# Journal of the Oriental Numismatic Society 

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## ONS News

## Obituary

Nicholas Rhodes (1946-2011)


It is with great sadness that we report the passing of our Secretary General, Nicholas Rhodes. One of the founder members of the ONS, Nick was brought up in London and had collected coins from an early age. He was first taken to AH Baldwin \& Sons Ltd at the age of seven and was given excellent guidance by the late Albert Baldwin. In 1962, when English coins became too expensive for a schoolboy pocket, he started collecting oriental coins, particularly the coins of Nepal, which seemed, at the time, to provide a fertile field for original research. On leaving school, he travelled overland to Nepal where he found a numismatist's paradise, full of Nepalese and Tibetan coins. After a mathematics degree from Cambridge, he qualified as an actuary and continued in that capacity for the rest of his working life until retiring relatively recently.

Nick served as Honorary Treasurer of the Royal Numismatic Society for 30 years (1973-2002), being elected Honorary Fellow of the Society in 2002, and took over the position of Secretary General of the ONS after the death of its founder, Michael Broome, in 1997.

Nick's specialist interests embraced the currency of the whole Himalayan region from Kashmir and Ladakh in the west, through Nepal, Tibet and Bhutan, to Assam and the Hindu states of northeast India. He also collected Chinese coins, and in recent years had developed an interest in the coinage of Acheh and Murshidabad. His interests also included the philately of the Himalayan region and he was an active member of the India Study Circle.

Nick wrote copiously on the currency of his chosen area, providing many articles for this publication, the Journal of the Numismatic Society of India, Numismatic Digest, The Journal of Bhutan Studies etc. His book, "The Coinage of Nepal", written in collaboration with the late Karl Gabrisch and Carlo Valdettaro, and now the standard reference work for the series, was published by the RNS in 1989. In recent years he collaborated with SK Bose on a series of books on the coinage of Assam, Tripura, Cooch Bihar, and Kachar.

He made many journeys to India, Nepal and Bhutan where he had a large number of friends and contacts. His wife, Deki, comes from Darjeeling and is of Sikkimese-Tibetan descent and so there were family ties for him in that area, too. Deki's grandfather,

Sonam Wangfel Laden La, was a remarkable man, who occupied a unique position in Darjeeling and Tibet during the first 36 years of the $20^{\text {th }}$ century. Together, they wrote a fascinating account of his life entitled "A Man of the Frontier", which was published in 2006.

I first met Nick in the early 1970s. In those days meetings of the ONS used to take place at the homes of certain members in the London area. A number of those meetings took place at Nick and Deki's home, which was then in Norbiton. Right from the start he showed himself to be person of great charm and generosity, always willing to talk about his collection and his areas of interest, always willing to encourage and assist other collectors. Many are those who, over the years, have benefited from his kindness. Sadly, in later life he was diagnosed with a serious chronic condition which required frequent strong medication which, in turn, affected his immune system. This made life rather difficult for him as he had to avoid crowded places where infections could be caught. He bore this burden with fortitude and remained, on the outside at least, as cheerful as ever. In spring, this year, he ran out of luck, getting a serious infection, and, despite several weeks in hospital, he was unable to resist this and the effects of the medication. He passed away on Wedesday 6 July.

Nick was a good friend to me and to many others. He will be sorely missed, not only for his numismatic knowledge, but as a person. But he will remain in our memory. We send our sincerest condolences to Deki, and to their son, John and his wife Thin Ley.
S.G


Nick and Deki, with the Editor

## Nick Rhodes, the Loss of a Numismatic Giant

Soon after I joined the Coins and Medals Department at the British Museum in 1970 I had the pleasure of meeting then getting to know Nick Rhodes as a visitor to the department and through the meetings of the Royal and Oriental Numismatic Societies. Throughout the last 40 years Nick was always ready with help and to give advice on oriental coins. He was generous with his knowledge in answering any questions relating to Indian and Chinese coins, but particularly those relating to the states lying north and south of the Himalayas. Recently Nick had been
assisting the British Museum with getting its Nepalese and Tibetan coins on-line, it could have asked for no one better to provide the skill and knowledge to help. The Museum also owed him an even bigger debt, as he skillfully guided the bequested collection of his friend, Carlo Valdettaro, into the British Museum in 1989, soon after Nick and Carlo (with Karl Gabrisch) had published their catalogue of Nepalese coins. This bequest made the British Museum's collection the world's most important holding of Nepalese coins in a public institution.

Throughout his busy career as an actuary working for international insurance companies, he found time to turn his collecting into serious academic research. His papers and books on the coinages of the Himalayan states and more recently on Indonesian coins will long stand as testimony to the excellence of his scholarship. His book on Nepalese coins (I made a small contribution helping Keith Rutter with its editing and it became clear to me in that process that it was Nick who had done most of the writing, drawing on the shared expertise of his co-authors) will remain the standard work on the subject for generations to come. His more recent works with S.K. Bose on the states of the eastern Himalayas are no less authoritative. Most recently I had been discussing two other series with him, the coinages of the Hindu kings of Kashmir and of the kingdoms of Samatata and Harikela (in Bangladesh). I know that he had much to contribute on them. Some of his work on Samatata and Harikela has fortunately already appeared, but I know there was much more to come. His loss leaves a huge gap in oriental coins research.

The readers of the Journal will be familiar with his excellent numismatic work, even if only through these pages, but it is good to remember that this was just one of Nick's areas of interest. Along side his daytime job and his passion for coins, Nick also collected and published on postage stamps in the Himalayan kingdoms, and had an extensive library on the region. He was also an important contributor to the modern history of Nepal, Tibet, Sikkim and Bhutan. He published a book with his wife on the role of his grandfather-in-law in the history of Tibet, and published articles in the Journal of the British Nepal Society, the Tibet Journal, Journal of Bhutan Studies. He was also Treasurer of the Bhutan Society in London.

In addition to my personally benefitting from Nick's support in numismatics, he also became a valued colleague in the Royal Numismatic Society. As a council member, then as Secretary, I was able to observe and benefit from his loyal service of 30 years as the Society's Honorary Treasurer. He brought his professional skills to the management of the Society's funds and enabled them to consolidate and grow in spite of the inflationary pressure and money-market turmoil of the Thatcher era. He joined the Society in 1968 and was elected as one of its rare Honorary Fellows in 2002 in recognition of both his service to the Society and his outstanding research on oriental coins. When Michael Broome founder and first Secretary General of the Oriental Numismatic Society, died in 1997, the provisional committee then set up to manage the society was unanimous in its choice of Nick to take over the role of Secretary General. His wisdom and leadership enabled the Society to continue to flourish with a more collaborative management process. The management committee has enjoyed many of its meetings in Nick's flat opposite the British Museum, warmly welcomed by his wife Deki, keeping us supplied with drinks and snacks while Nick led us gently through the business at hand.

The British and international numismatic communities have lost a numismatic giant, a great friend and a scholar and collector of immense importance. His friends and colleagues will feel his loss for a long time to come and in so many ways. I extend my heartfelt condolences to Nick's wife, Deki, their son, John, and the family.

## Joe Cribb

Former Keeper of Coins and Medals, British Museum

## Nick Rhodes: Down Memory Lane

Nick's sad demise brought up a great many memories - of his scholarship, generosity, erudition, enthusiasm, diligence and charm. But there is one, involving a specific coin, which I will always cherish more than others and I thought it appropriate to share it as part of the tributes paid to him in other pages of this journal.

Compared to others like Joe and Stan, my introduction to Nick was relatively 'recent'. In the mid-1980's I was a schoolboy coin collector in Bombay. A book
published in the early 80's had 'revolutionised' the


Nick during his talk, Utrecht 2009 numismatic scene in the city this was 'The Standard Guide to South Asian Coins and Paper Money', which, for the first time, catalogued in a single volume, all the South Asian coinages since the time of the Great Mughals (AD 1556 onwards). Amongst its authors were stalwarts like John Deyell, William Spengler and Nicholas Rhodes and all their photographs appeared on a page. This is where I first 'saw' Nick.

As the years passed by, I became more and more involved in Indian Numismatics. In October 1989, the ONS and the Indian Coin Society of Nagpur organised the 'First Oriental Numismatic Congress' in that city. This is where I saw Nick in person for the first time; I heard him speak and distinctly recall being awestruck by how much a 'giant' of a numismatist he was, but very much a 'gentle giant' at that.

Soon after the congress, I had the opportunity of meeting Nick face to face for the first time. RT Somaiya, a renowned coincollector of Bombay, shared some of his collection passions with Nick, most notably the coinage of Kashmir. Nick was to visit his residence to see his collection. Kind and hospitable as Mr Somaiya has always been, he invited some of the 'young blood' of the Bombay scene, so that they would benefit from their discussions. Present on that evening were myself, Dilip Rajgor and Subodh Pethe. When we arrived, we found Nick engrossed in documenting a coin - a rare silver coin of the 'Islamic Republic of Eastern Turkhistan', struck at Kashghar, which he duly published in ONSNL 129 - from Mr Somaiya's collection. Subodh had picked up a Nepalese copper coin from a curb-side dealer in Bombay, which Nick readily identified as that of king Gunanka. His English pronunciation of that name still rings in my ears!

A few months after this meeting, in the summer of 1990, a brother of a friend went to Kashmir for trekking in the Himalayas. I had been to Srinagar in 1987 and I had seen, in some of the shops in the Central Market in Srinagar, old Kashmiri coins on sale, particularly of the 'Hindu Kings' at five rupees a piece. I asked my friend's brother if he could bring me three or four. As he was only about 12 -years old, to help him identify the coins, I drew him a picture of what a 'Hindu Kings' coin looked like. A month later, he brought back four coins - I could identify three of them, two were of Queen Didda and one was of Harsha Deva. I could not identify the fourth. I took it to Mr Somaiya, who read the legend and announced that it was of 'Salla Raja' - the rarest of all the 'Hindu Kings' series! "I have seen truck-loads of these coins", he said in his inimitable fashion, "but I have never been able to get my hands on a Salla Raja". The joy of a nineteen-year old collector of ancient Indian coins (that's me!) knew no bounds and I was particularly astounded - and still remain astounded - at the extraordinary degree of luck and coincidence that had brought this exceptionally rare coin into my collection. As far as Mr Somaiya was aware, Alexander Cunningham had a coin of this ruler in his collection and he illustrated it in his book 'Coins of Medieval

India'. But apart from that, "Nick Rhodes is the only person who might have a coin of this king in his collection", said Mr Somaiya.

In 1996, I came to London for the first time, as a PhD student, to study the collection of Satavahana coins in the British Museum. In all these years, I had almost no interaction with Nick but when I met him at the London 'Coinex' in October 1996, he immediately recalled our meeting 7-8 years previously at Mr Somaiya's house. Later in the same year I went to the American Numismatic Society in New York, where I managed to document a copper coin struck by the East India Company in Garhwal. Knowing Nick's interest in the coinage of the Himalayan foothills, I sent the photograph to Nick and also gave him my reading of the inscriptions. Nick duly published the coin in ONSNL with full acknowledgement to me for reading the legends as well as giving him the photograph to publish.

In 1999, I was appointed as a curator in the British Museum with funding from the Society for South Asian Studies (British Academy) as its post-doctoral fellow. Although Joe Cribb takes the credit for arranging this most significant step in my career, I later realised that one of the statements in support of my application was also written by Nick as an Oriental numismatist of repute and an office-bearer of the Royal Numismatic Society.

In one of my meetings with him in India in the late 1990's, the topic of the coins of the Hindu Kings of Kashmir came up in our conversation. By this time, I had given up collecting coins but I still had my collection with me. I asked Nick whether he had a coin of Salla Raja in his collection - to my great surprise his answer was negative!
"I have one in my collection", I said to him and he appeared to look at me in disbelief. "Are you sure it is 'Salla'? It must be 'Sussalla'", he said, referring to another ruler - scarce, but certainly not as rare as Salla.
"No, no, I am quite sure it is 'Salla' - Mr Somaiya read it many years ago". In the years that had passed after Mr Somaiya's reading of the legend, I had managed to get my hands on the list of coin inscriptions in Sarada by John Deyell and had verified that Mr Somaiya's reading was correct. So I was certain the coin was of Salla even in face of the fact that doubt was being cast by Nick Rhodes, the greatest collector of Kashmir coins in the world!
"Okay, show it to me", Nick said.
The next day I took the coin with me to show him. He held it in his hand, placed it on his palm and then lowered his glasses from the bridge of his nose. He had a good look at it. Over his glasses I could see the glint in his eyes as he read the legend. I needed no further confirmation - but he pushed his glasses back, raised his head, looked at me and said, smilingly, "Yes - it IS Salla Raja'"!

At that moment, I could see rippling in his eyes the emotions only the acquisitive spirit of a genuine collector can bring forth. I knew he was moments away from asking, "Is it for sale? Can I buy it from you?" But the thorough gentleman Nick was, that moment never arrived - keeping the smile on his face, he placed the rare coin back into my hands.

I was touched by Nick's civility and politeness. I was also struck by the irony - I had a total of ten, maybe fifteen coins of the Hindu kings of Kashmir in my ex-collection. They were all common, bought over a decade for no more than 50 rupees a piece, and one of them was a 'Salla Raja'. Nick possessed the best collection of Kashmir coins in the World, with rarities such as the 'Crab' mohur in the name of Nur Jahan, but he did not have a coin of Salla Raja. And my coin had landed in my hands through the agency of a 12 -year old boy who had picked it up from a pot-full of coins in Srinagar when he only had the drawing I had scribbled on a piece of paper to vaguely know what sort of coins I was after. I was not even present when he had bought it!

At that time I knew the rightful place for the coin was with Nick, not with me. It should be with the best collection of Kashmir coins in the world, not languish in a plastic box with so many other odds and ends. The next day, I presented it to Nick. He was no doubt overjoyed but thanked me in the restrained and polite manner of a true Englishman.

Only about three years ago, we were invited to Nick's house in the seaside town of Hythe for a summer party. I took my camera along to take pictures of coins from his collection. While going through the coins, Nick exclaimed, "Ah, here's an old friend"! I took my eye off the viewfinder and turned back. He was looking at a coin in exactly the same way as he looked at it almost a decade ago in Bombay - placed in the middle of his outstretched palm, glasses lowered, his gaze resting over the coin over the bridge. Nick rolled his fingers and put the fist over my hand. When he opened it, a copper coin rolled out. "Salla Raja!" Nick said. I looked at him - he was smiling exactly as he did almost a decade earlier in Bombay.

## Postscript:



Before Nick's passing, his collection of Kashmir coins was acquired by Dr Paul Stevens. Paul has very kindly agreed to keep his collection as a long-term loan in the Heberden Coin Room, Ashmolean Museum, so that it remains accessible for research. The 'Salla Raja' coin now belongs to Paul and as such, has returned into my curatorial care! I am very happy to illustrate it here as a tribute to Nick's memory and as reminiscent of our personal collecting histories.

## Shailendra Bhandare, Oxford

There is little that I can add about Nick's numismatic works, both books and papers, that will not have been said by other people far more well-informed than me. Suffice it to say that his attention to detail and study of every die variety of the coins from the areas that he collected and studied was truly amazing. An inspiration to us all.

From a personal point of view, Nick was a kind and generous friend, not only with advice from his great knowledge, but also in the help he gave to me in adding to my collection, particularly of Assam and Kashmir. I really enjoyed the times that we spent together in Folkestone and Hythe, and my visits to Nick and Deki in their London apartment. I will truly miss our lunches and chats. My deepest sympathy to Deki and John and the family

## Paul Stevens.

## Nicholas Gervase Rhodes (1946-6th July 2011)



With great sadness most members of ONS will have received the news of the sudden passing of N.G. Rhodes.

After having been introduced to the world of coins by Baldwin's in London, as a young man, he started a collection of Nepalese and Tibetan coins during a visit to Kathmandu in the 1960s. He became a friend of Carlo Valdettaro (1921-1988), then $a$ resident of Calcutta, who frequently visited Kathmandu and was probably the first westerner who collected Nepalese and

Tibetan coins in a systematic and academic manner. Valdettaro was perhaps the major "numismatic guru" of N.G. Rhodes, who was an exceptional student and, in a letter dated 23 November 1987, Carlo Valdettaro wrote to me that "Giotto (Nicholas) has surpassed Cimabue (myself)."

In the 1980s Nicholas Rhodes started and led to completion a major work on the coinage of Nepal. He was assisted in the compilation of this work by Carlo Valdettaro and Karl Gabrisch. Nicholas draftet the texts and sent them to his co-authors. Carlo Valdettaro extensively commented on these drafts and made countless suggestions towards their improvement while Karl Gabrisch added further comments and took the responsibility for the photography of the coins and for tracing literature of difficult access. The work which grew out of this co-operation may be considered as Nicholas Rhodes' magnum opus and was published in 1989 under the title The Coinage of Nepal.

Already before Nicholas started working on Nepal he had focussed his attention on other Himalayan coinages such as those of Tibet, Kashmir, Ladakh, Sikkim, Bhutan, Cooch Bihar and other former north-east Indian kingdoms and published groundbreaking articles in these fields.

It was Karl Gabrisch's and Nicholas' intention to publish a book on the coins and banknotes of Tibet following the example set by The Coinage of Nepal. However, the death in 1995 of Karl Gabrisch, who was the driving force behind this project, left the book in its initial stage. In the near future Nicholas wanted to resume work on Tibet and eventually publish a major work with my assistance. But, meanwhile, he became absorbed in studies of the coins of north-east India and published several numismatic volumes on the eastern Himalayan hill states with Shankar K. Bose as co-author.

After retirement from his job as actuary with a reinsurance company he took a part-time job in the field of reinsurance in Singapore until a dangerous blood disease forced him into complete retirement. He bought an apartment in Calcutta (now: Kolkata) in order to be closer to Darjeeling where relatives of his wife are living and at the same time to have a base for his numismatic studies of north-east India. His wife Deki, a Tibetan of Sikkimese origin, had as grandfather Sonam W. Laden La, superintendent of police in Darjeeling, who in the 1920s established a police force in Tibet on behalf of the Tibetan government. Together with his wife, Nicholas published a book on Laden La, who was also involved in detecting a forgery case of Tibetan coins and banknotes and among whose papers Nicholas discovered some samples of the forgeries which Laden La had kept.

I had the privilege to spend some time with Nicholas in his house in Kent, in his London flat and in his flat in Calcutta, days which were all the more enjoyable because of Deki's wonderful hospitality, and which are now among my most cherished memories. I was always impressed by Nicholas' enormous knowledge in south Asian numismatics, his outstanding memory for coins he had only seen once and by his human qualities among which modesty and his eagerness to help others and share his knowledge are only two which I would like to mention here.

No doubt, Nicholas could have published numerous articles and books in the field of Himalayan numismatics, had his sudden death not cut short all his on-going projects and plans for further research, among which his unwritten book on Tibet.

We are going to miss a great friend and an outstanding numismatist.

Apart from publishing about 200 articles in the field of Asian numismatics, Nicholas was the main author or co-author of the following books:

Bruce II, Colin R., Deyell, John S., Rhodes, Nicholas and Spengler, William F.: The Standard Guide to South Asian Coins and Paper Money since 1556. First Edition. Iola, Wisconsin, n.d. (1981). (608 pp. illus.).

Rhodes, N[icholas] G[ervase]., Gabrisch, Karl and Valdettaro Pontecorvo de la Rocchetta, Carlo: The Coinage of Nepal from the earliest times until 1911. Royal Numismatic Society, Special Publication No. 21, London, 1989 ( 249 pp and 51 plates).

Rhodes, Nicholas and Bose, Shankar K.: The Coinage of Cooch Behar. Library of Numismatic Studies, Dhubri, 1999 (123 pp. and VII plates).

Rhodes, Nicholas Gervase and Bose Shankar K.: The Coinage of Tripura. With Notes on the Seals, Orders, Decorations and Medals of the State. Library of Numismatic Studies, Kolkata, 2002 (122 plus VI pp, XVIII plates).

Rhodes, Nicholas G. and Bose Shankar K.: The Coinage of Assam. Vol. I, Pre-Ahom Period. Library of Numismatic Studies, Kolkata, 2003 ( 134 plus V pp, IX plates).

Rhodes, Nicholas G. and Bose Shankar K.: The Coinage of Assam. Vol. II Ahom Period. Library of Numismatic Studies, Kolkata, 2004 ( 139 plus IV pp, XXXVI plates).

Rhodes, Nicholas G. and Bose Shankar K.: A History of the Dimasa-Kacharis As Seen Through Coinage. Library of Numismatic Studies, Published by Mira Bose, Kolkata and Guwahati, 2006 (128 plus II pp, XXII plates).

Nicholas and Deki Rhodes: A Man of the Frontier. S.W. Laden La (1876-1936). His Life \& Times in Darjeeling and Tibet. Library of Numismatic Studies, Kolkata 2006

## Wolfgang Bertsch

We also regret to announce the deaths of the following three ONS members earlier this year: Gwennolé H. Dorange, Dr Uwe van Bürck, and Jürgen Brockmeier. We send our condolences to their families.

## Memorial Event

A memorial event in memory of Nicholas Rhodes will take place on Saturday 3 September at the Royal Asiatic Society, 14 Stevenson Way, London NW1 2HD, London from 3-5 pm. Any member wishing to attend should contact Joe Cribb joecribb@btinternet.com.

## New Secretary General

We are pleased to report that Joe Cribb, former keeper of the Coin and Medal Department at the British Museum, and eminent oriental numismatist, has agreed to take over the position of Secretary General of the Society.

## 2011 Study Days at the British Museum

An ONS Study Day will be held at the British Museum on 26 November 2011. Members are encouraged to speak about any aspect of their coin interests. Short talks are always welcome at these events and help can be provided for those less familiar with computer presentations and projectors. If you would like to talk about some items you have recently acquired or give a longer presentation on your interests please contact Robert Bracey (robert@kushan.org). The meeting will be held in the study room of the Coins and Medals department, located in Gallery 69a, and will will start at 11am.

## 2012 East Asia Study Day at the British Museum

On Saturday 17 March 2012 the ONS will host an East Asian study day at the British Museum. Several speakers have already agreed to give papers including Alex Fang, Helen Wang, Joe Cribb, Qin Cao, and Keith Sugden, but other contributions are welcome.

If you would like more details about this event then please contact Robert Bracey (robert@kushan.org).

## British Museum Study Day



The audience gathers for the first speaker
ONS members gathered in London on 18 June for a study day. This event was well attended, including a number of interested scholars and members from India. The day was hosted by the British Museum. There were four long papers on the day.

Dr Ruby Maloni spoke first on 'Travellers Traders and Foreign Coins in Surat'. She explored the way that coins operated both as money, but also as bullion, and how this dual use changed with shifts in the political and economic balance.


Prof. Maloni explains some of the currency systems in Goa


Wannaporn Rienjang pauses to consider a question.

Wannaporn Rienjang followed with a presentation 'Coins and Religions: Coins and the Dating of Buddhist Sites in Gandhara’ which looked at the importance of coins in dating the many monuments of ancient Pakistan.

After a lively lunch Vesta Curtis gave a talk on 'Fascination with the past: the Legacy of Ancient Persia' in which she covered 2,500 years of Persian history from Persepolis to Mohammad Reza Shah with remarkable speed and clarity.

Joe Cribb finished the day by speaking on 'The Coinage of Kujula Kadphises and Wima Takto'. Those who have followed Joe's work will know that he has had a long interest in the coins of the Kushan Empire, and this talk was the latest instalment of a series exploring in detail the coins of different kings in the dynasty.

## Rasmir: Oriental Numismatics Conference 2011

The conference was organised under the auspices of the ONS and was supported by RASMIR website of Oriental Numismatics (www.rasmir.ru), Zeno Oriental Coins Database (www.zeno.ru) and I.I. Mechnikov Odessa National University (Ukraine). The University kindly hosted the event at its premises on 29-31 July 2011.

The organizers were pleased to welcome some 30 participants from Egypt, Georgia, Moldova, Netherlands, Russian Federation, and Ukraine. sixteen presentations were delivered to the audience, including 3 long-distance ones from abroad by means of the Skype technology. A number of additional papers were submitted for future publication along with the works presented at the conference.

