area. If this was the default coinage in circulation in the 6<sup>th</sup> century then its supplementation by imitation Roman solidi is plausible. Where those imitation coins were produced is another question, which could probably only be answered by metal analysis of imitation coins. Yemen's history of imitation coins however indicates that an initial design is imitated and then adapted to form a unique local currency rather than a continued imitation of other coinages. I believe it is likely therefore that an imitation of a Constantius II solidus from India arrived in Yemen via trade and then entered the coin system in use around Aden (no. 2). Imitation is a known contemporary practice in India and not Yemen at this period despite previous Yemeni history. Once more is known about the Roman coins of the al-Madhāriba hoard, it is entirely possible that further imitations will be found.

Other evidence from India suggests a connection to similar treatment of coins. The 'Mangalore' hoard from Southern India, reported by Nawartmal (1998), is a mixed group of Aksumite (Ousanas-Ezana) and Roman (Constans I-Theodosius II, with an imitation of Anastasius I) gold coins. Of the 21 Roman coins and 23 Aksumite coins, 6 of the Roman and 5 of the Aksumite coins bear scratching similar to that seen on the Roman coins from Yemen published above although many were additionally double-pierced. All 21 late Roman coins (c. 347-421 CE) show similar wear to raised areas, such as the emperor's face, as the Roman coins found in Yemen while the Aksumite coins (c. 320-365 CE) show less wear. Another possible mixed group is reported by Juel-Jensen (1994), who published an Aksumite gold coin of Ousanas which came to AH Baldwin & Sons as part of a group from India which also contained two Gupta archer type dinars of Chandragupta II (375-414 CE) and an assortment of Roman coins. The Roman coins ranged from Tiberius (14-37 CE) to Anastasius (491-518 CE), however the dates are actually in two groups: 1st century CE and 4<sup>th</sup>-6<sup>th</sup> century CE. It is not noted whether the Roman coins have any scratching. Darley (2013: 276-284) notes definite scratching on other late Roman coins in India (from the Akki Alur hoard and coins in the Madras Government Museum), as well as slash-marking and double piercing, which is not seen on the Roman coins from Yemen.

The evidence gathered above makes it clear that firstly, Aksumite and Roman gold coins are treated differently in Yemen. Secondly, a similar scratching practice may have been in place in India, which extended to Aksumite as well as Roman gold coins. When appearing on coins in India, scratching has been passed over as 'schroff marks' without much further discussion (cf. Darley 2013: 283-284 for this observation). Looking at this practice in Yemen however, further comment can be made because the context for the coins' use and burial is clearer. I think it is clear that Roman gold coins were in use and circulation in Yemen before the Aksumite invasion of the 6th century CE, when Aksumite gold coins arrived, perhaps as payments, and the coins were deposited together before the Aksumite coins could enter into similar usage. The evidence for similar practices in India strongly suggests that the owners and depositors of the coins were Indian traders, or at least were following Indian practices. The insecurity of the 6th century CE in Yemen might have prompted Indian traders to withdraw from Yemen, perhaps temporarily, which could provide the context for a large hoard such as the al-Madhāriba hoard and for similar groups of material in India. The evidence suggests that Aksumite coins travelled as a group to Yemen, and then on to India as part of a general exodus of coins alongside Indian traders in the 6<sup>th</sup> century CE. The mid-6<sup>th</sup> century CE was a tumultuous period in general. As well as the wars in Yemen which led to the downfall of the Himyarite kingdom, the first recorded instance of the bubonic plague - 'the plague of Justinian' - affected wide areas of Europe, the Middle East, and Asia (cf. Yule 2013: 1134). These circumstances finally give context to the movement of Aksumite and late Roman gold coins across the Indian Ocean.

#### Conclusion

Previous understanding of the interaction of Aksumite and Roman gold coins in Yemen is inaccurate: the hoarding of Aksumite and Roman gold coins together in Yemen is the result of the sudden combination of two systems as a reaction to Kaleb's invasion. The evidence suggests that Aksumite and Roman gold coins did not circulate together in Yemen despite their joint find spots. The joint al-Madhāriba hoard and other groups cannot therefore be used to endorse the claim that Aksum and Rome shared a weight-standard or economic system. The freshness of the Aksumite pieces - even the earlier coins - strongly indicates that they were gathered and kept out of circulation for some time before they arrived in Yemen. The context for such an event is clearly Kaleb's expedition in c. 520 CE. To my mind a plausible explanation for the al-Madhāriba hoard and the three mixed groups catalogued above is that Roman gold coins were in long circulation and use in Yemen and that the Aksumite coins came in as payment during Kaleb's expedition. The upheavals of this period meant that the coins were combined and immediately hoarded.

Aksumite gold coins in Yemen are only from Ezana's Christian period onwards, i.e. after the weight standard has settled to the new (and final) standard. It is not therefore surprising that these coins are hoarded together. It is also possible that the coins on the new standard were kept together in the Aksumite treasury and brought to Yemen during Kaleb's expedition. The similarity of wear of those Aksumite coins found in Yemen strongly suggests that these coins were stockpiled together before they were hoarded.

The changes in the Aksumite gold weight standard were for economic or political reasons which remain obscure but internal to the Aksumite kingdom. When Roman coins are found with Aksumite coins, they are usually mentioned in the context of proving that Aksumite coins followed Roman weight standards or that the coins must have circulated together. An examination both of the weight standards of these coins, and their differing treatment, show that in Yemen at least the coins' association is prompted by local strife, rather than as part of an economic system. The scratching which appears on Aksumite coins in India – but not on those in Yemen - strongly suggests that Aksumite coins only enter into an economic system alongside Roman coins once they arrive in India, most likely in the 6th century CE. It remains a possibility that had the political circumstances in Yemen had been different then the Aksumite coins may well have circulated and been treated like the Roman ones

The al-Madhāriba hoard is both an essential part of understanding gold coin use in Yemen, and an intriguing puzzle. The lack of information about the condition of the Roman part of the hoard means that – for the present – we must speculate whether a similar pattern of scratching might be seen on the Roman coins. Access to this material is currently not possible and further finds in Yemen are currently unlikely to be properly reported. Building on the evidence seen so far however, it is possible to demonstrate the differing

practices with Roman and Aksumite gold coins. It is also possible to say that the group of coins shown at the British Museum in 2007 are most likely to have come from Yemen, or possibly India. While there must be a note of caution – that the existence of scratching on Roman coins does not indicate that they *must* be from Yemen – where multiple scratch-marks appear on late Roman gold coins it is a strong possibility that the coins are from Yemen and this needs to be backed up by association with Aksumite coins without scratching.

