

# ONS



## Journal of the Oriental Numismatic Society

No.226  
Winter 2016

ISSN 1818-1252

Editor: Robert Bracey,



*ONS Meeting, Kolkata Paper Presenters with committee members of the Numismatic Society of Calcutta*

### ONS NEWS

Members are to be thanked for their patience as this issue is a little bit later than intended. Thanks are due to Stan Goron for his immense assistance as he stands down his role as editor, which he has fulfilled with much diligence and success for many years. Stan's dedication has made the journal an incredibly successful publication. In doing so he has been ably supported by many regional secretaries over the years, and this journal begins with reports on meetings in India and America provided by two of our very active current secretaries, Mahesh Kalra and Pankaj Tandon.

The journal is of course also a success because of the hard work put in by its members, many of whom contribute articles, and the many others who read it, speak at and attend the societies meetings. I hope that all of you will continue to support the journal in the future.

Robert Bracey (Editor)

### ONS Meeting in Kolkata (26 December 2015)

The ONS Meeting in Kolkata was held in association with the Numismatic Society of Kolkata on the afternoon of 26 December during the Mudra Utsav Coin Fair at Haldiram Banquets' Hall. The ONS Meeting was also used as an occasion to increase the membership of ONS-SA in the Eastern region of India and ONS is indebted to the organizers of Mudra Utsav for providing a stall to it for recruiting new members.

The ONS Meeting was dedicated to the memory of Dr. P. L. Gupta on occasion of his 101<sup>st</sup> Birth Anniversary and Mr. G. S.

Beed, founder member of the Numismatic Society of Calcutta. The Meeting was presided over by Col. Jayanta Dutta and saw the presentation of four papers; the first by Ujjwal Kr. Saha was about the Coinage of Rama Gupta, the elusive Gupta Emperor; the second paper by Binoy Kr. Kundu was about Kaccha Gupta, another mysterious ruler in the ancient Gupta coinage series. The next presentation was by Mahesh Kalra about the mint towns of Mughal Deccan during the reigns of Mughal Emperors from Akbar till the reign of Muhammad Shah. The paper also dwelt on the role of the role of Mughal mint towns as markers of conquest during the Mughal era. The last paper of the Meeting was the presentation by Mr. S. K. Bose and his close associate, Mr. Milap Chand Nakhat on a rare coin of Ratna Manikya, a ruler of Tripura kingdom. Mr. Bose first gave an outline of the ancient Tripura kingdom and then focussed his discussion on the rare coin of Ratna Manikya.

### ONS Meeting in Nashik (8 January 2016)

An ONS Meeting was held for the first time in the city of Nashik in Western Maharashtra on the afternoon of 8 January on the occasion of the 2<sup>nd</sup> 'Rare Fair' organized by the Collectors' Society of Numismatic and Rare Items. The ONS Meeting garnered some attention from first time visitors to the fair and saw a rise in ONS-SA membership in the region. The Meeting was presided over by Prof. Amiteshwar Jha, Director, IIRNS, Anjaneri, Nashik.

It saw three presentations; one by Dr. Dilip Rajgor (ex-Regional Secretary, ONS-SA) on the Punch-Marked Coins of Saurashtra Janapada. Dr. Rajgor expertly showed the various coins of ancient



Western India, illustrated with beautiful line drawings of the coins by Dr. Shailen Bhandare. The next paper by Mahesh Kalra debated the plausibility of labelling Muhammad Shah's Mughal Deccan Coinage as 'Asaf Jahi Coinage' especially in absence of any marked mint marks attributable to the vizier of the Mughal Emperor whose dying will dictated obedience to the Mughal Emperors by his successors underlined by the expression "to whom we owe it all". The ONS Meeting also saw local talent in the form of veteran collector, Purshottam Bhargave who showcased his collection of Shivrai, the copper coins of the Maratha warrior king, Chhatrapati Shivaji Maharaj (c. 1630-1681).



*Participants at the ONS Meeting, Nashik on the occasion of 2<sup>nd</sup> Rare Fair, Nashik*

#### **ONS Meeting in Mumbai (22 January 2016)**

ONS-SA organized a marathon ONS Meeting in Mumbai in association with the Asiatic Society of Mumbai on the evening of 22 January at the Society's colonial era Durbar Hall. The Meeting witnessed a mammoth gathering of ONS and Asiatic Society Members interested in the Proceedings which was presided over by Dr. Aravind Jamkhedkar, ex-Director, State Department of Archaeology. The Meeting was moderated by Dr. Dilip Rajgor and saw some very fine papers presented for the gathered numismatists.

The Meeting began with Dr. Shailen Bhandare's forceful and thought-provoking presentation on the Post-Mauryan Coinages of Deccan. He presented several new discoveries. The coinage helped him chart the possibilities of pre-Satavahana kingdoms in the region through linkages between the names and legends.

The next paper by Mahesh Kalra attempted to outline the rare Mughal coins in the collection of the Kunst Historisches Museum, Vienna with some beautiful coins well appreciated by the members.

Other papers included a very good attempt by Mohit Kapoor and Pumanand Sanket to attribute the later copper Vijayanagara coins with the legend 'RAMA/RAO' to the Aravidu dynasty of Vijayanagara headquartered at Penukonda and local Vijayanagara chieftains.

Another brilliant paper was on the coinage of British India by Dinyar Madon who tried to discredit the theory of a Diamond-shaped Mint Mark for the Lahore Mint by proving the mark was present on many other coins (See JONS 225 for the full paper)

The last presentation was a piece-de-resistance by Dr. Pankaj Tandon who brilliantly expounded the coinage of ancient Baluchistan under the Parataraja dynasty through various coins with Brahmi legends. The main draw of the presentation was the recreating of the possible genealogy of the dynasty through die-linkages between the coins of the different rulers. The members relished the opportunity to discuss the coin series and the possibilities of collecting the coins in India. The Meeting ended on



*Participants and Speakers at the ONS Meeting in the Durbar Hall of the Asiatic Society of Mumbai*

a high note with a dinner for the members organized by Mr. Farokh Todywalla who also bore the expenses of various audio-video systems used at the Meeting.

#### **ONS Meeting in Bangalore (28 February 2016)**

The 2<sup>nd</sup> ONS Meeting in Bangalore was held on the afternoon of 28 February on the occasion of the 7<sup>th</sup> National Numismatic Exhibition at Hotel Bell, Majestic, Bangalore. It was a great experience with a mix of new and senior numismatic research talent on display. Four Papers were presented with new perspectives; one by Gautam Jantakal was titled 'An Anomaly in Magadha Series I/II Transition Coinage'. It was presented with very good slides and a clear explanation by the first time presenter. The next presentation was by Prashant P. Kulkarni (ex-Regional Secretary ONS) who attempted to recreate the origin of Indian Coinage through some fantastic slides of rare coins and pre-historic money objects found in original locations in various parts of India; the next presentation by first time presenter, Sai Sravan had a good recap of early Vijayanagara History with some support from Mrs. Beena Sarasan. Mahesh Kalra's paper illustrated some rare Mughal Coins in the holdings of the Staatliche Museen zu Berlin (SMB Museum, Berlin) from the Guthrie and Adler Collection acquired by the Museum in the nineteenth century. Local ONS-SA members Pumanand Sanket and Balaji RB ensured great support as usual. The event was possible thanks to the support provided by Shri Rajender Maru, Archie Maru and the NNE team. The membership of ONS-SA has reached almost 250 thanks to the support of Indian members, coin dealers, coin societies and auction houses in all parts of the country.



*Participants at the ONS Meeting in Bangalore with sponsors, Mr. Rajender Maru and Archie Maru*

#### **New York Meeting, January 2016**

The North America section of the Society held its annual meeting in conjunction with the New York International Numismatic Convention on Saturday, January 9, 2016 at the Waldorf-Astoria Hotel in New York. There were four speakers:

Pankaj Tandon kicked things off with a short talk entitled "On the Dated Tetradrachm of Antiochus I." The subject coin is a unique tetradrachm of the Seleucid king Antiochus I minted in Ai-Khanoum which bears a date naming the month: Xa(ndikos) (March) and the year 15. If this marks year 15 of the king's reign, the date would be March 267 BCE and could well mark the arrival in Ai-Khanoum as Provincial Governor of the king's younger son, who would later become Antiochus II. An article on this coin is included in this journal.

John Zielinski then gave "An Overview of Nabataean Coinage." The Nabataeans were the Arabian civilization that built Petra. Their

earliest coins are struck over small denomination Ptolemaic bronzes, modeled after staters of Alexander III. The overstrikes were minted beginning in the 3rd century BCE. Later issues were struck on blank flans at Damascus, during the reigns of Aretas II et al, from the middle of the 2nd century to the late 1st.

Aretas III was ruler of Damascus from 82/83 - c. 71 BCE, during which time he struck city coins bearing his name. These closely follow the previous Seleucid issues, featuring a bust of the king, and Tyche of Damascus or Nike. Aretas III is featured on Roman denarii of Aemilius Scaurus, on which Scaurus propagandizes one of his campaigns against the Arabs. Aretas III is seen kneeling next to a camel, offering an olive branch. In fact, Scaurus' legions made little headway against Petra, and Aretas merely bribed the Romans to leave.

Malichus I (62-30 BCE) minted the first truly Nabataean coinage featuring his bust on the obverse and inscriptions in Nabataean script. The reverse types feature quasi-Tyrian eagles, cornucopias, and a raised palm of the hand in the gesture of a hamsa, an ancient greeting of peace and protection. These coins occur in half-shekel and three bronze denominations. Obodas II (30-9 BCE) continued minting a variety of coinage, introducing jugate busts of the king and queen. During his reign, the weight of the silver coinage was altered to achieve parity with the denarius.

The reign of Aretas IV (9 BCE - 40 CE) saw the largest emission of coins in Nabataean history, including bronze types of several denominations and drachms (sela'im). Silver shortages resulted in a brief emission of bronze substitute coinage. Aretas' successors Malichus II and Rabbel II continued to mint bronze and silver coinage, although the drachms became quite debased by the time Nabataea was annexed by the Roman Empire in 106 CE as Provincia Arabia.

John Deyell followed with a talk entitled "Reconsidering the so-called 'Kashmir' and 'Karkota' electrum *dinaras*". The topic is concerned with a later-Kidarite series of base gold or "electrum" coins, in the names Durlabha, Namvi, Pratapa, Vighraha, Vinaya and Yašo. They are usually attributed to the Karkota dynasty of Kashmir, a position followed by most authors since Alexander Cunningham, but the coins don't seem to be found in Kashmir, and not many of the names on them correspond to kings of the Karkota dynasty. So some numismatists like Shailen Bhandare have questioned this conventional attribution, and John has decided to look more closely into the issue.

The research is in progress. The types of evidence being considered include typological (what are the relationships detectable by comparing the appearance of the different coins?), metrological (what are the physical attributes of the coins and how do they compare?), metallographic (what are the coins made of and what does that tell us about their function as money or as a sequence of issues?), and distributional (what is the pattern of coin finds in respect to the geography of the times?).

With the help of XRF testing in Mumbai and Ottawa, it is hoped to complete this research in the near future.

Finally, Aleksandr Naymark spoke on "International silver and local copper in Sogdian numismatics." The number of Sogdian mints producing copper significantly increased during the last century and a half of Sogdian history (end of the 7th to the middle of the 8th century). At the beginning of this period we know only the coinages of Samarqand, Bukhara, Nakhshab and, possibly, Vardana. During the first half of the 8th century there were at least seven continuous massive coinages and at least the same number of mints that worked sporadically or just once and were responsible for a small number (1-3) of types. Judging from the abundance of finds, some of these "singular" types, however, may have been issued for a long time. Throughout the 150 years in question, the designs and legends of Sogdian coppers kept changing. Samarqand mint introduced 21 new types, and was closely followed by Bukhar Khuda mint (first situated in Bukhara, it was moved to Varakhsha in 720) that came up with 17 new types. Nakhshab and Ustrushana issued 5 types each, Kesh, Panjikant and Vardana could boast 4 each. At least 16 more types that were certainly minted in Soghd during the 7th and first half of the 8th century still await precise localization. The appearance of new mints and of new copper types

sometimes was prompted by the division of power between Arab conquerors and Sogdian princes: with the success of the Abbasid revolution, Abu Muslim started issuing fulus of "regular" caliphate type in the mint of Bukhara without discontinuing the Bukhar Khuda coinage in Varakhsha, while Samarqand Ikhshid Turghar organized a mint in his exile in Ishtikhan, that was later maintained by his brother Yazid.

All that time Sogdian silver drachms followed a single pattern - the design of the drachms of the long gone Sasanian ruler Varahran. Even the "move" of their production from Bukhara to Samarqand in 712 CE brought no meaningful changes to their iconography. Moreover, with two exceptions (coinages of Bukhar Khuda Khunak and of Samarqand Ikhshid Turghar), these coins retained the original legend introduced on them in the early 7th century -- *pwk' r xwb k'n'*, mentioning the long deceased Bukhar Khuda Kana.

This strange discrepancy between the copper and silver coinages can be explained by the different functions of silver and copper coins in local circulation: silver was serving all-Sogdian and international trade and the stability of its design was meant to be the visual guarantee of the reliability of these coins, while the copper circulated mostly locally and rulers of different principalities used it as the vehicle of their political propaganda.

### British Museum Study Day, February 2016

On 6 February the ONS held a study day at the British Museum. Joe Cribb gave a talk 'Getting Kushano-Sasanian and Kidarite coins in the right order'. Joe began by outlining the coinage of the Kushano-Sasanian kings from Ardashir in the mid-third century until the coinage of Varahran. Varahran marks an important break because this is the moment that coinage of the Sasanian Emperor Shapur II (AD 309-379) and that of Kidarites is first issued in the region. Joe then presented the development of the coinage under the Kidarites and the reasons for suspecting they date to the late fourth century AD. The presentation ended with a discussion of the location of the mints, only one of which (Baxlo = Balkh), is marked on the coins.

Before breaking for lunch Robert Bracey gave a talk 'Rohini's Coin' in which he presented a verse from the Pali collection of poetry the Therigatha. Though Pali specialists translating it have been happy to follow its sixth century AD commentator in reading the word *suvarna* as a coin, they have never questioned its presence in a poem they collectively date centuries earlier than the introduction of that coin. The talk explored how the same word can be used as a modern numismatic term, or in ancient texts to mean a specific denomination, a weight standard, a generic reference to coins, a unit of account, a technical term for a particular tax or payment, or simply to mean 'gold' - and the problems that creates for numismatists today.



Stan Goron showed a number of medals from the Paris mint, purchased directly from the mint in the 1990s, made by Thérèse Dufresne, depicting historic sites from around the world. Unfortunately the images shown here cannot do justice to the spectacular depth achieved in the medals, which was all the more







Le Colloque de numismatique cambodienne de la S.N.A.