The talks given at the meeting were as follows:
Petr Loboda: "New coins of Olbia."
Oleg Ivchenko: "Roman denarii of the $1^{\text {st }}$-beginning of the $3{ }^{\text {rd }}$ century: specificially in relation to their supply to the Chernyakhov culture."
Alexey Alyoshin: "Coins of the Kobadian region and their countermarks."
Andrey Boyko-Gagarin: "On a false Venetian ducat found in the Crimea."
Yevgen Lemberg: "On the identification of Barqa mint on dirhams struck in Ifriqiya province in AH 170."
Alexei Laptev: "Coins in the Saltov monuments of the Upper Seversky Donets river basin (Upper-Saltovo \# IV catacomb and Netaylovo burial ground)".
Roman Reva, Alexander Kazarov: "Coins of Sayid Ahmad I, the newly discovered ruler of the Golden Horde."
Leonid Dobromislov: "A method for the relative chronological evaluation of coin die usage. An example of a Kildibeq khan copper mintage at the mint of Azaq."
Younis Mohammad: "A Seljuq Dinar of Isfahan 512/ 1118 dating to the war between Sultan Sanjar and Mahmud." (Skype)
Alexander Kazarov, Yaroslav Studitskiy, Roman Reva: "Coins of Murtaza ben Ahmad: the final stage of the Golden Horde coinage."
Fedor Ermolov: "A regional mintage of silver coins during the reign of Janibeq khan." (Skype)
Evgneij Goncharov, Vladimir Nastich: "New numismatic monuments of the $9^{\text {th }}$ century from an Eastern Aral littoral (a newly discovered mintage of the Syr Darya Oghuz State)." (Skype).
Alexander Kazarov, Andrei Crivenco: "The recently discovered Jujid mint of Aqcha Kerman."
Andrei Crivenco, Slobodan Sreckovic: "Preliminary results of the study of the Bujak hoard."
Andrey Bragin: "A new date for a Khalil Sultan Timurid silver tanga mintage (AH $811 / 1408-1409 \mathrm{AD}$ )"
Andrey Bragin, Oleg Batrakov: "On a problem of a Baysangur Timurid silver tanga mintage."
Irakli Paghava, Severiane Turkia: "New data on the minting of Safavid currency in the kingdom of Kakheti (Georgia)"

In addition to the presentations, a round table was held on the subject: "Numismatics: a science or a hobby? Co-operation, protection of cultural heritage, free circulation of numismatic material".

Those attending the conference in person enjoyed joint lunches and excursions to the museums and historical sites of Odessa, including the Museum of Numismatics, the Archeological Museum, the Museum of a Regional History, and the Arab Cultural Centre.

The conference proceedings are due to be printed within three months from the completion of the conference. The collected articles will be published in Russian, coupled with extensive summaries in English.

The organizing committee is looking forward to inviting all interested persons to the next Rasmir: Oriental Numismatics conference which is planned for 2012.

## New Members

European Region


## Lists Received



## New and Recent Publications

Islamic Coins Struck in Historic Armenia, vol. I. Armīniya, Arrān (Madīnat Arrān), Barda‘a, Dabīl, Hārūnābād/al-Hārūniya and Ma‘den Bājunays. Early 'Abbāsid Period (AH 142 - 277 / AD 759 - 891), by Aram Vardanian.

This is the first publication in an intended series dealing with the cataloguing of Islamic coins struck in Armenia in the mediaeval period. This volume represents an up-to-date catalogue of gold, silver and copper coins struck at the mints of Armīniya, Arrān (also Madīnat Arrān), Barda‘a, Dabīl, Ma‘den Bājunays,

Hārūnābād and al-Hārūniya, all located in historic Armenia. Chronologically, it covers the so-called early 'Abbāsid and the Samarrā periods (AH 132 - 277). The catalogue includes around 260 coin types, each provided with illustrations.
Contents:
Introduction
Catalogue
Abbreviations used in catalogue
Formulae
Gold coins
Silver coins
Copper coins
Chronology of 'Abbādis governors of Armenia (132 - 220 AH)
Tables
Index of personal names and signs (symbols)
ISBN 978-99941-0-418-5, 148 pages, A4 format, soft cover, glossy paper.
"Tigran Mets" Publ. House, Yerevan, 2011. Price: 40 euros + shipping 5 euros.
To purchase this catalogue please contact the author at:

Craftsmen and coins: signed dies in the Iranian world (third to the fifth centuries $\boldsymbol{A H}$ ) by Luke Treadwell, 2011, 124 pages, well illustrated, paper-back, published by the Austrian Academy of Sciences press; price €31.32. ISBN 13: 978-3-7001-6959-8
"The engravers’ signatures discussed in this book were inscribed over a thousand years ago on the metal surfaces of coin dies which measured no more than three and a half centimetres in diameter. Although not a single signed die has survived to the present day, a small number of the many thousands of coins made from them remain in coin collections all over the world. What do these tiny marks have to tell us about the early medieval Islamic world?


In fact they tell us a great deal about the working lives of two metalworking craftsmen, Mujīb and Hasan, who made dies for mints in Afghanistan and Iran (293/905 to the $360 \mathrm{~s} / 970 \mathrm{~s}$ ). The signatures allow us to identify a number of dirham dies that can be attributed to each engraver. By comparing the style of these signed dies with unsigned dies of the same period we can build up a corpus of objects that can be attributed to each craftsman. The die corpus provides a pool of evidence upon which to base a detailed study of the engraver's working practices. It allows us to see how he manufactured these objects, what kind of tools he used, the styles of script he chose and even the mistakes he occasionally made.

Our engravers' working environment was very different to that of the caliphal period which preceded it. When the unitary caliphal state fragmented into numerous successor state polities, the highly regulated centralised caliphal die workshop disappeared. Since there were no trained dirham die engravers in the successor states, the new rulers were forced to employ craftsmen who had learned their profession as metalworkers or gemcutters in the bazaar, whence they brought their signing practice into the mint. The signing phenomenon, though short-lived, illustrates the momentous changes caused by the collapse of the caliphal monetary system."

## Book Reviews

Early World Coins and Early Weight Standards, by Robert Tye, Early World Coins, York, 2009 ISBN:0952414430, 9780952414438, 189 pages

This book will be difficult for some but an enjoyable read for many. Researchers have already come to appreciate Robert Tye's fastidious, painstaking thoroughness of observation and analysis, shown to such good result in his classic and invaluable book Jitals (1995). There is also a dedicated following for his whimsical, acerbic and invariably alternative insights encapsulated in his occasional papers, mostly on variations of an economic theme: the meaning of money, its social nature, and the political and power relationships which have shaped and influenced it throughout history. This book brings many of these hitherto difficult-toaccess essays together, making them available to a wider audience.

The book is divided into five sections:

1. "Catalogue of coins", giving line drawings and details for 1,248 selected coins from most epochs and parts of the world;
2. "Coin Types, their Spread and Development", a collection of thirteen essays exploring a number of monetary themes which the author believes are significant, interesting or just poorly understood;
3. "Short Accounts of Some Important Coin Types", offering short commentaries on some 174 types of coins catalogued in section 1, elucidating why the author feels each of them was influential in its time and place;
4. "Denomination Sets", another essay on a particular monetary theme; and
5. "Coin Weights and Historical Metrology", a booklet of some seventeen sections exploring in some depth the antiquity, continuity and evolution over millennia, of systems of weights associated with coinages.

Thus as presented, the book is a smörgåsbord of topics about a central theme: coins as money shaped by tradition, politics and the needs of different constituencies. While this structure serves admirably to bring together Tye's writings within a single cover, it does pose challenges for the reader, who might wish that a sharper editing had knit the sections into a more homogenous entity. It is not clear, for example, why the third section did not immediately follow the first, which it expands upon. Nor, for example, why section four was not a part of section two. A broader introduction, elucidating the book's purpose and giving a rationale for the selection of individual essays, would have put the reader in a more receptive frame of mind.

These minor quibbles aside, there is much in this volume that gives food for thought. For example, Tye's focus on "common" coins is highly welcome. As he states, "Rare coins tell us about obscure individuals and lost causes. Common coins bring us into contact with the past as it was lived." He addresses a larger problematique here: classically, numismatics has been fatally fascinated with rarity, a propensity which has tended to draw disproportionate attention to a tiny fraction of coins, to the detriment of a better understanding of the overwhelming numbers of common coins ${ }^{1}$. Indeed, even museum coin cabinets tend to over-represent the rarities, since there is often a specific limit of one or two specimens per coin type in museum collections. Tye does not give much explanation as to why he values common coins, but it is clear from his illustration selections and the tone of the explanatory essays that it is because the most common coins were the most influential. The Athenian owl, the Alexander tetradrachm, the Chinese cash, were the universal currencies of their days, having the same wide influence in their times as the American dollar today. What present-day economist would attempt to explain global financial trends through the lens of the Mauritian rupee or Mongolian tughrik? Yet in a way, that is the distorted lens that much numismatic literature has given to the historical fraternity to examine past monetary issues. Tye has set
about to remedy this, by offering one person's perspective on what coins have been plentiful, and therefore influential, in the past.

Robert Tye is courageous in his opinions. While occasionally his healthy scepticism is misapplied in ad hominem assaults on the scholarly profession, it is sufficiently often focussed on insightful interpretations of monetary phenomena to allow us to forgive the lapses. For example, his essay on "denomination sets" deals with some of the toughest nuts in economic history: who chose the forms of coinage, and for what purposes? Whose interests was coinage meant to serve? Indeed, why was it invented in the first place?

Tye notes that while dealing with the most common coins, one is often struck by the absence, in many places and many times, of the lowest denomination, i.e. copper coins or their analogues. Why was there often no coinage available for the mass of the people? Taking an example from Tudor England, he observes that the dearth of low-value denominations protected the interests of sedentary retail guilds against price competition from the itinerant unorganised sector. He concludes that political action by the guilds prevented the crown from issuing an adequate copper coinage for the poor.

Similarly, Tye addresses the conundrum of the invention of coinage, virtually simultaneously in Asia Minor, South Asia and East Asia in the middle of the first millennium BC. Economic historians commonly explain that coinage invention marked the transition from barter economies to market economies. But Tye notes markets had existed long before in urban civilisations, as had both commodity money-forms and moneys of account. In the light of these facts, he poses the question contrarily: "Why did people take so long to invent coins?" His answer is based on the emergence of reform movements in the three civilisations, during roughly contemporary episodes of conflict and stress, which sought popular support against traditional oligarchies by supporting the development of anonymous (coinage-based) market transactions, which enabled citizens to escape traditional aristocracy-dominated systems of material exchange.

A significant portion of the book is devoted to an in-depth study of metrological systems throughout history. None can deny that weight, equally with metal content, is a key parameter of coinage design and use. Indeed, adherence to a reliable and predictable weight standard is part of the core definition of coinage. Tye explores in detail the evolution of weight systems over great periods of time, concluding that: "...traditional weight systems were often maintained... for millennia. They are, at least sometimes, amongst the most extraordinarily enduring of all human institutions". The very structure of these systems, the common tendency to decimal units but binary fractions, he convincingly attributes to the universal use of the balance, which favoured those multiplicands and divisors.

His horizons in this metrological review are broad: in succession he treats of the weight standards of the ancient Egyptian, Greek, Roman and Sasanian empires; of the medieval Islamic, Carolingian, Scandinavian, English, and other European kingdoms; of the ancient Hindu and medieval Indo-Moslem realms; finishing with a review of Burmese and Chinese weights. In the section on India, he makes an admirable effort to correlate metrology as far back as the Indus civilisation with more recent articulations, drawing upon Marshall's excavation reports and contemporary accounts by such as Kautilya, Manu and Alberuni. He relates the metrology to the coinage systems, drawing together into a coherent structure such traditional measures as the ratti, masha, dharana, suvarna and tola. I fear I lack the capacity to comment on the finer points of his metrological exposition, and will leave that to another reviewer. Suffice to say that the book has spawned broader interest in the subject; those intrigued with the congruence of coins and metrology may access the internet group http://groups.yahoo.com/group/numismet.

In summary, this book is provocative, thought-provoking (not the same thing), challenging, exhaustive, highly detailed, and to this reader at least, thoroughly worthwhile. Marked by careful scholarship throughout, there is also a certain amount of personal opinion which stokes the thought processes while leaving the
reader to sort wheat from chaff. Most importantly, it is not just a useful reference work, but a compelling read in many parts. Readers, depending on their proclivities, will find much to praise or condemn, but they will not be disappointed by dullness.

1 A significant exception to this trend has been the rich and highlyproductive tradition of hoard analysis

John S. Deyell

British Museum Research Publication No 174. Catalogue of the Japanese Coin Collection (pre-Meiji) at the British Museum. Shin'ichi Sakuraki, Helen Wang and Peter Kornicki with Nobuhisa Furuta, Timon Screech and Joe Cribb.
An outline of this publication appeared in ONS 207. The work is valuable in a number of ways. The first three articles deal with the acquisition of the collection of Kutsuki Masatsuna by the British Museum, and offer an entertaining insight into Victorian museum practices.

Professor Shin'ichi Sakuraki provides a modestly entitled "Brief" History of Pre-modern Japanese Coinage, which contains far more information than any other western account I am aware of. He presents the full background of the "Fuhon" pieces, claimed by some to be Japan's earliest coins, although the author, among others, is not wholly persuaded. The economic background of later gold, silver, and copper issues is then presented.

The next article deals with the history of Japanese numismatics. The life of Kutsuki Masatsuna is then described. Both articles are interesting background information.

The catalogue proper then follows. As this is just the listing of the BM collection, not all known coins are shown. For example, only three types of oban are shown, and the Nagasaki Trade Coins are not represented at all, although they are pretty common coins (did a tray get missed or were these not considered as Japanese issues at the time the collection was made?). Any omissions are amply compensated for by what is present. There is a comprehensive collection of the "Twelve Antique Coins" which is free from any of the modern forgeries which bedevil the presentday collector. There is an extensive collection of Japanese coins made in imitation of Northern Song Chinese coins, and of the often crudely written and bizarrely inscribed unofficial Shimasen which are not often seen elsewhere. There are good examples of the silver square-holed coins issued in the $16^{\text {th }}$ century. The Kan'ei $t s u \bar{h} \bar{o}$ coin which was issued for nearly 230 years will form the majority of any collection of Japanese coins, and there are over 500 specimens, all attributed in line with the latest thinking. However, there is no description of the differences which particularise the types.

If there are only three oban in the collection, there are plenty of other lower denomination gold coins. Of particular interest are the twenty-six gold coins from Kōshu, again very rare items. Silver coins are well represented. The catalogue ends with a selection of some of the decorative and unorthodox coins issued locally in the 19th century.

Overall, the book is well-presented, and would make a welcome addition to the library of those interested in Far Eastern coinages.

## David Hartill

Gold Coins in the Collection of the Asiatic Society, Sutapa Sinha (editor), the Asiatic Society, Kolkota 2010, pp. xi, 138.
(See also the review of this book by N. Rhodes in JONS 207)
The memory of Rita Sharma, former Keeper of Epigraphy and Numismatics in the National Museum in New Delhi, is a dear one to all who had the pleasure of meeting or working with her. Her untimely death in a tragic accident in 2008 robbed Indian numismatics of one of its leading figures and one of its most respected professionals. This volume dedicated to her memory represents her inventory of the gold coins in the collection of the Asiatic Society, edited and prepared for publication by Dr Sinha of Kolkota University.

This famous collection is one of the oldest in India, but many of its former holdings were long since transferred to the India Museum, Kolkota. The coins published here are the residual holdings of the society, mostly from southern India, perhaps part of the Mackenzie Collection which contained many southern Indian coins and entered the Society in 1844. At least one of the coins (p. 26, no. 3/1) was in the collection even before that. It appears to be a contemporary gold copy of the ancient Kashmir gold series, most closely associated with the issues in the name of Shri Pratapa (which are normally so base they appear to be copper). This coin was first published as part of the Asiatic Society Collection in 1832 by its secretary H.H. Wilson ('Description of select coins, from originals or drawings in the possession of the Asiatic Society, Asiatic Researches, 1832, pp. 559-606) as his plate II, no. 46. Another coin, attributed by Sinha to the Yadavas (p. 49, no. 3/9) also appears to be the specimen published by Wilson as his plate IV, no 87, as from a drawing of a specimen then in the possession of Colonel Mackenzie.

As well as Indian coins, there are also a few examples of the gold coinage of Sumatra (pp. 117-9), and some of the gold coins imported in trade into the subcontinent: ducats of the Republic of Venice (pp. 121-3) and the Ottoman Empire (p. 116). Two Burmese charms (pp. 131-2) have been mistaken for south Indian pieces.

Dr Sinha is to be thanked for bringing Rita Sharma's work to fruition and for ensuring that these coins are made available to a wider audience with large clear images and full details. Even in the age of on-line inventories it remains a pleasure to hold this well-made book with its clearly presented account of these coins in the possession of Asia's most famous learned society, especially as grateful memorial to a much-missed colleague.

> Joe Cribb

Felicitas. Essays in Numismatics, Epigraphy \& History in honour of Joe Cribb
Editors: Shailendra Bhandare, Sanjay Garg
Published by Reesha Books International, Mumbai (www.reeshabooks.com), overseas distribution by Todywalla Auctions,

ISBN 81-89752-08, A4 size, case bound, pp. 500, Price Rs 2,200, US\$ 70, £ 40.

This volume has been published as a tribute to Joe Cribb and to the influence for good he has had during many years working in the Department of Coins and Medals at the British Museum. Many of the contributors, who have written the papers in this book, have begun by paying tribute to Joe for the lessons he has taught them. Their comments relate to the period after Joe began working at the British Museum. The development of Joe's interest in coins during his schooldays has been largely omitted, so it is reasonable to rectify this.

## Joe Cribb, the schoolboy who became interested in coins.

On page 31 there is a photograph of Steve, sitting in his wheelchair, with the caption "Steve Cribb: Joe's brother who introduced Joe to the wonderful world of coins". The caption is true and the reviewer uses a reviewer's licence to add some background to this succinct comment.

I first met the Cribb family at a time when Steve was a young teenager, Joe was in about his last year at primary school and I was a medical student. Steve was a keen coin collector and I made many visits to their home. Steve was not able to access his coins, so one of his brothers brought the trays from his coin cabinet. This was usually Joe. At one time, Steve was interested in Nuremberg jetons. I don't remember them attracting Joe. It was when Steve developed an interest in Chinese cash and ancient Chinese coins with unusual shapes, that Joe's interest was aroused. Steve discovered Wallis and Wallis auctions of Lewes. I was despatched to bid for a pair of uninscribed ancient Chinese hollow handle spades. Because Steve had introduced the auction house, he had first choice and I acquired the spade with a chipped foot (later
published). Steve obtained many of his Chinese coins by post and I remember several sessions during which Steve, Joe and I discussed which pieces were genuine and which were forgeries; and also the techniques used by forgers and how to identify their products more easily. In his survey of Joe's museum career, Andrew Burnett has written (page 25): "He cleverly picked a topic, China, in which the department had no expertise, and first learned Chinese, and then rapidly became the only person in the Western World who at that time had any real expertise in Chinese numismatics ..... and he alone had any idea about what was genuine and what was fake". It had all begun much earlier, sitting around the front room table in the Cribb's home.

Wallis and Wallis also yielded a Kushano-Sasanian quarter dinar of Hormazd Kushanshah. Who were these people making such attractive gold coins portraying the standing king enclosed by a legend in cursive Greek script that was difficult to read? What was happening in Central Asia? Who were the Kushans? We debated.

Several years later, Joe began his work in the British Museum. Shortly after this, he showed me, with great enthusiasm, some packets of copper coins still wrapped in newspapers. They looked as if they had not been disturbed since arriving at the British Museum in the late nineteenth century. Their inscriptions, partly in Kharosthi and partly in Chinese, combined Joe's interests in the Kushans and the Chinese. The rest is history. Joe's paper, written over a decade later, on "The Sino-Kharosthi coins of Khotan" (1984-85) is the best study of this subject.

## Felicitas

The book is introduced by a brief editorial written by Shailendra Bhandare and Sanjay Garg. This is followed by the curriculum vitae of "Joseph Edmund Cribb". The many achievements, publications, and distinctions during his career of forty years at the British Museum are listed. Andrew Burnett has added a survey of his career. The introductory section ends with a selection of photos illustrating Joe, his family and his colleagues.

The body of the book comprises a series of twenty-one papers covering a wide range of topics.

1. Michael Alram, Coinage, prestige and identity: from Rome to Persepolis and China.
2. Shailendra Bhandare. Linking the past: overstruck coins and the chronology of the Satavahanas
3. Robert Bracey. Kankali Tila and Kushan chronology
4. Vesta Sarkhosh Curtis. Fascination with the past: ancient Persia on the coins and banknotes of Iran
5. John S. Deyell. Reinterpretation of a Samatata coin: the first numismatic depiction of Bodhisattva Manjushri
6. Elizabeth Errington. A hoard of punch-marked coins from Mathura (?)
7. Harry Falk. Ten thoughts on the Mathura lion capital reliquary
8. Christine Fröhlich. Looking for Tyche: on the tracks of a syncretism from Greece to Gandhara
9. Sanjay Garg. The Raj and the Rajas: a tale of numismatic diplomacy
10. Najaf Haider. Minting technology in Mughal India
11. Terry Hardaker. Aspects of human society from the earliest punch-marked coinages of the Indian subcontinent
12. Syed Ejaz Hussain. Coins and commerce in Bihar in seventeenth century: some reflections
13. Barbara Mears. A review of the pagoda coins of South East India during the Nayaka and early colonial period
14. Wilfred Pieper. Haraśrī: a new king of ancient Almora
15. Himansha Prabha Ray. Coins as history: Kuninda and Kota coins of the Punjab
16. Nicholas Rhodes \& Vasilijs Mihailovs. The coinage of Samudra Pasai
17. Sutapa Sinha. History of the coin collection of the Bengal Sultans in the British Museum
18. Paul Stevens. John Prinsep's copper coinage
19. Pankaj Tandon. The crowns on Kanishka's bronze coins and some additional Siva images on Kushan coins
20. François Thierry. Onomastic, title and chronology of the Türgesh Kaghans
21. Helen Wang. Famous and not-so-famous people associated with the Royal Asiatic Society.

The book ends with a list of contributors, followed by a selection of colour plates.

The list of contributors, and the wide range of subjects they have chosen to write about, reflect the broad scope of Joe's own interests and the extensive range of his activities during his career at the British Museum. Scholars from a range of different backgrounds in numismatics and history will find evidence relating to their fields of interest in this volume. The papers are generally well researched and of a high standard. The printed presentation is good, and so are the illustrations.

It is not practical to discuss each paper individually, so the comments that follow are selective. These comments are subjective insofar as they relate to points that strike the reviewer, rather than being based on inherent merits.

Barbara Mears has undertaken the difficult task of trying to correlate the observed types of 'three swami' and 'one swami' pagodas of south east India with the descriptions, names and mint attributions provided by earlier travellers to the region. This is a complex piece of research and the end result is a much clearer understanding of this fairly common coin series.

The study by Pankaj Tandon into the forms of crown used on Kanishka's copper coins provides a further tool in the task of analysing Kushan copper coinage. There is still much work to do in analysing mint attributions and the sequence of issues. He adds to Joe's earlier paper (1997) some new Siva images on Kushan coins, but he avoids the vexed question of identifying this deity. The coin inscriptions state very clearly that he is the Kushan god Wesho. Indian iconography later adopted this image to represent the Hindu god Siva. What is the relationship between Wesho and Siva? It is a question that certainly merits more thought and I am sure Joe would agree.

Christine Frölich has looked at the Greek goddess Tyche and her affinities with the more easterly goddess Ardoxsho and the Indian goddess Hariti. A separate study by Madhurika Maheshwari ('From ogress to goddess, Hariti, a Buddhist deity', Mumbai 2009) considers the situation from the Indian perspective. She draws clear links between Hariti and Ardoxsho. These two studies, one starting from the Greek end of the spectrum and the other starting from the Indian end of the spectrum, are complimentary and best read together.