Finally, the movement of Aksumite gold coins to Yemen and across the Indian Ocean has commonly been attributed to the ongoing movement of gold coins through trade. The Greek inscriptions on Aksumite gold coins have fostered this idea. The rapid decline of Aksumite Greek inscriptions to the merely symbolic militates against the notion that the use of Greek was connected to trade. The consistent wear of Aksumite coins found in Yemeni and Indian contexts similarly runs counter to the idea that the coins were spreading out gradually through trade. While it has been suggested that Aksumite gold coins filled the gap between earlier Roman gold and later Roman gold in India, the state of wear indicates to me that it is most likely that Aksumite and late Roman gold arrived together in India. The context of Yemeni upheavals in the 6<sup>th</sup> century CE appears to be the moment when this happened.

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#### Bibliography

Abbreviations:

- BM British Museum, London
- KHM Kunsthistorisches Museum, Vienna
- MH S Munro-Hay and B Juel-Jensen Aksumite Coinage (Spink, London 1995)
- RIC ed. CHV Sutherland and RAG Carson *The Roman Imperial Coinage* (Spink, London)

#### General:

Abdy (2012)

R Abdy, 'Tetrarchy and the House of Constantine', ed. W Metcalf *The Oxford Handbook of Greek and Roman Coinage* (Oxford University Press), pp. 584-600.

#### Anzani (1926)

A Anzani, *Numismatica Aksumita*, (Rivista Italiana di Numismatica e Scienzi Affini III).

#### Atkins/Juel-Jensen (1988)

B Atkins and B Juel-Jensen, 'The Gold Coinage of Aksum. Further Analyses of Specific Gravity. A Contribution to Chronology', *Numismatic Chronicle* 148 (1992), pp. 175-180.

#### Bracey (2009)

R Bracey, 'The Coinage of Wima Kadphises', *Gandharan Studies* 3, pp. 25-74.

#### Casson (1981)

L Casson, 'The Location of Adulis (*Periplus Maris Erythraei* 4)', ed. L Casson and M Price, *Coins, Culture, and History in the Ancient World: Numismatic and Other Studies in Honor of Bluma L. Trell*, Wayne State University Press, Detroit, pp. 113-122

#### Darley (2013)

RR Darley, *Indo-Byzantine Exchange*, 4<sup>th</sup> to 7<sup>th</sup> Centuries: A Global History, Unpublished PhD Thesis: University of Birmingham (http://etheses.bham.ac.uk/5357/1/Darley14PhD\_redacted.pdf).

#### Day (2011)

R Day, 'Imitation in Aksumite Coinage and Indian Imitations of Aksumite Coins', *Rosetta* 9.5, pp. 16-22.

Ed. Errington/Cribb (1992)

ed. E Errington, J Cribb, with M Claringbull *The Crossroads of Asia: Transformations in Image and Space in the Art of Ancient Afghanistan and Pakistan* (The Ancient India and Iran Trust 1992).

#### Falk (2015)

H Falk, 'Indian Gold Crossing the Indian Ocean through the Millennia', ed. F De Romanis and M Maiuro, *Across the Ocean: Nine Essays on Indo-Mediterranean Trade* (Brill), pp. 97-113.

#### Finneran (2007)

N Finneran, The Archaeology of Ethiopia (Routledge).

#### Göbl (1976)

R Göbl, 'The Roman-Kushanian Medallion in the British Museum', *Journal of the Indian Numismatic Society* Vol 38, 1976 Part 1, pp. 21-26.

#### Göbl (1999)

R Göbl, 'The Rabatak Inscription and the date of Kanishka', ed. M Alram and DE Klimburg-Salter (1999), *Coins, Art, and Chronology* (Vienna), pp.151-175.

#### Gupta (1976)

PL Gupta, 'British Museum Romano-Kushana Medallion: its Nature and Importance', *Journal of the Indian Numismatic Society* Vol 38, 1976 Part 2, pp. 73-81.

#### Hahn (1984a)

WRO Hahn, 'The Numismatic Evidence for the Reconstruction of the Aksumite Royal Line', *American Numismatic Society Museum Notes* 29 (1984), pp. 159-179.

#### Hahn (1984b)

WRO Hahn, 'Further Reconsiderations on the Chronology of the Coinage of Aksum', *Jahrbuch für Numismatik und Geldgeschichte* 34, pp. 127-134. Hahn (2000)

WRO Hahn, 'Aksumite Numismatics - A critical survey of recent research', *Revue Numismatique* 155, pp. 281-311.

#### Hahn/West (2016)

WRO Hahn and V West, Sylloge of Aksumite Coins in the Ashmolean Museum Oxford (Ashmolean Museum, University of Oxford).

#### Hobbs (2006)

R Hobbs, Late Roman Precious Metal Deposits, c. AD200-700: Changes over time and space (British Archaeological Reports S1504, 2006).2

#### Jamme (1955)

A Jamme, Les albums photographiques de la collection Kaiky Muncherjee (Aden), (Bardi 1955).

#### Juel-Jensen (1994)

B Juel-Jensen, 'A Gold Coins of Aksum Struck from Hitherto Unpublished Dies', *Spink Numismatic Circular* Vol. CII, no 5, p. 212 (with additional plate in Vol. CII, no. 6, p. 266).

#### Juel-Jensen (2000)

B Juel-Jensen, 'Aksumite "Coins" for Tourists and a Forged Gold Coin from India', *Spink Numismatic Circular* Vol. CVIII, no. 1, pp. 8-9.

#### Kent (1956)

JPC Kent, 'Gold Coinage in the Later Roman Empire', ed. RAG Carson and CHV Sutherland, *Essays in Roman Coinage Presented to Harold Mattingly* (Oxford University Press), pp. 190-204.

#### Macro (1993)

E Macro, 'The Austrian Imperial Academy's Expeditions to South Arabia 1897-1900', *New Arabian Studies 1*, ed. RB Serjeant, RL Bidwell, and G Rex Smith, (University of Exeter Press), pp. 54-82.