For more information about the Journal or the Société please write to [redacted]

### Numismatic Chronicle, Volume 175

The 2015 Numismatic Chronicle was published in early 2016 and contains a number of items of interest to ONS readers including an article;

A Contribution to Kiurikid Numismatics: Two Unique Coins of Gagik, King of Kakhet'I and of David II of Lori (Eleventh Century) by Alexander Akopyan and Aram Vardanyan

As well as several hoards;

Jordan- A hoard of Byzantine and Arab-Byzantine Coins from the Excavations at Jerash by Achim Lichtenberger and Rubina Raja

Iran – A hoard of Sasanian Drachms from Ilam Province buried c.AD 602 by Hodge Mehdi Malek

Middle East? - The Hephthalite Drachms Minted in Balkh a Hoard, a Sequence, and a New Reading by Stefan Heidemann [A quick editorial note is in order. The Hephthalite hoard published by Heidemann has no provenance but there is no reason to suspect it comes from anywhere other than central Asia and the tag 'Middle East?' seems to be an error on the part of the editors.]

And finally a review:

Nikolaus Schinell, *Sylloge Nummorum Sasanidarum. The Schaaf Collection*, with contributions by Michael Alram, Rika Gyselen and Robert Schaaf, by Susan Tyler-Smith

### Coinage and History of The Princely States of Chhota Udepur, Deogarh Baria, Lunavada and Sunth

Language- English and Gujarati, all color 360 Pages. Rs. 1950/- and get the Catalogue + 4 CD/ DVD set worth Rs. 900/- + free shipping (in India only). Listed price Rs. 2700/-.

The book has been advertised as containing more than 250 images, as well as line drawings, and is accompanied by a CD containing additional information.

### Money as God? The Monetization of the Market and its Impact on Religion, Politics, Law, and Ethics

ed. Jürgen von Hagen and Michael Walker, Cambridge University Press, pp.455. ISBN 978-1-107-04300-8

From the jacket:

"The nature of money and its impact on society has long interested scholars of economics, history, philosophy, law, and theology alike, and the recent financial crisis has moved these issues to the forefront of current public debate. In this study, authors from a range of backgrounds provided a unified examination of the nature and the purpose of money."

The lack of any numismatists in the range of backgrounds probably explains why the authors fail to draw a clear distinction between money and the physical objects that represent it. Of the eighteen papers many are concerned with numismatic themes (including one on the origin of coinage in Lydia) and two chapters that might be of interest to ONS readers; Rudolf G. Wagner "Fate's gift economy: the Chinese case of coping with the asymmetry between man and fate" and Berndt Hamm "'Mothers and children': discourses on paper money during the Song period".

### Book Reviews

**Brian Kritt, New Discoveries in Bactrian Numismatics, Classical Numismatic Studies No. 8, Lancaster, Pennsylvania: Classical Numismatic Group, 2015, pp xiv, 147, ISBN 978-0-9898254-8-1. \$45.**

Reviewed by Simon Glenn.

This volume builds on Kritt's earlier published work, in particular *Seleucid Coins of Bactria* (Lancaster, Pennsylvania, 1996) and *Dynastic Traditions in the Coinage of Bactria: Antiochus – Diodotus – Euthydemus* (Lancaster, Pennsylvania, 2001). The new discoveries of the title consist of coins apparently from the so-called

### New and Recent Publications

#### Numismatique Asiatique

Issue 16 of *Numismatique Asiatique*, the journal of the Société de Numismatique Asiatique, France, was published in December 2015. It includes the following items:

Bernard Dupaigne: 'Les monnaies traditionnelles des confins lao-cambodgiens dans les collections du Musée de l'Homme'

Daniel Cariou: 'Les ateliers annexes de Pondichéry'

François Joyaux: 'Un échec longuement préparé: la sapèque de 1905 pour le Tonkin'

Alain Escabasse: 'Ouvrages contenant des informations sur le monnayage et la numismatique du Cambodge (Troisième Partie)'

Vaisali hoard as well as two individual coins, one with implications for the chronology of early Parthian coinage and the second a new variety of the Seleucid bronze coins attributed to Ai Khanum.

The volume is divided into seven chapters of which the first two deal directly with the Vaisali hoard of gold staters of the Graeco-Bactrian kings Diodotus I, Diodotus II, and Euthydemus I. As so often in the study of Graeco-Bactrian and Indo-Greek coins the circumstances of discovery and the original composition of the hoard are far from clear. The first notice of the existence of the hoard came in this journal in 2001.<sup>1</sup> The find was said originally to have consisted of a thousand gold staters of Diodotus I, Diodotus II, and Euthydemus I, before the number was revised lower and local villagers melted down a number of coins, leaving Boppearachchi and Grigo to suggest an original find of around 70 coins, of which they were only able to publish seven. Since the initial publication of the hoard Zeng has discovered a number of die links between coins said to come from the find.<sup>2</sup> Krit (p.1) has identified 'two hundred pieces attributable to the hoard' from a preliminary search of auction catalogues. Unfortunately, however, he does not give his criteria for attributing coins to the hoard, only implying (p. 37) that simply an appearance on the coin market was enough for it to be given this provenance.


Much of the first chapter is given over to fitting in new varieties and further examples of known types into the model of the coinages of the Diodotids and Euthydemus I given in *Dynastic Traditions*. Krit corrects some of Zeng's interpretations and provides evidence of a further die link between the staters of Diodotus I and Euthydemus. An interpretation of the hoard comes in the second chapter. The Vaisali hoard is unusual for a number of reasons. Coming from Bihar state in north-east India it is the furthest east that a hoard of Graeco-Bactrian coins has been found by some considerable margin. Boppearachchi and Grigo explained the location of the hoard by suggesting it was the result of trade between the Graeco-Bactrians and the Mauryan Empire. Krit, however, prefers a military explanation with the coins being taken east by Demetrius, the son of Euthydemus I during his Indian campaigns.

The state of many of the coins in the Vaisali hoard is another unusual feature. The majority of the coins have a chisel cut on the obverse uniformly placed diagonally downwards from the top of the king's head, but almost always avoiding the face. Coins with similar cuts are known from Bactria, but none of the Euthydemus staters have this peculiar feature, evidence Krit correctly takes as showing that this king was responsible for instituting the process of cutting the coins. Krit cites examples of staters of Antiochus I from Ai Khanum with similar cuts and suggests (p. 34) that the feature was intended to 'depoliticize earlier issues'. The fact that only gold coins were treated in this way is not considered and must have had some bearing, the cuts allowing the quality of the metal to be clearly visible. A number of new varieties of Diodotid staters are also detailed and revisited in a brief third chapter in which Krit sets out the resulting revisions to his models of the coinages of all three kings.

Chapter four deals with new varieties of Parthian bronze coins and a new interpretation of the Bujnurd hoard. Krit concludes that the beginning of Parthian coinage should be dated c. 215 BC. As with the earlier model of coinage for Euthydemus, however, this dating relies on a fixed chronological point in the coinage in which Krit puts much faith. Around this point a number of assumptions lead to the extrapolation of a particular date, a dangerous process that can lead to overly-confident results.

In his fifth chapter Krit returns to the coins of the early Graeco-Bactrian kingdom. We have here the first response to the suggestion of Jens Jakobsson that there was in fact a previously unrecognised king Antiochus who ruled between Diodotus II and Euthydemus I.<sup>3</sup> One of Jakobsson's supporting pieces of evidence for this new king was that his rearrangement of the coinage was compatible with the fundamentals of the earlier models of Krit and Holt, a claim which is vehemently denied here by Krit. The rebuttal of the Antiochus theory is on the whole convincing, particularly in its detailed arguments about the organisation of the coinage models. The reason for the first coins of Diodotus I carrying the name of Antiochus is still unclear, however, with Krit only suggesting (p. 85) that

Diodotus wished to maintain 'the connection to his former master by having the authority to call in the power of the Seleucids to support his kingship'. Why the Seleucids would wish to support such a recent rebel is not explained and the uncertainty surrounding the first Graeco-Bactrian coins will doubtless continue for some time.

Chapter six discusses the significance of a recently discovered unique Seleucid bronze coin apparently to be attributed to Ai Khanum with a bull with a man's face on the obverse and an anchor on the reverse. The obverse type is taken by Krit to represent worship of the river Oxus at Ai Khanum and is dated c. 285-280 on the basis of a series of similar coins with a legend indicating the co-regency of Seleucus I and Antiochus I. Krit also suggests a symbol on the reverse of the coin is consistent with the Brahmi *jha* identified along with other characters by Narain on bricks from Ai Khanum. In his final chapter Krit takes this similarity and expands it in an effort to determine the composition of the control marks he has previously attributed to Ai Khanum, in particular the  also found on bricks in the city. The method he employs is a comparison with the characters found on Indus seals of the Harappan culture, the latest date for which he gives as 1300 BC. Krit is aware of the difficulties of making such a connection, and suggests that the figure of the man-faced bull from the coin is analogous to the 'chimaeras' found on Indus seals. The substantial difference in time periods should immediately make one wary of any such connection (no matter what its nature) and it should be pointed out that the man-faced bull was a regular feature of Greek iconography when depicting river gods, particularly in Sicily in the Classical period. Likewise, the vast majority of control marks at Ai Khanum can be resolved into Greek letter forms with no recourse to much earlier scripts. In this field there are certainly cases where iconography can fit a Mediterranean and South East Asian context, but it seems unlikely that this is such an example.

The volume is well illustrated throughout (most images are black and white with a small proportion of colour plates), a feature which is essential given the very detailed discussion of different features of the various coinages, whose organisation often relies on changes in small details. The work contained in this volume will be essential reading for scholars of the early Graeco-Bactrian kingdom and the Seleucid presence in Central Asia and the debate it will doubtless spark is eagerly awaited.

#### Notes

1. O. Boppearachchi and K. Grigo, 'Thundering Zeus revisited', *JONS* 169 (2001), 22-24.
2. C. Zeng, 'Some notable die-links among Bactrian gold staters', *NC* 173 (2013), 73-78.
3. J. Jakobsson, 'Antiochus Nicator, the third king of Bactria?', *NC* 170 (2010), 17-33.

## Articles

### THE STORY BEHIND PALESTINE'S ORPHANS AND THE 1947 JORDANIAN 500 MIL LOTTERY NOTE

By Tareq Ramadam

In 1947, the Hashemite Kingdom of Jordan under King Abdullah I, in conjunction with a civil society movement in Mandatory Palestine, issued lottery tickets as a way to raise funds to support Palestinian Arab orphans.

The charitable society, known as the Arab Orphans Committee (or General Arab Committee for Orphans), was established in Haifa seven years earlier in 1940 as a non-profit NGO by Ahmad Samih Khalidi whose goal was to provide job-training and vocational opportunities for Arab children who were orphaned as a result of the 1936-1939 Arab Revolt in Palestine.<sup>1</sup> The revolt, which was harshly suppressed by British military and police forces, left

roughly 5,000 Palestinian Arabs dead, 10,000 wounded, and nearly 6,000 detained and/or imprisoned.<sup>2</sup> Realizing the critical need to educate a large segment of the Palestinian population, many of whom were now fatherless and facing serious financial vulnerabilities, the Arab Orphans Committee, through the help of donors and the Jordanian government (and later, the German government) aimed to provide young men opportunities to acquire trade skills at a newly-planned vocational institute near Haifa (and later, Jerusalem).

One such fundraising method involved the selling off of lottery/raffle tickets, such as the one pictured below and which are rarely seen in numismatic and notaphilist circles today.



Obverse of Jordanian 500 Mil Lottery Note



Reverse of Jordanian 500 Mil Lottery Note

These large-sized Jordanian-issued notes share virtually the same dimensions as the Palestine One Pound note, both measuring 89 x 166 mm and are printed almost entirely in Arabic (save for the inscription 'No. 005613' on the bottom left of the obverse).<sup>3</sup> Additionally, since Jordan did not issue its own banknotes until 1949 in the form of the Jordanian Dinar (the lowest denomination of paper currency being the '500 Fils' note), these lottery notes still bear the Palestinian monetary designation of '500 Mil' (located on the top left and top right of the obverse), since the 'mil' and 'pound' were both used in Transjordan/Jordan for nearly three decades. While circulation of the Palestine Pound persisted until 1950 in Jordan, by 1948, it had been supplanted in the new State of Israel by the Anglo-Palestine Pound as the British Mandate's Palestine Currency Board stopped producing coins and banknotes for Palestine by 1947.

The aforementioned lottery note is a rather rare example of Jordan's historic usage of the Palestinian *mil* as its official monetary unit on numismatic-related, state-sponsored material culture. Elaborating on the note's textual properties, a reading of the obverse reveals that this series of raffle notes were a second issue and were printed under the directive of His Majesty the Hashemite King Abdullah ibn al-Hussein in cooperation with the Arab Orphans Committee (in Haifa). Further, they were printed and sold via a special permit acquired from the Council of Ministers of the Hashemite Kingdom of Jordan. The financial aid that would be collected from their sale would go towards the development of a modern vocational trade school near Haifa for the Arab orphans of Palestine (construction of the school was completed in 1948).

The note also states that the unveiling of the winner will take place in Amman on the first day of March, 1947 under the supervision of a committee that the government will select while the Jordanian-based 'Arab Bank' and the 'Bank of the Arab Nation' guaranteed payment for all raffle winners. The total value of all

winning prizes would be 21,500 Palestine Pounds (based on the sale of 100,000 tickets).

In regards to the layout of the note, its obverse imagery depicts two scenes of young boys engaging in skilled labor, while the background and center of the note depicts what appears to be a model of the trade school that the committee envisioned with rays of light red projecting from it. The overall obverse colors include white, black, red, and light green while the right side of the obverse exhibits perforation with the left edge containing Arabic text (in red) that is unclear due to the way the ticket was removed (from what may possibly have been a single booklet).

The reverse of the note is divided into two columns that lay out both the number of tickets as well as the number of potential prizes (left) as well as the conditions (*shurut*) for the raffle drawing. The guidelines reveal that the winner will be announced in the local newspapers and that copies of the results will be sent to the two aforementioned banks to distribute the prize monies.

Only two years after this lottery note was issued, the Jordanian government adopted a new monetary system as a result of the passing of the Provisional Act No. 35 of 1949 which led to the establishment of the London-based Jordan Currency Board. As a result, the Jordanian Dinar (JD) became Jordan's official currency on July 30, 1950 and the Palestine Pound (and by extension, the *mil*) ceased to be accepted as legal tender a few months later on September 30 of that same year.<sup>4</sup> To reiterate, this lottery note, thus, represents one of the few currency-related items issued by Jordan while bearing the monetary unit of Mandatory Palestine and, by extension, subsequently serves as an insightful snapshot of rapidly shifting historical and political circumstances and their impact on the formation of new national consciousnesses and identities over time and space.