François Thierry has tackled the literary evidence relating to the Türgesh kaghans of Central Asia, a people whose cash-style coins are now becoming better known. His analysis corrects earlier errors and provides a historical background, which can be used by numismatists who study their coinage.

Overstruck coins provide a valuable source of evidence for establishing the relative dating of coin issues. Shailendra Bhandare has looked at this kind of evidence in the context of Satavahana coinage. The traditional view that coins with the issuer's name 'Satavahana' were all struck by the founder of the dynasty is no longer tenable. It is now clear that some of these coins were struck later, probably using 'Satavahana' as a dynastic name. This is just one of his conclusions.

Nicholas Rhodes and Vasilijs Mihailovs have discussed the historical evidence relating to the rulers of Samudra Pasai, including that provided numerous tombstones. They present a revised chronology for the rulers of this Sumatran kingdom, along with a catalogue of the coins.

The comments made in the preceding paragraphs give an idea of the scope. Many scholars will find the papers interesting and useful. I am pleased to recommend this book and would also like to congratulate the editors for assembling such an interesting group of papers.

## Corrigendum

In two articles by Ludovic Liétard, published in JONS 207, 'A new type for Marinid or early Wattasid silver coinage' and 'New mint names for a Marinid half dirham type' a typographical error occurred in the Arabic text. This typographical error was a superfluous alif which, due to a software problem, appeared at the beginning of some words.

While it is quite probable that readers would remedy the error themselves, for the sake of correctness, the author would like to bring to the readers the final and definitive descriptions of the coins where the typographical error appeared.

1. A new type for Marinid or early Wattasid silver coinage


Fig. 1 (coin 1): a half dirham listed by Arroyo
Obverse:


Fig. 2 (coin 2)
Obverse:


Fig. 3 (coin 3)
Obverse:


Fig. 4 (coin 4$)$

Obverse:


Fig. 5 (coin 5)
Obverse:
امـامنـا
الله
Reverse:
اصيلا
امـامنا
الله


Fig. 6 (coin 6)
Obverse:


Fig. 1 (coin 1): a half dirham (obverse) struck by 'Abd al-Haqq II in Aṣila (El Hadri 403)

Obverse of coin 1 (Quran 65:2):

$$
\begin{aligned}
& \text { و من بثت } \\
& \text { الله يجعل } \\
& \text { لة مخرجا }
\end{aligned}
$$

## Articles

## REFLECTIONS ON "OBVERSE" AND "REVERSE" IN NUMISMATICS ${ }^{1}$

By John Deyell

"Obverse" and "reverse" are not exclusively numismatic terms but are more widely used, for example in the printing trade and in optical storage technology. The common element in all these usages is that the terms differentiate the two sides in essentially two-dimensional media, such as coins (ignoring the edge), paper, fabric or recording discs. The implication is that each has a "front" side that is by the standards or conventions of the industry somehow more significant, higher-quality or otherwise of greater importance, than the other side, the "reverse" side. Where the medium bears information, as is the case with coins, banknotes, printed pages or discs (double-sided DVDs, etc.), the obverse or front is the side on which the message begins and the reverse carries the remainder of the information.

Since classification lies at the core of numismatic science, there is a long and varied literature on the issue of defining the basic terms "obverse" and "reverse". There are at least three threads throughout this discussion worth mentioning: the technical definition, the aesthetic definition and the literary definition.

## I. The technical definition of obverse and reverse.

The technical aspect relates to the process of minting itself. Throughout history, whenever both sides of the coin have been die-struck, the manufacturing process has involved a lower stationary die and an upper moveable die. Conventionally, the lower die is called the anvil die or pile die, and the upper die is called the hammer die or trussel die. In hand minting, the lower die is set in an anvil, bench, or stone, and the upper die is held in the hand, or with tongs, or connected by a hinge to the lower.


Fig. 1: Indian hand-minting, according to a $19^{\text {th }}$ century edition of a $16^{\text {th }}$ century treatise on the operation of the Mughal mints. ${ }^{2}$

In mechanical minting, the lower die is set in the machine frame, and the upper die is set in a vertically-mobile apparatus. In both processes, the blank coin planchet is set on the lower die and the upper die imparts shock pressure to the planchet, driving it onto the lower die. In hand minting, the pressure is applied by a

[^0]hammer; in mechanical minting by either a screw, piston, or lever arm mechanism propelled by any available power: human, animal, water, steam, electrical or other.


Fig. 2: Coin press formerly used at the Utrecht Mint (Netherlands). ${ }^{3}$ The coin dies have been removed, but it can be seen that the lower die was set in a plate in the immobile base, while the upper die was attached to the rocker arm.


Fig. 3: Diagram of hand minting showing the shock absorption effect of the planchet ("blank"). ${ }^{4}$

Since the planchet absorbs part of the shock of striking, the lower die is somewhat less stressed than the upper die. Therefore, the lower die tends to last longer in the manufacturing process. This is known from a number of observations and experiments ranging from the most ancient period to the most modern. ${ }^{5}$ Records and

[^1]reports from medieval mints and modern mints alike show that the consumption rate for upper dies is consistently higher than for lower dies.


Fig. 4: Lower or pile die (left) and upper or trussel die (right) after hand-striking in an experiment by Di Hu. ${ }^{6}$ The upper die shows mushrooming due to the impact of the hammer, while the lower die shows no such deformation after equal use. The same effect was earlier reported by Sellwood, whose first upper die split. Surviving ancient dies show the same effect.

Although in pre-modern Asian numismatics such mint records are seldom available, the same phenomenon can be deduced through die-count or die-link studies of the surviving coins themselves. For example, the die-count of the Indo-Greek tetradrachms in the Qunduz hoard ${ }^{7}$ (ca. 140-100 BC) yielded the following results:

| Coin issuer | No. of <br> coins in <br> sample | No. of <br> obverse dies <br> identified | No. of <br> reverse dies <br> identified |
| :--- | :---: | :---: | :---: |
| Demetrius II | 50 | 16 | 44 |
| Eucratides <br> helmeted | 123 | 91 | 107 |
| Eucratides II | 130 | 87 | 117 |
| Heliocles | 204 | 141 | 178 |
| Platon | 12 | 7 | 10 |
| Total | 519 | 342 | 456 |

For this study, the cataloguers defined the "obverse" as the side bearing a regal portrait, and the "reverse" as the side bearing an inscription. So the results are comparable for all reigns.

In this case, the number of dies needed to impress one side of the coin was always less than the number needed to produce the other side, at $75 \%$ overall.

Di Hu, "Experiments in ancient Roman coin minting", unpublished paper available online at: www.archaeologystudent.com
${ }_{7}$ Di Hu, op. cit. Fig. 23.
${ }^{7}$ Raoul Curiel and Gérard Fussman, Le trésor monétaire de Qunduz, Paris, 1965, pp. 49-54


Fig. 5: Bactrian tetradrachm of Eucratides showing convex obverse and concave reverse. ${ }^{8}$

From inspection of the coins, it is evident that the portrait side was consistently convex, while the legend side was consistently concave. As well, the volume of metal in the raised portrait was much greater than the volume of metal in the relief on the other side.

Taking these two factors together, one can deduce that the portrait side was produced by the anvil die and the legend side by the hammer die. Why? Simply because the physics of imparting an impression to both sides requires that the hammer die push metal downwards into every cavity of the anvil die. This is best achieved by an inside-out transmission of pressure (hence the concave upper and convex lower profiles). In effect, the IndoGreek tetradrachm was a mild form of die cap. So we can confirm that it was the lower or anvil die that required fewer replacements during the manufacturing process. Since the portrait was a masterpiece of the diesinker's art, it made sense to minimise the number of die reproductions needed for a coin issue.

The same physical effect pertained in mints producing Islamic coins. In a study of die identities in Husainid silver tankas of the Bengal Sultanate (ca. 1493-1519), I encountered the same imbalance of die counts:

| Husainid <br> coin type | No. of coins <br> in sample | No. of obverse <br> dies identified | No. of <br> reverse dies <br> identified |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 33 | 29 | 32 |
| $\mathbf{2}$ | 62 | 57 | 61 |
| $\mathbf{3}$ | 11 | 10 | 11 |
| $\mathbf{4}$ | 48 | 35 | 42 |
| $\mathbf{5}$ | 54 | 46 | 53 |
| Total | 208 | 177 | 199 |

In this case, the die ratio of one side to the other was $89 \%$. I would attribute this milder disequilibrium to the fact that the Indo-Greek coins had moderately high relief even on the reverse side (upper die) and relatively thick flans, causing more stress to the upper die and less to the lower. The Islamic coins had lower relief on the reverse side (upper die), causing less stress to the upper die than on Indo-Greek coins, and relatively thin flans, causing more stress to lower dies than on Indo-Greek coins. Even then, the pattern of fewer anvil dies is discernible.

Except in very rare cases, therefore, it is safe to say that, in technical terms, given enough specimens, it is possible to detect which face of a coin was produced by the anvil die and which was produced by the hammer die. Because the "obverse" and "reverse" naming conventions were earliest applied to coins in the Greek minting tradition, the anvil (portrait) die is called obverse and the hammer (legend) die is called reverse. So strictly in technical terms, the side of the coin produced by the lower die is obverse, while the side produced by the upper die is reverse.

Where coins followed this design tradition, the mints in which they were produced tended to follow the ancient die protocol of

[^2]placing the portrait die below and the reverse die above. One sure indicator of this fact is the production of brockages.


Fig. 6: Brockage of Western Kshatrapa silver dramma ${ }^{9}$
It is noticeable that the silver drammas of the western Kshatrapas (ca. AD 150-350), which were produced in great numbers to a close minting tolerance, are frequently found with a brockage of the portrait side. Legend side brockages, if they exist, are rare.

Since it is generally agreed that brockages occur due to adhesion of an already-struck coin to the upper, hammer die, it is clear that the Western Kshatrapa mint workers engraved the portrait on the lower, anvil die (as did their Indo-Greek predecessors).

I have a gadhaiya paisa mint error in my possession (ca. $11^{\text {th }}$ $12^{\text {th }}$ century AD ), a coin that features a reverse impression on one side and a rough surface on the other side.


Fig. 7: Normal gadhaiya coin, showing vestigial royal bust on obverse and highly stylised fire altar on reverse. ${ }^{10}$


Fig. 8: Error gadhaiya coin, showing normal reverse but only rough striations on the obverse.

Upon reflection, it appears the blank flan had not been placed on the lower die at all, but sat haphazardly on the medium that held the anvil die, and was struck anyway by the minter using just the upper die. Hence, we deduce that the "portrait" side of the gadhaiya paisa was produced by the anvil die. This is confirmed when we notice that the gadhaiya coins have a high relief "portrait" on a convex background, while the other side has a low relief design on a concave background (much like the Indo-Greek tetradrachms).

Such die management was obviously technically superior, since it permitted lower effort and hence lower cost, to engrave dies. For this reason, the technique was adopted wherever it made sense.

For example, it is well known that brockages of the AngloIndian silver rupee almost always occur on the portrait side (the famous "lakhi" or "lucky" rupee). So for the most part, the British Indian mints engraved the king-emperor's portrait on the lower die.


Fig. 9: Anglo-Indian silver rupee brockage ${ }^{11}$
The same convention appears to have been followed by mints of the Princely States as well: at the dawn of the twentieth century, a senior official of the Nizam's mint in Hyderabad (India) wrote,

The obverse die is firmly wedged in a hole made in a piece of iron anvil...in a large bolster of black granite burried [sic] partly in the ground... The reverse die is similarly wedged in wrought iron handle. ${ }^{12}$

## II. The aesthetic definition of obverse and reverse.

This brings us to the second line of inquiry into "obverse" and "reverse", namely the aesthetic one. By convention, the side of the coin bearing a portrait, royal or otherwise, is the "obverse" ("heads" in the American tradition), while the other side is the "reverse" (American "tails"). This is more a question of relative honour, one side to the other, or ritual priority, or greater political significance. More than mere convention, it is a deeply-rooted and broadly adopted practice, with much force of great antiquity and popular acceptance.

One has only to glance through a catalogue of current world coins to see that many of the world's countries, whether kingdoms or republics, have adopted some variation of the convention of having a bust or portrait of a person, living or dead, on one face of the coin. So by this tradition, "heads" are obverse, "tails" are reverse.

This tradition, of course, links closely into the above discussion on minting techniques, since the prototype "heads and tails" was the Greek coinage, where the coin's obverse bore a portrait created by the lower die.

## III. The literary or message-bearing definition of obverse and reverse.

There is of course, a third line of thought on this question, which we might term the "literary" convention for lack of a better word. This holds that where a coin is aniconic and largely comprises a written message, then the side on which the message commences is the obverse, while the side on which it finishes is the reverse. Stan Goron adopted this convention in his landmark catalogue of coins of the Indian Sultanates. ${ }^{13}$

Indeed, more broadly in Islamic numismatics, in instances where the legend runs to both sides, most cataloguers have adopted this convention.


Fig. 10: Bengal Sultan Hussain Shah AR tanka. Legend starts on the obverse (left) and continues onto the reverse (right). ${ }^{14}$

[^3][^4]More broadly, this is the usage in other disciplines and industries, referred to above, especially in printing and publishing.

Of course, while images are rare on Islamic coins, variations in legend are not. One recurrent pattern has been the display of the name or titles of the Khalif on one side, with the name and titles of the ruling sovereign on the other.


Fig. 11: Delhi Sultan Balban AR tanka. King's name and titles on the left; Khalif's name and titles on the right. ${ }^{15}$ Which is the obverse?

This has perplexed cataloguers; some have given priority to the religious leader, others to the secular leader. So the question of obverse and reverse in Islamic numismatics is more complex.

Some time ago, Bacharach and Awad discussed this issue at some length. ${ }^{16}$ They first approached it from the technical perspective, attempting to use brockages to see if there was a consistent pattern in coin production. They found that neither the Khalif nor the king had priority in die placement; both were subject to brockages. So neither is per se the obverse from a technical perspective. They did find that the mint and date were consistently found on the hammer die, which was replaced more frequently.

They concluded, the "only solution is for scholars to define obverse and reverse in terms of the priorities they consider most important and then be consistent in their own work". Probably a good last word on the subject!

## AN UNUSUAL ABBASID DINAR

## By Yahya Jafar

In this article I am publishing an unusual Abbasid dinar ${ }^{17}$ which was minted in al-Muwaffaqiya in AH 267. Its peculiarity is that it deviates from the norm that was used in minting dinars for that period in that it lacks the usual attributions; it simply shows the shahada formula on the obverse and reverse of the coin. In order to suggest a possible explanation for the deviation of this coin from the norm, one needs to review briefly the events of the time.

The most dangerous revolt that the second-period Abbasid dynasty faced was that of the Zunj. It had erupted during the reign of the caliph al-Muhtadi (ан 255-256) under the leadership of a Kharijite called 'Ali b. Mohammed, and it took fifteen years to quell. 'Ali b. Mohammed claimed descendency to the fourth righteous caliph, 'Ali b. Abi Talib, and led a large group of mostly African slaves, who were referred to as "Zunj". These slaves had laboured in difficult conditions in the vicinity of Basra in the south of Iraq, mostly in agriculture and salt mining. This Zunj Rebellion, as it became known, had successfully defied several attempts by Abbasid armies to quell it. Its leader, Ali b. Mohammed, referred to himself as "al-Mahdi", and took refuge in a city that he called al-Madina al-Mukhtara, the exact location of which is not yet determined. This city gradually gained popularity and importance as it was said to have been on the route of north-south trade. In

[^5]fact the whole rebellion gained popularity in the south in view of the diminishing strength and popularity of the Abbasid caliphs.

In AH 267, the Caliph al-Mu'tamid ala Allah gave the task of quelling this rebellion to his powerful brother, al-Muwaffaq biAllah, whose first action was to establish and set up camp in a newly built town which was called al-Muwaffaqiya. This town was reportedly situated on the river opposite al-Madina alMukhtara in order to establish better control of activities and try to divert trade from al-Mukhtara. Gradually, al-Muwaffaqiya gained popularity and attracted many who diverted much of their trade to it. Through various effective military campaigns, 'Ali b. Mohammed was eventually defeated and killed in АН 270, after which, al-Muwaffaqiya appears to have lost its importance. On the other hand, some historians claim that, when the Zunj attacked, destroyed and burnt the city of al-Basra, many of its inhabitants took refuge at al-Muwaffaqiya and remained there after the Abbasid army left it; then it gradually became known as al-Busaira (= little al-Basra) and, thereafter, al-Basra, which is where it is today.

Returning to the dinar in question, I would suggest that, since the Zunj rebellion was popular in the south of Iraq and the Abbasid regime was somewhat unpopular, it would have been difficult to initially convince the populace there to trade using coinage carrying the name of the reigning caliph. Yet, at the same time, there was a need to issue coinage that included the name of al-Muwaffaqiya on the coins for propaganda purposes. Thus, in its early days of the establishment of the city, the coinage was struck in the style characteristic of the early dinars of the first Abbasid period (i.e. without the name of the caliph), and even in size. It is worth pointing out that the date on the coin may present a problem in that the first tooth of the word sabic seems to be higher than subsequent teeth which may suggest the beginning of the word tisa; however, I believe that the die cutter erred and corrected himself by adding a dot under the fourth tooth, thereby confirming it to be a $b \bar{a}^{\prime}$, hence, the word becomes sabi (=seven) rather than tisa ${ }^{\prime}$ (=nine)

Thereafter, as the Abbasid campaign gained acceptance and popularity, the issuing of coins there reverted to the norm, as can be seen from the example of the dinar ${ }^{18}$ issued at al-Muwaffaqiya dated AH 269.

The description of the dinar dated AH 267 is as follows:


Outer obv.:
لله الأمر من قبل ومن بعد و يومئذ يفرح المؤمنون بنصر الله

Inner Obv.:


Rev. Margin:
محمد رسول اله ارسله بالهـى و دين الحق ليظهره على الدين كله و لو كره

[^6]The descripton of the dinar dated AH 269 is as follows:

لا لا شاله و الـه الا له

| الله | God is our Lord |
| :---: | :---: |
| محمد رسو لنا | Muhammad is our Messenger |
| المـهي امـامنا | al-Mahdi is our leader |

## Standard Muwahhid legend on square, silver dirhams

These Muwahhid legends (Vives ${ }^{19}$ 2088; Hazard ${ }^{20}$ 1101) are the most common legends in the hoard, found on at least one side of 482 out of 575 coins. The original coin was struck by the Muwahhids (Almohads) in Spain and North Africa in large quantities and was used on dirhams ( 1.55 g ) and a few half dirhams. As the coin does not carry the name of a ruler, it cannot be dated, but is assumed to have first been struck under 'Abd alMu'min 524-558/1130-1163 and then by succeeding rulers. These were struck with and without mint names. At least 15 mints in Spain and 22 in North Africa made the coins. During the Muwahhid reign the style of writing was very neat in three evenly spaced lines. After the fall of the Muwahhids in AD 1269, the Hafsids continued to strike the same coin. Christians made copies of these coins - millares (Blancard ${ }^{21}$ ) - for use in commerce with Andalusia and the Maghreb.


Figure 1: Type 7
What sets apart the majority of the hoard coins is the use of parallel lines to separate the legend lines (figure 1). 333 coins are Type 7; none have a mint name, two are half-dirhams.

Specific gravity tests on three of the coins yield a fineness of 0.70 silver. Die analysis indicates 103 obverse dies and 98 reverse dies in this type. Using a standard formula (Esty ${ }^{23}$ ):

Estimate of original number of Dies $=\mathrm{nd} /(\mathrm{n}-\mathrm{d})$
$\mathrm{n}=$ the number of coins in the sample
$\mathrm{d}=$ the number of different dies represented in the sample (for a particular side)
gives an estimate of 179 original obverse dies and 165 reverse dies being used. Using a conservative estimate of 5000 coins being struck per die ${ }^{24}$, the original mintage would be about 800,000 coins. Only one coin of this type has been published: Zeno ${ }^{25}$ 52471.

## Type 1



[^7]

Figure 2: Type 1
Fifty-four of the hoard coins have the same legend as Type 7 but without dividing lines. These have a style distinct from the standard Muwahhid coin and can easily be distinguished from them.

Thirteen coins have the mint of Tunis on the reverse and another three do not show the name but are linked by die number. There are die links to Type 13, and from those coins to Type 7, indicating all three types were produced in a close time frame. There are three recorded coins of Type 1 not from this hoard:

Zeno 52451 matches A-001/p-002.
Zeno 70513 (Tunis mint) does not have any die matches.
ANS $^{26} 1937.179 .31007$ of $1.275 \mathrm{~g} 15 \times 20 \mathrm{~mm}$ is from an excavation in Tebega (Tebaga), 'Algeria' (Tunisia) and does not match any of these obverse or reverse dies.

## Type 13



Figure 3: Type 13
When two types of coins are produced at the same time it is likely that a mule is produced. There are many mule variations in this hoard; the one below has an obverse of Type 1 and a reverse of Type 7. Six of the twenty-four Type 13 coins had the identical die reverse. One reverse has the mint name of Tunis but that reverse is not found in the set of Type 7 coins.

Type 22


[^8]

Marinid Legend (anonymous) on square silver coins


Figure 4: Type 22
This anonymous legend set is assigned to the Marinid dynasty under Yūsuf b. Ya'qūb 685-706/1286-1307 (Hazard 1137; El Hadri ${ }^{27} 28$ ) and is duplicated on 12 hoard coins with the addition of parallel lines dividing the legend lines. There are nine hoard coins, including a half-dirham, duplicating both sides. The obverse legend, found on 43 hoard coins, was commonly used by rulers in the Muwahhid, Nasrid, Marinid, and Wattasid dynasties. The reverse legend is found on 20 hoard coins. There is an unusual decoration/symbol at the left of the second obverse line of the dirhams. Three different decorations are used, two in this series.

## Type 24



Figure 5: Type 24
In a set of 14 coins (one half-dirham) we see another set of mules, this time using the obverses from Type 7 and Type 22. Since obverse and reverse dies have different structures, one for receiving the blow from a hammer and the other for being affixed firmly to a solid object, I do not know how these were struck. There are die links to Types 7 and 22.

Type 14


Figure 6: Type 14
The seven Type 14 coins use the standard Muwahhid legends of Type 7, but have two parallel lines with beads in between to separate the legends. None of the coins have all of the legends visible. One coin has a fineness of 0.70 to 0.72 . There are no die links to other types, although Type 34 has a reverse of the same style as Type 14's reverse. The single example of this type

[^9]reported in the literature (Hazard 1101-rules) is from a different set of dies.

## Remaining Coins

Some of the remaining coins are original issues: one standard Muwahhid coin in ornamented Kufic script (Type 2 373), two millares (Type 3 393, 394), and one struck by the Marinid 'Abd alḤaqq II b. 'Uthmān III (Abū Muḥammad) 823-869/1420-1465 (Type 26 392; El Hadri 395; Hohertz ${ }^{28}$ 300). Five coins have the standard Muwahhid legends given above, but on the obverse the word Allah is missing at the end of each line (Type 6 , two dies).

Numerous mules of various types exist. There are coins like Type 7 but with single dividing lines rather than double ones, one incuse coin and some with only one set of parallel lines on the reverse side. Three of the coins repeat the legends found on the Muwahhid quarter dirham (Hohertz 89).

## III Summation

## Deposit of Hoard

The last dateable coin in the hoard, Type 26 392, is from the Marinid ruler, 'Abd al-Haqq II (1420-1465). The style looks the same as his original coins. Type 33411 has part of the name of the Hafsid ruler Abū 'Umar 'Uthmān (839-893/1435-1488). Type 30 also mimics a gold coin of his. That would place the earliest time for deposit of the hoard in the 1435-1488 range.