#### Munro-Hay (1984)

SC Munro-Hay, 'Aksumite Chronology: Some Reconsiderations', Jahrbuch für Numismatik und Geldgeschichte 34, pp. 107-126.

#### Munro-Hay (1989a)

S Munro Hay, 'The al-Madhāriba Hoard of Gold Aksumite and Late Roman Coins', *Numismatic Chronicle* 149, pp. 83-100.

#### Munro-Hay (1989b)

S Munro-Hay, Excavations at Aksum: An Account of Research at the Ancient Ethiopian Capital directed in 1972-1974 by the late Dr Neville Chittick (London).

#### Munro-Hay (1991a)

S Munro-Hay, Aksum: An African Civilisation of Late Antiquity (Edinburgh University Press).

# Munro-Hav (1991b)

S Munro-Hay, 'Aksumite Overseas Interests', *Northeast African Studies* 13 no. 2/3, pp.127-140.

#### Munro-Hay (1991c)

S Munro-Hay, 'The coinage of Shabwa (Hadhramawt) and other ancient South Arabian coinage in the National Museum, Aden' *Syria* 68, pp. 393-418.

#### Munro-Hay (1992)

S Munro-Hay, 'Forgeries of the Aksumite Series', American Journal of Numismatics <sup>3</sup>/<sub>4</sub>, pp. 49-64.

#### Munro-Hay (1995a)

S Munro-Hay and B Juel-Jensen, Aksumite Coinage (Spink, London)

#### Munro-Hay (1995b)

S Munro-Hay, 'A New Gold Coin of King MHDYS of Aksum', Numismatic Chronicle 155, pp. 275-277.

#### Munro-Hay (1999)

S Munro-Hay, *Catalogue of the Aksumite Coins in the British Museum Collection* (British Museum Press).

#### Munro-Hay (2003)

S Munro-Hay, Coinage of Arabia Felix: The Pre-Islamic Coinage of the Yemen (Milan).

#### Munro-Hay/Oddy/Cowell (1988)

S Munro-Hay, A Oddy and M Cowell 'The gold coinage of Aksum: new analyses and their significance for chronology', *Metallurgy in Numismatics II* (Royal Numismatic Society Special Publication 19), pp. 1-16.

#### Nappo (2009)

D Nappo, 'Roman policy in the Red Sea between Anastasius and Justinian', eds. LK Blue, J Cooper, RI Thomas and RJ Whitewright, *Connected Hinterlands. Proceedings of the Fourth International Conference on the Peoples of the Red Sea Region* (Oxford: BAR International), pp. 71-77.

#### Nappo (2015)

D Nappo, 'Roman Policy on the Red Sea in the Second Century CE' in ed. F De Romanis and M Maiuro Across the Ocean: Nine Essays on Indo-Mediterranean Trade (Bri?ll), pp. 55-72

#### Nawartmal (1998)

H & L Nawartmal (=W Hahn), 'Spätantikes Handelsgold in Südindien' in *Money Trend* November 1998 pp. 52-57

#### Nawartmal (1999)

H Nawartmal (=W Hahn) 'Aksumite Coins in India – Some New Evidence Spink Numismatic Circular Volume CVII No 1 pp. 3-4

#### Oddy/Munro-Hay (1980)

WA Oddy and S Munro-Hay 'The Specific Gravity Analysis of the Gold Coinage of Aksum' in *Metallurgy in Numismatics I* (Royal Numismatic Society Special Publication 13) pp. 73-82

#### Phillipson (1998)

DW Phillipson, Ancient Ethiopia (British Museum Press)

Phillipson (2000)

DW Phillipson, Archaeology at Aksum, Ethiopia, 1993-7: Volume II (London)

#### Phillipson (2012)

DW Phillipson, Foundations of an African Civilisation: Aksum and the Northern Horn 1000BC-AD1300 (James Currey).

#### Potts (2010)

DT Potts, 'The Circulation of Foreign Coins within Arabia and of Arabian Coins outside the Peninsula in the Pre-Islamic Era', ed. M Huth and PG van Alfen, *Coinage of the Caravan Kingdoms: Studies in Ancient Arabian Numismatics* (The American Numismatic Society, New York), pp. 65-82.

#### Sewell (1904)

R Sewell, 'Roman Coins Found In India', Journal of the Royal Asiatic Society, pp. 591-637.

#### Sidebotham (1986)

SE Sidebotham, Roman Economic Policy in the Erythra Thalassa: 30BC-AD217 (Brill).

#### Sturm (2015)

G Sturm, David Heinrich Müller und die südarabische Expedition der Kaiserlichen Akademie der Wissenschaften 1898/99 (Verlag der Österreichischen Akademie der Wissenschaften, Vienna).

#### Tomber (2012)

R Tomber, Indo-Roman Trade: From Pots to Pepper (Bristol Classical Press).

#### Turner (1989)

PJ Turner, *Roman Coins from India* (Royal Numismatic Society Special Publication 22, London).

#### West (2001)

V West, 'The Early History of the British Museum Collection of Aksumite Coins', *Journal of the Oriental Numismatic Society* 167, pp. 28-32.

#### West (2002)

V West, 'The Ashmolean Museum Collection of Aksumite Coins', *Journal of the Oriental Numismatic Society* 170, pp. 9-11 and 171, pp. 27-29 (article mistakenly split over two journal issues).

#### West (2003)

V West, 'Aksumite Coins in the Fitzwilliam Museum, Cambridge', Journal of the Oriental Numismatic Society 175, pp.31-32.

#### Yule (2013)

P Yule, 'A Late Antique Christian king from Zafār, southern Arabia', *Antiquity* 87/338, pp. 1124-1135.

Zazarro et al (2014)

C Zazzaro, E Cocca, A Carannante, A Filigenzi, R Loreto, A Manzo, V Perna, C Durand, S Massa, C Mandelli, R Nardi, and D Nappo, 'The Contribution of the Universita degli Studi di Napoli "l'Orientale" to the 2013-2014 Eritrean-Italian Archaeological Field Season at Adulis', *Newsletter di Archeologia CISA* Vol. 5, pp. 507-590.