Notes

1. Phillip Mattar. (ed) Encyclopedia of the Palestinians, p. 279 (by Michael R. Fischbach). Facts on File, Inc. New York, 2005.
2. Rashid Khalidi. The Iron Cage: The Story of the Palestinian Struggle for Statehood. Beacon Press. Boston, 2006, p. 107.
3. For measurements of Palestine One Pound Note, see Howard M. Berlin. The Coins and Banknotes of Palestine under the British Mandate 1927-1947. McFarland and Company, Inc. Publishers. Jefferson, N. Carolina, 2001, p. 62
4. [http://www.cbj.gov.jo/pages.php?menu\\_id=108](http://www.cbj.gov.jo/pages.php?menu_id=108)

ON THE UNIQUE DATED TETRADRACHM OF ANTIOCHUS I

By Pankaj Tandon<sup>i</sup>

In *ONS Newsletter* 159, Robert Senior published a remarkable coin of the Seleucid king, Antiochus I, a silver tetradrachm featuring a date.<sup>ii</sup> Since that time, there has been quite a bit of discussion about this coin, but no clear resolution of its significance. Indeed, there has not even been clarity on the reading of the legends on the coin. As I acquired the coin in 2003, and therefore have the advantage of examining the coin in hand rather than through pictures, I thought it worthwhile to revisit the coin, to clarify at least the reading of the legends, and then to offer my theory for the coin's significance.



Figure 1: AR tetradrachm of Antiochus I<sup>iii</sup>

The coin is illustrated in Figure 1 and can be described as follows:



- Obverse:** Diademed head of king facing right, with two diadem ends hanging behind.
- Reverse:** Nude Apollo with some drapery on his right thigh seated left on an omphalos, holding two arrows in his right hand and leaning his left hand on a bow, legend at right in two lines: ΜΗΝΟΣ ΞΑ / ΒΑΣΙΛΕΩΣ, legend above, upside down: ΕΤΕΙ, monogram of Ai-Khanoum (Δ within a circle) in left field.
- Details:** Weight: 16.94 gm, diameter: 26 mm, die axis: 6 o'clock.

Let us first discuss the portrait. Given that the name of the king is not visible on the reverse, we need to look at the portrait to make a determination of the issuer of the coin. Senior attributed it to Antiochus I, saying that the portrait was his “as it appears on his initial issues in his own name with horses-head reverse.” A few years after Senior’s article, the coin appeared in a Triton Auction.<sup>iv</sup> The cataloguer of the auction also attributed the coin to Antiochus I, on the grounds that it was struck from the same obverse die as McClean pl. 336, 2.<sup>v</sup> Finally, Houghton, et.al. included the coin in the *Addenda and Corrigenda to Seleucid Coins Part I* in Part II of *Seleucid Coins*,<sup>vi</sup> and attributed it to the same king on the grounds that it shared the same obverse die with SC 430.2a (= ESM 694) and SC 437 (= ESM 696). Thus there is unanimity on the attribution of the coin to Antiochus I, although with slightly different arguments for why this attribution is correct.



Figure 2: Size Comparison of SC 430.2a and the dated coin

I agree with this attribution also, but would like to point out that the dated coin does not share its obverse die with SC 430.2a or SC 437. As Senior pointed out in his original article, the “dies are medallitic, being much larger than normal and omitting the dotted border.” In particular, the head of the king is significantly larger on the dated coin than on the others, which is confirmed both through careful measurements and, rather more obviously, by placing the coin side-by-side with the illustrated coins. Figure 2 shows a single photograph of SC 430.2a next to the dated coin, made by placing the dated coin on the page in SC next to coin 430.2a. The difference in the size of the head is obvious. Once that becomes clear, it is easy to see many differences in the details of the portrait: for example, in the hair curls and the shape of the diadem ends. Even the shape of the face is different. Thus the dated coin does not share its obverse die with SC 430.2a or SC 437.



Figure 3: Comparison of the McClean coin with the dated coin

It may, however, share its obverse die with the coin from the McClean collection at the Fitzwilliam Museum, identified by the cataloguer of the Triton auction. This coin is also medallitic in

character and all details appear to match. A comparison of the coin with the dated coin, obtained by placing the dated coin on the plate next to the McClean coin and taking a single photograph, is presented in Figure 3.<sup>vii</sup> There are slight differences around the lips, which could be the result of differences in the strikes or of differences in the lighting when the coins were photographed.<sup>viii</sup> If the two coins do not share an obverse die, it cannot be denied that the size of the head on the two coins is virtually identical, in contrast to the comparison of the dated coin with SC 430.2a. The two coins, however, certainly do not share a reverse die; the reverse of the McClean coin can be seen in the illustration of both sides of the coin in Figure 4.<sup>ix</sup> There are numerous differences between this reverse and the reverse of the dated coin. Therefore, it is not clear whether the McClean coin was also dated. The areas of the coin where the date elements would be present are off the flan, so it is difficult to determine this one way or another. But the McClean coin does show a clear name in the left field: ANTIOXOY, and therefore it seems reasonable to suppose that this was present also on the dated coin.



Figure 4: The McClean Coin

Returning to SC 430.2a and SC 437, although the dated coin does not share its obverse die with them, the fact that several authors felt that it did is proof positive that the styles of the three coins very closely resemble one another. There can be little doubt that the obverse die of the dated coin was cut by the same hand that cut the obverse die of those two coins, and at around the same time. This observation will be important in understanding the significance of the coin.

Now let us turn to the legends. The word ΒΑΣΙΛΕΩΣ is uncontroversial, and almost certainly was accompanied by the word ANTIOXOY in the part of the left field that is off the flan. The name ANTIOXOY on the McClean coin is carved far enough to the left of Apollo’s hand that it seems reasonable to suppose that it was present on the dated coin also. Also uncontroversial is the reading of the first part of the date. Senior read it as ΜΗΝΟΣ ΞΑ – month of Xa(ndikos) – and this has not been contradicted by anybody. The ambiguity arises over the year. Senior suggested the possibility that the top legend read ΕΤΕΙ – year 15 – but was not sure about it and therefore did not reach a “definite conclusion ... concerning the complete inscription nor the meaning of this remarkable coin, nor even the certainty of its issuer.” The cataloguer of the coin in the Triton Auction agreed with Senior’s reading of the month, but read the “years” portion of the legend as ΕΤΕΙΣ – years – and indicated that there was no number following this. Houghton, et. al. returned to Senior’s reading and stated without equivocation that the legend was ΕΤΕΙ – year 15. In a subsequent discussion on the Seleukids discussion group,<sup>x</sup> however, doubts have been expressed about this reading. In particular, the idea that there is another letter following ΕΤΕΙ has been floated, the letter perhaps being Σ, Ν or Χ.

Figure 5 shows a detail of this part of the legend. We can see that there is indeed the hint of a letter after the very clear ΕΤΕΙ. However, a close examination in hand reveals that this additional “letter” is not in the same plane as the first four letters of the legend. Indeed, it is quite clear that the entire ground underneath the legend is rough and appears to have been disturbed. My best guess is that the celator first carved a longer word, perhaps ΕΤΟΥΣ (to be consistent with the earlier ΜΗΝΟΣ), intending to follow it with the date, but then realized he had run out of room on the flan. He then recarved the legend, shortening the first word to ΕΤ and then



following it with the date.<sup>xi</sup> It is quite clear that the intended legend is ETEI, year 15.



Figure 5: Detail of the “year” part of the legend

What might be the significance of this date? Houghton, et. al, observed that, if the date is measured in years since the accession of Antiochus I to sole kingship, year 15 would be 266 BCE. They continue: “This date corresponds roughly to the execution of Antiochus’ son and coregent Seleucus (Trog. *Prol.* 26), who was still alive in 267 (SEG XXV 1170). It is thus possible that his younger son, the future Antiochus II, was elevated to the coregency in 266 and that the date inscribed on this tetradrachm commemorates his accession, but this suggestion is entirely speculative.”

In the absence of hard facts, we are indeed forced to speculate, but I would like to add one more element to this speculation. I have already pointed out that the dated coin was cut by the same hand and at the same time as SC 430.2a and SC 437. The first of these coins has a horse-head reverse, while the second one has the Apollo on omphalos reverse. Thus the dated coin was issued around the same time as the mint at Ai-Khanoum finally converted to the Apollo reverse. As Houghton and Lorber point out, this conversion “almost certainly occurred later than at other major mints.”<sup>xii</sup> The dated coin now gives us a more precise idea of when this conversion likely took place: in March 266 BCE. Further, the dated coin perhaps celebrates not the elevation of the future Antiochus II to coregency but his arrival in Ai-Khanoum to take up residence in the eastern capital. We have never been sure if he ever did this, only presuming that he probably did, in the same way as his father did during the reign of Seleucus I. This coin gives us a little more confidence in what continues to be a speculative suggestion.

#### Notes

- i. Boston University. A version of this paper was presented at the New York meeting of the Oriental Numismatic Society, January 9, 2016. In thinking about this coin, I had helpful e-mail exchanges with Richard Ashton, Jens Jacobsson, Don Squires, Lloyd Taylor and especially the late Chris Bennett. Scott vanHorn and Adi Popescu were kind enough to supply me with scans of the relevant pages of the Grose book on the McClean collection.
- ii. R.S. and A.H.: “Two Remarkable Bactrian Coins,” *Oriental Numismatic Society Newsletter* 159, Spring 1999, pp. 11-12.
- iii. Tandon collection, inventory number 383. A full color enlargement of the coin is available at <http://coinindia.com/galleries-greek-antiochos.html>.
- iv. Classical Numismatic Group, *Triton VI lot 447*, January 14-15, 2003.
- v. S. W. Grose: *Fitzwilliam Museum Catalogue of the McClean collection of Greek coins*, Cambridge: University Press, 1929.
- vi. Arthur Houghton, Catherine Lorber, and Oliver Hoover: *Seleucid Coins A Comprehensive Catalogue. Part II Seleucus IV through Antiochus XIII*, New York and Lancaster, PA: The American Numismatic Society and Classical Numismatic Group, 2008, p. 647.
- vii. The difference in the color of the background under the dated coin is the result of my having placed a sheet of paper there to obscure the images of the other coins on the plate.
- viii. I am indebted to Sam Kazmi for making this observation.
- ix. I am grateful to Adi Popescu for supplying me with a high quality scan of the image of the coin from Grose. A digital photograph of the coin was not available.
- x. <https://groups.yahoo.com/neo/groups/seleukids/conversations/topics/2134>
- xi. Senior had remarked that, if the date was intended to be 15, the numbers were out of order – they should have read IE. However, “backward” dates were not uncommon on Greek coins and later Parthian dates all placed the

hundreds first, followed by the tens, with the units coming last, perhaps following the convention being used here.

xii. Arthur Houghton and Catherine Lorber: *Seleucid Coins A Comprehensive Catalogue. Part I Seleucus I through Antiochus III*, New York and Lancaster, PA: The American Numismatic Society and Classical Numismatic Group, 2002, p. 151.

## MORE ABOUT THE VERY RARE GEORGIAN COINS FROM MEGRELIA WITH THE MINTNAME DĀDIYĀN

By Alexander V. Akopyan (Moscow)

The *Dadiani* was the family name of the Princes of Odishi, who ruled in the region of Samegrelo or Megrelia (Western Georgia) in the twelfth-seventeenth centuries. The name of this ruling family became eponymous for the name of this province in Persian and Ottoman Turkish — دادیان. The centre of the principality of Megrelia (Dādiyān) was the city of Zugdidi (see map, Fig 1).

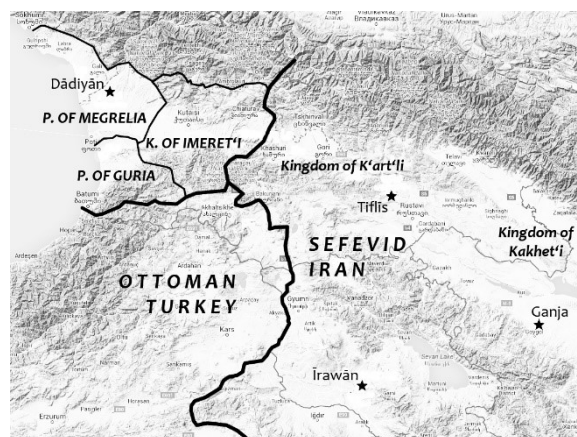


Fig. 1. Ottoman-Safavid border according to the Treaty of Zuhāb, 1639, the states of Eastern Georgia, and mints (★) in the Southern Caucasus operating during the reign of ‘Abbās II’.

In the seventeenth century, Megrelia occupied the eastern coastal area of the Black Sea, and bordered, in the south, the Ottomans and the politically less significant principality of Guria and, in the east, the Kingdom of Imeret’i and the Persian-controlled Kingdom of K’art’li. For part of that period, Megrelia (Dādiyān) lay on the only trade route from Persia and the kingdom of K’art’li to the basin of the Black Sea that bypassed the Ottoman Empire, which was unfriendly to the Persians. Due to its strategical position, Megrelia (Dādiyān) saw the production of the most unusual coins in Georgian and Safavid numismatics.

The Italian missionary, Archangelo Lamberti, in his *The Description of Colchis* mentioned that the Armenian merchants, invited by Prince Levan II Dadiani (1611–1657), introduced in Megrelia the use of Iranian-type coins. These Armenian merchants were settled by the prince in a special “new town” (apparently called Rukhi) near Zugdidi (one of this towns where the mint may have been located<sup>2</sup>). They were the first to introduce a special marketplace and custom-made shops in Megrelia. The connection of Armenians with trading and the production of coins was a common practice for Iran<sup>3</sup> and Ottoman Turkey. The reasons for Prince Levan II striking coins in Dādiyān were to obtain profit from the reminting of incoming foreign silver (as in Persia) and also for purposes of trade with Persia. There was, however, no need for coined money among the locals, who mostly used barter.<sup>4</sup> It is very remarkable that Megrelia was never conquered by the Safavids or submitted to them, yet under the influence of the Armenian merchants, who had close ties with Iran, it was precisely Safavid-type silver coins that were struck there. It was the direction of

bullion flow from coastal Megrelia to inland Persia that was the key reason for choosing to strike these local coins in this way.

Thanks to the recent article by I. Paghava,<sup>5</sup> in which he gave an account of coin-production in Dadiān, we now have clear confirmation of coins having been produced at this mint. According to this investigation, however, a group of four crudely struck Safavid-type coins (three of which were previously described as having been struck in Dādiyān<sup>6</sup>) should be excluded from consideration, as, according to Paghava, the mintname on them cannot be read as دادیان (see Fig. 2).<sup>7</sup>



Fig. 2. One of the coins previously described as struck in “Dādiyān”, “AH 1053,” but which has now been excluded from this mint’s production<sup>8</sup>.

The only confirmed specimen of the Dādiyān mint at the time of Paghava’s research was a dateless coin in the Tübingen collection (no. 91-1-120)<sup>9</sup>, struck by Levan III Dadiani (1661–1680) in the time of Shāh Sulaymān, in his type A, *i.e.* the type struck during the years AH 1079–1081/ AD 1668–1670. Since the time the aforementioned article was published, two more coins struck in Dādiyān have become known.<sup>10</sup> The first of them bears a clear inscription, like the Tübingen specimen, whereas the second coin shows degradation of the inscription style (but different from that which characterises the coins of the excluded group).