The common local coinage for small transactions in Hafsid territory was the square dirham. The mass and fineness varied during the years. Tunis was a major commercial port, and during the later part of the dynasty the coins used in trading were from places such as Aragon, Venice, Sicily etc. It is notable that the hoard lacks gold coins, round coins, or coins from other areas other than copies of the old style Muwahhid coins, millares and copies of Marinid coins. This hoard represents small transaction coins.

The Ottomans took over Egypt in 1518 and issued their own coins. Tripoli (Libya), Algiers (Jaza'ir), Gafsa (Tunisia) and Tlemcen (Algeria) were also taken by the Ottomans and mints established quickly. When Tunis was finally taken by them in 1574 (982) a mint was established there that made various coins, including the square ones. None of the Ottoman-Tunis coins are found in the hoard. This would lead us to suppose that the hoard was deposited before the Ottoman conquest of Tunis.

The second last Hafsid ruler, Aḥmad III (950-981/1543-1573) copied the practice of the Ottomans and issued dirhams with his name and date on them (952-964/1545-1556) (Hohertz 243-251). None of these were present in the hoard.

The use of parallel lines to divide legend lines on coinage was not in the history of the Muwahhid, Marinid, or Hafsid coinage. However, to the east the Mamluks of Egypt, Turkish clans (Mitchiner ${ }^{29}$ p201 1196, 1203) and the Ottomans used this device. The prolific akches of the Ottomans started having dividing lines under Murād I (763-791/1362-1389) (Srećkovici ${ }^{30}$ p31) and continued the practice through the 1500 's. Ottoman control in the North African area started in Egypt in 923/1517 and in Algiers around 1515. The hoard coins with parallel lines were probably made after this time.

We can conclude that the hoard was deposited sometime between 1435 and 1545 ; at the latest by the Ottoman conquest in 1574.

## Who issued the coins?

Where do these coins fit in North African numismatics? The hoard coins were made with little control over the quality of workmanship - split planchets, off-angle strikes, and obverse/reverse dies were mismatched. These were probably

[^10]struck during turbulent times. To make almost one million coins nearly one tonne of bullion is required. This could be acquired through taxes or from plundering. The coins mimic the initial coins of the Muwahhid and Hafsid dynasties with their obverse and reverse legends being repeated. The hoard coins also introduce dividing lines for the legends, mimicking Ottoman coins. Is the issuing authority trying to have ties with the Ottomans and the past? A brief history of later turbulent times in Tunis follows, taken from the following sources: Arnoulet ${ }^{31}$ (excellent detail), Bosworth ${ }^{32}$, E.I. ${ }^{233}$, Husain ${ }^{34}$, Julien ${ }^{35}$, Mercier ${ }^{36}$, and Perkins ${ }^{37}$.

## Hafsid Turmoil

In 748/1348 Tunis was conquered by the Marinids and occupied for two years. The Marinids reoccupied Tunis in 757/1356 for a few months.

In 932/1526 al-Ḥasan b. Muḥammad V (Al-Ḥasan), after the death of his father, took reign of the Hafsid dynasty by murdering two of his brothers. His youngest brother, Rashīd, fled and appealed to the Turkish sultan for help in restoring him to the throne. Rashīd was jailed. The murders undermined al-Hasan's authority and civil war broke out. Khayr al-Dīn (Barbarosa), the Turkish ruler of Algiers, was provided with 80 galleys and 8000 soldiers by the sultan to conquer Tunis. He arrived at the entrance port to Tunis, La Goulette, and was welcomed by the people, who believed he had brought Rashīd back. The next day, 14 August 1534, Barbarosa entered the gates of Tunis, plundered the city and drove al-Ḥasan from the city. Al-Ḥasan appealed to the Holy Roman Emperor and King of Spain, Charles V. Christians were threatened by the power being exerted in the western Mediterranean by the Turks. The Pope granted Charles V the right to $1 / 10^{\text {th }}$ of the revenue of the Spanish clergy enabling the king to fight Khayr al-Dīn with forces sufficient to destroy Khayr al-Dīn's power (Husain p38 note 3). On 14 July 1535, with a fleet of 400 ships and 30,000 men, Charles V captured La Goulette. Six days later he took Tunis and restored al-Ḥasan to the throne. Three days of looting followed, and thousands were reportedly killed. Charles V acknowledged that al-Hasan was hated by his subjects and that after the fearful massacre which had marked his return 'he was even more an object of contempt and his authority was absolutely nil' (Julien p284). The emperor confined himself to leaving a few troops at La Goulette and left al-Ḥasan the task of making provisions for his own safety.

In a campaign against Kairouan in 1542, al-Hasan was deserted by his troops. He resigned himself to go to Europe to beg for reinforcements. Before leaving for Europe, al-Hasan placed his treasure and jewels in La Goulette, entrusting them to the Spanish governor, Don Francisco de Tavar. In addition, he filled a ship with all kinds of goods to sell in Italy. Al-Ḥasan had hardly arrived in Europe when he received alarming news from the commander of La Goulette - his son, Aḥmed III, who was commander at Bône, had seized authority in Tunis.. Al-Hasan headed back with adventurers and infantry recruited in south Italy. But his son was prepared for resistance and had considerable forces. Al-Ḥasan was defeated and brought to his son. A choice

[^11]was given - life imprisonment or loss of vision. He chose the latter. After this, his son Ahmed III gave him some freedom, as the father was in disrepute and not dangerous. The father escaped and sought refuge among the Spanish Christians at La Goulette. The treasure and jewels were no longer there and he accused Don Francisco de Tavar of having taken all of his wealth. Al-Hasan then left for Sicily and later died. Rebellion in Tunis drove Ahmed III from the throne and placed his uncle, Moulay 'Abd al-Malik there as ruler. However, the uncle died 36 days later and the younger brother of Aḥmed, Moulay Muḥammad (Muḥammad VI), was chosen as the new ruler. Ahmad was winning support in the interior of the country during this time, and eventually drove out his younger brother, who took refuge in La Goulette.

In Algiers, a new ruler was also appointed, the beylerbey 'Uludj 'Alī̀, who suggested to the Ottoman sultan, Selīm II, that all of North Africa be brought under Ottoman rule. He invaded Tunisia in October, 1569 and easily captured Tunis. The Hafsid ruler, Aḥmed III, fled to the Spanish at La Goulette with his treasure and there joined his brother, Muḥammad VI. 'Uludj 'Alī installed a governor in Tunis and returned to Algiers. Aḥmed III left for Spain and pleaded with Philip II for the means to recover the kingdom. Philip's bastard brother, Don Juan of Austria, took his forces of 138 ships and 27,500 men and landed at La Goulette on 2 October 1573. He communicated to Ahmed the terms for coming back - that nothing could be done without approval of the Spanish governor. Ahmed III would not agree to the terms, but his brother, Muhammed VI, agreed and was placed on the throne. Muhammad VI was hated by his subjects as he was the puppet of the Christian Don Juan and the Spanish. The Spanish commander took control of all the valuable articles in Tunis and took four columns of the Great Mosque. In June of 1574, 24 Spanish companies and 21 Italian companies were left to guard Tunis.

Again, 'Uludj 'Alī of Algiers mustered 6,000 riders to attack Tunis by land while a Turkish fleet of 4,000 men landed at Carthage on 1 July 1574 to attack Tunis from another position. Tunis was captured. The first attack on La Goulette was carried out and on 13 September it was taken. Muḥammad VI and his family were captured and taken to Istanbul. Aḥmed III, who had been put in irons on one of Don Juan's galleys, was finally released with his wife and children and sent to Sicily where he later died. The Hafsid dynasty ended.

The exact ruler who issued the majority of the coins in this hoard cannot be identified since specific documentation is lacking, but these coins were probably made during these tumultuous last decades of the Hafsid dynasty.

## SOME CONTEMPORARY FORGERIES OF AKÇES OF THE OTTOMAN SULTAN MURAD IV (1623-1640)

By Nikolaus Schindel

In the current literature on the economic history of the Ottoman Empire, the $17^{\text {th }}$ century is usually defined as a period of severe crisis, especially because of an alleged debasement of the main denomination, viz. the silver akçe. New numismatic evidence is challenging this view: ${ }^{38}$ one of the main results of the analysis of the Beçin coin hoard closing under Ahmed I (1603-1617) is the fact that there was no reduction in the silver content of the akçe under Murad III (1574-1595), nor under his successors, Mehmed III (1595-1603) and Ahmed I. The overall weight of the Ottoman standard coin was decreased in several steps - it weighed 0.68 g in

[^12]1574 , but only 0.32 g in $1603-,{ }^{39}$ but the silver purity remained at a high and quite consistent level of around $95 \%{ }^{40}$

It goes without saying that this is true only of official akçes. While coin forgeries are a phenomenon almost as old as the coins themselves, the intensity with which they turn up varies greatly. The earliest unofficial forgeries of Ottoman akçes date to the $14^{\text {th }}$ century: Fig. A shows a quite rough imitation of an issue of Beyazit I (1389-1402) which, underneath a thin layer of silver, has a copper core.


Fig. A

### 1.03 g .13 mm .12 h . Type A1/I (reverse retrograde) ${ }^{41}$

It is in the $17^{\text {th }}$ century, however, that imitations become more numerous - one even might say ubiquitous. The Beçin hoard, totalling 48,849 Islamic coins, contained 1153 unofficial akçes of barbarous style, ${ }^{42}$ which sometimes seem to have a reasonably good silver content, as well as 301 fourée akçes, ${ }^{43}$ mostly pieces which were struck with stylistically degenerated dies on flans consisting of a copper core surrounded by a thin layer of silver. ${ }^{44}$ Also in other hoards such as the "Edirne" hoard ${ }^{45}$ or another $17^{\text {th }}$ century parcel ${ }^{46}$ such forgeries were present - even if in both cases there was just a single specimen. This proves that, despite the care normally taken to sort out spurious coins when forming a hoard, these fourée pieces managed to creep in.

The most extreme case, however, are parcels which apparently contain only unofficial coins. A group of some forty $17^{\text {th }}$ century Ottoman akçes was offered in the coin trade in 2010. All the coins were unofficial fourée forgeries: under a very thin layer of silver one can see the copper core, a feature which unfortunately is very difficult to make visible on black-and-white photographs. Not even among the badly struck and almost illegible specimens, has an original Ottoman coin crept in.

It is, as always, next to impossible to judge whether this parcel is complete or not. What seems to be certain to me is that we are not dealing with a hoard in the sense of a substantial fortune, hidden intentionally, but rather with a purse which was accidentally lost. A really fascinating feature is the fact that, out of the 42 coins of which pictures were available, no fewer than 15 were struck with the same reverse die. This opens the possibility that the purse was formed in the unofficial mint itself, an assumption which also would explain why official coins are altogether missing. One even might go so far as to propose that the forgeries were smuggled into circulation in relatively small groups like the present one.

Let us now have a look at the coins themselves. I was able to record the details of six coins (all photos a little enlarged):

[^13]

1. 0.26 g .12 mm .9 h .

2. 0.25 g .12 mm .9 h .

3.0 .22 g .13 mm .9 h .

3. 0.22 g .11 mm .11 h .

4. 0.20 g .11 mm .9 h .

6.0 .17 g .10 mm .3 h .

All coins share the same reverse die; two different obverse dies can be recognised. Despite some minor errors in the rendering of the mint name, one can establish without difficulty that it is supposed to read Sofia. Since this is the only legible mint in the entire parcel, one might conclude that these imitations were produced in present-day Bulgaria, viz. the area where the locally struck Sofia akçes would have been most common. Different groups of forgeries from Rumeli (the European parts of the Ottoman Empire) are already known, such as a group of akçes of Suleiman I, ${ }^{47}$ or some $18^{\text {th }}$ century coins in the name of Mustafa III. ${ }^{48}$

The obverses vary drastically as regards their quality: the best obverse die, attested on no. 1 to 3 , clearly shows that it is issues of Murad IV which are imitated. Amazingly enough, all three coins have the same die axis; since the other specimens prove that the dies were not fixed, it is very plausible that no. 1 to 3 were struck almost simultaneously. The fact that all these coins show exactly the same die position can only be explained by the assumption that they were struck before the craftsmen who handled the upper die and the hammer laid it aside. In the case of no. 4 and 6 is seems that a heavily garbled reverse die was used. We can thus observe two different obverse dies compared with only one reverse die; but then the sample of six coins is quite small. The ideal form of the type on both sides can be reconstructed as follows:

[^14]Obv.: سلطان/مراد بن/احمد خان ("Sultan Murad, son of Ahmed, khan"), within a line and dotted border.
 glorious. Struck in Sofia. (year) 0"), within a line and dotted border.

Typologically, the model is Srećkovic's type combination A/I $/$ *5. ${ }^{49}$ Oddly enough, obverse type A (with the نان of o the left of the 1 ) is quite rare: it is attested in Srećkovic's type corpus only for Belgrade and Üsküp. Official akçes from the mint of Sofia are known exclusively featuring Srećković's obverse type B. ${ }^{50}$ The date which should read 1032 - the year when Murad ascended the throne - is always missing save for a dot which we could read as $\cdot$, i.e. 0 . Also the mint name is misspelled since the first letter is not connected to the left and thus looks more like, than $ص$. The phenomenon that dies of different quality of images or legends occur alongside each other, and are even die linked, can be observed quite often in such unofficial coinages. One should note that when it comes to the quality of striking from a technical point of view, these imitations stand comparison with the official issues of Murad IV.

The models date to the second quarter of the $17^{\text {th }}$ century. In the Beçin hoard, by far the most common sultan on the fourée pieces is Ahmed I, under whom the treasure closes. ${ }^{51}$ One is, therefore, tempted to date also the present coins to the reign of Murad IV, and not much later. Thus, even if possibly incomplete, this small parcel of coins sheds some light on the actual monetary circulation of the Ottoman Empire in the $17^{\text {th }}$ century.

# YAUDHEYA GOLD AND COPPER COINS WITH A NEW LEGEND 

By Devendra Handa

At the time of the International Seminar on Gupta Coinage held under the auspices of the Numismatic Society of India and hosted by the Department of Ancient Indian History, Culture \& Archaeology, Panjab University, Chandigarh during November 10-11, 2010, a large number of scholars including Ellen Raven, Hans Bakkar, Robert Bracy, Prashant Kulkarni, Chandrashekhar Gupta, S.K. Bhatt, Pratipal Bhatia, Ashvini Agrawal and others had an opportunity to see the collection of Shri R.K. Aggrawal at Ambala, which contained, among many other interesting coins and antiques, a unique gold coin of the Yaudheyas to which I had referred to in my book on 'Tribal Coins of Ancient India' in 2007. I had the good fortune of ascertaining the views of some of the scholars who had examined this coin about its genuineness but the opinions were divided - some regarded it as genuine, some as fake and some were non-committal. As such there was no unanimity. Through the courtesy of Shri Aggarwal and his sons I also examined the gold coin very carefully spending a few hours with them at their place. The owners do not allow anybody to take a photograph of the coin and also refuse to give a photograph to anybody. I am, however, thankful to them for their input and the photographs of the copper coins provided by them and am presenting an eye-copy of the gold coin with my views.


[^15]The coin was obtained from a goldsmith of Narayangarh in Haryana and its possible provenance is the close vicinity of this town adjoining the Garhwal region. It is die-struck and the die seems to have been prepared meticulously. There are no traces of filing on the edge, nor any depressions on the surface which are generally seen on cast pieces. The coin weighs 8.8 grams and has a diameter of 20.5 millimeters. The obverse shows 6 -headed Karttikeya standing facing on a lotus pedestal and holding a lance (sakti) in his right hand with another long sceptered pestle-like attribute in his left. This attribute is capped by a flower (?) and a tassel dangles down from it. The six heads of the god are arranged in two rows of three each, the central faces being full and the side ones in profile. The faces show some details of eyes, nose, mouth, etc. and an earring in the right ear of the principal face is clearly visible. The god wears a dhoti and bears matted locks on the heads. The legend from about VIII to V o'clock along the margin reads Bhagavata-svamin(o) Brahmanya-devasya hiranyabala$v r(i) d d h(i) k r(i) t a$ in Brahmi characters of the north Indian variety assignable to around the second century AD. The reverse carries the figure of Lakshmi standing facing on a lotus seat and holding a lotus in her right hand raised to the level of the shoulder with her left hand akimbo and supporting some unidentifiable object (may be the loose end of the nether garment). She is anointed by elephants that are shown inverting pitchers of water above onto her head. On the proper right of the goddess is a ten arched chaitya or hill symbol surmounted by a nandipada and with a wavy line below. To her left is depicted a tree in railing. The margin bears traces of dots.

The Yaudheyas are known to have issued their coins in copper except the unique small silver piece now preserved in the British Museum and bearing the figure of six-headed Karttikeya standing to the front on a lotus seat and holding a lance in his right hand with his left hand akimbo and a Brahmi legend around reading Bhagavata-svamino Brahmanya Yaudheya on the obverse. On the reverse is six-headed Sasthi holding a lotus in her right hand with her left hand on her hip, standing front on upon a lotus seat flanked on her right by a six-arched chaitya or hill, capped by a parasol, and surmounted by a nandipada and a tree in railing on her left with an undulating line below, all within a dotted border. Quite a large number of Yaudheya copper coins of this class bearing the variant readings of Bhagava-svamino Brahmanyadevas(y)a, sometimes followed by the word Kumaras $(y)$ a, and another type in which Sasthi is replaced by a deer to left or right facing a hill or temple and bearing the Brahmi legend Bhagavato Brahmanydevasya sometimes with the additional word Darmattaya, are also known to us.

The Yaudheya gold coin is based on the Kushan module but differs in weight, which is higher than the Kushan dinaras of approximately 8 grams. It seems to have been struck on the Indian weight standard of a suvarna of 80 rattis or 9.25 grams (144 grains). The devices, too, are purely indigenous. It is the first and the only one known so far and its uniqueness is perhaps the reason for doubting its genuineness. The legend, too, is a new one. The coin seems to have been struck on some special occasion and any comment on its specificity will be speculative. The only probability, however, is indicated by the legend, which may be interpreted as '(This is the coin struck in the name) of the divine Lord Brahmanyadeva (i.e. Karttikeya), the augmenter of the power of wealth (gold or silver). Some achievement of the Yaudheyas resulting in the increase of their power and wealth may have thus been the possible occasion. It is difficult to say whether this achievement was the result of their struggle against the mighty Kushans or of subjugating the Kunindas, who are known to have issued the largest silver currency amongst the tribal states and were located quite close to the Yaudheyas at that time.

I am also taking the opportunity of bringing to light some copper coins for the first time. Coin no. 1 shows, on the obverse, six-headed Kartikeya standing front on. The right hand holding the lance is worn out and the left hand rests on the respective hip. A long-handled attribute, capped by a lotus flower marked by small pellets with a tassel flowing from it, is depicted on the left of the god. The legend around the margin is quite worn out but the

Brahmi letters visible between I and V o'clock position read ... devasya hiranya. . . . This seems to have been part of the legend Bhagavata-svamino Brahmanyadevasya hiranyabalavriddhikrita as noted on the gold coin under discussion. The attribute to the left of the god also resembles the attribute of the gold coin. The reverse of the copper coin shows a deer to left facing a triangular ten-arched hill, capped by a parasol and perhaps surmounted by a nandipada. Under the hill symbol is the dotted lotus flower while a prominent srivatsa and a vase symbol may be seen above the back of the deer. The wavy line is visible between X and XII as also are the dots of the border. Both the obverse and reverse thus resemble Yaudheya copper coins of this class but the legend definitely follows the one noted on the gold coin.


Coin no. 1
Coin no. 2 is very much worn and shows a long-handled attribute with part of the Brahmi legend . . . devasya hiranya . . . on the obverse and a deer to the right with a hill symbol in front:


Coin no. 2
The third coin depicts, on its obverse, 6 -headed Kartikeya front on and standing on a lotus seat holding a lance in his right hand and the other long-handled attribute in the akimbo left hand with a Brahmi legend visible between III and V o'clock position reading . .. . sya-hiranya . . . The reverse is quite similar to that of the gold coin, showing a female figure (Lakshmi) standing in the centre, flanked by a hill symbol with wavy line below on her right, and a tree in railing on her left. Since the coin is in a mediocre state of preservation, the elephants anointing the goddess and the upper portion of the hill symbol are not clearly visible:


Coin no. 3
Coin no. 4 is also very worn and the figure of Kartikeya on the obverse has survived only in traces but the visible part of the legend . . . sya-hiranya . . . between II and IV indicates similarity with the obverse of other coins. The reverse resembles the reverse of the preceding coin but is quite worn:


Coin no. 4
Though very worn and indiscriminately struck like other copper coins of this class of the Yaudheyas, these coins leave absolutely no doubt of the existence of the new legend on their coins and also the genuineness of the gold coin of the tribe.

# AN UNPUBLISHED HOARD OF INDOSASANIAN TYPE COINS OF UNKNOWN PROVENANCE IN THE ALLAHABAD MUSEUM, ALLAHABAD, UTTAR PRADESH, INDIA 

By Pratipal Bhatia

### 1.1 Introduction

During the second week of December 2010, I visited the Allahabad Museum, Allahabad, Uttar Pradesh, India. The Allahabad Museum is a 'national level museum' and it functions under the Ministry of Culture, Government of India. Originally it was established as a small museum in 1931 under the aegis of the Allahabad Municipal Committee, but its collections grew fast, and in 1952 it was shifted to its present spacious building located inside Motilal Nehru Park, popularly known to the locals as the 'Company Bagh' in the 'Civil Lines' area of the city. The museum is fairly well organised having a number of galleries highlighting Indian heritage of ancient, mediaeval and modern periods. It has an air-conditioned library functioning under well-informed library staff.
1.2 The coin collection of the Allahabad Museum is not very large. Its coin cabinet acquired some coins from the old Municipal Museum of Allahabad, and received some coins as gifts from the local coin collectors. Over the years, the museum purchased a good number of coins and a few coins came in distribution of treasure trove finds in Uttar Pradesh. During my search for the Indo-Sasanian type coins ${ }^{1}$ in the Accession Register of Silver Coins of the Allahabad Museum, I found that entry No. 1 refers to 45 silver coins acquired by the museum in 1934. On examination, it was found that all these coins were of Indo-Sasanian type that circulated in north India during the early mediaeval period. There is no record of the exact provenance of these coins and their mode of acquisition is unknown. Based on the study of different series of the Indo-Sasanian type coins during the last three decades I may say that the 'silver coins' that are listed under serial No 1 in the Accession Register of the Silver Coins of the Allahabad Museum belong to a hoard or part of a hoard that was found in Uttar Pradesh. ${ }^{2}$ For the sake of the convenience of our readers, these coins may be described as the Allahabad Museum Hoard, hereafter addressed as AMH. The AMH coins have not been studied or published ${ }^{3}$ so far. They are described as silver coins in the museum records but no metallic analysis has been conducted on any of these coins. I am, therefore, not in a position to discuss the percentage of pure silver content in the AMH coins.
1.3 Indo-Sasanian is not the name of the coin but a term used to describe a class of coins that have, on the obverse, a stylised Sasanian-type crowned bust in profile facing right, and on the reverse, they have a Sasanian-type fire altar with two attendants in the right and left fields. ${ }^{4}$ These coins followed the imagery of Sasanian coins but were struck in the Indian subcontinent. The
contemporary Indian epigraphs and literature ${ }^{5}$ refer to the IndoSasanian type coins by the generic term dramma that is derived from the Sasanian term drahm which, itself, is derived from the Greek term drachm. ${ }^{6}$ The Indian term dramma is sometimes qualified by a personal name and sometimes by a place name prefixed to it. ${ }^{7}$ The prefix distinguishes one particular type of dramma from another type of dramma. The Siyadoni inscriptions issued during AD 903-969 in the Pratihara kingdom refer to a few dramma names and also some other coin names, but their relationship to each other is not clear. The same epigraphs also refer to donations of $1 / 2,1 / 3$ and $1 / 4$ dramma. ${ }^{8}$ However, no extant coins have been reported or identified so far that may meet the description of $1 / 2,1 / 3$ or $1 / 4$ dramma. The Siyadoni inscriptions also refer to donations of varatakas and kapardakas. that is cowries. The latter may have formed the lowest monetary unit. It shows that the dramma was a cowrie-based currency in which cowrie shells were used as money of account. ${ }^{9}$

Indo-Sasanian type coins were struck to the Sasanian weight standard. However, the pure silver content of the Indo-Sasanian type coins seems to be much less, than the pure silver content found in the Sasanian coins. Based on the published results of the metallic tests conducted by some scholars one may conclude that the pure silver content in the Indo-Sasanian type coins varied from type to type, region to region, and century to century. The IndoSasanian type coins do not use Pahlavi script. When some aksharas or legends appear on the Indo-Sasanian type coins they are either in Brahmi or proto-Nagari or Nagari scripts. The AMH coins do not bear the full name of any issuing authority, or place of mintage or date of issue of the coins.
1.4 The first appearance of the Indo-Sasanian type coins is associated with the arrival of the Hunas and their political expansion in the Indian subcontinent in the late $5^{\text {th }}$ and early $6^{\text {th }}$ centuries AD. These coins remained in circulation in some part or other of the Indian subcontinent up to at least the $13^{\text {th }}$ century AD, that is for well over half a millennium after the fall of the Sasanian Empire in AD 651. To the basic Sasanian type obverse and reverse designs varying degrees of modification were introduced in the Indo-Sasanian type coins.
2.1 Based on the style of the obverse and reverse designs, the legends that appear or do not appear on the AMH coins, the changes noticed in the palaeography of the legends, the size variations that appear in the coins, we may suggest a broad classification and subsequent break-down of the Indo-Sasanian type coins of the AMH. ${ }^{10}$
2.1.1 The AMH has 31 specimens of later varieties of the Sri $V i$ series of the Indo-Sasanian type coins.
2.1.2 There are nine coins of the $\operatorname{Sri} \operatorname{Vig}(r a)$ series of the IndoSasanian type in the AMH.
2.1.3 The AMH has five coins of later and crude varieties of the Srimadadivaraha series.