# THE BANAS

# Govindraya Prabhu Sanoor



#### Synopsis

Bana, the name mentioned in the Puranas, existed in Karnataka as a ruling dynasty in the early 2<sup>nd</sup> century CE with the dynastic name *Brihad-Banas* or 'Greater Banas'. Although the dynastic name appears in early Kadamba inscriptions, no specific rulers' names are mentioned. The epigraphs of the Kadambas mention the tribute levied on the Banas by their overlords. The land they ruled was known as *Bana Mandala*. It is only from three copper plate grants, namely the Udayendiram grant,<sup>1</sup> the Gudimallam grant of Vikramaditya II,<sup>2</sup> and the Mudiyanuru plate of Malladeva,<sup>3</sup> that we come across its first ruler, Jayanandi Varman, who ruled between 782 to 793 CE. They functioned as a significant feudatory power. Little else can be found about the Banas in modern literature on Indian history. However, this dynasty, because of its important contribution to the heritage of Karnataka, should not be ignored in this manner.

The royal family of the Banas claimed their descent from the demon king, Bali, the son of Virochana. It was Bali who caused Vishnu to descend to Earth in the form of Vamana<sup>4</sup> in one of his incarnations. Their claim on the family link with Bali was mentioned in Vikramaditya II's grant inscription. The mythical character Bana is none other than the devotee of Shiva who served Shiva as a doorkeeper. The royal family of the Banas ruled over the taluk of Chikkaballapura<sup>5</sup> in the Kolar district of Karnataka, and Parigi (Paravipura) in the taluk of Hindupur, which is in the modern district of Anantapur in Andhra Pradesh.<sup>6</sup> They claimed themselves as the 'Lords of Nandagiri'. Nandagiri, also known as Nandidurga, is in the taluk of Chikkaballapur. The Kudalur grant of the Ganga ruler, Marasimha II,7 leads us to believe that the Banas were overpowered by the Gangas, who subsequently forced the Banas to move to Kolar. This is further understood by their claim as Lords of Kolalapura (modern Kolar) as evidenced by the stone pillars of a temple in Kolar that have the title Samanta Kesari inscribed, which was adopted by the ruler Vikramaditya Bana.

#### **Political History**

The earliest reference to the Banas can be found in the pillar inscription of Kadamba Kakkusthavarman (422-477 CE). The inscription mentions the tribute paid by the *Brihad-Banas* to the Kadamba ruler Mayurasharman. The Kannada inscription of Halmidi mentions the Banas as well. Ganga Kongunivarman's record<sup>8</sup> mentions that he was anointed to conquer the *Bana-Mandala* or the territory of the Banas.

Jayanandi Varman (782-793 CE) is known from the copper plate records of the time (Udayendiram, Gudimallam and Mudiyanuru). He is the first known ruler of the dynasty. Jayanandi Varman assisted his Pallava suzerain, Nandivarman II Pallavamalla, against

the Gangas and was consequently rewarded with a part of the Ganga territory in return for the favour. The Belkere inscription assignable to the 8<sup>th</sup> century CE refers to this ruler as *Vriddaraja Mahabali Banarasa*. A Karshanapalle inscription<sup>9</sup> refers to the reign of a chief (name not legible) of *Mahabali-kula* and records that a certain Okkalan in the chief's service slew an elephant in battle.

**Vijayaditya I (793-845 CE)**, the son of Jayanandi Varman, was the second in line. During his time, Rashtrakuta Govinda III defeated Dantivarman Pallava.<sup>10</sup> Vijayaditya thus accepted the overlordship of Govinda III. But before the Rashtrakutas could protect their newfound feudatories, the Nolamba king (who ruled with the association of the Gangas and was matrimonially related to them) conquered Gangavadi.<sup>11</sup> At the same time, Pallava Dantivarman took advantage of the situation to attack and conquer some of the Bana territory. The territory of the Banas was thus sandwiched between two strong political powers of the time.

**Malladeva (845-846 CE)** succeeded next. The Chippili inscription of Madanapalle taluk in the district of Chittur registers the gift made by Malladeva Banarasa to a certain Eraya. He had only a small fiefdom to maintain, as most of the land his father had inherited had been wrested by the Nolambas and the Pallavas. In one of the epigraphs the king assumes the title *Jagadekamalla*<sup>12</sup> and hence it is obvious that he was still able to maintain the territory that he had. He is also referred to as *Vidhuvallabha Malladeva Nandivarman*.<sup>13</sup> The Banas, Vaidumbas and the Ganga king Prithivipathi I were allied during his reign, and their opponents were the Nolambas and Telugu Chodas.

Vikramaditya I (846-883 CE), the son of Malladeva, ascended the throne after him.<sup>14</sup> His reign saw several battles. On the one hand, he was able to add Soremati to his territory with the help of the Vaidumbas, but, on the other hand, Soremati was soon lost to Mahendra Nolamba after a long battle. Several inscriptions and hero-stones in a ruined village of Punganuru, mention the attack on Pulinadu by the Nolambas.<sup>15</sup> As a feudatory of the Pallavas, Vikramaditya I had the support of the Pallavas. At the same time, he had the blessings of the Western Gangas due to his marriage with the daughter of Ganga king, Prithvipathi I. At a later date, Vikramaditya I seems to have declared his independence and gained control over the region around Mulbagil. From then onwards, the Pallavas lost their control over the Banas. King Vikramaditya I bore titles such as *Bana Vidyadhara*, *Bana Kandarappa* and *Jayameru*.<sup>16</sup>

**Vijayaditya II (888-909 CE)**, the son of Vikramaditya I, took control of the Bana territory after him. The king is also known as *Mahabali Banarasa Virachudamani Prabhumeru.*<sup>17</sup> The Nolamba king, Mahendra, was unhappy to see the Banas regaining power. He sent two of his generals with a huge army in order to invade Pulinadu, which was under Bana control. But the Banas had the support of Gandatrinetra Vaidumba,<sup>18</sup> who fought as an ally in the battle to drive the enemies away.

Vijayaditya II was the only king among the Bana rulers who assumed independence. The Karshanapalle inscription<sup>19</sup> dated 9<sup>th</sup> century CE refers to the reign of Banarasa, who was also in charge of Gangavadi. The Punganuru inscription<sup>20</sup> records a gift of a wetland to the family of Kalianniga Kandanarayana. It also mentions that the king, Vijayaditya Prabhumeru, ruled Vadugavalli. Soon afterwards, the Chola king, Parantaka I, attacked the Banas and the Vaidumbas, and the Banas were defeated by his army. Vijayaditya II died in the year 910 CE.