Fig. 3. Levan II Dadiani in the name of ‘Abbās II, ‘abbāsī, Dādiyān, AH 1056/AD 1646-7.

**Coin 1** (weight – 7.27g, diameter – 23 mm, Fig. 3). *Obv.* Shī‘a kalima in five lines:

لا إله إلا الله / محمد / رسول الله / علي و / لي الله

*there is no god except Allāh, Muḥammad is the messenger of Allāh, ‘Alī is close to Allāh.*

This legend is surrounded by a linear, dotted and another linear border.

*Rev.* The following inscription in three lines:

بگیتی سکه صاحبفرانی / زد از توفیق حق عباس ثانی /  
ضرب دادیان ۱۵۶

*In the world, ‘Abbās the second, by favour of God, struck the coins of Ṣāhibqirānī, struck in Dādiyān, 1[0]56.*

The visible borders are a linear and a dotted one.

This earliest-known dated coin of Dādiyān provides very important evidence for confirming the *terminus anti quem* for the origin of the coins struck in AH 1056/1646-7 AD — during the reign of Levan II Dadian, truly as Archangelo Lamberti noted. The weight

of coin 1, the metal content, the layout of the inscription and the content of the inscription coincide with that of Iranian coins of the same year. But there are lot of differences in the engraving style of the coins’ inscription in comparison with contemporary Safavid coins from Iranian mints. This clearly shows the non-Iranian origin of this coin (*cf.* Fig. 4 and 5 — coins of the nearest Iranian mints, Tiflīs AH 1056<sup>11</sup> and Īravān AH 1057<sup>12</sup> with calligraphically executed graceful inscriptions both in *nasta‘līq* and in *naskh*).



Fig. 4. ‘Abbās II, ‘abbāsī, Tiflīs, AH 1056/AD 1646-7.



Fig. 5. ‘Abbās II, ‘abbāsī, Īravān, AH 1057/AD 1647-8.

Despite its crudity, the engraving style of coin 1 does allow us to read the whole legend, but some peculiarities of the last line should be especially noted. The letter *bā* of the word ضرب has an exaggeratedly high beginning. That is not very unusual for cursive *nasta‘līq* writing, but it is very uncommon for coin calligraphy. The two letters *dāl* in the mintname were engraved differently: the first is bigger and the second is much smaller, in *rā*-like form. It should be noted, that on the Tübingen coin the two letters *dāl* were also engraved in a different size and style. Perhaps this reflected some *nasta‘līq* stylistic ban on writing the same letter more than once in the one word the same way. The *ālīf* of the group *ب* in the mintname is traversed by a thin line, that is possibly only a bit of *islīmī* (arabesque) background decoration, widely used on Safavid silver coins.

Lamberti mentioned, that “*the prince has a mint, where every year coins for some thousands scudo were struck.*”<sup>13</sup> Taking into account the weight of a Genoese trade scudo for the Levant, 27.25g<sup>14</sup> (equal to *ca.* 3½ ‘abbāsī), each thousand of these scudi accounts for up to three and a half thousand ‘abbāsī, so we have to expect no less than seven thousands ‘abbāsī per year. Was this amount correct? Presumably not. For the last two hundred years only a very small number of Dādiyān coins have come to light, so it seems that the mint output was greatly exaggerated by Archangelo Lamberti. On the other hand, Jean Chardin informs us that “*the Prince of Mingrelia, who died twenty years ago, began to strike coins, but it did not last long, because silver imports into the country were limited, and in the country, itself, silver was not mined.*”<sup>15</sup>

But these ‘abbāsīs were struck, so why are they so extremely rare? During the systematic archeological research that took place in Georgia during the Soviet period, it was reasonable to expect some finds of these coins from here, but none were made. But one needs to bear in mind that Archangelo Lamberti explicitly noted that the locals did not use coins, and if they were forced to use them, they preferred foreign ones (Hungarian, Italian, Spanish or Georgian).<sup>16</sup> This state of affairs is confirmed by the total absence of Dādiyān coins finds in Georgia. Thus, all the Dādiyān coins must have gone to Iran. But once in Iran, at the first mint beyond the border (whether this was Tiflīs or Īravān), they were under Iranian fiscal jurisdiction and had to be reminted into Iranian coinage, like

any other silver coins issued *outside* of Iran.<sup>17</sup> For Iranian officials these coins were apparently the same as any other European silver coins — they were foreign and were subject to melting.

It could well be that because it was well known at the time that the coins would be melted down in Iran and reminted, the engravers began to take even less care in their engraving, which led to increased crudity in style, as can be seen in the following, second coin. This coin is the “descendant” of the previous coin but bears very crude inscriptions.



Fig. 6. Unknown Dadiani prince in the name of ‘Abbās II, ‘abbāsī of crude style and light weight, Dādiyān, no date.

**Coin 2** (weight – 7.00g, diameter – 23 mm, Fig. 6). The inscriptions on the coin are the same as on Coin 1, except for the omitted date and the engraving style, which is much cruder.

The weight of this coin, also shows a slight reduction from the standard weight of the ‘abbāsīs of ‘Abbās II, 7.37g. As this coin is dateless, it is impossible to associate it with any particular Dadiani Prince of Megrelia.

The great rarity of the coins of Dādiyān is due to the reasons for their production. These coins were not even intended for foreign transactions by Levan II, himself. For example, in the order for the renovation of the famous Georgian Monastery of the Cross in Jerusalem (Georgian *Jvaris Monasteri*) dated 1643, Levan II bestowed two thousand *aslanis* (i.e. leeuwendalders)<sup>18</sup>, but none of his own coins.<sup>19</sup>

So it seems that only by accident did four specimens survive the melting-pot in Iran to become known to us despite almost 200 years of intense research in the field of Georgian numismatics: one in the Tübingen collection, the two published in this article, and one now kept in a private collection in Georgia. One coin (the one in the private collection, Georgia) was purchased in Iran, whereas the two coins in this article were purchased from Western auctions. Their provenance, however, can also probably be traced back to Iran, as can that of the coin in the Tübingen collection.

For all these reasons, the coins of Dādiyān are amongst the rarest of Georgian coins, and it is no wonder that such prominent Georgian numismatists as V. Langlois, Prince M. P. Baratayev, E. A. Pakhomov and D. G. Kapanadze did not mention coins of Dādiyān in their general surveys of Georgian numismatics.

#### Notes

1. The fifth mint in the Southern Caucasus, Shimakhī, is off the map.
2. Paghava I. Chekanka sevefidskoy moneti v vostochnom Prichernomor’ye. In: *Vostochnaya numizmatika v Ukrainie. Chast’ III. Ulus Dzhuchi, Krimskoe khanstvo i sopredel’nie gosudarstva v XIII–XVIII vv. Sbornik publikatsiy*. Ed. by K. Khromov. Kiev, 2013. P. 136 [Safavid Coinage in the Region of the eastern Black Sea; in Russian]. The reader is referred to this detailed article for particulars about the numismatic history of Dādiyān.
3. Matthee R., Floor W., Clawson P. *The Monetary History of Iran. From the Safavids to the Qajars*. NY, 2013. P. 14.
4. My translation from: Arkandzhelo Lamberti. *Opisanie Kolkhidi, nazivaemoy teper’ Mingreliey*. Transl. K. F. Gan. Tiflis, 1911. P. 174–175. [Transl. from: Archangelo Lamberti. *Relazione della Colchide hoggi detta Mengrellia*. Napoli, 1654]
5. Pagava I. Op. cit. P. 125–142.
6. Goron S. The Coinage of the Safavid ruler, ‘Abbās II up to AH 1060 // *ONSN 177* (Autumn 2003). P. 17–19. Two of these ‘abbāsī seem to have been listed previously in the Krause Catalog — with date AH 1053 of type A, and without date of type B1 (C. R. Bruce II, Th. Michael, H. Miller at

- a. *Standard Catalog of World Coins. Seventeenth Century 1601–1700*. 4th Edition. Iola (WI), 2008. P. 1030, no. 163.13; P. 1031, no. 169.2).
7. For detailed discussion see: Paghava I. Op. cit. P. 132–134.
8. My thanks to S. Goron for the photo of this coin (weight — 7.1g, diameter — 20mm) and for the idea of including it in this article.
9. Information from Steve Album, who apparently first added this mintname in the Krause Catalog under the Iran section (*Standard Catalog of World Coins. Seventeenth Century...* P. 1023).
10. Both coins in private collections, Russia. They are the only coins of Dādiyān offered for almost the past 20 years.
11. Zeno, no. 11112.
12. Zeno, no. 85474.
13. Arkandzhelo Lamberti. P. 174.
14. *Standard Catalog of World Coins. Seventeenth Century...* P. 1061, no. 15. Weights of the silver scudo of the other Italian states in the seventeenth century varies from 26g up to 36g and was not constant even in the one state (cf. Op. cit. P. 1051–1144).
15. My translation from: J. Chardin. *Voyages du Chevalier Chardin en Perse et autres Lieux d’Orient...* T. 1er. Paris, 1811. P. 186. Cited by: Pagava I. Op. cit. P. 130.
16. Arkandzhelo Lamberti. P. 174.
17. Matthee R., Floor W., Clawson P. Op. cit. P. 5.
18. Del Mar A. *Money and Civilization*. London, 1886. P. 348.
19. Chekhanovets Y. *Gruzinskaya tserkov’ na Svyatoy Zemle*. Moscow, 2012. P. 77. [The Georgian Church in the Holy Land].

## SOME NOVEL PRE-ISLAMIC COINS FROM CENTRAL ASIA

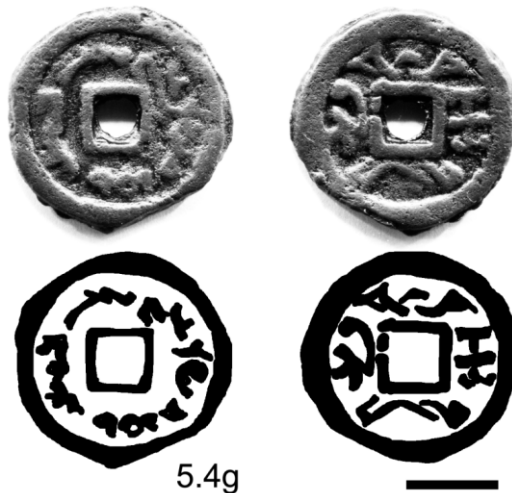
By Shinji Hirano

Recent progress in Central Asian numismatics is full of surprises because new and previously unknown coins continue to appear. Here, I describe some coins that I have encountered in recent years which appear to be unpublished.

The pictures and illustrations of the coins are shown enlarged and accompanied by a 1cm scale bar.

In inscriptions < > represents visible parts of characters and [ ] represents broken parts.

### No.1. A novel Turgesh coin



Weight: 5.4g, bronze

Obv. a legend <βγγ twrkyš x’γ’n >

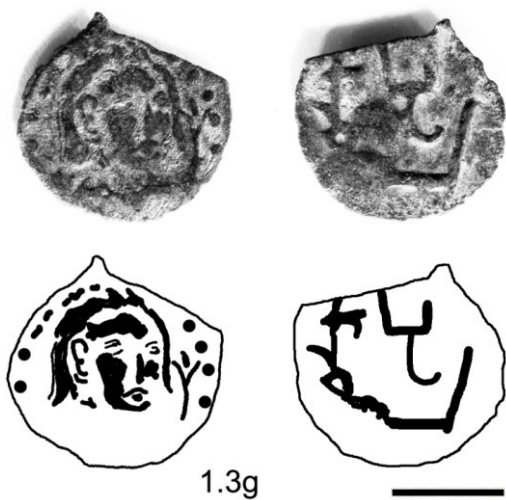
Rev. a word <pnv > and a few unknown tamghas

The legend clearly shows that this is a Turgesh coin. However, some unknown tamghas or symbols are on the reverse. Provenance of this coin is unknown.

### No.2 An unknown coin with a novel tamgha

This coin looks like a Chach coin with an unknown tamgha on the reverse. The portrait itself is reminiscent of that of Ferghana coins. The provenance of this coin is not known.





1.3g

Weight: 1.3g, bronze broken?

Obv. ruler's face

Rev. an unknown tamgha and a legend < jm't > .

**No.3 & 4 Coins with a goblet tamgha**

**No.3**



4.1g

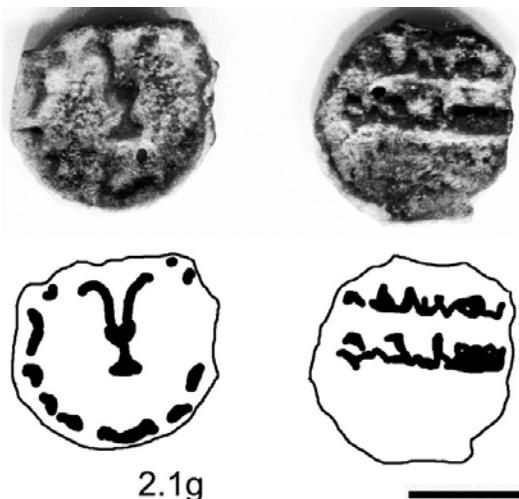
Weight: 4.1g, bronze

Obv. a goblet-like tamgha

Rev. upper line < nwr'nt or nwb'nt or nwy'nt ?? >, lower line < rwdh >

The coin bears a goblet-like tamgha on one side and a two line inscription on the other side. The goblet-like tamgha is similar to a coin previous published in this journal (see Hirano, JONS 2008). The provenance of this coin is not known but it was associated with an example of the previously published type. The meaning of the upper line of the legend has not been determined yet. The legend < rwdh > on the reverse is possibly to be related to the word < rwd >, which means "bronze". It should be noted that < rwök > means bronze coin instead of < pny > in the era of the Ancient Letters (4th BCE).

**No.4**



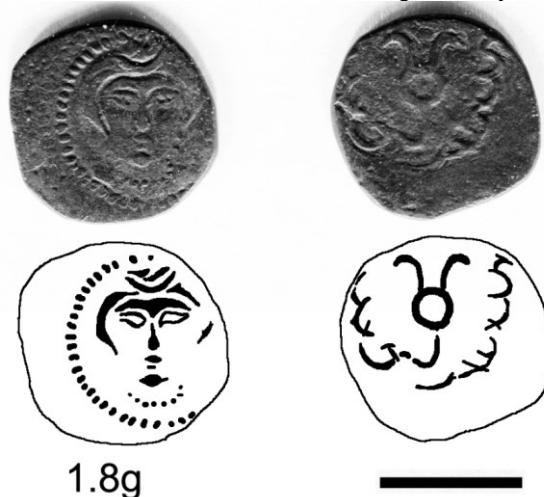
2.1g

Weight: 2.1g, bronze

This coin seems to be a small denomination of the No.3 coin. The two coins were associated though their particular provenance is unknown.