Coins of all the above-mentioned three series are frequently found together in large numbers as treasure trove coins, in coin hoards of known and unknown provenance, in excavations and explorations from the Punjab to Bihar; but their finds are primarily concentrated in Uttar Pradesh. ${ }^{11}$ As stated above, these coins circulated in north India during the early mediaeval period.
2.1.1 Among the AMH coins, 31 specimens have, on the obverse, a Sasanian-type bust in profile to right, and a protoNagari legend in two lines that reads Sri Vi (which can also be read as Sri $Y i$ ), ${ }^{12}$ or part thereof in front of the bust in the right field. On better specimens, the king is shown wearing a crown shaped as which is only partly visible on a couple of AMH coins. Below the bust in the left field is a symbol that looks like
$2{ }^{13}$. It is a neck ornament worn by the king. The coins of this series are described as the Indo-Sasanian type coins of the Sri Vi series. ${ }^{14}$

The palaeography of the obverse legend of series 2.1.1 coins is a distinctive feature of this series. ${ }^{15}$ The form of the proto-Nagari syllable $\dot{S} a \mathbf{\Sigma} \mid$ that is used in the obverse legend ${ }^{16}$ differs from the $\dot{S} a \boldsymbol{\ell}$ that is used in the obverse legend of coins of series
2.1.2. The form $\boldsymbol{\Sigma} \mid$ is met with in the Udaypur Inscription of king Aparajita, dated Vikrama Samvat $718=$ AD 661, ${ }^{17}$ and in the Pratihara inscription dated Harsha Samvat $155=$ AD $898{ }^{18}$ of king Mahendrapala. This form of the syllable Śa $=\boldsymbol{\Sigma} \mid$ is also used in the coins of the Srimadadivaraha series. ${ }^{19}$ We saw this form of Śa used in the obverse legend on two unpublished specimens of Indo-Sasanian type coins of the Sri ma series in the State Museum, Lucknow and on some published coins. ${ }^{20}$ The obverse of these particular coins have a Sasanian-type bust to right facing a protoNagari legend in two lines that reads Sri ma with an additional large-sized flower-vase type symbol below the proto-Nagari letter $m a$. The reverse has two attendants on the right and left sides of the fire altar. The attendants are of different style as their bent long legs give the impression of a dancing pose. The legend Sri of these coins has a close resemblance to the Sri of the Sri Vi coins. ${ }^{21}$

The coins of series 2.1.1 emphasise the first part of the legend Sri and the style of lettering remains the same throughout, which makes it rather a conservative series. Gradually, however, the size of the Sasanian-type bust began to shrink and became very crude and the size of the Sri began to expand. In the later coins, either only the upper line of the second letter Vi, that appears below in the second line, is visible or the entire letter disappears altogether. In the final stages, only three dots remain on the left side of the obverse as a reminder of the Sasanian-type obverse bust of which the facial features were indicated by dots. ${ }^{22}$ The matras of Sri also begin to disappear one by one. ${ }^{23}$ In the final stages of this series, only a squiggle that looks like $\boldsymbol{\varrho}$ which is reminiscent of the Sri inscribed on the obverse of coins of series 2.1.1 is visible in the right field opposite two or three dots on the obverse of coins of this series. ${ }^{24}$ The reverse of the coins of series 2.1.1 have a highly stylised fire altar with two attendants on the left and right side.


Fig. 1 Stylised fire altar (after R.C. Kar, 1953) ${ }^{25}$

Though the basic theme of the reverse design remains Sasanian, the style of depicting the fire altar, especially the flames of the fire drawn in an abstract form, is different. ${ }^{26}$ The dies used for the coins of series 2.1.1 are larger than the flans; therefore complete obverse and reverse designs are not visible on most coins. It seems that the old worn-out dies remained in use, and that speaks for the popularity, longevity and market acceptability of coins of series 2.1.1, whose authorship is debated. Based on the minutiae observed on the obverse and reverse designs of these coins, a number of groups, varieties and sub-varieties may be distinguished. ${ }^{27}$

We took the weight, diameter and thickness of all 31 coins individually and assigned them serial numbers. However, the images that are available to us are without serial numbers and we cannot, therefore, co-ordinate the coin images with the weight, diameter and thickness of individual coins of this series.

When plotted on a frequency table the coins of series 2.1.1 weigh from 3.420 g to 4.084 g with a concentration at 3.8 g .


The diameter of these coins varies from 17 mm to 15 mm . The majority of the coins measure 17 and 16 mm and only two coins have a diameter of 15 mm .


The thickness of the coins varies from 2.6 mm to 1.9 mm , but the majority of the coins are 2.0 mm or 2.1 mm thick.


Among the three coin series ${ }^{28}$ represented in the AMH, the coins of series 2.1.1 are the most numerous, displaying a large variety of obverse and reverse dies, many of which are used or even worn out and broken judging from the extant coins. ${ }^{29}$ The circulation area of Sri Vi coins was very large, as may be observed by the distribution of the coin finds. ${ }^{30}$ Sri Vi coins are found in the Punjab, Haryana, Himachal Pradesh, Uttar Pradesh, Uttarakhand and Bihar. The largest hoard of 10,159 coins, of which the
majority were of this type and its variants, was found in the village of Bawan, in the Tehsil and District of Hardoi in Uttar Pradesh. ${ }^{31}$
2.1.2 The AMH has nine coins on which the obverse Sasaniantype bust looks stylistically different from the obverse bust as depicted on the coins of 2.1.1. Further, the coins of series 2.1.2 have the obverse legend inscribed in two lines of which the first line is inscribed in the right field in front of the obverse bust, and the second line is inscribed below the bust. The positioning of the obverse legend distinguishes coins of series 2.1.2 from the coins of series 2.1.1 on which both lines of the legend are inscribed in the right field. On coins of series 2.1.2, the legend is inscribed in Nagari characters that read Sri Vig (ra), which is different from the legend on coins of series 2.1.1. Putting a short legend in place of a single letter after $S r i$ is an innovation in the Indo-Sasanian coinage. The letter $r a$, which is attached to the foot of the letter $g a$, is rarely seen on these coins, as the lower part of the legend is generally off the flan and merges with the neat dotted border beneath, that is partly visible on some coins. We have not seen any coin having the syllable $h a$ after the second line of the legend $\operatorname{Vig}(r a)$, and that includes the 10,159 coins of the Bawan Hoard. ${ }^{32}$ There is no reason to read this coin legend as Sri Vigraha. On some extremely rare coins, a crescent shaped symbol 5 is seen after Sri Vig(ra). ${ }^{33}$ The AMH has one such coin ${ }^{34}$ We do not know the significance of this symbol. Is it a numeral, a religious symbol, or something else? The crown design of the obverse bust on the coins of series 2.1.2 resembles the crown seen on the obverse of Sri ma series. ${ }^{35}$ The palaeography of the legends on 2.1 .2 coins is also different. The letter Śa $\boldsymbol{Q} \mid$ of Śri looks like modern Devanagri (Hindi) script. It was this Śa which was styled as Gauda by V.A. Smith and he described the coins as Magadha type. ${ }^{36}$ The examination of coin hoards found in Bihar reveal that coins of series 2.1.1 and 2.1.2 are found mixed in all the reported hoards and invariably the majority of coins in the hoards found from Bihar are of series 2.1.1. It is not appropriate, therefore, to describe the coins of series 2.1.2 as Magadha type. The reverse of the coins of series 2.1.2 have a stylised Sasanian-type fire altar the flames of which are depicted as a pyramid of dots, and two attendants in the right and left fields drawn in a different style from the reverse fire altar of coins of series 2.1.1. Additionally some coins of series 2.1.2 have a solitary Nagari letter ma and sometimes sa inscribed in place of the shaft of the reverse fire altar. This, too, is an innovation in the Indo-Sasanian type coinage of north India. Thus, the reverse of series 2.1.2 is also different from the reverse of coins of series 2.1.1. However, though the style of depicting the obverse and reverse designs of the coins of series 2.1.2 differs from the obverse and reverse designs of 2.1.1 coins, they are invariably found together in all the coin hoards that we have examined so far. We have not found an exclusive hoard of either series 2.1 .1 or 2.1.2. There is no report of a single coin overstruck by coins of one or the other series. They were parallel series, perhaps the product of different mints, the establishment of which was required due to increased monetisation and demand for standardised metallic money that moved in the markets of north India. Based on the reverse design, the coins of series 2.1.2 can be sub-divided into four series:
2.1.2.1 Two coins of AMH do not have a solitary Nagari letter on their reverse in place of the shaft of the fire altar.
2.1.2.2 One coin of AMH has a crescent-type symbol inscribed after the obverse legend $\operatorname{Vig}(r a)$ below the bust, and it also has a solitary Nagari letter $m a$ in place of the shaft of the fire altar on the reverse.
2.1.2.3 Three coins of AMH have a solitary letter $m a$ on the reverse in place of the shaft of the fire altar.
2.1.2.4 Three coins of AMH have a solitary Nagari letter $s a$ in place of the shaft of the reverse fire altar.
2.1.3 The AMH has five coins that belong to the Srimadadivaraha series. These coins have, on the obverse, the image of Adivaraha, with the head of a boar on a human body described as the varahavatara of the Hindu god Vishnu. The reverse of these coins have a legend in two lines in proto-Nagari characters that read srimadadivaraha above, and below this there
is a partly visible but highly stylised Sasanian-type fire altar with two attendants ${ }^{37}$ that have a close resemblance to the lower part of the reverse fire altar of series 2.1.1. The AMH coins of series 2.1.3 are not in good condition and belong to very late and worn issues of this series. Based on the obverse and reverse designs these coins can be divided into three sub-series.
2.1.3.1 The obverse of coins 41-42 have Adivaraha up to his stomach facing right and no other symbols are visible. The reverse of these coins have a proto-Nagari legend in two lines that reads srimadadivaraha with nothing visible below.
2.1.3.2 Coin 43 is a somewhat better specimen. Its obverse has Adivaraha up to the upper part of his hips facing to right, but it is distinguished by the fact that it has traces of two broad lotus leaves above the head of the Adivaraha that looks like an umbrella. The reverse of this coin has the proto-Nagari legend in two lines inscribed in slanting script that reads srimadadivaraha. Thus this particular coin belongs to Adivaraha coins that have lotus leaves on the head of the varaha. ${ }^{38}$
2.1.3.3 The AMH has two badly worn coins that belong to series 2.1.3 as is obvious from the image of the Adivaraha on the obverse of coin 44 and traces of it on coin 45.

The AMH has no coins of Adivaraha and Sri Vinayakapaladeva type. ${ }^{39}$ We may therefore conclude that this hoard was formed prior to the issuing of the Adivaraha and Vinayakapaladeva coins that were initiated by the Pratihara king, Sri Vinayakapaladeva (c. AD 931-943). ${ }^{40}$

## Catalogue of AMH coins

Series 2.1.1: Sri Vi

### 2.1.1.1



Coin 1.
Sasanian-type bust of king to right and proto-Nagari legend, Sri Vi. The first line is completely visible but the lower part of the second line is worn.
Coin 2.
Similar but part of the bust and upper part of Nagari legend are off the flan, a large-sized Nagari Vi and part of the neck ornament of the king are visible below.

## Coin 3.

The bust and its neck ornament 2 are clearly visible, both lines of Nagari legend are partly off the flan.

Part of fire altar drawn in thick lines, dots on the left side suggestive of an attendant; the right side is worn.

Similar, the left-side attendant is worn, right side edges are cracked, dots below are indicative of a dotted border.

Similar, left side attendant is clearly visible.


Coin 4.
A few bold dots to left indicating part of the bust to right, Nagari legend Sri in bold characters and upper part of Vi are visible. Some dots are visible above, indicative of dotted border around.

## Coin 5.

Similar but only three bold dots and large-sized Nagari Sri in front in the right field, upper part of Vi below.
Coin 6.
Similar but two bold dots and a line indicative of the chin of the bust to right facing bold Nagari Sri, traces of upper part of Vi below.

## Coin 7.

Similar to coin 4 but this coin looks slightly smaller, Sri in bold letters with very small portion of the upper part of Vi visible.

## Coin 8.

Traces of dots on the left side
Similar, attendant to the right side is clearly visible but the one on the left side is off the flan.

Similar to coin 4 but only a small part of right side attendant is visible.
facing bold Nagari Sri, but its matra indicated by second vertical line is partly off the flan, upper part of Vi below.
Coin 9.
Three dots and a small line below facing a bold Nagari $S r(i)$ and upper line of $V i$ below are visible.

Coin 10.
Part of bust to right, bold
Nagari Sri; lower half of the obverse is worn.
Coin 11.
Traces of dots to left with large-sized Sri in the right field

Similar, part of attendant to right is visible

Similar, but upper part of the reverse is worn; part of attendant to right is visible.

Similar, part of attendant to right is visible.

### 2.1.1.3



Coin 12.

Outline of the bust to right, its facial features indicated by bold dots and lines, part of Nagari $S r(i)$, two vertical lines (= part of śa and matra) are missing and the legend now looks like a squiggle $\boldsymbol{\Sigma}$. Upper part of $V i$ below in the right lower field is visible.
Coin 13.
Similar and a better specimen, part of Nagari letter $V i$ is visible below.

Coin 14.
Part of bust to right, worn Nagari $\operatorname{Sr}(i)$ without vertical strokes, upper part of $V i$ is visible.
Coin 15.
Similar to above but the obverse die may have broken

Similar, upper part of the fire altar and traces of attendant to left are visible.
during striking which becomes obvious by the disorientation of the squiggly-looking Sri.

### 2.1.1.4



Coin 16.
Part of Sasanian-type bust to right with a squiggly-looking Sri in front; part of dotted border is visible to right.
Coin 17.
Part of bust to right facing part of a squiggly-looking Sri; lower part worn out.
Coin 18.
Part of bust to right facing part of $S(r i)$ that looks like a squiggle; part of $\boldsymbol{3}$ is visible in the lower left side; rest of lower part is worn.
Coin 19.
Two bold dots to left and a large sized squiggle that is a remnant of Sri. If one looks hard one can see traces of two vertical lines indicative of part of sri and its matra.

Coin 20.
Three bold dots and a squiggle in the right field

Coin 21.
Similar to above.
Coin 22.
This coin seems to have been struck by a broken obverse die. In the lower left field part of the neck ornament is visible and to its right above one can see the upper part of Nagari Sri.
Coin 23.
Traces of bust to right facing part of Nagari Sri that looks like a squiggle with broken lines. It was perhaps struck by a broken obverse die or the latter broke during the process of striking the coin.

### 2.1.1.5



24


Coin 24.
Traces of large-sized bust with bold dots and lines for facial features, facing a partial squiggle to right

Coin 25.
Large-sized crowned bust to Similar to above. right.

### 2.1.1.6



Coin 26.
Part of bust to right facing part of $\operatorname{Sr}(i)$, with the sign

Part of stylised fire altar, traces of attendant to left. above.

Coin 27.
Part of crowned bust to right facing upper part of Sri, with the sign $\cap$ above.

Coin 28.
Part of bust to right similar to coin 26 facing upper part of a squiggly-looking $S r i$ with a sign $\boldsymbol{P}$ above as in coin 27.
Coin 29.Similar to above.

Part of fire altar, its upper part is clearly visible.

Part of stylised fire altar.

### 2.1.1.7




31


Coin 30.
Traces of a large-sized bust facing to right, and below part of neck ornament $\because$.

Coin 31.
Similar, traces of partial Sri in Similar the right field.

Series 2.1.2: Sri Vig(ra)

### 2.1.2.1



32


33


Coin 32.
Wt. 3.939 g , Dia. $15 \times 15 \mathrm{~mm}$, Thickness 2.5 mm .
This coin is distinguished by the style of its crowned bust facing right, and it has some resemblance to coins of the Sri $m a$ series. Its crown looks like a flower or branch of a plant. It is facing the Nagari legend Sri and below the bust is the legend $\operatorname{Vi}(g r a)$. The last part of the legend is worn.

Coin 33.

Wt. 3.902 g , Dia. $17 \times 16 \mathrm{~mm}$, Thickness 2.3 mm .
Similar to above but crude in
execution. Part of $S($ ri $)$ clearly visible, but only some traces of lower legend are visible.

Dots and lines for fire altar and its flames, similar to above, No Nagari letter is visible; left side attendant is visible but right side attendant is off the flan. Dotted border around is partly visible.

### 2.1.2.2



Coin 34.
Wt. 4.033 g , Dia. 17x16 mm, Thickness 2.1 mm .
Similar-looking bust as above, facing a well-inscribed Nagari Sri in modern looking Hindi script and below (Vi)g(ra) in large-sized Nagari letters, followed by a small-sized crescent-like symbol that looks like $\boldsymbol{?}$. The coin is worn on the left side. This type of symbol is noticed among the obverse symbols of the Indo-Sasanian type coins of Lot no. 584 of the Government Museum Mathura.

Part of Sasanian-type firealtar, flanked by two attendants wearing an Indian dhoti-type garment that comes up to their knees above their uncovered lower legs. Both attendants are shown in the posture of bowing towards the altar. In place of the shaft of the altar there is a well inscribed proto-Nagari letter $m a$ in triangle headed script. The exact significance of the letter is not clear. The left side of the reverse is worn out.

### 2.1.2.3



Coin 35.
Wt. 3.732g, Dia. 16X15 mm, Similar to above, it has a large Thickness 2.1 mm
Rude Sasanian type bust to right facing the legend Sri, below only upper part of the legend is visible.

Coin 36.
Wt. 3.894 g , Dia. $16 \times 15 \mathrm{~mm}$, Thickness 2.6 mm .
Similar to above, but the bust and legend sri are not clearly visible, below bold and large sized $V i$ and upper part of $g(r a)$ are very clear but the lower part is worn. A little bit of the coin is cut from the upper side.
sized Nagari letter ma in place of the shaft of the altar, left side attendant shown wearing Indian dhoti-type garment up to his knees, and right side attendant is only partly visible.

Similar to above. Part of the fire altar and letter $m a$ in the centre are visible. Some dots above with a decorative line below are suggestive of fire altar.

## Coin 37.

Wt. 3. 950 g , Dia. $16 \times 16 \mathrm{~mm}$, Similar to above with large Thickness 2.5 mm .
Similar to above but worn and not clear. Only traces of Nagari legend are visible.
sized letter $m a$ which is clearly visible. Some traces of partial fire altar and attendants are also visible.

### 2.1.2.4





40


Coin 38.
Wt. 3.865 g , Dia. 17 x 15 mm , Thickness 2.4 mm .
The obverse of coins of this series follow the obverse of coins of Series 2.1.2.2. They have stylised Sasanian-type bust to right facing a Nagari legend in two lines. It being a worn coin, the legend is only partly visible. It reads

Sri
vig(ra)
Coin 39.
Wt. 3.90 g , Dia. $15 \times 15 \mathrm{~mm}$, Thickness 2.5 mm .
Similar to above but needs to be cleaned. It is dumpy and small in size.

Coin 40.
Wt. 3.895 g. Dia. $15 \times 14 \mathrm{~mm}$,
Thickness 2.4 mm .
Similar to above but slightly smaller in size. Part of the bust to right and legend in two lines are visible,

Sri
(vi)ga

Series 2.1.3: Adivaraha

### 2.1.3.1



41


The reverse is similar to the reverse of Series 2.1.2.2 with a difference that it has a Nagari syllable sa on the reverse fire altar in place of its shaft. The use of $s a$ distinguishes it from the preceding series of coins. The attendant in the left field and part of fire altar are clearly visible. Its edges are cracked.

Similar to above. Its reverse is better conserved. The attendant in the left field and part of fire altar above the Nagari letter sa in place of the central shaft, are clearly visible.

Similar to above. Part of fire altar and traces of attendant in the left field and Nagari letter $s a$ are clearly visible.

Coin 41.
Wt. 3. 850 g , Dia. $17 \times 16 \mathrm{~mm}$, Thickness 2.1 mm .
It has the image of the Adivaraha up to his stomach facing to right. His mouth is wide open and he is wearing a beautiful necklace around his neck, the design of which is not visible on this image, but is visible on the coin itself; part of his vanamala is visible below his left arm; a dotted border is partly visible above.
Coin 42.
Wt. 3.696 g , Dia. $16 \times 15 \mathrm{~mm}$, Thickness 2.1 mm . Similar to above but partly worn; a large dot above the left shoulder of the Adivaraha is visible.

### 2.1.3.2



43
Coin 43.
Wt. 3.742 g, Dia. $18 \times 17 \mathrm{~mm}$,
Thickness 1.9 mm .
Adivaraha up to the upper part of his hips facing to right, and traces of some symbols are visible in the right field. Lotus leaves are visible above the head of the Adivaraha.

Proto-Nagari legend in slanting-style letters, that read
srimadadi
Varaha

### 2.1.3.3



Coin 44.
Wt. 3.618 g , Dia. $16 \times 15 \mathrm{~mm}$, Thickness 2.2 mm .
Similar to coin 41 but worn, and the Adivaraha is depicted more towards the left side, perhaps due to the shifting of the die during the process of striking the coin. There is a cut on the coin: perhaps somebody tried to test the metal by taking a small bit out of it.
Coin 45.
Wt. 3.385 g , Dia. $16 \times 15 \mathrm{~mm}$, Thickness 2.1 mm . Small, dumpy but worn coin.

Proto-Nagari legend in two lines that read
Srimad (adi)

## Varaha

Badly worn, only traces of legend below.

Acknowledgements: I would like to convey my thanks to the Director of the Allahabad Museum, Allahabad, and his colleagues for their assistance in the study of the coins and permission for publication. I would also like to thank the National University of Singapore for providing me with facilities for my research study. Assistance provided by the photo archives of the AIIS, Gurgaon, is also appreciated. This paper has been prepared with the assistance received from Mr Tan Shawn, to whom my thanks are due.