Vikramaditya II (909-912 CE) ruled with not much success. His name is seen in two of the copper plates, namely those of Udayendiram and Gudimallam. Most of the territory was lost to Parantaka I of the Cholas, in which conflict the king fought alongside his father. His son Vijayaditya III assisted him during his reign. From the same Udayendiram plates of Vikramaditya II we also know that his great-grandfather had the name Prabhumeru. **Vijayaditya III (912-940 CE)** succeeded to the throne after his father, Vikramaditya II. He held the title *Pugalvippavara Ganda*.<sup>21</sup> He did not confront the Cholas, but accepted their overlordship. His reign was quite peaceful.

**Vikramaditya III (940-960 CE)**, the next ruler, sided with the Rashtrakutas to campaign against Parantaka I. The Rashtrakuta king, Krishna III, had a great affection towards the Vaidumbas and the Banas. Vikramaditya III was the favourite of Krishna III, which can be assumed from his title *Krishnapriya*.<sup>22</sup> Krishna III even distributed some of his territories to the Vaidumbas and the Banas. On the death of Krishna III, Vikramaditya III re-established ties with the Cholas.

It was at this time that the Banas may have split into two lines. Iriva Nolamba was powerful by then and the Bana ruler, Sambayya, was brought under Nolamba control. Other Bana rulers, namely Chandiyanna and Chilparasa served as Chalukya feudatories. By then, the Chalukyas of Kalyani were the powerful overlords of Karnataka, and brought the Banas fully under their control. Some of the rulers such as Chandarasa, Bandarasa, Bibbarasa, and Vira Gonkarasa I ruled *Khandavamandala*, the Mannadadi region, as subordinates to the Chalukyas. Eventually the Banas faded into the mists of history, and their name was never heard thereafter.



Fig. 1. Map showing the territory of the Bana kingdom<sup>23</sup>

Based on the discussion above, the chronology of the Bana kings is shown below. The dates for some of the rulers are still tentative and will further undergo refinement as more epigraphs are discovered.

Ruler	Rule
Jayanandi Varman	782 - 793 CE
Vijayaditya I	793 - 845 CE
Jagadekamalla Malladeva	845 - 846 CE
Vikramaditya I	846 - 883 CE
Prithvipati I	883 - 888 CE
Vijayaditya II	888 - 909 CE
Vikramaditya II	909 - 912 CE
Vijayaditya II	912 - 940 CE
(Pugalvippavara Ganda)	
Vikramaditya III	940 - 956 CE
Sambayya	956 CE
Chandiyanna	
Chilparasa	1068 CE
Chandarasa I	
Bandarasa	
Bibbarasa I	

Chamdarasa II	
Loka	
Bibbarasa II	1106 CE
Vira Gonkarasa I	
Udayaditya Vira Kalarasa	1173 CE
Vira Gonkarasa II	1077 - 1102 CE
Kumara Malla	1102 - 1122 CE
Gonkarasa III	1122 - 1172 CE
Kaava	
Gonka IV	1173 CE

Table A. Chronology of Bana Chola rulers

# Coinage<sup>24</sup>

The catalogue below lists all the Bana coins known. Only two types of Bana *gadyanas* are recorded so far, although several die variations are known to exist (the credit for publishing these types goes to Sri Mukunda Prabhu, Mangalore). In this manuscript, both types of coins are still attributed to the Banas, though the Lion-Elephant issues were issued by their feudatories.

The gadyanas with the legend Sri Vairi Gaja Kesari were assigned to one Duddarasa of the Bana family, based on the Vira Shasana<sup>25</sup> found at Molate in the district of Coorg. This attribution needs reconsidering. According to this inscription, the title adopted by King Duddarasa is Mahamandaleshwara and he was ruling a part of Coorg. The reference to the 'people of the land of the Banas' (Banarasi) is made in the initial acknowledgement part of the inscription text. On this basis, it appears that Duddarasa was adjudged to be a Bana king, but in reality he might have been a Bana feudatory. The feudatory title Mahamandaleshwara is clearly seen in the inscription. Also, all the known coins of this type are found with dealers in Shimoga, Thirthahalli, Hassan and Coorg.

The title *Samanta Kesari* was borne by King Vikramaditya,<sup>26</sup> the paternal uncle of Bana-raja, who was the feudatory of Vijayaditya Satyasraya, the Chlalukya king (999 -1009 CE). This inscription, found to the north of the village of Betapalli in the district of Anantapur, registers the grant of 20 *mattars* of red soil, a *mattar* of wetland and 2 *mattars* of garden land to Talereyar by Vikramaditya, the uncle of Banaraja, when the latter was ruling *Turamara-vishaya* as the king's feudatory. It also states that Vikramaditya had the birudas (titles) *Taruna-Vasantan* and *Samanta Kesari*, and that he was ruling the Ayiradi division. All the known coins of this type are usually found with dealers in Bangalore, Kolar and Chintamani.

Yet another coin variety (no. 10) with an elephant on the obverse and a lion on the reverse is noticed. The lion seen on the reverse signifies the allegiance of the feudatory king of the Banas to his overlord. The provenance of Shiralikoppa supports this coin having been issued by a Bana feudatory, though the absence of a title makes it hard to assign the coin to a particular king.

Three denominations of coins are known for the Banas. These are *gadyana*, *hana* and *haga*. This section lists all the known varieties of coins. These are extremely rare and hardly ever illustrated in numismatic publications.

**Catalogue of Bana Coins** 





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 The Old Chikkaballapura taluk is now part of the district of Chikkaballapura. The district encompasses Gowribidanur, Gudibanda, Bagepalli, Chikkaballapura, Sidlaghatta and Chintamani.

6. SII II, p. 358. 7. MAR 1921, p. 18 ff.

8. SII II, p. 387, v. 13.

9. AR #335 of 1912.

10. IA XI, p. 121.

- 11. EI X, p. 56 (which was under the control of Nandivarman).
- 12. EI II, p. 76.
- 13. IA XV, pp. 172 ff.
- 14. SII III, Pt-I, pp. 93-94.
- 15. ARE 571, Year 1906.
- 16. EI XVII, p. 6, v. 14; AR #569, 1906.
- 17. EI XI, p. 227
- 18. ARSIE, 1913, pp. 90-01.
- 19. EC X, Year 1904 #243-244; ARE #327, 1912; ARE #323 1912.
- 20. AR #542, 1906.
- 21. EI III, p. 75 ff.
- 22. EI III, p. 75.
- 23. Bana region is shown in grey.
- 24. Govindraya Prabhu Sanoor, The Nolambas, Coinage and History
- Karkala, India, 2009.
- 25. EC Vol I, #62, pl. IX.
- 26. SII IX, Pl I, #47, #2.