**No.5 A novel Samarkand coin**

The present coin seems to be a Samarkand coin because of its tamgha although the provenance is not known. It is possible that this is an earlier issue of Samarkand coins such as Smirnova type 33. This coin's small diameter is due to it being unusually thick.



1.8g

Weight: 1.8g, bronze

Obv. ruler's face with a crescent ornament

rev. a Samarkand tamgha on the center and two words < x'γ'n > on the right and < pn > on the left.

**No.6 Another novel Samarkand coin**



1.4g

Weight: 1.4g, bronze

Obv. ruler's face with a crescent ornament

Rev. a Samarkand tamgha in the center surrounded by an inscription  
The appearance of this coin is quite similar to No.5 Samarkand coin but the unreadable legends seem to be different. The provenance is not known.

**No.7 A Novel coin with a Samarkand tamgha**



2.1g

Weight: 2.1g, bronze Scale bar: 1cm

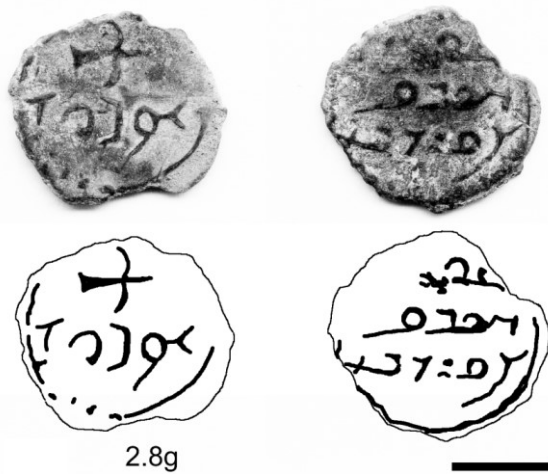
Obv. ruler's face with a crescent ornament and the letters are possibly a part of <x'γ'n >.

Rev. ruler's face with a crescent ornament a Samarkand tamgha on the left and a legend on the right. Only a few letters <xw(...)] > can be readable, and they may be a part of the word queen <xw(ty)[nh].

This coin bears the rulers' (?) faces on both sides with Sogdian legends and a Samarkand tamgha. Several types of Samarkand coins with a Samarkand tamgha are known. For example, in addition to the coins above No.5 and No. 6 coins, Smirnova type 1, type 26, and type 33 bear a Samarkand tamgha on the center of the reverse whereas Smirnova type 1660 bears a Samarkand tamgha not on the center. However, the relationship between the present coin and other Samarkand coins remains elusive. The provenance is not known.

**No.8 A Tirmidh coin**

This coin is published on zeno 117760, and it seems to be a Tirmidh coin. The legend may represent the ruler's name. The provenance is not known.



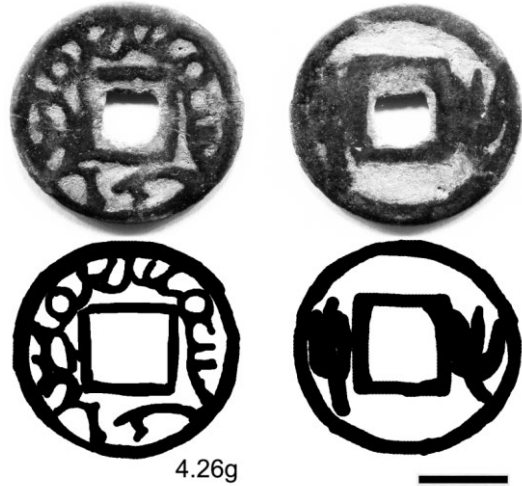
2.8g

Weight: 1.3g, bronze

Obv. an anchor-like tamgha and a legend <'pδ(p.) >

Rev. 3 lines of Sogdian legends; line 1/ <[ ](.).w[ ]>, line 2/ <xwβw > (lord), line3/ <kwyr-β(r) >

**No.9 A Novel coin of Chinese cash type**



4.26g

Weight: 4.26g, bronze

Obv. unreadable Sogdian legend.

Rev. two tamghas

This coin is a large Chinese cash-type coin. The legend is reminiscent of Smirnova 657 but distinct. The two tamghas on the reverse are not clear, and it is not certain if the left tamgha is of Samarkand or not. Thus the attribution of this coin remains unclear. The provenance is not known.

**No.10. A novel coin with an unknown tamgha**



1.24g

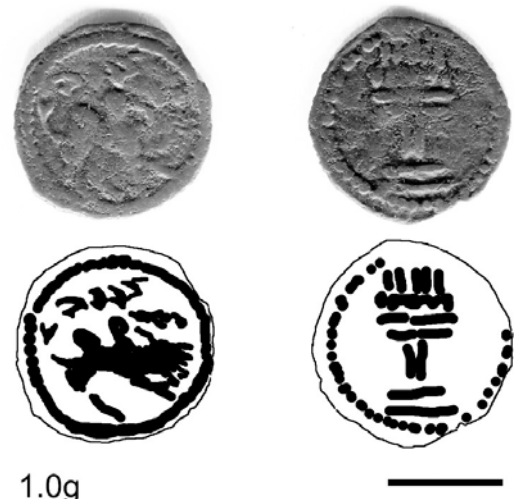
Weight: 1.24g, bronze

Obv. ruler's face with a legend?

Rev. unknown tamgha.

The tamgha is reminiscent of that of some Hephtalite coins. The provenance is not known.

**No.11. A variety of Bukharan coin with a legend**



1.0g



Weight: 1.0g, bronze  
 Obv. a camel with a legend. <cyrd-'[ ]>  
 Rev. a fire altar

The Bukharan type with a camel and fire altar is relatively common. However, this coin bears a legend above the camel, <cyrd>, which could be a part of a Sogdian name, perhaps a ruler. Provenance is not known.

**No.12 A variety of Chach coin**



1.6g

Weight: 1.6g, bronze  
 Obv. an animal and a word <prn>  
 Rev. a tamgha and a legend.

This coin seems to be a new variety of coin of the ruler Sochak of Chach (Shagarov & Kuzunozov type 231). The regular type bears a word <xwbw> above the animal whereas this coin bears the word <prn>. The legend on the reverse seems to be <[ ]tšry xw[β?]>. The provenance is not known.

**No.13. A novel coin with an unknown tamgha**



1.6g

Weight: 1.6g, bronze  
 Obv. a ruler's face  
 Rev. an unknown tamgha

As the provenance of the present coin is not known and it does not bear any legend its identity is unclear. The appearance and tamgha are reminiscent to those of Hephtalite coin (ex. Album Auction 15 lot 55).

**No.14 A unknown coin with a ruler's portrait**

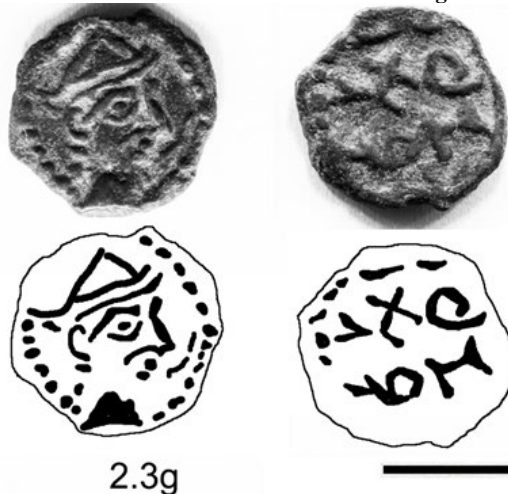


1.9g

Weight: 1.6g, bronze,  
 Obv. ruler's face  
 Rev. unknown tamgha?

This coin is rather compact and thick. The provenance of this coin is not known.

**No.15. A novel coin with ruler's face and legend**

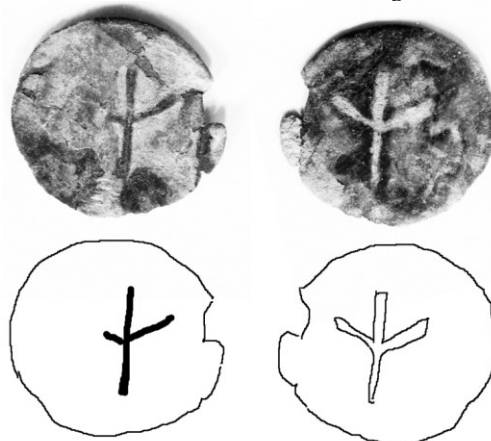


2.3g

Weight: 2.3g, bronze  
 Obv. a ruler's face  
 Rev. two lines of legend

The legend is not certain but could be <mw/cwr> or <'mp-cwr>, a Turkish name written in mirror-image Sogdian letters. Alternatively the legend could be written corrupt in Greek characters. The provenance is not known.

**No.16 An unknown coin or medal with a tamgha**

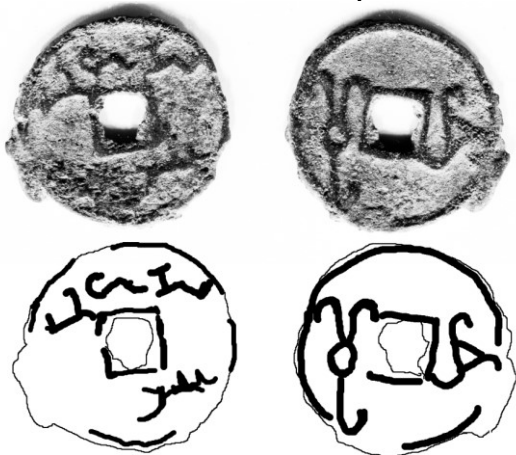


0.5g



Weight: 0.5g, bronze  
 Obv. an unknown tamgha  
 Rev. an incuse of unknown tamgha  
 This coin is very thin, resulting in a repousse effect. The provenance is not known.

**No.17 A notable variant of the Shishpir coin**

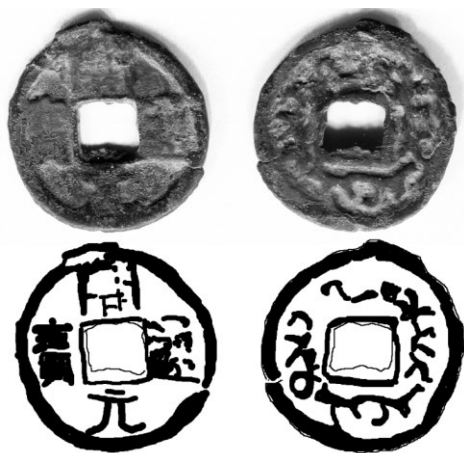


3.6g

Weight: 3.6g, bronze  
 Obv. < šyšpyr > < MLK >  
 Rev. two tamghas  
 The coin, Smirnova type 48, of Ikhusid Shishpir is well-known. Smirnova 48 bears four tamghas on the reverse whereas this coin bears only two tamghas like the later series of Samarkand coins (e.g. Ikhsid Wurk Varatamuk, Smirnova type 301). As only this example is known it is difficult to determine if this coin is a mule or new type.

**No.18 Kai Yuan Tong Bao with Sogdian legends**

It is well known that local Kai Yuan Tong Bao were issued in Samarkand (Smirnova 43) and in Bukhara (Smirnova 1379). This is another type of local Kai Yuan Tong Bao with Sogdian legends. Though possibly from Northern Tokharistan the provenance is not known.



2.2g

Weight: 2.2g, bronze  
 Obv. Kai Yan Tong Bao (written with Chinese characters)  
 Rev. unreadable Sogdian legend

**Acknowledgement**

I am grateful to Prof. Yutaka Yoshida (Kyoto Univ.) for his reading of Sogdian legends and his interpretations.

**Bibliography**

Hirano, S. Some novel pre-Islamic coins. ONS Newsletter 192, 19-20. 2007  
 Stephen Album Rare Coins, Auction 14, 2012

Shagalov, V.D. & A.V. Kuznetsov. Catalogue of coins of Chach III-VIII A.D.2006. Edition FAN Academy of science of the republic of Uzbekistan, Tashkent.

Smirnova, O.I. Svodnyæi katalog Sogdiæiskikh monet : bronza. Moscow. 1981.

Zeno-Ru, Oriental Coins Database.

<http://www.zeno.ru/showphoto.php?photo=117760+>

**KUSHAN COINS IN THE DEPARTMENT OF COINS AND MEDALS, THE NATIONAL MUSEUM IN WARSAW**

Emilia Smagur

The collection of the Department of Coins and Medals of the National Museum in Warsaw consisting of over 250,000 items is the largest numismatic collection in Poland and one of the largest in Europe. The creation of the collection dates back to 1921, when the Collection of Polish Coins was set up based on the Count Kazimierz Sobański's collection bequeathed by him to the National Museum in Warsaw.

In the same year Władysław Semerau-Siemianowski donated to the Museum his ancient coins collection comprising over 30,000 items which he assembled when he worked as a physician in the Balkans, along the Black Sea coast and in Constantinople. At present the Collection of Ancient Coins consists of over 40,000 items representative of the whole ancient coinage (Romanowski 2012a: 3-4; 2012b). They include, among others, Oriental coins: Greek-Bactrian, Parthian, Indo-Scythian, Kushan, and Sasanians. The collection of Kushan coins is small and has not yet been published<sup>1</sup>.

The National Museum in Warsaw is one of the co-organizers of the XVI International Numismatic Congress that will take place in 2021 in Warsaw. This date marks the centenary of the Department and shall be accompanied by an opening of the new numismatic exhibition. The occasion will also offer Oriental numismatists who attend the Congress the opportunity to get acquainted with Oriental coins held in Poland.

The collection of Kushan coins consists of five Soter Megas (Vima Takto) coins, four Vima Kadphises' coins, three Kanishka I's coins and one Vasudeva I's coin. These coins were acquired in different ways. Most of them were bought in the 1970s and 1980s from DESA<sup>2</sup>. One of them was officially transferred by the Regional Liquidation Office in Wrocław<sup>3</sup> in 1946 and two were donated by individuals<sup>4</sup>. Unfortunately, it is impossible to establish the place where they were found or their original place of acquisition.

In this note the ruling periods, attribution to the mint, as well as inscriptions on coins are quoted according to the latest catalogue of Kushan coins from the collection of the American Numismatic Society (Jongeward and Cribb 2015: table 2). References are given according to the same catalogue, and in some cases to Göbl's work (1984).

**Soter Megas coins (c. AD 90 – 113)**

Copper didrachms (c. 8.5 g)

**Coin 1**

**Obverse:** Mithra, head and shoulders bust facing right; hair with two rolls of curls above diadem with circular loop and two ties, and one roll of curls below; rays emanating from his head; wearing cloak clasped above naked shoulder; holding an arrow in raised hand; tamga behind head. All within the dotted border.