## References and Notes

${ }^{1}$ For the explanation of the terms Indo-Sasanian type coins please see below notes 6-7.
${ }^{2}$ In 1913-14 a large hoard of 638 silver coins of 'Bhojadeva' and 'Vigrahapala' were found along with $33 / 4$ seers (Indian weight) of Cowrie shells in the village of Khatauni (not Khajausi), Tehsil Meja, District Allahabad. A. K. Shrivastava, Coin Hoards of Uttar Pradesh, 1882-1979 (Lucknow x 1980), p. 100, Hoard No. 564; T.T.R. No. 62, 1913-14. In recent years a large hoard of Indo-Sasanian type coins with the obverse legends Sri Vi, Sri Vig(ra) along with Adivaraha coins, was found in village Korain, Tehsil and District Fatehpur, a neighbouring district of Allahabad. JNSI, LXIX, 2007, pp. 190-193, pls. VII-VIII.
${ }^{3}$ Some Indo-Sasanian type coins of 'Allahabad' were published by K.K. Maheshwari, Imitations in Continuity (Nasik 2010), pp. 250, 252, coins 1527, and 1555. He has, however. not cited his source for these coins.
${ }^{4}$ Pratipal Bhatia, Supplement to JONS 205 (London 2011), pp. 39-44.
${ }^{5}$ Shanta Rani Sharma, 'Money Economy in Rajasthan, c. AD 600-1000, the substantial Epigraphic and Numismatic Testimony', Numismatic Digest, Vol. 25-26 (Nashik 2001-2002), pp. 101-118.
${ }^{6}$ James Prinsep, JASB, VI (1836), pl. xix, 7-14; reprinted in E. Thomas (ed.), Essays on Indian Antiquities by Late James Prinsep (Oxford 1873), Vol. I, Article XV, pp. 402-18, pl. XXXIII, 3-14; A.F.R. Hoernle, JASB, November 1889, pp. 228-231; Michael Mitchiner, Oriental Coins and Their Values: Non-Islamic States and Western Colonies, Sanderstead, 1979, pp. 20-22, coins 32-64; p. 40, coins 208-218; and pp. 57-62, coins 325-402; John S. Deyell, Living Without Silver, OUP (New Delhi 1990), pp. 26 and 40, end-note 18; P. Bhatia, 'Indo-Sasānian Coins in the Bhuri Singh Museum, Chamba, Himachal Pradesh,' Coin-2008, Kolkata, p. 21. ${ }^{7}$ R.C. Agrawala, JNSI, XVII, Pt. II, 1955, pp. 64-82; L. Gopal, ‘Coins in the Epigraphic and Literary Records of Northern India in the Early Medieval Period,' JNSI, XXV, 1963, pp. 1-16; L. Gopal, Early Medieval Coin-Types of Northern India,' (Varanasi 1966), pp. 2-16; D. Sharma, ${ }_{8}$ Rajasthan Through the Ages (Bikaner 1966), pp. 408-409.
${ }^{8}$ Epigraphia Indica 1 1892:167-170.
${ }^{9}$ P. Bhatia, 'Cowries in early medieval coin hoards of Rajasthan and Uttar Pradesh,' paper submitted for publication to ONS Indian chapter in 2008.
${ }^{10}$ This classification is not necessarily chronological; it is based on the quantities reported, fabric, palaeography, obverse and reverse designs that appear on the AMH coins.
${ }^{11}$ Bhatia, ' Sri Vigra(ha), Sri Vi and Srimadadivaraha coin series: hoard evidence from Ahicchatra,', Proceedings of the $10^{\text {th }}$ International Numismatic Congress (London 1986), pp. 471-479; Bhatia, 'Note on the Physical Distribution of the Indo-Sasanian, Shri Vigra(ha), Sri Vi and Sri Adivaraha coins in the Ganga Valley, AD 700-1000,' JNSI, L (Varanasi 1988), pp. 99-108; Ibid, LXIX, 2007, pp. 190-193.
${ }^{12}$ See proto-Nagari letter $y a$ and $v a$ as used in the Dighwa-Dubhauli inscription of the Pratihara king Mahendrapala, IA, XV, 1886, pl.
${ }^{13}$ See coin 3 in our Catalogue given below; Bhatia, 'Bawan Hoard of IndoSasanian Coins,' Proceedings of the XIth International Numismatic Congress (Brussels 1993), pl. XI, coins 1-3 and 11.
${ }^{14}$ Ibid; Bhatia (1988), pp. 101-02.
${ }^{15}$ R. C. Kar, Journal of the U. P. Historical Society, Vol. II (N.S.), Parts I \& II, 1953, pp. 72-78.
${ }^{16}$ Ibid; Bhatia (1988), p. 101.
${ }^{17}$ EI, IV, 1896-97, pp. 29-32 and Pl.; G. H. Ojha, The Palaeography of India (in Hindi), $3^{\text {rd }}$ edition (New Delhi 1971), Pl. XX.
${ }^{18}$ Dighwa-Dubhauli Plate of the Maharaja Mahendrapala, Harsha Samvat $155=\mathrm{AD} 898, I A, \mathrm{XV}, 1886$, pp. 105-113, pl.
${ }_{19}$ Kar, op. cit., Plate XIV: 1; my recent re-examination of all the Srimadadivaraha coins found at Ahichchhatra shows that the style of sri, on whichever coin it is visible, is always similar to that found in coins of Sri Vi series.
${ }^{20}$ Michael Mitchiner, p. 59, coins 358-359; Maheshwari, p. 235, coins 1431-1434.
${ }^{21}$ Ibid.
${ }_{22}^{22}$ See coins 1-3 of our Catalogue below.
${ }^{23}$ Bhatia (1993), pl. XII.
${ }^{24}$ This seems to be the result of extra heavy striking of old and worn dies for manufacturing new coins in order to meet the demand for a particular type of coins. The dies were struck so heavily in the centre that one syllable or a part thereof could get impressed on the flan. This reminds us
what happened in the Adivaraha and Sri Vinayakapaladeva coin series. In the final phase of that series only one syllable $k a$ that appears in the centre of the second line of the three-line legend is visible, and the rest of the legend is not visible. Bhatia, 'Jhansi hoard of Adivaraha/Vinayakapaladeva Coins', Pragdhara No. 17 (Lucknow 2006-2007), p. 146, coin 97. 407 and pl. 31, coin 12.
${ }^{25}$ Kar, op. cit.
${ }^{26}$ Ibid.
${ }^{27}$ Bhatia (1993), pp. 249-258
${ }^{28}$ See above p. 15.
${ }^{29}$ See coins 15, 22-23 in our Catalogue given below.
${ }^{30}$ Bhatia, (1988), pp. 105-108.
${ }^{31}$ See above note 23.
${ }^{32}$ See above note 11 .
${ }^{33}$ Coin 34 in our Catalogue.
${ }^{34}$ Ibid.
${ }^{35}$ Maheshwari, p. 225:6.
${ }^{36}$ Smith (1906), pp. 239-240; Bidyabinod (1923), p. 56.
${ }^{37}$ Bhatia, 'Adivaraha Coins: Continuity and Change’, ICS Newsletter, No.
${ }^{42}$ (Mumbai 2007), pp. 20-25; Pragdhara No. 17 (Lucknow 2006-2007), pp. 129-135.
${ }^{38}$ Ibid.
${ }^{39}$ Bhatia (2006-2007), pp. 137-149; Bhatia, 2007, pp. 22-24.
${ }^{40}$ The Pratihara king Shri Vinayakapaladeva is known by two dated inscriptions, (1) The Bengal Asiatic Society Plate of the (Pratihara) Maharaja Vinayakapaladeva issued from Mahodaya in VS 988 (= AD 931)', JASB, XVII, pt I, p. 70; IA, XV, 1886, pp. 138-141; Bhandarkar's List no. 53. (2) Rakhetra Rock Tablet dated VS 999 and 1000 (AD 942-3), ASI, Ann. Rep, 1924-25, p. 168; GAR, 1924-25, no. 32; Bhandarkar's List no. 2110; Michael D. Willis, Inscriptions of Gopaksetra: materials for the history of Central India (London, 1996), p. 3.
The Pratihara King Vinayakapala is also mentioned in the Brihatkathakosa, composed at Wadhwan by Harisena in V.S. 989 (= AD 932). D. Sharma (1966), p. 188.

## THE COINS OF THE KASHMIR KING HARSHADEVA (AD 1089-1101) IN THE LIGHT OF THE 'GUJRANWALA' HOARD

By Joe Cribb (UK), with Mobin Ahmed (Pakistan)

I dedicate this article to the memory of Nick Rhodes, our sadly departed Secretary General. I valued Nick's friendship and his numismatic knowledge for the past 40 years as well as his wise counsels in the Royal Numismatic Society, where he was Treasurer for 30 years, and in the Oriental Numismatic Society through which I first met him. His generous spirit was a continuous support in so many of my numismatic endeavours. His publications on Nepal, Tibet, Assam, Kashmir and many smaller states of the northern borders of the Subcontinent will remain standard references for generations to come. A giant of oriental numismatics is lost to us.

Among the monotonous coinage of mediaeval Kashmir, with its continuous issue of copper coins with the same crude designs from the ninth to the thirteenth century, the issues of Harshadeva stand out as an exception of high interest. 'Kashmir coins from the seventh to the thirteenth century AD had a boring monotony. The only break in this monotonous series occurs in the reign of Harshadeva (1089-1111 [sic] AD) when gold and silver coins were struck...' (Gupta 1969, p. 68). A newly discovered group of coins, apparently from a hoard found in north-eastern Pakistan add to the fascination created by Harshadeva's exceptional issues.

According to book VII, verses 829-1739 of the chronicle of Kashmir, Kalhana's Rajatarangini (quotations here are from M.A. Stein's translation, originally published in 1900, but reprinted several times since), Harsha came to power by overthrowing his half-brother, Utkarsa, the heir appointed under duress by Harsha's father, Kalasa (1063-89). His father's rejection of him as an heir was born out by the appalling record of the atrocities of his reign. Kalhana's account of Harsha is likely to contain much that is accurate as his father, Canpaka, served as a minister in Harsha's court. Kalhana was writing c. 1149-50, only 50 years after his reign. One can imagine that the stories about Harsha were
embroidered by Kalhana for poetic purposes and to flatter the king of his own time by contrasting his reign with that of the evil king Harsha.

His most famous crime was his persecution of religious shrines. Like England's Henry VIII, he recognised that monasteries and shrines contained huge amounts of gold and silver and he set about removing their wealth. The Rajatarangini makes it clear that Harsha's destruction of religious establishments brought him immense wealth and he lavished this on favoured members of his court, mercenaries and on his extravagant lifestyle.

VII:1085 Then Lostadhara, once upon a time asked the king to set a god free from his captivity in a temple 1086 ... the king acted in that way, and found thereupon a treasury full of jewels, gold and other valuables. 1087 And he reflected upon what riches there might be in other wealthy temples, when there was such wealth in this deserted shrine. 1089 As he was addicted to extravagant expenditure upon various corps of his army, his thoughts in consequence of the above assumption became in time firmly fixed upon the spoliation of temples. 1099 Those who are anxious to amass fortunes do not stop from evil actions, though in this world they may have reached riches which are a wonder for all. 1344 The king broke up and removed the glorious image of Vishnu Parihasakeshava... (This cult image of Vishnu was worth 84,000 palas of silver $[=336,000$ rupees], according to Rajatangini IV.202)

According to Kalhana, his extravagant and dissolute behaviour invited the ridicule and hatred of his subjects: VII:933 By the favours of this liberal king who showered gold about, all bands of singers came to vie with kings. 1129 Others brought slave girls before him and said they were goddesses. He worshipped them, and abandoning his exalted position and wealth was laughed at by people. 1148 He had carnal intercourse with his sisters, and angered by a harsh word he punished and violated Naga, the daughter of his father's sister.

As well as robbing the shrines, Kalhana reports that he also imposed heavy taxes on his people: VII:1100 Oh Shame! Though he possessed his grandfather's and father's treasures and those which Utkarsa at the commencement of his reign had brought from Lohara, 1101 and though he had confiscated from the temples the riches bestowed there by former kings, yet he endeavoured to secure more wealth by oppressing the householders. 1107 What more need be said? As he was seizing property of all by all sorts of prefects, he appointed also a 'prefect of night soil' to raise revenue. 1108 Owing to his senselessness which was only hidden by the appellation given to him 'he who is pregnant with riches', the employ of these treasures corresponded to their manner of acquisition.

Kalhana summarises the state to which Kashmir was reduced by Harsha's reign: VII:1577 The goddess of wealth [Lakshmi] which resided in this land, after having been mocked by ill treatment, did not show herself anywhere again. He also records the contempt that Harsha's contemporaries had for his conduct by linking him with the Muslim Turks who ruled beyond Kashmir's western borders: VII:1095. There was not one temple in a village, town or in the city which was not despoiled of its images by that Turushka [i.e. Turk or Muslim], king Harsha. Identifying Harsha as an idol-destroying fundamentalist, Kalhana pours further scorn on him by pointing out his pork-eating, he could not even be a good Muslim: VII:1149 While continually supporting the Turushka [Turk/Muslim] captains-of-hundreds with money, this perverse-minded [king] ate domesticated pigs until his death. It is significant that Harsha's contemporaries compared him with the Turks and that Harsha thought it wise to include Turks in his army (Wink 1997, p. 75). By the time of Harsha's reign, Kashmir's territory had been reduced and it no longer controlled the Punjab, as it had done in former times because of the successful progress of the Islamic Turkish empire of the Ghaznavids. This Turkish state had attempted to take Kashmir and captured the northern Punjab (Wink 1997, p. 123) from it, but had only been able to contain it within its mountain stronghold. 'Kashmir was not conquered by Mahmud of Ghazni in the eleventh century; the great wave of Turkish invasion stopped short at the mountain
ramparts of Kashmir' (Wink 1990, vol. 1, p. 254). Kashmir had by the time of Harsha become the last place of resistance to the Islamic advance in the north-west of the sub-continent and remained free of Muslim rule until the mid-fourteenth century. Kalhana clearly saw Harsha's conduct as a threat to the independence of his Hindu enclave and was perhaps warning his contemporaries of the risks of allowing Turkish troops into Kashmir, as the Ghaznavids remained a threat into the time of Kalhana, when writing of Ghaznavid campaigns shortly before he wrote his chronicle: Rajatarangini, VIII. 2843 The people feared that the territory invaded by the Turushkas had fallen altogether into their power and thought that the whole country was overrun by the Mlecchas [i.e. foreigners].

Harshadeva's depradations of his country and natural disasters caused severe economic hardship and price inflation. After a devastating flood...in 1099-1100, Kalhana recorded how Harsha's Kashmir became overwhelmed by inflation: 1220 A Khari [80 kilograms] of rice was bought for five hundred Dinnaras, and two Palas of grape-juice cost one Dinnara. 1221 A Pala $[\mathrm{c} .41 .67 \mathrm{~g}]$ of wool was sold at six Dinnaras. Of salt, pepper, Assafoetida and other articles it was difficult even to hear the name. (according to Stein 1900, vol. 2 p. 327 the normal price was 200 dinnaras per Khari of rice)

## Gold and Silver Coins

It is therefore no surprise that Kalhana reports that one consequence of Harsha's stolen wealth and profligacy prompted him to have high-value coins made to supplement the longstanding issue of low-value copper coins. He converted some of the gold and silver he assembled into coin and used it to distribute largess to his favourites and probably to pay his army. VII: 950 At that time the use of gold and silver money [dinnara] was plentiful in this land, but that of copper money rare. 1117 ... Kanaka, a younger brother of Canpaka, became Harsha's own pupil in singing and exerted himself with much trouble in practising songs. 1118 To compensate him for his trouble he gave him a lakh of money [dinnara] in gold, without flinching.

Kalhana describes Harsha's direct action in introducing a specific new gold coinage. VII:927 As he was fond in his amusements of the Daksinatya (Dekkan) fashion he introduced a coin type (tanka) copied from that of Karnata. Although Karnataka was far from Kashmir, other references in the Rajatarangini to the far south of India suggest a close connection with these distant lands (VII:935 Bilhana [the poet], who had left Kashmir in the reign of King Kalasa had been made by Parmadi, the lord of Karnata, his chief Pandit...)

The earliest confirmation of the veracity of these references to coinage in Kalhana's narrative of Harsha's reign came with Alexander Cunningham's publication of two gold and one silver coin in the name of Harshadeva, two of which had designs copying Karnatak designs (Cunningham 1894). 'Both gold and silver coins are spoken of in the reign of Harsha Deva, AD 1090, as the chief money of commerce, while the copper coin was but little used. I have specimens of the gold coins of different types, weighing 73 and 72 grains, and one of silver weighing 23.5 grains.' (p. 31) 'The only new types in the Kashmir series were those introduced by Harsha Deva for his gold and silver coins. The "elephant" type, which he used for both metals, was copied from the coins of Karnata, and the "horseman" type was imitated from the money of the Brahmani kings of Kabul.' (pp. 36-7) Stein ( 1899 , p. 145, 1900, vol. 2, pp. 317-9) took up Cunningham's discovery and linked them more directly with the Rajataragini's account: 'we find the gold and silver coinage of Harsa practically represented by unique specimens', but saw in Kalhana's account a 'poetically exaggerated statement that, under Harsa, there circulated also gold and silver coins besides the ordinary copper currency.'

Cunningham and Stein's assurance of the attribution of these three coins to Harshadeva did not, however, stand long before being questioned. Rudolf Hoernle (1903, p. 545) argued against Cunningham's attribution of these three coins to Kashmir, suggesting that the reference to Harsha's Karnatak coin designs
was a reference to the creation of a seal in the Karnatak style. He suggested (p. 547) that the elephant coins should be attributed to king Harsha Deva of Malwa (c. 950-74) and the horseman type to Harshavardhana of Kanauj (c. 606-648) as it is 'too early and too western'. Curiously, at this point discussion about the attribution of these coins comes to an end, as Cunningham's attribution has not been questioned since, and they are listed without question by Gopal (1966), Gupta (1969) as Harsha's issues. There is little to be said against Cunningham's attribution.

## New Discovery: the 'Gujranwala Hoard'

Earlier this year, information about a hoard of silver coins with the name Harshadeva began to appear. The coins were said to have been found near Gujranwala in the north-eastern Punjab. Two coins were reported through one collector and eight more through another. It is not clear whether the hoard contained any other coins. The coins were said to weigh between 2.5 g and 2.7 g . The designs were the same as Cunningham's unique gold horseman type and one example shared its dies.

## Gujranwala hoard:

$O b v$. A: Man riding a horse towards the right, wearing a triangular hat (or detail not visible), his right arm raised holding a spear (only traces of the spear visible), the horse ornamented with a necklace of dots and a strap across its rump.
Inscription in Sharada script: Śrī Harṣadeva
$O b v$. B: Woman (as the man on obverse A but with breasts) riding a horse to right, wearing a rounded hat, her right arm raised holding a spear, the horse ornamented with a necklace of dots and astrap across its rump.
Inscription in Sharada script: Śrī Harṣa[deva]; traces of letters behind the rider.

Rev. a: Goddess seated with bent legs on a lotus (with dotted petals when visible), wearing a triangular crown (with three upright motifs at front and curved motifs to the sides), and a skirt (represented by a line at waist and dots below), with a ribbon tied below her breasts with ends stretched out on both sides below her raised arms, holding a lotus flower (see particularly figs. 3-5) depicted as a dotted device in her raised right hand, and vase (see particularly figs. 4-5) in her raised left hand.


Fig. 1
1 obv. A1/rev. a1 (fig. 1)


Fig. 2
2 obv. A2/rev a2 (fig. 2) (same dies as Cunningham's gold coin, now in BM)


Fig. 3


Fig. 4
obv. A3/rev. a3 (fig. 4)


Fig. 5
obv. A3/rev. a4 (fig. 5)


Fig. 6
obv. A4/rev a4 (fig. 6)


Fig. 7
obv. A5/rev. a5 (fig. 7)


Fig. 8

8
obv. A5/rev. a5 (fig. 8)


Fig. 9
obv. A5/rev. a5 (fig. 9)


Fig. 10
10 obv. B1/rev. a6 (fig. 10)

## Harshadeva's gold horseman coin:



Fig. 11
British Museum, ex-Cunningham collection, registration no. $1894,0507.396$, weight 4.73 g , diameter 15 mm (fig. 11).
Obverse die A2; reverse die a2 (as Gujranwal silver coin no. 2)

## Prototypes for Harshadeva's horseman types:

Silver drama of the Kabul Shahis, c. AD 800


Fig. 12
British Museum, ex Cunningham collection, registration no. $1894,0507.430$, weight 3.49 g , diameter 19 mm (fig. 12).
Obv.: a man riding a horse to right, holding a spear in his raised right hand
Inscription, in Bactrian script: $\Sigma \mathrm{PI} \Sigma \Pi \mathrm{A} \wedge \mathrm{ABA} \triangle$ (Sri Spalabad)
Rev.: in Sharada script: Śrī Spalapatideva
Gold tanka of Gangeyadeva, Kalachuri king of Tripuri (AD 101540)


Fig. 13
British Museum, registration no. OR.0893, weight 4.2g, diameter 19.5 mm (fig. 13).
$O b v .:$ four-armed goddess seated crosslegged on lotus
Rev.: inscription in three lines: Śrīmad Ga/ngeyade/vah
The obverse designs appear to have been based on the silver 'bull and horseman' coins of the Shahi kings ruling in the Kabul and Gandhara region from the eighth to tenth century (fig. 12). Debased imitations of these coins continued to be produced in Afghanistan, Pakistan and north-western India down to the thirteenth century (Deyell 1990, pp. 51-60). The posture of the horseman on Harshadeva's coins seems to be an adaptation of the Shahi design, but the inscription arranged above reflects the positioning of the inscription on the bull side of the Shahi issues (Kalhana recorded Harshadeva's relationship with the now defunct Shahi kingdom: VII:956 Vasantalekha, the king's wife, who belonged to the Shahi family...). The reverse design representing a two-armed goddess seated on a lotus and holding a lotus blossom and a vase appears to draw inspiration from the gold coins depicting a four-armed goddess on a lotus appearing on the gold coins of central northern India current in the time of Harshadeva. The lotus and vase attributes of the two-armed goddess suggest
that she is likely to be Shri or Parvati. The four-armed goddess design, also representing Shri, was introduced by Gangeyadeva (fig. 13), the Kalachuri ruler of Tripuri (AD 1015-40) and continued in use until the thirteenth century (Deyell 1990, pp. 86110). It seems to have derived from the scarce tenth century gold issues of the Palas and Rashtrakutas (Cribb 2005, p. 38, nos. 63 and 64). The unexpected feminisation of the rider on the single coin struck from die B1 is difficult to interpret. It may simply be an example of the poor work of a different die engraver who has not full understood the nature and detail of the design, rather than an attempt to show a female rider. The marks on the edge of the coin behind the rider do not lend themselves to easy explanation. They look like the edges of letters, but may be further misunderstanding by the die engraver, rather than an additional inscription. The execution of the reverse die (a6) is also different in treatment.

The availability of Shahi and Kalachuri prototypes for the Harshadeva coinage in the eleventh century supports the attribution of these coins to Harshadeva king of Kashmir (10891101), rather than a ruler in the seventh century as suggested by Hoernle (1903). The link with Kashmir is also borne out by the style of representation of the two-armed goddess, drawn in a disjointed style with heavy dotted features. The script style on the gold and silver horseman coins is also the same as that on Harshadeva's regular Kashmir copper coins.

Our understanding of Harshadeva's gold horseman coin is therefore reassessed on the basis of the discovery of ten silver coins of the same type. The size and weights reported suggest that the coins are the same size as the gold issue, but lighter due to the difference in specific gravity of the two metals. The issue of identical coins in two metals is not a usual phenomenon because of the risk of forgery through the gold plating of the silver coins to deceive the unwary. When the simultaneous production of identical gold and silver coins does happen, it is because the gold pieces are being made for distribution through largesse (as in Rajatarangini 1117-8) while the silver are made for circulation. The discovery of a hoard of silver coins outside Kashmir suggests that the coins were circulated. The weights of the coins so far reported do not show how they fit into any pre-existing currency system, as they match neither the Shahi nor the Kalachuri monetary standards. The weight of the silver coin (c. 2.6 g ) could be based on the local weight standard being about a sixteenth of the pala (c. 41.67 g ), the gold, therefore, about an eighth.