# A UNIQUE AH 393 DIRHAM OF 'ALĪ B. JA'FAR, JA'FARID EMIR OF TIFLĪS

#### Irakli Paghava

'Alī b. Ja'far was the representative of the sovereign Ja'farid dynasty and ruled in and around Tiflīs from the 990s till the end of the 1020s CE. Narrative sources referring to this ruler are extremely rare and laconic: the surviving sources were researched by Gocha Japaridze, who established that 'Alī b. Ja'far was mentioned just once in a Georgian medieval document (in the charter of Catholicos Melkisedek granted to the Svetiskhoveli Cathedral, 1020?), and once more in an Arabic context (according to Ibn al-Qiftī, a certain Abū Muḥammad al-Hasan b. Bundār al-Tiflīsī, an ardent Shiah and man of letters of the turn of the 10<sup>th</sup>-11<sup>th</sup> century, devoted one of his treatises to 'Alī b. Ja'far).<sup>1</sup>

Correspondingly, the coinage of this Ja'farid emir constitutes the primary source of information on his reign. 'Alī b. Ja'far's numismatic legacy was extensively researched by Gocha Japaridze back in the 1990s (six coin types in total).<sup>2</sup> Two more types were discovered and published by the author (in co-authorship with Severiane Turkia and Kirk Bennett).<sup>3</sup>

Now, six years later, we have been fortunate to discover yet another coin type (the 9<sup>th</sup>, for the moment) of this 11<sup>th</sup> century Ja farid emir. Our aim in this short article is to publish this new coin type as well as analyse its historical significance.



Fig. 1. Dirham of 'Alī b. Ja 'far with AH 393 date

This is so far the only specimen known of this new type of 'Alī b. Ja'far. Fortunately, we know its provenance: it was reportedly found (on the ground?) somewhere in the vicinity of Rustavi, a city about 8 km from Tbilisi (about 22 km from ancient Tiflīs, as its site currently constitutes one of the districts of the modern city).<sup>4</sup>

Details of the coin are as follows: weight 1.88 g, dimensions 19x20 mm, die axis 5:00; AR (*de visu* - we have not been able to undertake and alloy composition analysis).

#### **Obverse:**

Central area:

لا اله الا الله وحده لا شريك ل[ه] القادر با[الله]

Marginal legend:

**Reverse:** *Central area*:

> محمد رسول الله صلى الله عليه الامير المظفر على بن حعفر عز؟

Marginal legend: Qur'ān, IX33

# محمد [رسول الله لرسله باله]دي ودين الح[ّق ليظهره على الدين كله ولو كره المشركو]ن

Both dies used were much bigger than the flan. Evidently, an attempt was made to make a hole in the coin (perhaps to transform it into a pendant), but it was unsuccessful.

The marginal area of the obverse is occupied by the standard mint/date formula. Regretfully, the mint name is effaced, but there can hardly be any doubt that it was Tiflīs, the only mint place ever attested for the Ja'farids.

On the other hand, and quite fortunately, the date is legible on the coin: AH 393, corresponding to 1002/3 CE. This is a new date which provides us with additional information on the chronology of 'Alī b. Ja'far's coin-producing activities.

Moreover, as we shall see below, this new date is indicated on this new coin type. It would not be inexpedient to mention here that, whenever we encounter coins of 'Alī b. Ja'far dated differently, the coin types are also always different to some degree (for instance, the AH 413 and 418 types are similar, but with some differences). We may even conjecture that the dates on the coins do not reflect the actual time of minting, but rather the year when the new coin type was first issued. But then, what could be the reasoning behind the introduction of new coin types? Perhaps it was economic, for instance to indicate a decrease in the silver standard of the coinage. We know, for example, about the general trend of debasing the originally high-standard silver Kufic dirham coinage in the late 10th-11th centuries, when the silver crisis was already in full swing. The relatively rapid debasement of the Ja' farid coinage started precisely in the reign of 'Alī b. Ja'far.<sup>5</sup> Or perhaps there were some other reasons as well of a political nature, for instance, the need to indicate a different *lagab*, or name?

From the latter point of view, it is noteworthy that the central area of the obverse is occupied not only by the traditional Shahada but also by the name of the Caliph; on the two earlier coin types dated AH 386 (996/7) and with the date effaced,<sup>6</sup> the Caliph's name is engraved on the reverse, below محمد رسول الله (thereafter it is always placed below the initial fragment of the Shahada). More importantly, on this new coin type al-Qādir bi-llāh was already

acknowledged, not his predecessor, al-Tā'ī' li-llāh, as on the two earlier coin types, dated AH 386 (996/7) and with the date effaced. Al-Tā'ī' li-llāh was deposed by the Buyid, Bahā' ad-Dawla, in favour of al-Qādir bi-llāh in AH 381 (991), but managed to survive. This fact undoubtedly strengthened the legitimist opposition in favour of al-Tā'ī' li-llāh. A number of Muslim dynasts like the Samanids and even some Buyids, evidently including 'Alī b. Ja'far of Tiflīs, did not recognise al-Qādir bi-llāh and continued to exercise sikka in favour of al-Tā'ī' li-llāh. Al-Qādir bi-llāh's authority was not consolidated until AH 390 (999/1000 CE) and particularly after the death of al-Tā'ī' li-llāh in AH 393 (1003 CE).7 Remarkably, our coin bearing the name of al-Qādir bi-llāh is dated with this very year. Perhaps it is no coincidence, and this new coin type (described above), was issued deliberately to declare his allegiance, symbolic or otherwise, to al-Qādir bi-llāh.

Since this coin with the name of al-Qādir bi-llāh bears the date AH 393, it becomes clear that the coin we published earlier in coauthorship with Severiane Turkia8 has to be dated AH 386-393, or, more probably, AH 392.