**Reverse:** Horseman (king?) riding a horse to right; wearing Phrygian cap with two long diadem ties; raised hand holding pickaxe; three pronged tamga below horse's head. Greek inscription: ΒΑΣΙΛΕΥ[Σ] ΒΑΣΙΛΕΥΩΝ ΣΩΤΗΡ ΜΕΓΑΣ



Museum number: NPO 49089  
 Details: weight: 8.24 g; diameter: 19.7 x 19.8 mm; die axis: 12 h. Obtained from DESA in 1972.  
 References: Jongeward/Cribb 177-206  
 Comments: late phase, cursive lettering style; three-pronged tamga on obverse and reverse

**Coin 2**



Museum number: NPO 49091  
 Details: weight: 8.56 g; diameter: 20.7 x 20.4 mm; die axis: 1 h. Obtained from DESA in 1984.  
 References: Jongeward/Cribb 147-156  
 Comments: early phase, square lettering style

**Coin 3**



Museum number: NPO 49092  
 Details: weight: 7.90g; diameter: 20.2 x 19.8 mm; die axis: 11 h. Obtained from Stefan Gacki in 1970.  
 References: Jongeward/Cribb 177-206  
 Comments: late phase, cursive lettering style; three-pronged tamga on obverse and reverse

**Coin 4**



Museum number: 165933  
 Details: weight: 8.23 g; diameter: 19.1 x 18.7 mm; die axis: 11 h. Obtained from the Regional Liquidation Office in Wroclaw in 1946.  
 References & Comments: as previous, with possible cuts on the edge of the coin (?)

**Coin 5**

Copper hemidrachm (c. 2 g)



Museum number: NPO 49090  
 Details: weight: 2.02 g; diameter: 13.5 x 13.4 mm ; die axis: 1 h. Obtained from DESA in 1984.  
 References: Jongeward/Cribb 160-172  
 Comments: early phase, square lettering style; three-pronged tamga on reverse

**Wima Kadphises coins (c. AD 113 – 127)**

**Obverse:** King, full figure, standing frontally with head to left, bearded; wearing headdress; knee-length tunic, trousers and boots, all under a cloak over both shoulders, long sword suspended from strap; sacrificing at small altar (with slab above and below central column) with extended right hand; trident in left field; club and tamga in right field. Greek inscription: ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ ΣΩΤΗΡ ΜΕΓΑΣ ΟΟΗΜΟ ΚΑΔΦΙΣΗΣ

**Reverse:** Oesho, mountain god, with three heads; standing frontally, head to left, erect lingam; wearing dhoti; holding trident vertically in right hand, left hand rest on hump of bull, nandipada in left field. All within the dotted border. Kharosthi inscription: *maharajasa rajadirajasa sarvaloga 'isvarasa mahisvarasa v' ima kathpiśasa tradara*

References: all examples are Göbl 762; Jongeward/Cribb 274-299

Comments: all examples are main mint, bilingual series

**Coin 6**

Copper tetradrachms (c. 16 g.)



Museum number: NPO 49081  
 Details: weight: 17.23 g; diameter: 27.2 x 26.8 mm; die axis: 11h. Obtained from DESA in 1972.

**Coin 7**



Museum number: NPO 49082  
 Details: weight: 15.80 g; diameter: 26.7 x 25.7 mm; die axis: 12 h. Obtained from DESA in 1972.

**Coin 8**



Museum number: NPO 49083  
 Details: weight: 16.37 g; diameter: 26.5 x 26.1 mm; die axis: 12 h. Obtained from DESA in 1972.

**Coin 9**



Museum number: 220490  
 Details: weight: 16.97 g; diameter: 27.3 x 26.6 mm; die axis: 11 h. Obtained from Zygmunt Zadorowicz in 1961.

### Kanishka I coins (c. AD 127 – 151)

Copper tetradrachms (c. 16 g.)

#### Coin 10

**Obverse:** King, full figure, standing frontally with head to left, bearded; wearing headdress; knee-length tunic, trousers and boots, all under a cloak over both shoulders, sword suspended from strap; sacrificing at small altar (with slab above and below central column) with extended right hand, holds spear with left hand. Bactrian inscription:  $\beta$ AO KANH $\beta$ KI

**Reverse:** Buddha Shakyamuni, standing frontally, head surrounded by halo, hair in top knot; wearing monastic robes, making gesture of reassurance with open right hand, left hand above waist; tamga in the left field inside inscription. All within the dotted boarder. Bactrian inscription: [C]AKAMA-NO BOY $\Delta$ O



Museum number NPO 49087

Details: weight: 15.25 g; diameter: 24.1 x 23.9 mm; die axis: 11 h. Obtained from DESA in 1972.

References: Göbl 786; Jongeward/Cribb 616

Comments: main mint, late phase; four cuts on the edge of the coin

#### Coin 11

**Obverse:** similar

**Reverse:** Athsho, fire god, standing frontally with head to left; bearded, wearing diadem with two ribbons, knee-length tunic and boots; probably holding tongs with left hand at waist and offering ribboned diadem with extended right hand; tamga in left field.. Bactrian inscription: A $\theta$  $\beta$ O



Museum number: NPO 49084

Details: weight: 15.64 g; diameter: 23.3 x 23.2 mm; die axis: 11 h. Obtained from DESA in 1972.

References: Göbl 772; Jongeward/Cribb 459-479

Comments: main mint, middle phase

#### Coin 12

**Obverse:** similar

**Reverse:** Oado, wind god, running to left, with head to left; bearded and with wind-blown hair; wearing thigh-length dhoti; holding large cloak in both raised hands above head and dropping to feet; tamga in left field. Bactrian inscription: OAAO



Museum number: NPO 49085

Details: weight: 16.71g; diameter: 26.7 x 25.6 mm; die axis: 11 h.

Obtained from DESA in 1972.

References: Göbl 783; Jongeward/Cribb 579-591

Comments: main mint, middle phase, coin very worn

### Vasudeva I coin (c. AD 190 – 230)

Copper unit (c. 8 g)

#### Coin 13

**Obverse:** King standing facing left, head surrounded by halo, wearing helmet, armour and boots, holding trident in left hand, making an offering at fire altar with extended right hand. Long sword at waist. Trident in left field above the altar. Bactrian inscription:  $\beta$ AONANO $\beta$ AO BAZO $\Delta$ HO KO $\beta$ ANO

**Reverse:** Oesho, mountain god, two-armed, one-headed, hair in topknot, erect lingam, standing facing before bull, bull to left; wearing dhoti; probably holding diadem in extended right hand and in raised left hand a trident. Tamga in the right field. All within a dotted border. Bactrian inscription: OH $\beta$ O



Museum number NPO 49086

Details: weight: 8.90 g; diameter: 22.2 x 22.2 mm; die axis: 11 h.

Obtained from DESA in 1972.

References: ?

Comments: main mint

#### Notes

<sup>1</sup> The author has been granted the finances for the preparation of her doctoral dissertation on Kushan coins by the Polish National Science Centre within the scope of financing the doctoral scholarship under the decision DEC-2014/12/T/HS3/00174 dated 2014-07-01.

<sup>2</sup> DESA (Dziela Sztuki i Antyki) – the Auction House and Gallery, a Polish national entity engaged in trading of artworks and antiques, founded in 1950.

<sup>3</sup> The Regional Liquidation Office was set up on the basis of the Decree of 8 March 1946 on Abandoned and Post-German property. It secured abandoned estates, controlled and made inventories of such properties, rented or leased them and sold movable property. The Office was dissolved on 17 March 1951, see: <http://archeion.net/atom/index.php/okregowy-urzad-likwidacyjny-we-wroclawiu-2;isaar>

<sup>4</sup> Stefan Gacki in 1970 and Zygmunt Zadorowicz in 1961.

#### References

Göbl R. *Münzprägung des Kušanreiches*, Vienna, 1984

Jongeward, D. and Cribb J. with Donovan P. *Kushan, Kushano-Sasanian and Kidarite Coins. A Catalogue of Coins from the American Numismatic Society*, New York, 2015

Romanowski A. "The Department of Coins and Medals of the National Museum in Warsaw", *International Numismatic Newsletter*, no. 13, 2012, pp. 3-4

Romanowski A. *Department of Coins and Medals*, Warsaw, 2012

## KUSHAN WIMA TAKTO (C. AD 90-113) VARIATIONS IN ANEPIGRAPHIC OESHO/ARDOCHSHO COINS

By Heinz Gawlik

Only a few examples of uninscribed coins of the Oesho/Ardochsho type (also known as Herakles/Tyche) of the Kushan king Wima Takto are found in the literature. In Cunningham 1888 one coin is illustrated. Mitchiner 1973 & 1978 each show one coin (for a total of two) from his own collection but in 1973 he mentions the weight of 15 coins in the British Museum (BM). MacDowall mentions the weight with some variations of the same 15 coins in the BM. Göbl 1993 refers to one coin in the Kushan collection of Bern. Pieper 2013 has illustrated one coin and Jongeward & Cribb 2015 describe two coins in the collection of the American Numismatic Society. Illustrations of all these coins are rather poor due to small size and/or worn conditions.

The identification of all details is difficult on a single coin because some parts of the die are always off the flan. That is one of the reasons why all pieces in my possession are illustrated in this



paper regardless of condition. Beside the weight and dimensions the die axes of the coins are provided. The die axes (DA) are expressed using a clock analogy as hours, 'oc'.

Jongeward & Cribb 2015 describe this particular coin of Wima Takto as follows:

“Reduced Indian standard copper unit (c. 1.5 g) circulating in Gandhara. Related to posthumous Azes coppers with Tyche reverse Gandhara. Related to posthumous Azes coppers with Tyche reverse  
*Obverse:* Oesho (Type 2) stands facing, head to right; holds staff in right hand, animal skin in left: Kharoshthi letter (vi) to right, tamga to left. No inscription.

*Reverse:* Ardochsho (Type 1) stands facing right, wears long robe, holds cornucopia; flower pot symbol to right, nandipanda to left. No inscription.”

The related posthumous Azes coppers with Tyche reverse (Senior 2001: types 122 & 123) are contemporary coinages issued during the reigns of Kujula Kadphises and Wima Takto (Cribb 2015).

The coins illustrated in Fig. 1-1 to 1-3 are all with goddess Ardochsho of Type 1 as classified by Jongeward & Cribb. In this type Ardochsho stands to the right in a three-quarter profile with both breasts visible. The right arm with elbow is clearly behind the body holding the lower end of the cornucopia (horn of plenty). In Fig. 1-1 the upper part of the left arm is visible supporting the cornucopia most probably. Oesho (Pieper 2013 writes of a hybrid Herakles-Shiva deity) is of the same style on all examples. The top of the long stick or scepter in his right hand can't be seen on any of the illustrated coins but the current author believes it is probably a trident. A coin in the auction portal Vcoins shows the upper part of the stick (Fig. 4).



Fig. 1-1: Æ unit Type 1 (12 – 13mm, 1.21g, 1oc)



Fig. 1-2: Æ unit Type 1 (12 – 12.5mm, 1.21g, 4oc.)



Fig. 1-3: Æ unit Type 1 (12.5 – 13mm, 1.76g, 2oc.)

The next group of illustrated coins (Fig. 2-1 to 2-5) shows an Ardochsho standing to the right at an angle of ninety degrees. The left upper arm is almost vertical and parallel to the body. With reference to the classification of Jongeward & Cribb the coins in this group have to be considered as a different type. All other types of Kanishka and Huvishka show Ardochsho in a three-quarter upper profile. The only three coins of this variat are illustrated in Cunningham 1888 and Mitchiner 1973 & 1978.



Fig. 2-1: Æ unit Type new. (12.3 – 13mm, 1.49g, 4oc)



Fig. 2-2: Æ unit Type new. (12.3 – 13mm, 1.60g, 7oc)



Fig. 2-3: Æ unit Type new. (12.5 – 13mm, 1.67g, 1oc)



Fig. 2-4: Æ unit Type new (12 – 13mm, 1.06g, 10oc)



Fig. 2-5: Æ unit Type new (11 – 11.5mm, 1.28g, 1oc)

Fig. 3 shows an Ardochsho in a three-quarter profile as it is in Type 1 with the upper part of the right arm close to the body as in the group of coins shown in Fig.2.



Fig. 3: Æ unit Type 1 var. (12.5 – 13mm, 1.45g, 2oc)



All coins are almost of a circular form with diameters between 11 to 13mm. The variation in weight is more significant and is between 1.06 to 1.76g. The result corresponds to the weight of coins in the BM with a nearly identical range between 1.06 to 1.83g (Mitchiner 1973). The relative positioning of obverse and reverse design (die axis) is irregular. The occurrence of Type 1 and the variation discussed in this paper is almost same. The examples in above mentioned literature have a ratio between Type 1 and the variation of 4:3. Whereas the ratio of illustrated coins in this paper is 3(4):5.



Fig. 4: AE unit (1.2 g, 15 mm) with authorization of Indus Valley Coins

#### Bibliography

- Cribb, J. 2015. "Dating and locating Mujatria and the two Kharahostes". *JONS*: 223: 26-48
- Cunningham, A. 1888. Coins of the Indo-Scythians, *The Numismatik Chronicle*, VIII: 199-248, - reprint 1971 published by Indological Book House, Varanasi
- Göbl, R. 1993. *Donum Burns, die Kušanmünzen im Münzkabinett Bern und die Chronologie*. Vienna: Fassbaender.
- Jongeward, D., J. Cribb with P. Donovan 2015. *Kushan, Kushano-Sasanian, and Kidarite Coins*, The American Numismatic Society, New York.
- MacDowall, D.W. 1968. Soter Megas, The King of Kings The Kushana, *The Journal of the Numismatik Society of India*, XXX: 28-48.
- Mitchiner, M. B. 1973. *The early coinage of Central Asia*, London: Hawkins Publications.
- Mitchiner, M. B. 1978. *Oriental Coins and their Values: The Ancient and Classical World 600 BC - AD 650*. London: Hawkins Publications.
- Pieper, W. 2013. *Ancient Indian Coins Revisited*. CNG, Inc. Lancaster/London

## A MYSTERIOUS HARIKELA TYPE SILVER COIN IN THE NAME OF LILA VARAHA

S. K. Bose and Milap Chand Nakhat

According to *Manjuśrīmulakalpa*, a sixth century chronicle, Harikel or Harikela was a territory in Bengal with a distinct identity. Despite differences in opinion among scholars, it is generally accepted that Harikela was located in the coastal region of Chittagong district, north of Karnafuli river<sup>1</sup>. Interestingly, according to a Chinese map, which was drawn in accordance with the accounts of Fa-Hien and Hiuen Tsang and published in 1710 AD, Harikela comprises the coastal region between Samatata and Odisha<sup>2</sup>.

With regard to the circulation of coins in the region, it has been observed that initially gold coins of Samatata together with very small numbers of their silver pieces were in circulation in the Comilla region from around 575 AD and continued till 700AD<sup>3</sup>. While many varieties of silver coinage of Harikela were simultaneously used in different areas of Chittagong region, with the recession of Samatata power, Harikela silver coins were used all

over Samatata and Harikela for all economic activity. This continued at least till the 8<sup>th</sup> century, if not longer<sup>4</sup>.