The Rajatarangini refers to the use of gold and silver coinage in Harshadeva's reign and these coins now confirm that statement: VII: 950 At that time the use of gold and silver money [dinnara] was plentiful in this land, but that of copper money rare. The evidence, however, remains thin and the second part of his statement that copper coinage was scarce is not confirmed by the record of modern coin collections. The Shri Pratap Singh Museum in Srinagar, for example, is recorded by Bleazby (1900, p. 20) as having 29 copper coins of his reign. Looked at statistically this is about 2.25 coins for each year for his 13 year reign, not much different to the number of the museum's recorded coins of Diddadevi ( $980-1003$ ) 63 coins in 23 years ( $=2.74$ coins p.a.), of Sangrama (1003-28) 55 coins in 25 years ( $=2.2$ coins p.a.) or of Harshadeva's predecessor Kalasa (1063-89) 62 coins in 27 years ( $=2.3$ coins p.a.). A different picture of copper coin circulation is, however, represented by a hoard buried after AD 1128 found in Chamba District in Himachal Pradesh (Gupta 1988, pp. 112-23). The hoard contained no coins of Harshadeva, but 85 of Diddadevi, 81 of Sangrama and 94 of Kalasa. If the hoard represents a more accurate picture, then the Museum collection could disproportionately represent Harsha because of the contributors to the collection being swayed by his racier historical reputation. Until more Kashmir hoards are recorded it is difficult to assess the accuracy of the Rajatarangini's account of the paucity of copper coinage in his reign.

The small number of the horseman coins which survive does not give us enough information to assess the quantity issued, but the small number of dies (six obverse and six reverse for eleven
coins) used to strike the surviving coins does suggest that only a small number were made.

## The other gold and silver coins of Harsha

As Cunningham suggested, two coins in his collection (figs. 14 and 15) and now in the British Museum verify the statement in the Rajatarangini that Harsha had coins made on the model of the coins of Karnataka. His gold and silver coins both had the same design, an elephant facing right on the obverse and a two-line inscription on the reverse naming the king: Śrī Harşa/deva, written in the same style in Sharada script as on the horseman coins and on his copper coins. The elephant design is closely modelled on the elephant appearing on the gold coins attributed to the Ganga rulers of Karnataka (fig. 16 and 17) in the period coinciding with Harshadeva. The attribution of the Karnataka coins is very problematic, as the inscriptions on them are not sufficiently informative to confirm their attribution to the Gangas, so scholars have to rely on Kalhana's testimony in the Rajatarangini: VII:927 As he was fond in his amusements of the Daksinatya (Dekkan) fashion he introduced a coin type (tanka) copied from that of Karnata. The Karnatak coins in question are certainly from this region, but their circulation seems to have extended beyond the period of the Gangas and beyond their territory as they are also found in Sri Lanka (Chattopadhyaya 1977, pp. 44-8). While one is tempted to accept Cunningham's attribution, until further evidence emerges these two coins have to remain in question. Cunningham's collection was not free of forgeries and one should ask whether these two coins could be the product of an enterprising forger supplying Cunningham or his source with coins designed to fit the Rajatarangini's report. My inclination is to accept that these are coins of Harshadeva, but subject to the caveat that, as yet, their authenticity cannot be tested.

## Gold coin of elephant type:



Fig. 14
British Museum, ex Cunningham collection, registration no. 1894,0507.398, weight 4.67 g , diameter 14 mm (fig. 14).
Obv.: elephant standing facing right, with its trunk hanging down, ornamented with a double dotted harness over the shoulder and an anklet of dots.
Rev.: two line inscription in Sharada script: Śrı̄ Ha[rṣa]/deva (only the lower part of the syllable $r s ̣ a$ is visible)

## Silver coin of elephant type:



Fig. 15
British Museum, ex Cunningham collection, registration no. 1894,0507.396, weight 1.52 g , diameter 12 mm (fig. 15).
Obv.: as gold coin, but no dotted ornaments on the elephant, and floral motifs between elephant's legs and above back.
Rev.: as gold coin, but syllable $r s ̣ a$ is completely off the edge of the coin, and there is a three-dot symbol to the left of the inscription.

## Western Ganga gold coins:



Fig. 16
British Museum, ex Elliot collection, registration no. $1886,0505.58,3.39 \mathrm{~g}, 13.5 \mathrm{~mm}$ (fig. 16).
Obv.: elephant standing to right with foliage between its legs and above its back
Rev.: floral motif


Fig. 17
British Museum, ex Marsden collection, registration no. Marsden 1069a, $3.91 \mathrm{~g}, 15 \mathrm{~mm}$ (fig. 17).
$O b v .:$ elephant standing to right, with foliage between its legs and a Kannarese inscription above its back teva (?)
Rev.: floral motif
The horseman and elephant coins attributable to Harshadeva may not be the only silver coins attributable to Kashmir, as two silver coins are known which may be Kashmir issues. They have a crouching lion facing left below a thunderbolt on the front and the inscription Shrimad Diddakadevah in Sharada script around a central ball device enclosed in a circle of dots. (Gupta 1988, p. 212, plate XXVI, nos. 1 and 2; Deyell 1990, p. 345, figs 61a and 61b) According to Gupta, they were found in a hoard at Chamba in Himachal Pradesh, in 1968 with 44 Indo-Sasanian base-silver coins and 2 Kashmir base-gold coins of Vinayaditya (pp. 109-11, 212, hoard now in the Bhuri Singh Museum, Chamba). Their weights were not recorded, but they appear to be about $15-17 \mathrm{~mm}$ in diameter.

## Harsha Copper coins

Harsha's copper coins are part of the continuing monotony of Kashmir's copper coinage, all sharing the same design. However, they are worth describing here for completeness sake, but with the knowledge that additional specimens will undoubtedly appear in the future to add to the varieties recorded here. Harsha's copper coins appear to be made of two different alloys, a bronze, with low tin content, and brass, with added zinc. The brass coins have a yellowish colour and have lead some to relate them to the records of gold issues (Mitchiner 1979, for example, lists two coins as base gold (p. 38, nos 185 and 186).

## Variety 1

Obv.: Stylised representation of a seated female figure with bent legs, wearing a garment (represented by a linear collar with an arc of seven dots across her chest and lines across her waist with three dots below), a headdress (represented by three vertical lines above a horizontal line) and large circular earrings. Lotus blossoms to the right and left of her head.
Inscription in Sharada script in a single line across the centre of the design, broken by the image in the centre: Ha/rṣa raja
Rev.: Stylised representation of a standing male facing, holding a trident(?) in his left hand, wearing a skirted garment with puffed sleeves (represented by heavy lines and crossed lines at the waist), a headdress (represented by three vertical lines above a horizontal line) and earrings (four dots to either side of the head).

Inscription in Sharada script in a single line in the right field under the king's left arm: deva
Examples: British Museum, ex-Cunningham collection, registration no. 1894,0507.399, 6.03 gr , diameter 18 mm (fig. 18); British Museum, ex-Bhagvanlal collection, registration no. $1889,0105.1029,6.01 \mathrm{~g}$, diameter 18 mm (fig. 19).


Fig. 19

## Variety 2

As variety 1 , but the inscription arranged differently: Reverse inscription in Sharada script in two lines de/va
Examples: British Museum, ex-Cunningham collection, registration no. $1894,0507.971,6.69 \mathrm{~g}$, diameter 17 mm (fig. 20); British Museum, ex-India Office Collection, registration no. IOC. $639,6.00 \mathrm{~g}$, diameter 19.5 mm (fig. 21).


Fig. 20


Fig. 21
Variety 3
As variety 1 , but the inscription arranged differently Obverse inscription in Sharada script: Ha/rṣa ra Reverse inscription in Sharada script: ja de[va]


Fig. 22
Example: British Museum, ex-Cunningham collection, registration no. $1894,0507.974,6.09 \mathrm{~g}$, diameter 19 mm (fig. 22).

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N.B. I would like to thank Shailendra Bhandare for his assistance with this article, particularly his identification of the objects held by the goddess on the back of the horseman-type coins, and Bob Senior for sharing two of the images of the new silver coins with me.

# A RUPEE OF AURANGZEB WITH THE MINTNAME ‘TIBET-I-KALĀN’ 

By Nicholas Rhodes

In ONS Newsletter 156 (Summer 1998), pp.19-20, I published a gold mohur of Aurangzeb from the 'Khusru' collection, with the mint name 'Tibet-i-Kalān' ${ }^{52}$. At the end of that article, I noted that 'we should now look out for the corresponding silver rupee, which almost certainly exists'. I can now report that a specimen of the corresponding rupee has appeared, and is illustrated below:


Wt. 11.47 g Diam. 21.5 mm
The details of the design are identical to the gold mohur, but the die is naturally slightly larger, as is to be expected. The date is not visible on this piece, but it must surely be AH 1076, year 8 , the same as the gold coin. The full background to the issue of this coin is given in my previous article, so is not reproduced here. One item of interest is that this rupee apparently turned up in a hoard of Mughal coins (approx. 400-500 pcs) from the Karnataka/Maharashtra borderlands, north east of Goa, amidst other Shah Jahan and Aurangzeb rupees. This provenance would suggest that this particular coin was circulated only in India, purely as a propaganda exercise, to demonstrate this significant extension of Aurangzeb's empire.

It is remarkable that this issue is documented in detail in several Persian texts, namely the Ālamgīrnāma, the Maāsir-i-

[^16]Ālamgiri and in Khafī Khān II $^{53}$. Very few other coin issues receive this degree of attention, and the Ālamgīnāma even mentions that 1000 gold mohur and 2000 silver rupees were sent as specimens to the Court. The implication is that the coins were struck in Tibet (Ladakh) itself, but it is clear from the quality of die production on this coin that the die was cut by one of the experienced imperial die cutters, almost certainly in one of the main mints, and an expert in the coins of Aurangzeb may be able to suggest the location of the die-cutter. However, the poor quality of the striking, showing neither the Hijra date nor the regnal year, may indicate that it was indeed struck in Tibet, but this is very uncertain. It is possible that the 2000 specimens sent to the Court may be the only pieces ever struck, and it is not impossible that further examples will appear in hoards of Mughal coins from India.

# THE TIBETAN COINS IN THE PALACE MUSEUM, BEIJING 

By Nicholas Rhodes

(Edited by Wolfgang Bertsch)
Editor's note: This article was drafted by the late Nicholas Rhodes about four years ago. It was written for publication in a Chinese numismatic journal, possibly for Zhongguo Qianbi ("China Numismatics"). However, I am not sure if a Chinese translation was ever prepared and published in China.

As a tribute to Nicholas Rhodes whose expertise in Tibetan numismatics was not matched by anybody, I would like to publish it in the journal of the ONS. The article is also evidence of Nicholas Rhodes' modesty: although he is without doubt the sole author of this article and the research is entirely his own, he mentions two Chinese co-authors (Ding Meng and Zhang Wuyi) putting his own name last. In order to give full credit of authorship to Nicholas I have eliminated the names of the Chinese numismatists.

I understand that on $15^{\text {th }}$ December 2010 Nicholas had given a talk on the subject of this article for members of the Royal Numismatic Society in the Warburg Institute in London. He had sent me the draft of this article without illustrations; In an appendix I am adding copies of photographs of the coins which are discussed in the article.

## W. B.

The coin collection of the Palace Museum in Beijing was first published in 1937, in a little booklet entitled Coins of the Ch'ing Dynasty, which has been reprinted many times since. ${ }^{54}$ The coins consist entirely of Qing Dynasty coins which were preserved in the Palace as a record of the sample coins sent to the various provinces to indicate the type of coin which ought to be produced according to the Imperial edicts issued in various years. The purpose of this article is to describe in detail the Tibetan coins preserved in the collection, which differ from the other coins in that they are made of silver rather than from a copper alloy. In particular they demonstrate very clearly how the central government adopted different practices when producing coins for the Tibet region of China. We will also explain why it was that these different practices were adopted.

[^17]In the first half of the eighteenth century, the only coins to circulate in Tibet were silver coins struck by the Malla rulers of Nepal. Initially these were of good quality silver, but after about AD 1720, the coins were debased with as much as $33 \%$ or more of copper added to the alloy. The coins weighed about 5.6 g , or 0.15 "Srang" in the Chinese system of weights that was used in Tibet. The Tibetan people accepted the debased coins as being of equal value as the fine silver coins, and the Nepalese rulers and traders made considerable profit from supplying these coins to Tibet.

In AD 1751, when the ( $\left.11^{\text {th }}\right)$ Dalai Lama came of age, he wrote to the Nepalese kings objecting to the practice of debasing the coins, and for some years the Nepalese supplied good silver coins again to Tibet, in exchange for gold bullion, but there were still a very large number of debased coins circulating in Tibet. Between 1754 and 1768, the king of Gorkha, Prithvi Narayana, blockaded the Kathmandu Valley, and disrupted trade between Nepal and Tibet, and very few new Nepalese reached Tibet. In 1763/4 a few coins were struck by the Regent, the Demo Tulku, in Lhasa, but the experiment was not a success. In 1769 Prithvi Narayana finally conquered the three Malla kingdoms of Kathmandu, Bhatgaon and Patan.

Once he had conquered the Nepal Valley, Prithvi Narayana tried to resume the profitable practice whereby Nepal supplied silver coins to Tibet. However, the Tibetans demanded that the old debased coins be accepted as equal in value to the fine silver coins struck by Prithvi Narayana in Nepal. The Nepalese were not prepared to accept such terms. Negotiations between the two countries continued for about twenty years, but no peaceful solution could be found. During this period the Nepalese supplied more debased coins to Tibet in 1775-77, and the Dalai Lama issued some fine silver coins in 1785, but the Nepalese still refused to accept their debased coins as equal in value to the fine silver coins. Ultimately the Nepalese resorted to force and invaded Tibet. After initial successes on the part of the Nepalese, the Tibetans appealed for help to Emperor Qian Long, and in 1791 a Chinese army defeated the Nepalese and drove them back to their own country. In that year the local Tibetan Government issued many debased coins to satisfy the local demand for coins.

The first priority of the new central Government administration in Lhasa was to finally solve the coinage problem. There was still a shortage of coins in Lhasa to satisfy the demands of the Tibetan people, and central Government was not happy to continue the practice of issuing debased silver coins, because these were of very uncertain value. It was in the $57^{\text {th }}$ year of Qian Long (AD 1792) that orders were dispatched from Beijing to issue coins for Tibet. Initially the suggestion was for low-value copper coins to be issued, as circulated in the rest of China, but the Governor of Sichuan province correctly pointed out that the Tibetan people were not used to a copper coinage. He also observed that there were no copper mines in Tibet, and the cost of transporting copper from central China along the mountainous roads would be prohibitive. The Emperor agreed that coins should be made in Tibet out of silver, so that the demands of the Tibetan people would be satisfied, according to their local practices and customs.

Although it was the practice for sample copper coins to be supplied to other mints, in the case of Tibet, because the officials in Beijing were not well acquainted with the situation in Lhasa, only a general description of the required coins was supplied. The instruction stated that the coins should have the legend "Qian Long Zhang Bao" and the regnal year of the Emperor in Chinese script on one side and in Tibetan script on the other side. The instruction stated that three denominations should be issued, weighing $1.5,1$ and 0.5 Qian. The local officials in Lhasa were expected to exercise their own judgement as to exactly how to design and produce coins that would be acceptable to the local people.

In Lhasa, the local people were used to four denominations of coins in circulation, but these were produced by cutting the full Nepalese coins. The full coins weighed 1.5 Qian (or about 5.4 g ), and these were cut into fractions of two-thirds, half and one third, weighing $3.6 \mathrm{~g}, 2.7 \mathrm{~g}$ and 1.8 g respectively, or 1 Qian, 0.75 Qian and 0.5 Qian. The order from Beijing had not mentioned the 0.75

Qian denomination, but the local officials decided to issue a coin of that weight in order to satisfy local demand. The coins were to be circulated at the value of 6 coins of the 1.5 Qian value to equal 1 Liang of silver bullion, with the lower values in proportion. In that way a $10 \%$ charge was made to cover the costs of production.

As regards the technique to be used for making the coins, the local officials decided to use the same technology that had been used to strike the earlier Nepalese coins and the coins that had previously been made in Lhasa. Under this technology, upper and lower steel dies were individually engraved with the design incuse and in mirror image, according to a master design provided. The metal dies were then tempered by heating them up to a high temperature and then cooling them down rapidly in cold water. This made the dies hard. Round silver flans of the desired size, weight and fineness were then produced. The lower die was placed on a hard surface, and a blank flan was placed between the dies, and the face of the upper die was placed on the flan. The upper die then received a hard blow from a sledge-hammer so that the designs on the two dies were impressed on each side of the flan and the coin was then ready for use. Because the upper die received the direct blow from the sledge-hammer, it wore out rather faster than the lower die. Each time a die broke, it had to be replaced by a new die, and, as each die was hand-produced, it differed slightly from other dies. From a close examination of the coins, it is clear that it was the die with the Chinese legend that was used as the lower die, and this is the die that is traditionally called the "obverse". This is the method used in western countries for making coins, and differs from the traditional Chinese method for making coins.

Under the traditional Chinese method, a sample cash was first carved by hand out of brass, and the design was approved by the Emperor and other high officials. This sample cash was then used to produce "mother cash" using a casting process. These "mother cash" were very carefully produced, so that each "mother cash" was an exact replica of the original sample cash. The mother cash were then used to produce moulds for casting the cash for circulation, and every cash produced was identical in details of the design, differing only slightly in thickness and weight.

The coins were finally struck in Lhasa in the $58^{\text {th }}$ year of Qian Long and they were the first coins to be struck in China using the "western" technique. When the first silver coins were struck in Lhasa in the name of the Emperor, it was decided to send samples back to the Emperor in Beijing, for purposes of record, and these samples are the first three Tibetan coins now preserved in the Palace Museum. Since the original order from the Emperor only demanded the issue of three denominations, it was decided that it would not be appropriate to send an example of the 0.75 Qian denomination to Beijing, as that might have generated unfavourable questions.

No more Imperial edicts seem to have been sent from Beijing to Lhasa for the next decade, but coins continued to be made according to the basic principles of the original edict of the $57^{\text {th }}$ year of Qian Long, and adapting the coins struck to the local situation. The first change occurred after only a few months, when it was realised that the Tibetan people were not prepared to consider the smaller coins as being of lower value. They only accepted minor denominations in cut form, and all round coins were regarded as equal in value, with the possible exception of the smallest denomination, the 0.5 Qian. In addition, all the new coins, including the 1.5 Qian coin, were regarded as equal in value to the old debased Nepalese coins that were valued at 9 coins to the Liang of silver bullion. Because of this, it was decided only to issue coins of a single denomination, the 1 Qian, weighing about 3.6 g . The diameter of the new coins was increased from 23.5 mm to about 26.5 mm , so that they were about the same as that of the old Nepalese coins. These new coins, and the old Nepalese coins could then circulate alongside each other as equal in value, even though they were of different weights.

There is no evidence that further Imperial instructions were received for about a decade, and the local officials in Lhasa continued to strike coins, changing the date each year. Certain changes in calligraphy, diameter and other details of the design
were also made, perhaps to indicate different workshops within the mint, different officials in charge of coin production, or merely the appointment of a new die cutter. In AD 1796, when the Emperor Qian Long decided to abdicate his imperial responsibilities after his reign of sixty years, the news took many months to reach Lhasa, and coins with the "impossible" date Qian Long $61^{\text {st }}$ year had already been struck. As soon as the news of the new emperor was received, the local administration struck coins dated Jia Qing $1^{\text {st }}$ year. As no examples of these new coins are preserved in the Palace Museum, it is possible that they were struck on the initiative of the local officials, rather than as the result of an imperial edict. Although almost all known specimens of this date are of the full 1 Qian denomination, one example of a 0.5 Qian piece is preserved in the Shanghai Museum.

In the early years of the Jia Qing reign, while the old Qian Long emperor was still alive, the situation in Beijing was rather uncertain, and it seems that no new supplies of silver were received in Lhasa from Beijing. During the next few years, although a few coins were struck dated to the Jia Qing $2^{\text {nd }}$ to $6^{\text {th }}$ years, the numbers struck were very small, and few examples of these years have survived. In Jia Qing $6^{\text {th }}$ year a new design was introduced, with an inscription in Manchu, as well as Chinese and Tibetan, the only time that Manchu script was ever used on a coin struck in Tibet. Of this year both 1 Qian and 0.5 Qian denominations are known, although the latter is only known from a single example in a private collection. Again, since no examples of these coins are preserved in the Palace Museum, it is possible that these coins were struck as a result of local initiative, rather than as a result of Imperial edict.

Finally, in Jia Qing 7 ${ }^{\text {th }}$ year, some time after the death of the Qian Long Emperor, an imperial edict was sent to the officials in Tibet, instructing them to issue new coins of 1 Qian and 0.5 Qian denomination. The order took some months to reach Lhasa, and the coins issued as a result of this imperial edict were struck dated Jia Qing $8^{\text {th }}$ year. The imperial edict may have given a broad indication of the design, and the new coins differed from the earlier pieces in having no ornamentation between the Chinese characters on the obverse, within the inner circle. The Manchu script that was used in Jia Qing $6^{\text {th }}$ year was not used again. Examples of the new coins produced as a result of this imperial edict were sent to Beijing, and are now preserved in the Palace Museum. Although die duplicates of the 1 Qian denomination have been found among circulating coins, no other examples of the 0.5 Qian denomination have been discovered. It is possible that this small denomination was only struck for sending to the Emperor, and was not struck for use in the market.

More coins were struck in Jia Qing ${ }^{\text {th }}$ year, but then there were no coins struck from Jia Qing $10^{\text {th }}$ to $23^{\text {rd }}$ years inclusive. The reason for this break in production is not recorded, but may have been due to a break in supply of silver from central government. Coins were again struck in Jia Qing $24^{\text {th }}$ and $25^{\text {th }}$ years, the latter in particularly large quantities, presumably thanks to the supply of silver being resumed. No imperial edicts are recorded during this period, and no sample coins exist in the Palace Museum.

After the death of the Jia Qing emperor in AD 1820, new sample coins were sent out to all mints, indicating the design to be used for the Dao Kwang era. On this occasion, for the first time, Tibet was not left out. Sample silver coins of the two denominations, 1 Qian and 0.5 Qian, were produced in Beijing and were presumably sent to Lhasa. Examples of these "mother" coins are preserved in the Palace Museum, and they appear to have been produced by the traditional Chinese method of casting, rather than using the western method of die striking. No examples of these "mother" coins have been discovered in Lhasa or elsewhere, so the coins in the Palace Museum are unique historical records of what the authorities in Beijing intended the new Tibetan coins to look like. In actual fact, the new coins produced in Tibet did not faithfully copy the design sent from Beijing, and differ in the following details:

On the obverse, a) ornamentation was added between the Chinese characters within the inner circle and b) the date "nien
yuan" ( $1^{\text {st }}$ year) was placed at the top and bottom, rather than at left and right.

On the reverse, a) The transliteration of the Emperor's name as written is "rD'o-kwong" rather than "To'u-kwang", b) the date was translated into the Tibetan language as "Dang-po" rather than a transliteration of the Chinese language "Nien-yo" into Tibetan script. It is also clear that the Tibetan version supplied from Beijing was written by someone not fully familiar with the Tibetan language and script.

In addition, no half denomination, 0.5 Qian, coin is known for the Dao Kwang emperor. It is not recorded why these changes were made. One possibility is that the "mother" coin arrived in Lhasa after the local officials had already designed and struck new coins on their own initiative. In any case, no actual examples of the new coins were sent to Beijing to be preserved in the Palace Museum. It is possible that, in Beijing, the officials were not aware that these changes had been made.