As to the reverse, it bears the blessing of the Prophet formula, for the first (and so far, only) time this appears on the coinage of the Ja'farids. It can be found in the third line from the top:

# صلى الله عليه May God bless him

We are not absolutely convinced, but the bottom line of the central area of the reverse seemingly reads p±, 'izz, i.e. power/might. This would be the first appearance of this term on the coinage of 'Alī b. Ja'far; later we will see it on the coins dated AH 413 and 418, repeated four times.

The evolution of the ruler's protocol as presented on the coinage of this Ja'farid emir – the appearance of the kunya, various laqabs, words (mottos?) like 'izz or mans $\bar{u}r\bar{i}$  – may represent the rising power and/ or ambitions of 'Alī b. Ja'far.

With the publication of this previously unrecorded type described above, it would be useful to revise the chronological list of 'Alī b. Ja'far's coin types, while, at the same time, providing a type conformity guide with references to G. Japaridze's work. This can be seen in the table below:

Type sequence	Designation / date:	G. Japaridze's work:	Caliph:
Ι	386	Ι	al-Tā'ī' li-llāh
II	386-392/3	-	idem
III	393	-	al-Qādir bi-llāh
IV	394 or 404	II	idem
V	mansūrī	V	idem
VI	victorious	-	idem
VII	413-like	VI	idem
VIII	413	III	idem
IX	418	IV	idem

Table A: 'Alī b. Ja'far's coinage, type sequence and designations (conformity guide), according to the new data

To sum up: this coin (type) is of historical importance and sheds some more light on Georgian-Arab relations and their mutual numismatic history.

#### Acknowledgements

I would like to express my gratitude to Goga Gabashvili and Severiane Turkia for their support.

#### References

1. [Japaridze Gocha. 'Muslim Figures with the Nisba At-Tiflisi in the 8th-14<sup>th</sup> C.']: 85-86 (Original text in Georgian: ჯაფარიძე გოჩა.

"მუსლიმი მოღვაწეებიათ-თიფლის ის ნისბით VIII-XIV საუკუნეებში" საქართიეთოს სსრ ს ა უკუნეებში". საქართველოს *მეცნიერებათ*ანა აკადემიის მაცნე, ენისა და ლიტერატურის სერია N4 (1989): 85-86.)

- 2. Japaridze Gocha, 'On the Coins of the Tbilisi Amīr 'Ali b. Ğa'far', Bulletin D'Études Orientales L (1998): 97-107.
- 3. Paghava Irakli, Turkia Severiane, 'A New Early Coin Type of 'Alī b. Ja'far, Emir of Tiflis, Citing the Caliph Al-Tā'ī' lillāh', Journal of Oriental Numismatic Society 199 (2009): 7-9; Paghava Irakli, Bennett Kirk, 'New Monetary Material for the Numismatic History of 'Alī B. Ja'far, Ja'farid Emir of Tiflīs, and its Significance', Journal of Oriental Numismatic Society 213 (2012): 11-12.
- 4. It is now preserved in a private collection.
- 5. Turkia Severiane, Paghava Irakli, 'The Coinage of Ja'far III B. 'Alī, Emir of Tiflis', Journal of Oriental Numismatic Society 197 (2008): 7-8.
- 6 Japaridze, 'On the Coins of the Tbilisi Amīr 'Ali b. Ğa'far', 98-99; Paghava, Turkia, 'A New Early Coin Type of 'Alī b. Ja'far, Emir of Tiflis, Citing the Caliph Al-Tā'ī' li-llāh', 7-9.
- 7. Japaridze, "On the Coins of the Tbilisi Amīr 'Ali b. Ğa'far", 99.
- 8. Paghava, Turkia, "A New Early Coin Type of 'Alī b. Ja'far, Emir of Tiflis, Citing the Caliph Al-Tā'ī' li-llāh", 7-9.

# **A PROPOSED '50 DINAR' NOTE OF** KING TALAL OF JORDAN

#### Tareq A. Ramadan

King Talal bin Abdullah was the second monarch of the Hashemite Kingdom of Jordan, ruling from July 20, 1951 until he abdicated the throne on August 11, 1952. His time as head of state was marred by inter-family discord and allegations of mental illness. Despite his brief reign, he still left an important political legacy in the small, desert kingdom where he introduced a modified, liberalised constitution that decreased the individual power of the king. He also made a concerted effort to re-establish diplomatic ties with neighboring Arab states weary of his father's grand political ambitions.1



Fig. 1. Mirrored photograph of King Talal

However, despite having ruled for slightly more than a year, it is no surprise then that few official state-sanctioned materials bearing his image or his name were produced during his tenure. A set of stamps, consisting of several denominations depicting him were prepared (although unissued) in honor of his accession to the throne, but were then burned shortly after he abdicated.<sup>2</sup> Several examples, though, were salvaged from the fire and made their way to private collections. Apart from the stamps, little official material culture bearing the likeness of King Talal exists, apart from photographs, vignettes, and apparently, a pre-trial, 'proposed' paper note (more specifically, an archival print) that is the subject of this short article.

A recent Spink auction yielded a lot that included an intriguing item of what appeared to be a fifty dinar note with a caption that read: 'Hashemite Kingdom of Jordan, printers archival photograph for a proposed issue of 50 dinars, 1949, zero serial numbers, portrait of King Hussein wearing keffiyeh at right (Pick 5 for similar but portrait different and never used on Jordanian

*currency*). <sup>3</sup> The 'note' has a serial number of '000000' and bears at the bottom left, the inscription 'SPECIMEN NO. 12.' A closer examination of the proposed note reveals that the image is not of King Hussein at all, but that of his father, Talal.<sup>4</sup>



Fig. 2. Proposed 50-dinar 'note' bearing King Talal's portrait<sup>5</sup>

While the 'proposed note' was dated to 1949 (Jordan's first year of an independent currency and monetary system and the same year Jordan's Currency Board was formed), it is a static date that is not reflective of the year of production.<sup>6</sup> Jordan, under King Abdullah I, implemented the Provisional Act No. 35 of 1949 which led to the formation of a London-based Jordan Currency Board which was responsible for producing Jordan's first currency as a 'sovereign' state and that is why the date of '1949' accompanied these early notes.<sup>7</sup>



Fig. 3. King Abdullah I '1949' 50-dinar specimen note no. 38<sup>8</sup>

The first banknotes to feature Abdullah's grandson, King Hussein bin Talal's image, similarly bears a date of '1949' although the notes were produced in 1952, pre-dating his official coronation as monarch, which occurred on May 2, 1953.