Recently, Nakhat, the co-author noticed an unusual silver coin of Harikela type, which surfaced in the Belonia Sub-division bordering Comilla in Bangladesh and also near Pilak Pāthar, an archaeological site of Tripura in India. The distance between Pilak and Agartala is 103 km. It appears that the legend on the said silver coin is 'Lila Varaha'. On the obverse, within a circle, lies an image of 'Varaha' (boar), instead of the more common recumbent bull, with a legend above. On the reverse, there is a tripartite symbol within a circle, similar to all known Harikela coins. The artistic quality is undoubtedly far superior. This, therefore, seems to be a late variety of Harikela coinage. Besides the circle in the reverse, there is an outer border of large pellets surrounding the design. These pellets are not prominently visible on the obverse. The letters on the obverse may be assigned to the 9<sup>th</sup> century AD, on palaeographical ground. The coin weighs 5.67 g. and has a diameter of 32 mm.



Fig.1 Obverse and Reverse of Lila Varaha

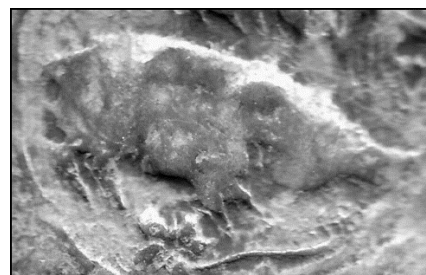


Fig.2 Detail of coin showing boar to right

Pilak-pāthar, the place near the find spot has a numismatic background. A good number of debased gold coins of the Kharāḍga dynasty were discovered in Pilak along with silver coins of Harikela. But most interesting remains a lighter series of Harikela coins, the flans of which are thinner, broader and larger, when compared with the Harikela coins that surfaced in the neighbouring Chittagong or Comilla regions. The obverse of the Pilak-pāthar coins show a recumbent bull and various legends such as Harikela, Viraka, Piraka, Sivagiri and Jayagiri. Piraka has been identified with Pilak-pāthar and Viraka might be Varaka, located in the neighbouring Baraka valley. The newly discovered 'Lila Varaha' coin can be designated as yet another such addition to the many varieties of Harikela coins.

'Varaha' is the third incarnation (*Avatāra*) of Lord Vishnu. Terracotta plaques found in the Pilak area represent at least two such *avatāras*, *Varāha* and *Kurma*<sup>5</sup>. Besides such terracotta, iconographic stone sculptures representing Vishnu in several forms have been found in the region, dating from c. 7<sup>th</sup> -9<sup>th</sup> AD.

*Śrīmad Bhāgavatam*, an ancient chronicle, contains a holy story of Vishnu Lila as Varaha (divine play of Lord Vishnu as Varaha or

boar). According to this mythological story, once long ago, a demon named Hiranyaksa caused the earth to sink in the water at the bottom of the sea of the universe. In order to save the earth from the demon, Lord Brahma, the creator of earth, sought help from Vishnu. Lord Vishnu took the shape of a boar, jumped into the ocean and lifted up the earth out of water. Meanwhile, Demon Hiranyaksa attacked the Lord, but killed by the supreme power. This episode is known as *Lila Varaha* and is presented in the *Śrīmad Bhāgavatam* as follows:

*Brahmovāca*

“yatrodayatāh kṣiti-taloddharanāya bibhrat  
kraudīm tanum sakala-yajña-mayīm anantah  
antar-mahārṇava upāgatam ādi-daityam  
tam damṣṭrayādrim iva vajra-dharo dadāra”

(Brahma said : “When the unlimitedly powerful Lord [Vishnu] assumed the form of a boar as a pastime, just to lift the planet earth, which was drowned in the great ocean of the universe called Garbhodaka, the first demon [Hiranyaksa] appeared and the Lord pierced him with His tusk”)<sup>6</sup>.

It is certain that the issuer of the coin in discussion, whether the king or the guild member(s), was a devotee of Vishnu.

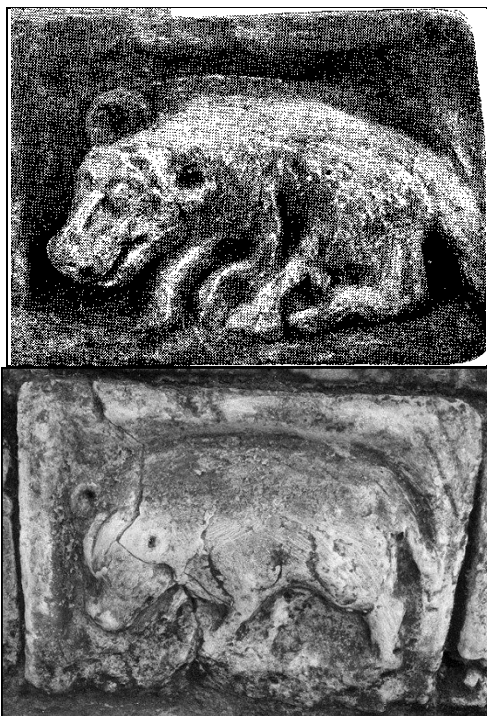


Fig.3 Terracotta plaques portraying Varaha, found at Pilak-pāthar, an ancient site<sup>7</sup>

Though not directly relevant, it is worth mentioning two pieces of billon, or debased silver, coins struck nine hundred years after the Harikela type coin mentioned above. After the Burmese invasion of Assam in the 1820's, two coins were issued popularly known as 'pig rupee'. The legend on one has been read as 'Sri Sri Gahuri Nripa', ( gahuri = pig = boar = Varaha)<sup>8</sup>. The only connection between 'Lila Varaha' and 'Sri Sri Gahuri Nripa' is that the Harikela type coin influenced Pyu and Arakan (of Myanmar) in respect of design, and the 'Gahuri Nripa' coin was issued by the Myanmar king himself.

*Notes*

1. V. Choudhry, 'Hitherto unknown Harikel Coins : Some Analytical Comments', *Silver Jubilee Souvenir, Chattagram University Museum, Chittagong*, 1998, p.16.
2. S. Julien, *Huen Tsang's Records* (French Translation), Volume II , annexed as Map of Central Asia and India. Also see *Epigraphia Indica*, Vol. XXVI, p. 316 (Reprinted 1985, Archaeological survey of India, New Delhi).
3. N.G.Rhodes, 'Note on the Harikela and Akara Coins', *Early Coinage of Bengal (c.2<sup>nd</sup> Century BC – 10<sup>th</sup> Century AD )* by S.K.Bose and Noman Nasir, forthcoming.

4. *Ibid.*

5. J. Gan Chaudhuri, *Tripura- The Land and its People*, Leeladevi Publications, Delhi, 1980, p.59-60.

6. A. C. Bhaktivedanta Swami Prabhupada, *Śrīmad Bhāgavatam*, Second Canto, Chapter 7, Text 1, The Bhaktivedanta Book trust, New York, 1972, pp. 337-338..

7. K. D. Menon, State Editor, *Tripura District Gazetteers*, Govt. of Tripura, Agartala, 1975, pp. 66, 390 and 479 (Second photograph). The figure of boar deserves special mention as it is stylistically related to the terracottas found in Maināmati of Coomilla (Bangladesh), not far from Pilak-pāthar. Again, this place is within Belonia, a southern sub-division of Tripura, where large numbers of Mugh, who are Buddhist by religion, have settled. Probably their ancestors have migrated from Arakan of Myanmar.

8. H.E. Stapleton, 'Contributions to the History and Ethnology of North East India - I & II', *JASB* Vol. VI, Asiatic Society of Bengal, Calcutta, 1910, pp. 141 -166 and pls.

## A COIN OF TATAR KHAN OF BENGAL IN THE NAME OF GHIYATH AL-DIN BALBAN, SULTAN OF DELHI.

By Md. Shariful Islam

Mughith al-Din Yuzbak (AH 652-655/AD 1254-1257) was a ruler of Bengal who declared himself sultan. Goron and Goenka (2001, p.157) lists coins of Yuzbak as B75 and B76 that bear dates from AH 652 to 655. In 655/1257 on an expedition to Kamrup, Yuzbak was killed by the Koch Hajo army (Ali, 1985, p.97-98). Afterwards Bengal was ruled by 'Izz al Din Yuzbaki (657/1259) and Taj al-Din Arslan (657-663/1259-1265). No coins of these last mentioned rulers have been identified. Arslan Khan was succeeded by his son, Tatar Khan, in 663/1265. According to *Tarikh-i Firuz Shahi* (Barani, p. 53), Tatar Khan explicitly acknowledged the authority of Ghiyath al-Din Balban who ascended the throne of the Delhi sultanate in 664/1266. No coin of Tatar Khan has hitherto been recorded.

In Goron and Goenka (2001) the earliest coin listed in the name of Ghiyath al-Din Balban struck in Bengal is dated AH 667 though the date is recorded as doubtful. According to Ali (1985, p.99), Tatar Khan most probably died in 666/1268 and was succeeded by Sher Khan, who died in 670/1272. Therefore, the earliest coin from Bengal in the name of Ghiyath al-Din Balban recorded in Goron and Goenka (2001), albeit it with a date that needs to be confirmed, was issued by Sher Khan.

In this paper I am pleased to publish a coin from the mint of Lakhnauti issued in the name of Ghiyath al-Din Balban (fig. 1) that clearly shows the date AH 665, a date that falls during the reign of Tatar Khan, who ruled Bengal as governor under the authority of Balban.

Fig. 1



Obverse

Reverse

The central legend on the obverse of the coin reads:

‘al-sultān al-a‘zam  
ghiyāth al-dunyā w’al-dīn  
abū’l muẓaffar balban al-sultān

while the central legend on the reverse is:

‘al-imām  
al-musta‘īm amīr  
al-mū‘minīn’.

The marginal inscription on both sides of the coin has the same information about the mint and date, namely:



*ḍarb hadhihi al-ṣiddat bi khitṭah lakhnauī fī sanah khamsa wa sittīn wa sittami'at*

'this silver (coin) was struck in (the) year five and sixty and six hundred', i.e. AH 665.

This is a significant discovery for Bengal numismatics as it supports the claim in *Tarikh-i Firuz Shahi* that Tatar Khan acknowledged the authority of Ghiyath al-Din Balban and issued coins in the latter's name.

*Note:*

The author is an Associate Professor at IBA, Rajshahi University. He is grateful to Stan Goron for editing the paper, and to Noman Nasir for confirming the date on the coin.

*References*

- Ali, M. M. (1985), *History of the Muslims of Bengal*, Imam Muhammad Ibn Sa'ud Islamic University, pp. 91-102.  
 Barani, D. D., *Tarikh-i Firuz Shahi*, text ed. Maulavi Sayyed Ahmad Khan Sahib, Bib. Indica, Calcutta, 1862. Eng. tr. in Elliot and Dowson, Vol. III; also in *J.A.S.B.*, 1869.  
 Goron, S. and Goenka, J. P. (2001), *The Coins of the Indian Sultanates*, Munshiram Manoharlal Publishers Pvt. Ltd., New Delhi, pp. 156-158.

## DAKHIL BALAPUR- A NEWLY DISCOVERED MINT OF BENGAL SULTANATE

By Md. Shariful Islam

### Introduction

A number of new numismatic discoveries of Bengal sultanate have been published in recent years. In this article a newly discovered mint/location of Bengal coin has been presented. Coin 1 of Nasir al din Mahmud Shah (832AH/1427AD and 837-864AH/1433/4-1459AD) of Bengal sultanate is similar to type B455, B458, and B459 (Goron and Goenka, 2001). Mints of these three types of coins are Dakhil Banjaliya, al-Firuzabad and Iqlim Muazzamabad respectively. But the mint on the margin of reverse of coin 1 clearly shows 'Dakhil' followed by 'ba' + 'lam' + 'alif' followed by 'Pur'. There should have been an 'alif' between 'ba' and 'lam' though that letter is not visible and may have been merged with vertical stroke of 'lam'. These forms name of a location, most likely the mint of the coin, 'Dakhil Balapur'. Figure 1 shows closer view of the reverse margin where the name of the mint is written. Figure 2 is the hand sketch of how the name of the mint is seen under magnifier.



**Coin 1**

**Obverse:** *nasir al dunya wa'l din abu'l mujahid Mahmud shah al sultan*

**Reverse:** *nasir al islam wa'l muslimin khallada mulkahu*

Metal: Silver  
 Mass: 9.82 g  
 Mint: Dakhil Balapur  
 Date: Off flan



**Figure 1**



**Figure 2**

### Probable Location and Historical Implications

The exact location of Balapur is not clear as this name has not been found by the author in any other source. Google maps locates two Balapurs, one on the border of the Northwestern part of present Bangladesh (Medieval East Bengal) and West Bengal of India and the other in Norshingdi district inside Bangladesh. As the first location is at almost in the central area of Gaur of medieval Bengal, the word 'Dakhil', meaning either gateway, entrance or seizure is not meaningful. Hence, this location is the least likely of the two locations for the mint written on the coin. The second Balapur is a village located on the river bank of Meghna of present Norshingdi district in Bangladesh. Other side of the river is Comilla district which was under Tripura Kingdom (Blochmann, 1968). Figure 3 shows location of Balapur in Norshingdi district by Google map. Balapur was an important river port. There is still ruin of residence of Zamidar (landlord) Nobin Chandra Saha that was built in the year 1906. This indicates that Balapur was probably an important business place even during medieval period. As it was a river port, the word Dakhil may have been used before Balapur to indicate Balapur as a gateway to Bengal from the side of Tripura.

There is evidence that Tripura once encroached up to Sonargaon of Bengal. It is also evident from historical commentary that Tripura successfully captured a vast area of Bengal several times when Bengal suffered from an internal political crisis. During the reign of Rajah Kans (Ganesh) and his son Jalal al din Muhammad Shah, Tripura invaded Bengal (Blochmann, 1968). According to Rhodes and Bose (2002), Dharma Manikya of Tripura (1431-1462AD) enlarged the boundary of the Tripura kingdom taking advantage of the weakness of the Bengal sultans. Reign of Dharma Manikya began during the political crisis in Bengal when Nasir al din Mahmud Shah was probably engaged in a power struggle with Jalal al din Muhammad Shah (1415-1416AD/818-819AH and 1418-1432/3AD/821-836/7AH) and his successor Shams al din Ahmad Shah (1433/4AD-837AH). Therefore, it is not unlikely that Norshingdi district or a part of it came under the Tripura kingdom during the early years of Dharma Manikya of Tripura in 837AH. A recent find of a few coins also shows a probable unsuccessful rebellion in the period of Nasir al din Mahmud Shah in 832AH during the reign of Jalal al din Muhammad Shah (Islam and Nasir, 2015). After securing his control over Bengal sultanate Nasir al din Mahmud Shah probably later regained those lands from Tripura. According to Blochmann (1968), with the restoration of the Iliyas shahi dynasty by Nasir al din Mahmud Shah Bengal recovered her ancient limits. Therefore, another possibility is that the word 'Dakhil' indicates the seizure of Balapur as an eastern limit by the Bengal sultanate. B455 and B458 (Goron and Goenka, 2001), which are similar in type to Coin 1, but with different mint names, bear the dates 842AH and 841AH on them. The date of B459 (Goron and Goenka, 2001) could not be read. Therefore, it can be presumed that this type of coin of Nasir al din Mahmud Shah was issued during the early years of his reign. This fits into the argument that the coin was issued at some time during Nasir al din Mahmud Shah's expansion of the boundary of Bengal which may have taken place during the early years of his reign after he has secured his position in Bengal.



**Figure 3** (Source: Google map)

**Note**

The author is an Associate Professor at IBA, Rajshahi University. The author is grateful to Stan Goron and John Deyell for their support and guidance in writing this article. The author is grateful to Mosharraf Hossain for technical support.

**Reference**

Blochmann, H. (1968), *Contribution to the Geography and History of Bengal*, Calcutta: Asiatic Society of Bengal (reprint 2003), Pp. 27-28.  
 Goron, S. and Goenka, J. P. (2001), *The Coins of the Indian Sultanates*, Munshiram Manoharlal Publishers Pvt. Ltd., New Delhi, Pp. 187-217.  
 Islam M. S. and Nasir, N. (2015), Revisiting Nasir al Din Mahmud Shah's reign in Bengal: A study based on literature and numismatic evidences, *Journal of the Oriental Numismatic Society*, No.223, Pp. 24-26.  
 Rhodes, N. G. and Bose, S. K. (2002), *The Coinage of Tripura*, Library of Numismatic Studies, Kolkata, P. 102.

**THREE COINS OF THE HUNNIC KINGS OF SIND IN THE BARBER INSTITUTE**

By Robert Bracey

A series of gold coins closely resembling those of the Sasanian Emperors of Iran but often with the addition of a Brahmi character before the king's face (see fig.1) have been relatively well known for a long time. Examples were published by Paruck (1924), Cousens (1929) and Göbl (1984), the last of whom thought they were issued in Kabul.



*Fig.1 The character śri before the faces of the king*

It was, however, the work of Robert Senior (1990; 1991a; 1991b; 1996; 2002) which brought these to wider attention and suggested for the first time that they were issued in Sind. His work also showed that they were part of a larger series, some of which had symbols other than the Brahmi śri. The coins use the same crowns and types as Sasanian coins from the time of Shapur II (AD 309-379) until the period of Piruz (died AD 484) or shortly there-after. Senior, and most Sasanian specialists after him (Schindel, 2004: app.III; Tyler-Smith, 2007: 355; Nelson, 2011<sup>1</sup>; Alram, 2015: 15)

have accepted these coins as the product of a Sasanian mint located somewhere in Balochistan, Sind, or Southern Punjab.

Dissenting voices on this point included Joe Cribb (2002) who suggested that the practice of minting only gold, a failure to produce smaller denominations, and the peculiar symbols on the coins indicated that this was not a Sasanian mint but a Hunnic kingdom producing very close copies. The current author is preparing a catalogue of the known examples of this series (about 120) based on Cribb's previous research in the area and agrees entirely with the assessment that these are very unlikely to be official Sasanian issues.

In 2014-15 Rebecca Darley, Jonathan Jarrett, Maria Vrij, and the current author, undertook a project to examine Byzantine coins in the Barber Institute, Birmingham. This project was supported by the company Bruker, who manufacture XRF machines, and staff in the Chemistry Department, University of Birmingham. As part of the project a small group of contemporary coins were selected from the collection to be tested. It was initially intended to test two Sasanian coins, but upon examination these turned out to be Hunnic issues from Sind.

The use of X-Ray Fluorescence to measure coins is relatively well established. It has the advantage of being able to quantify a wide range of different elements, but it measures only the surface. Questions of how representative the surface of a coin is of the whole coin, and which particular XRF techniques are most appropriate and how best to calibrate the machines or interpret the results are still controversial.

The two coins which were tested are shown in figures 2 and 3. The coins were donated to the Barber in the 1970s by Philip Whitting. Whitting had initially acquired S0073 from the auction house Baldwin's in 1967, and notes at the Barber indicate it was previously owned by W.V.R Baldwin, who had apparently acquired it 'before April 1947'. Whitting subsequently acquired the other two coins in January 1968, also from Baldwin's. Both use the crown and reverse type of Shapur II, have marks (unreadable) where a Pahlavi inscription would be expected, and are of the same type, though different dies.



*Fig. 2 Hunnic Coin of Sind with Shapur II crown, from Barber Institute (S0074, 7.27g)*

Coin S0074 was initially tested using a small desk-top machine, which showed that different points around the centre returned very different results. This suggests that the small punch in the centre of the face is a 'plug', and additional piece of gold inserted for some reason from a different source.



*Fig. 3 Hunnic Coin of Sind with Shapur II crown, from Barber Institute (S0073, 7.11g)*

Both coins were subsequently tested several times. The full results are shown in table 1. It will be apparent to the reader that substantial



variations are possible even when the same coin is tested using the same machine. Compare, for example, the amount of silver (Ag) detected in tests 3 and 4 on coin S0073.

Unfortunately interpreting XRF data is not straight-forward. How many of the other elements detected are actually present in the coin, or are simply being detected on the surface, is an open question. This problem will be addressed by the project in the future. However, there is one significant issue that is very relevant to this series. Are these results comparable with data gathered from other sources?

	S0073					S0074		
	Obv		Rev			Obv	Rev	
	1	2	3	4	5		6	7
Au	74.4	73.0	73.6	72.3	75.0	77.1	72.8	76.2
Ag	19.4	20.4	21.5	14.5	15.7	15.5	13.8	13.1
Cu	0.63	0.64	0.73	0.26	0.32	0.35	0.31	0.26
Al	0.76	0.74	0.59	2.25	1.55	1.04	1.59	1.52
Ba	0.03	0.03						0.03
Bi	0.00	0.02						
Br		0.04	0.03	0.04	0.00	0.00		0.05
Ca	0.80	0.57	0.26	1.01	0.51	0.66	1.39	0.77
Cl		0.33		0.18	0.18	0.18	0.42	
Cr								0.05
Ge					0.00			0.01
Ir		0.08						
Fe	0.17	0.16	0.14	0.44	0.35	0.26	0.43	0.31
Mg	0.29	0.19	0.13	0.67	0.47	0.29	0.52	0.37
Hg				0.02				
K	0.33	0.39	0.31	0.92	0.83	1.15	2.26	1.76
Re								0.11
Rb	0.06	0.05	0.00		0.00	0.00		
Se	0.06	0.07	0.02	0.07	0.00	0.00		0.04
Si	2.39	2.39	1.87	6.05	3.99	2.60	4.75	4.35
Na		0.45	0.41	0.68	0.62	0.46	0.87	0.66
S	0.56	0.34	0.30	0.55	0.33	0.28	0.65	0.33
Ti	0.05	0.06			0.10	0.12	0.11	0.09
Zi	0.05	0.04	0.04	0.00	0.06		0.04	0.05

Table 1: Results of XRF Tests on the Coins<sup>3</sup>

Several British Museum coins from this series were examined using the technique known as specific gravity<sup>2</sup>. In this the weight of the coin as measured in air is compared with its weight as measured in a fluid, in order to calculate the coin's density. As gold (specific gravity 19.32) is much denser than the material it is usually alloyed with (copper with an SG of 8.93 and silver with an SG of 10.49) this is a very good indication of how pure the coins are.

One of those British Museum coins (fig.4) is of the same type as the two examples from the Barber. When measured it has a specific gravity of 18.71, which was interpreted at the time as indicating a gold content of 92.1%. This is clearly much higher than the values suggested by XRF. Even if we assumed most elements were only present on the surface and re-calculated using the gold, silver, and copper then S0073 would have 77.6 to 83% gold and S0074 83 to 85.1%, which by the table in Oddy (1998: table 1) would equate to SGs between 16.3 and 17.2. The problem of how to reconcile results from such different techniques remains.

However, the important thing is relative results, whether different groups of these coins have more or less gold than others,

whether they have more or less than Sasanian, or other Hun coins? Tests on three Ardashir II types at the BM produced results between 17.89 and 18.35, all lower than the single SG result available for Shapur II. So the SG result suggests the debasement of this series (some of the Peroz types are nearly silver) began very early.

The XRF results are still useful as they tell us something about the relative amounts of copper and silver in these coins, which the SG is unable to do. Silver is denser than copper, so in calculating a gold content from an SG value it is important to understand how much silver/copper is added to the coin. The dominant practice in debasing coins throughout the third/fourth century AD in Afghanistan/Pakistan, under the Kushans and the Kushanshahs seems to have been to use a mixture of copper and silver (Sachs & Blet-Lamarquand, 2003). If this same mixture were assumed for the Hunnic Sind types it would inflate the gold content relative to other coins of the region as the XRF indicates they were debased entirely by adding silver<sup>4</sup>. The obvious question of whether the issuers received expertise from a Sasanian mint rather than a Kushan/Kushanshah mint remains for future research.



Fig.4 Hunnic Coin of Sind with Shapur II Crown, BM 1921.0331.43, 7.31g, published Paruck #253, Göbl #1352/1

Finally, the Barber institute also has a single coin (fig.5), which appears to be a cast copy rather than an original, and has a crown of the same type as Ardashir II (AD 379-383). Four other examples in this series using Ardashir crowns are known, and one other of the same type as the Barber example, but that coin is struck from a different die. So this coin is also of interest for the series as it is probably a copy of a genuine example not otherwise published.



Fig.5 Cast(?) of Hunnic Coin of Sind with Ardashir II crown, from Barber Institute (S0098, 7.37g)

#### Acknowledgements

Images of British Museum coins are reproduced courtesy of the Trustees of the British Museum, those from the Barber Institute, Birmingham, UK, with the kind assistance of Maria Vrij. XRF results are courtesy of the All That Glitters project. Robert Bracey is currently working for the ERC funded Beyond Boundaries project.

#### Notes

1. Nelson's 860, 861, 879, 880, 916, 927, 928, 929, 951 are all part of this series.
2. The specific gravity measurements were all conducted by W.A.Oddy, see Bracey & Oddy (2010) for details. They were also sampled for another technique, neutron activation, in 1969 by A A Gordus, but though Gordus published many results on Sasanian silver I have been unable to find a



publication of data from these coins or to discover if unpublished notes survive.

3. The preparation of the coins varied, with 1&4 cleaned with acetone, and 6 and 8 manually cleaned using a berberis thorn. 6 was calibrated differently to the other tests. All tests were conducted on an 18 minutes cycle using an 8mm mask on a Bruker S8 Tiger, and then normalised to produce a 100% total. Entries 0.00 represent detections of parts per million by the machine, while blank entries represent a failure to detect the element at all.

4. No variation in copper/silver ratio is sufficient to resolve the discrepancy between the SG and XRF results.

#### Bibliography

Alram, M (2015) "The Cultural Impact of Sasanian Persia along the Silk Road – Aspects of Continuity" e-Sasanika 14.

Bracey, R & Oddy, W A (2010) "The Analysis of Kushan Period Gold Coins by Specific Gravity", Gandharan Studies Vol.4: 31-39.

Cousens, H (1929) *The Antiquities of Sind with Historical Outline*, Bhartiya Publishing House.

Cribb, J (2002) 'Sasanian-style coinage in post-Kushan Sind' Presentation to Oriental Numismatic Society, 6 April 2002, London, unpublished.

Göbl, R (1984) *Münzprägung des Kušanreiches*, Vienna.

Nelson, B R (2011) *Numismatic Art of Persia: The Sunrise Collection, Part I: Ancient 650BC to AD 50*, Classical Numismatic Group.

Oddy, W. (1998) "The Analysis of Coins by the Specific Gravity Method" *Metallurgy in Numismatics* 4: 147-157

Paruck, D J (1924) *Sasanian Coins*, Bombay.

Sachs, C & Blet-Lamarquand M (2003) 'Le Monnayage D'Or Kouchans et de leurs successeurs nomads: alteration et chronologie' *International Numismatic Congress: 1659-1669*.

Schindel, N (2004) *Sylloge Nummorum Sasanidarum* vol. 3, Wien.

Senior, R (1990) 'Coinage of Bahram Ghor leads to identification of Sassanian mint at Sind' *The Celator* October 1990: 14-15.

Senior, R (1991a) 'The Coinage of Sind from 250 AD up to the Arab Conquest' *JONS* 129.

Senior, R C (1991a) 'Coins of Vahran V indicates earlier mint activity at Sind than was previously thought' *The Celator* Vol.5 No.2: 42-3.

Senior, R C (1996) 'Some new coins from Sind' *ONS Newsletter* 149: 6.

Senior, R C (2002) "Some Unpublished Ancient Coins" *JONS* 170: 14-19.

Tyler-Smith, S (2007) 'Review of Sylloge Nummorum Sasanidarum vols. 3/1, 3/2 by Nikolaus Schindel' in *Royal Numismatic Society Journal*, vol.167 (2007): 346-359.

## CONTENTS OF JOURNAL 226

	Page
ONS news and meetings:	1
Book Review: Brian Kritt, New Discoveries in Bactrian Numismatics, review by Simon Glenn	5
THE STORY BEHIND PALESTINE'S ORPHANS AND THE 1947 JORDANIAN 500 MIL LOTTERY NOTE by Tareq Ramadam	6
ON THE UNIQUE DATED TETRADRACHM OF ANTIOCHUS I by Pankaj Tandon	7
MORE ABOUT THE VERY RARE GEORGIAN COINS FROM MEGRELIA WITH THE MINTNAME DĀDIYĀN by Alexander V. Akopyan	9
SOME NOVEL PRE-ISLAMIC COINS FROM CENTRAL ASIA by Shinji Hirano	11
KUSHAN COINS IN THE DEPARTMENT OF COINS AND MEDALS, THE NATIONAL MUSEUM IN WARSAW By Emilia Smagur	15
KUSHAN WIMA TAKTO (C. AD 90-113) VARIATIONS IN ANEPIGRAPHIC OESHO/ARDOCHSHO COINS by Heinz Gawlik	17
A MYSTERIOUS HARIKELA TYPE SILVER COIN IN THE NAME OF LILA VARAHA by S. K. Bose and Milap Chand Nakhat	18
A COIN OF TATAR KHAN OF BENGAL IN THE NAME OF GHIYATH AL-DIN BALBAN, SULTAN OF DELHI by Md. Shariful Islam	20
DAKHIL BALAPUR- A NEWLY DISCOVERED MINT OF BENGAL SULTANATE by Md. Shariful Islam	20
THREE COINS OF THE HUNNIC KINGS OF SIND IN THE BARBER INSTITUTE by Robert Bracey	21