Prior to this, the Palestine Currency Board's 'Palestine Pound' served as the official currency of both Mandatory Palestine and the Emirate of Transjordan (and for a few years 'The Kingdom of the Jordan'). After the assassination of King Abdullah I in Jerusalem in July 1951, Crown Prince Talal succeeded him, albeit rather briefly, as King. After vacating the throne a year into his tenure, he was moved to Irbid along with his mother, then relocated to Egypt where he lived for less than a year, before finishing out the rest of his life in Istanbul where he passed away on July 7, 1972.<sup>9</sup>

Unfortunately, there are no biographies on King Talal, but he has often been painted as an anti-British Arab nationalist in some circles. In 1960, an article titled '*Mudhakaraat al-Malik Talal*' or 'The Memoirs of King Talal' was published in Egypt by Mamduh Rida (with the editing assistance of Subhi Touqan) in the magazine '*Ruz al-Yusif*', which later became a book in 1961. However, its historicity and authenticity are in doubt.<sup>10</sup>

Today, King Talal's image adorns the Jordanian 10-dinar note where he is sporting a white *kefiyyeh* and double *a'gal*, typical of those worn by the tribal elites from Arabia, while also wearing a dark robe and a ribbed, under-shirt with additional regal garments.



Fig. 4. Modern Jordanian 10-dinar banknote featuring King Talal's portrait

This same photo was used in a vignette as well as the aforementioned stamps<sup>11</sup> – all of which seem to have similarly stemmed from the original photograph in Fig.1.

In 1952, King Talal introduced a revised, more liberal constitution (than the December 1946 one), that among other things stated "*Money is minted in the name of the King in the execution of the law*",<sup>12</sup> although language denoting the inclusion of the King's image on paper money was absent.

While no official banknotes bearing Talal's image were ever circulated during his brief reign, the existence of the archival photograph of this proposed fifty dinar note should be seen as an attempt to continue in the monetary tradition set forth by his



Fig. 5. King Talal 20 fils stamp

father King Abdullah only a few years earlier. Talal's abdication and the circumstances surrounding that event, however, prevented him from successfully partaking in that tradition.

# References

- 1. Robert B. Satloff, From Abdullah to Hussein: Jordan in Transition, 1994, p. 45.
- 2. Abed Habib Najjar, The Stamps of Jordan 1920-1965, p. 127.
- 3. https://www.the-saleroom.com/en-us/auction-

catalogues/spink/catalogue-id-srspi10078/lot-3939a5cf-3f25-4baa-8ac1-a5c600bb8f82.

4. While the '50 Dinar' note of King Abdullah was red/white, this archival photograph bearing King Talal's image appears green/gray and white, though it may very well be black and white in reality.

5. https://www.the-saleroom.com/en-us/auction-

catalogues/spink/catalogue-id-srspi10078/lot-3939a5cf-3f25-4baa-8ac1-a5c600b8f82.

6. Production of the archival photo/ proposed note, like the stamps, likely dates to the end of King Talal's tenure in the summer of 1952, nearing the time of his abdication, which was probably the reason they were never printed and circulated (this evidence is obviously only circumstantial).

7. Central Bank of Jordan: http://www.cbj.gov.jo/pages.php?menu\_id=108 8. Spink & Son auction Lot 789, 1 Hashemite Kingdom of Jordan, specimen

50 dinars, law of 1949, red serial number A/A 000000 (April 2013).

9. Robert B. Satloff, op. cit., pp. 56-57.

10. Joseph Andoni Massad, *Colonial Effects: The Making of National Identity in Jordan*, 2001, p. 319, footnote 33.

11. The original photograph seems to have Talal facing right but the image seems to have been flipped so that he faces left on both notes that depicted him (the archival photo and the modern 10-dinar note).

12. The Constitution of the Hashemite Kingdom of Jordan, p. 11 Under 'Part IV: The Executive Power, Section 1- King and His Rights, 37: ii (Press and Publicity Bureau, Ministry of Foreign Affairs, Amman, January 1952- The Commercial Press Jerusalem).

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# PATRAKOLA TEA GARDEN TOKENS

# Col. J. Dutta & Anjali Dutta

The Patrakola Tea Garden was in Adampur, Sylhet, then in Assam, and now in Bangladesh. The garden was owned by Tommy McMeekin & Son, and managed by Finlay, Muir & Co. before 1900, and by Barlow & Co. of Calcutta in the early 1900s. Jessop & Co. replaced Barlow & Co. as the agent sometime around 1915.

Pridmore<sup>1</sup> cited Heaton records that this garden had ordered 3,000 and 12,000 tokens from Birmingham Mint in October 1896 and April 1903 respectively.

# Type 1

According to Heaton records, in October 1896, Birmingham Mint produced 3,000 tokens in brass with a milled edge and the legend *PATRAKOLA* in a semicircle above. This token has been recorded by Pridmore, but has not been illustrated before. We now present the same below. The diameter of this token is 30.90 mm. The average weight is 8.10 g. (Fig. 1).



Fig. 1. Patrakola token 1896

# Type 2

In April 1903, the garden obtained 12,000 tokens from Birmingham Mint but with a smaller diameter. The exact size has not been mentioned by Pridmore. The token had probably the same design as in Fig 1: *PATRAKOLA* in a semicircle above, a four-pointed central aperture in the centre, and a small star motif below.

# Type 3

In 1915, Jessop & Co ordered from the Calcutta Mint a 28.39 mm token with all the features of the above token on both obverse and reverse, but with an additional design of a vine around the central hole extending to either side of the small star. The edge is milled<sup>2</sup> and the average weight is 7.40 g.



Fig. 2. Patrakola token 1915

#### Acknowledgements

We would like to acknowledge the help of Atif Alauddin in conducting our research on these tokens.

#### References

- 1. F Pridmore, The Coins of the British Commonwealth of Nations, Part 4 India, Vol.2 Uniform coinage, Spink & Son Ltd., London.
- 2. S K Bose, Dr Anjali Dutta & Dr Jayanta Dutta, *The Tale of Tea Tokens*, Library of Numismatic Studies, Kolkata, in print.

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