For the next few years, until Dao Kwang $4^{\text {th }}$ year, coins were struck in each year in considerable numbers, but between the $5^{\text {th }}$ year and $14^{\text {th }}$ year inclusive, no new coins were produced, presumably because of shortage of silver bullion. No further imperial orders seem to have been sent to Lhasa regarding coinage, and no changes were made in the design. In Dao Kwang $15^{\text {th }}$ and $16^{\text {th }}$ years, coins were again struck, but in much smaller numbers. After that, the Lhasa mint was closed, and the equipment and records were returned to Beijing. The supply of silver to the mint was becoming a problem, and continuing with the striking of pure silver coins was no longer feasible.

When the Dao Kwang emperor died, the officials in Beijing presumably considered whether to reopen the mint in Lhasa. A pair of "sample" coins was produced with the new reign name, Xian Feng, copying the design of the "mother" coins produced in Beijing in the first year of the Dao Kwang era. These pieces were produced using the tradition Chinese technique. These pieces are hand-carved from a piece of silver bullion, with great care made in the precise details of the calligraphy. No care was taken to ensure that the flans were of the correct weight, and the pieces are of heavy weight. These actual "sample" pieces are preserved in the Palace Museum collection, but it is probable that no "mother" coins were made and sent to Lhasa.

After about AD 1836, little silver bullion was sent from central China to Tibet, so there was no possibility for the Chinese Amban in Lhasa to reopen the official Tibetan mint for the rest of the nineteenth century, and no further Tibetan coins are preserved in the Palace Museum.

The Tibetan coins that are preserved in the Palace Museum, are of particular importance in the study of the coins of the Tibet region of China. They demonstrate the extent to which officials in Beijing only occasionally sent imperial edicts to Lhasa to indicate the type of coins that should be made there, and that local officials in Lhasa exercised their own judgement as to the details of coin production. They show how it was accepted in Beijing that western technology would be used to strike silver coins in Lhasa, so that samples were initially sent to the Emperor for the purpose of record. They show how, when the Lhasa mint was in its final stages, the central authorities in Beijing tried to include the Tibet mint in the traditional process, whereby sample coins were produced centrally, and sent to the provincial mints. In Beijing, the sample Tibet silver coins could only be produced using the eastern casting technology and not the western die-striking technology actually used in Lhasa for the production of the local coins.

## Patterns of Sino-Tibetan coins from the Palace Museum in Beijing.

The reproductions are taken from copies of photographs which were obtained from China by the late Gilbert Richardson (U.S.A.). Richardson considered the Tibetan side as the obverse of these coins.

Qian Long, year 58:


## Jia Qing, year 8



1 Sho (1 Qian), Diam.: 26 mm

½Sho (0.5 Qian), Diam.: 21 mm

## Dao Guang, year 1



1/2 Sho (0.5 Qian), year 1, Diam.: 21 mm

## Xian Feng, year 1



1 Sho (1 Qian), Diam.: 26 mm

½ Sho (0.5 Qian), Diam.: 21 mm
The date on the Tibetan side of the coins in the name of Dao Guang and Xian Feng can be read as nyin yo which most probably is an attempt to transcribe in Tibetan the Chinese legend nian yuan (year one). Yo may be short for yon, the final " n " being omitted due to lack of space.

Crude forgeries of the Sho-denomination struck in the name of Xian Feng exist in both copper and silver or white metal. One example is illustrated, enlarged, below:


Xian Feng year 1. A crude modern forgery offered on eBay by Oldart (871), August 2010, no. 200510413556

## THE "SA" AND "BOD" COUNTERMARKS ON SICHUAN RUPEES

By Wolfgang Bertsch

Sichuan rupees were struck in Chengdu from about 1902, and later (from about 1920 until about 1940) also in Kangding for circulation in eastern Tibet. ${ }^{55}$ They were produced by the Chinese with the intention of replacing the rupees of British India which were widely circulating in Tibet in the last quarter of the $19^{\text {th }}$ and in the beginning of the $20^{\text {th }}$ century. Originally, the Sichuan rupees struck in the Chengdu mint were of good silver, almost matching the quality of their Indian prototypes. The rupees struck in the former Sino-Tibetan border town of Kangding (formerly known as Tatsienlu) were of silver alloy and can be identified by the larger portrait of the Chinese emperor, Guang Xu , and are, therefore, referred to as the "big head" type. This and other types can be

[^18]found with various countermarks which were discussed by Karl Gabrisch and myself. ${ }^{56}$

One of the countermarks found on Sichuan rupees represents the Tibetan character "sa", which means "earth" or "land". It is not known which local authority is responsible for this countermark. ${ }^{57}$ One may presume that it originated in an important Tibetan monastery. Many Tibetan monasteries acted, among other things, as money lending institutions. It is possable that some of the countermarks found on Sichuan rupees, such as the "sa" mark, were applied to coins of low silver content before they were handed out as credit. By applying a countermark to the coins, the monastery probably guranteed that it would take back the coins thus chopped at their full face value. ${ }^{58}$

Two versions of the "sa" mark exist: one was applied with a small round, slightly lobate punch (fig. 3), the other by a larger square punch (fig. 2). Recently (in 2010) a third variety of the "sa" mark applied on a Kangding rupee with an even larger square punch was offered on eBay (fig. 1). The coin actually has two punches with two different "sa" letters, one composed of three strokes while the other has four strokes.

For the following reasons the two marks on the eBay coin seem suspicious to me:

1. the two "sa" letters appear to have been designed by somebody who was not familiar with Tibetan calligraphy, the strokes being apart from each other, while they should be attached or close to each other in the normal Tibetan dbu chan script (script "with head");
2. These types of countermarks were never found before they appeared on the coin offered on eBay;
3. The fact that two different punches showing the same Tibetan character in two different styles may suggest that somebody was experimenting with different punches. It is unlikely that a monastery or some other local authority would have applied two punches of different style on the same coin. While there exist Sichuan rupees which bear more than one type of punch, I have never seen a coin of this type which bore two punches of different style which have the same meaning.

Another Sichuan rupee was offered on eBay, bearing the countermark "bod" (meaning: "Tibet") in Tibetan script (fig. 4). This mark was unknown until it made its appearance in July 2010. I also have some doubts regarding the authenticity of this mark. The fact that Sichuan rupees of the "big head" variety are relatively common and can be purchased at reasonable prices, presents an opportunity to forgers to increase the value of this type of coin by applying an "unrecorded", newly created countermark on the obverse.
${ }^{56}$ Gabrisch Karl and Bertsch, Wolfgang: 'Chopmarks on Sichuan Rupees and Coins from Tibet'. Numismatics International Bulletin, vol. 26, no. 3, March 1991, p. 57-65.

This article was reproduced under "Tibet" in a countywise illustrated list of chopped coins in Chopmark News in the early 1990s. I am not sure of the volume number and year of publication.
${ }^{57}$ Nicholas Rhodes suggested that the countermark "sa" may be of Bhutanese origin, since there exist many Bhutanese copper coins inscribed with the syllable "sa" (Rhodes, Nicholas: The coinage of Bhutan. Oriental Numismatic Society, Information Sheet no. 16, January 1977). However, in a later publication he reached the conclusion that the countermark "sa" was applied to Sichuan rupees in eastern Tibet (see footnote 36 in the following article: Rhodes, Nicholas: "Coinage in Bhutan", Journal of Bhutan Studies, vol. 1, no. 1, p. 84-113. This article was also published on the internet:
http://himalaya.socanth.cam.ac.uk/collections/journals/jbs/pdf/JBS_01_01 _04.pdf).
${ }^{58}$ However, according to a Chinese source this guarantee was not respected for Sichuan rupees bearing a countermark which has been attributed to the eastern Tibetan monastery in Litang: The monastic authorities are said to have refused to take back at their face value Sichuan rupees of bad alloy, even when they were originally countermarked by themselves. Cf.:Yue Shi: "Si chuan lu bi gai jun yong ping ying bi bian ?" ("Is the Sichuan rupee with the coutermark <jun yong ping> for military use?"'). Zhongguo Qianbi (China Numismatics), no. 28, 1990.1, p.74.


Fig. 1. Two "sa" countermarks on Sichuan rupee Offered for \$ 1600 by eBay-seller maria-ozawa (476), item no. 270642784306, September 2010


Fig. 2
Genuine "sa" countermark on Sichuan rupee of the "flat nose, with collar"type. Collection W. Bertsch.
Weight: 11.48 g. Diameter: 30.5 mm . Purchased in Nepal in 1986.


Fig. 3. Diameter: 30.5 mm
Sichuan rupee of the "flat nose, with collar" type, with "sa" countermark within quatrefoiled area. Collection W. Bertsch.


Fig. 4. "bod" Countermark on Sichuan rupee. eBay seller mars-1 (1991), item no. 140426743404, 12.7. 2010

## LOCALLY STRUCK COINAGE OF THE MALDIVES: UPDATE ON PARTICULAR COINS

By Peter Budgen

In JONS 207 I covered in detail my studies on the final issues of locally struck coins in the Maldives, dated AH 1318, 1319 and 1320. In one section I described the rare issues of coins struck in silver for 1319 and 1320, and invited responses from people who had, or thought they had, examples of these coins.

One fellow member did reply and sent me pictures of a coin in his collection that had always puzzled him. He thought it had been struck in white metal, but could find no references to it in the catalogues he had available, nor did the dealer who sold him the coin have a clue as to what it was. Although the pictures were a little indistinct I was able to confirm that he did indeed possess a 1319 two lariat coin that had been struck in silver.

One other member, ie. myself, was also lucky enough to acquire a similar coin. After submitting my article, but before its publication, I saw a 1319 coin in a dealer's list where it was described as "seems to be silver" but not illustrated. Taking a chance I purchased it and discovered that sure enough it was a genuine silver strike.

As I have built up quite an archive of images of these coins from various sources, including museum collections and old publications I can identify the recognition details to confirm whether any such coin is genuine or false. The coin now in my collection is illustrated in Fig.1.


Fig. 1
As I stated in my original article the silver 1319 two lariat coins were struck with dies that had previously been used for regular bronze coins. On the silver coins there are a number of distinctive die cracks appearing on both the obverse and reverse dies. These cracks were obviously not apparent when the dies were first used, as I have specimens of bronze coins from the same dies, either without evidence of any cracks, or cracks at an early stage of development.

On the obverse die the most noticeable crack runs through the Arabic word for Muḥammad.


Fig. 2


Fig. 3
The coin in Fig. 2 is struck in bronze, while the coin in Fig. 3 is the silver specimen. The die crack is shorter and less developed on the bronze coin, but on the silver coin the crack extends from the wordl sulta $\bar{a} n$ almost to the toothed border and is a more pronounced feature.

Similarly for the reverse die there are two noticeable die cracks that have appeared on the silver coin, but are not apparent on the bronze coin.


Fig. 4
In Fig. 4 the upper crack on the silver coin can be seen extending from the line of the word sanat (year) through the extreme right hand tip of the digit " 3 " and continuing up to the base of the word sulțān. The lower crack has developed along the he to the base of the lam of al-baḥr (sea).

In contrast, neither of these cracks appears on the well-struck specimen of a bronze coin shown in Fig.5. The close-up pictures shown in Figs. 2 and 5 are from two separate bronze coins in my collection where the dies used for the opposing sides are different to those appearing on the silver coin.


Fig. 5
Unfortunately there is a further distinctive die crack apparent on other silver specimens I have encountered, but it is off the coin on my own specimen. This particular feature appears at about 8 o'clock and extends from the extreme left hand tip of the word
bahr across the toothed border to the edge of the die. In Fig. 6 the die crack is just visible outside the toothed border on my bronze coin, but on other silver coins I have seen it is a much more noticeable, developed feature and extends further towards the edge of the die..


Fig. 6
As can be seen in Fig.7, on my own silver coin the die crack outside the toothed border is off the coin, but the crack running through one of the teeth of the border that is just apparent in Fig. 6 is more obvious on the silver coin.


Fig. 7
As yet, I have not found any specimens of the silver 4 lariat coins of AH 1320 apart from those in the British and Ashmolean Museums and pictures in H.C.P. Bell's major work ${ }^{59}$ and John Allan's article in the 1912 Numismatic Chronicle ${ }^{60}$. All of the specimens in the museum collections and illustrated in the above works are from the same pair of dies, but so far no bronze coins from these dies have been encountered by me. If anyone has, or knows of any other coins struck in silver I would be interested in hearing from them. My contact email address is p.budgen@btinternet.com.

# AN ELUSIVE STAGE IN THE SAMARQAND ARCHER COINAGE 

## By Aleksandr Naymark (Hofstra University, New York)

In memory of Eugene Zeimal' - Great scholar and courageous man

## 1. The Hoard from the Qara-tepe on the Narpai

Back in 1983, Samarqand archaeologist, Oleg Miklailovich Rostovtsev, found a series of similar objects during the excavations of the early mediaeval site of Qara-tepe, situated on the ancient Narpai canal in the Zarafshan valley, about half way between Bukhara and Samarqand. ${ }^{61}$ Sometime in the middle of the

[^19]same field season, the administration of the Samarqand Institute of Archaeology replaced him with another archaeologist, Iurii Petrovich Manylov, who actually completed the project and published a concise article with the description of these excavations. The objects of our interest were described in Manylov's report as "bronze semispherical plaques, $1.4-1.6 \mathrm{~cm}$ in diameter and $0.5-0.4 \mathrm{~cm}$ high." [Manylov 1987, 53].

A few years later, Rostovtsev realized that the little convex plaques from his excavations could actually be coins. In 1989 he approached the assistant curator at the Coin Room of the Samarqand Institute of Archaeology, Liudmila Iur'evna Shpeneva, with a handful of these "plaques" and asked her to clean them. Rostovtsev also mentioned that there were more specimens of this type in Qara-tepe excavations, all from the same confined area, and that he would submit the rest of them to Shpeneva if she were successful in cleaning the first group. Shpeneva, who traditionally conducted all conservation and cleaning work for the coin room, tried to clean two of these strange coins, but they were destroyed in the process. Embarrassed by this result she passed more coins for a trial cleaning to the conservation department of the Samarqand Institute of Archaeology, but this brought the same negative results - the coins did not survive the standard procedure. As I happened to be working at that time on the Varakhsha collection in the Institute's coin room, Shpeneva asked me to pass the remaining six specimens to a conservator in Moscow. These rather strange-looking coins promised to be interesting, and I took the remaining six pieces to Moscow, where Nina Igorevna Vinogradskaia, a conservator at the department of Archaeology of the Museum of Oriental Art, cleaned five of them. She, however, found it impossible to clean the sixth one, as it did not contain any non-corroded metal at all. The result of her work can be seen in Fig. 1.


Fig. 1 Coins from the Qara-Tepe hoard

[^20]The coins of copper-silver alloy were struck on thin ( $0.4-0.9 \mathrm{~mm}$ ) blanks with diameters ranging from 13.8 to 15.2 mm . The weights of three complete, albeit severely corroded, specimens range from 0.36 to 0.42 grams. The coins are very convex - the depression in the middle is up to 3.1 mm deep and as the dies were significantly smaller than the blanks, the profile of the coins resembles the one of a soft felt hat with poorly articulated brim. No imagery survived on the convex side of any of the five specimens. What has been preserved on the concave sides of all five specimens looks like a senseless combination of dots and curving lines. Yet they form a pattern which obviously repeats at least on four out of the five specimens, which were evidently struck with different dies, and it is possible to offer a 'reconstruction' of the type. I see (sic!) in this set of dots and lines the decomposed figure from the convex (reverse) side of the Archer coin type (cf. figs. 2-6). ${ }^{62}$


Fig. 2
Samarqand archer coin stage 4 (Zeno 20982)
In the spring of 1990 I presented a short paper about these coins at the annual session of the Numismatic Department of the Moscow Historical Museum and then sent a two-page abstract on the same topic to the symposium on the ancient history of Samarqand, which was to be held in September of that year. This text, however, was not printed and I mention it here solely because my own typewritten copy of it would later provide the basis for Larissa Baratova's attribution of analogous coins, was cited by her and thus became the starting point of the little discussion that recently developed around them.

Upon my arrival in Samarqand in September 1990, I returned the five cleaned specimens and the untouched one to the Coin Room of the Samarqand Institute of Archaeology, where they still reside, albeit in much deteriorated condition. ${ }^{63}$ I also tried to obtain the rest of the hoard and additional information about the archaeological context in which it was found. The first goal proved to be impossible: Rostovtsev had already retired from the Samarqand Institute, leaving behind no information on the whereabouts of the remaining specimens. As to the second quest, Manylov graciously provided me with the following information: (1) originally the find consisted of approximately twenty coins; (2) all specimens were found on the floor of room 1, scattered in and near a narrow passage to another room. As it was already established then that the "silver plaques" were actually coins, he came up with very likely explanation of the archaeological circumstances of this find: he suggested that this was a hoard that was originally hidden between the wall and the door frame (there were cases like this Panjikant) and that then fell out and spread on the floor during the destruction of the building. Manylov also suggested that the archaeological context of the find (first of all, pottery) dates this hoard to the $6^{\text {th }}$ century. I am grateful to Yurii Petrovich for his generous help.

The "ceramic date" suggested by Manylov seems to correspond quite well to another piece of numismatic evidence from Qara-tepe: the published excavation report states that "a non-epigraphic coin of the $7^{\text {th }}$ century" was found on the floor of room 1 [Manylov 1987, 47]. Given the time and the locale, this could only be a specimen belonging to the fifth and the last type in the Samarqand series of coppers carrying portraits in three-quarter turn. This particular type is datable to the 620 s or, at the latest, to the 630 s , as it immediately precedes the introduction the first cash type in the coinage of Samarqand Sogd - of kaiyuan tongbao with

[^21]the stylised Samarqand symbol and inscription b'gy [Naymark 2005a,227, n. 1]. As the report mentions only one floor in this room, we may assume that the destruction of the site, during which the hoard fell out of its hiding place, took place sometime around AD 620-630. It is also quite likely that the hoard had been hidden earlier. Yet it should have happened during the life of the adobe building, that was destroyed in the $7^{\text {th }}$ century, and thus the hoard can hardly be attributed to an earlier date than the second half of the $6^{\text {th }}$ century.

## 2. A Hoard from Panjikant

Information about another find of similar coins became available in 1994 with the publication of the brief report on the archaeological works conducted in Panjikant during the excavation season of 1985 [Belenitskii, Marshak, and Raspopova 1994, 104-5; Shkoda 2009, 93]. The report described a hoard of twelve coins found within the enclosure of Temple I: two scyphate "bronze" coins were put together edge to edge and thus formed a hollow space which accommodated ten smaller silver coins; then the hoard was wrapped in white linen.

According to this report, the silver coins belong to the "type" marked as 012 in the plate illustrating Zeimal's classification of Samarqand Archer coins [Zeimal' 1983, Tabl. 31], or, expressing it in words rather than images, to the latest type within the fourth and the last stage of Zeimal's systematisation of this protracted coinage [Zeimal' 1983, 271].

The information about two "bronze" coins given in the text of the report was rather incomplete. We were told that they are 12 mm in diameter (according to Shkoda -13 mm ) ${ }^{64}$ and severely scyphate. It is not quite clear what the authors of the report meant when they mentioned "figural signs" [figurnye znaki] on the concave side, but since the text did not identify the images in any way, it seemed quite obvious that the designs were not readily readable. The authors of the report also mentioned that no such coins had come to light in Panjikant prior to this case. As the description seemed to match the type of coins which I already knew from the Qara-tepe hoard, I made a personal inquiry with Valentin Germanovich Shkoda, who was responsible for the excavations of the temples. During his stay in New York in 1994, I showed him the photographs of the specimens from Qara-tepe on the Narpai canal and he confirmed that the two unusual bronze pieces from Panjikant hoard belonged to the same principal type.

The Panjikant hoard was discovered in the suit of "sedimental" microstrata formed over the years by the water running down the side of the mud-brick wall. ${ }^{65}$ This suit covered the sufa (a benchplatform) situated in the passage between the northern facade of Temple I (near room 18) and the wall of the temple court. This sufa was built during the $3^{\text {rd }}$ period of the temple's construction history. Both Marshak and Shkoda attribute this construction period to "the border between the $5^{\text {th }}$ and the $6^{\text {th }}$ centuries" [Belenitskii, Marshak and Raspopova 1994, 103, 105; Shkoda 2009, 51, 93]. As the hoard was found above the sufa erected in this period and in the stratum formed by the process of decay of the structures belonging to this period, we have every right to assume that the hoard dates from the $6^{\text {th }}$ century.

In his discussion of the hoard's date [Belenitskii, Marshak and Raspopova 1994, 105], Marshak notes that this stratigraphic situation suggests a later date than that of another archer hoard discovered during the excavation of Sector VII in Panjikant. The latter was attributed to the $5^{\text {th }}$ century primarily on the basis of two facts: (1) the joint discovery of this hoard and of the pottery

[^22]fragments of the so called $1^{\text {st }}$ ceramic complex of Panjikant in the very same arrow slit of the fortification wall; and (2) that the new wall, which covered this very arrow slit during the next construction period, belonged to the structure datable to the early $6^{\text {th }}$ century, at the latest, on the basis of ceramic finds belonging to the $2^{\text {nd }}$ ceramic complex of Panjikant [Belenitskii, Marshak and Raspopova 1979, 258-261]. The hoard from Sector VII was ultimately published by Zeimal' [Zeimal' 1983, 275, 293, Table 31-2, nos. 34-59], who accepted Marshak's arguments and thus changed the terminal date of the archer coinage from the first half of the $7^{\text {th }}$ century, which he had suggested earlier [Zeimal' 1972, 74], to the early $6^{\text {th }}$ century [Zeimal' 1983, 271, 293]. He, however, pointed out that there are rather numerous finds of similar coins in the Panjikant strata firmly dated to the $6^{\text {th }}$ century by pottery finds and suggested that coins of this type remained in circulation long beyond the date of their issue [Zeimal' 1983, 2712].

Discussing the new hoard from the temple courtyard, Marshak indirectly returned to the old discussion about the terminal date of the archer coinage. He tried to explain what he saw as a discrepancy between the date of the coins and the date of the stratum: "Here, this small hoard evidently fell from the wall of the temple's third construction period (around the end of the $5^{\text {th }}$ to the early $6^{\text {th }}$ century). Most likely, the small linen pouch with coins was a donative of a believer, for which old non-circulating coins could be used. One cannot also exclude a possibility that these coins were lost by mistake and then got into the brick or mortar used in the platform" [Belenitskii, Marshak and Raspopova 1994, 105]. While both such "delays" are in principle possible, I prefer to abide by Zeimal's theory that the coins issued during the fourth stage of the Samarqand archer coinage (types 011 and 012 of Zeimal's plates) circulated later - as we shall see below, the "bronze" coins of the temple hoard date to a later period than the silver ones.

## 3. Two coins from a burial in Karnab

In 1997, a German-Uzbek archaeological expedition explored the burial mound of Abdurrakhman-kyr (A403) situated in the Karnab-chul' desert, 11 km north-east of the settlement of Karnab and approximately at the same distance from the north-western foothills of the Ziyatdin and Zirabulak heights [Alimov, Boroffka, Buriakov and Parzinger 2003, abb.1]. The almost rectangular burial chamber of this kurgan was very spacious ( $3.80 \times 3.20 \mathrm{~m}$ ) and accommodated multiple deceased of both sexes. The majority of human remains were found along the walls of the chamber. They preserved nothing of their anatomical structure and can be best described as random assemblages of bones and artefacts. It is obvious that these are the remnants of corpses that were moved from their original place of deposit after the complete loss of the soft tissue. Two intact ceramic vessels found among these bones [Alimov, Boroffka, Buriakov and Parzinger 2003, 206-209] are datable to the $6^{\text {th }}$ or, at the latest, early $7^{\text {th }}$ century [see below]. The two skeletons that occupied the centre of the floor in the middle of the chamber had preserved their anatomic structure [Alimov, Boroffka, Buriakov and Parzinger 2003, 206-209]. A jar placed near the feet of the western body [Alimov, Boroffka, Buriakov and Parzinger 2003, Abb. 136 and 137, no. 23], unmistakably belongs to the early Islamic period [cf. for example: Semenov et al. 2001, fig. 81], which in terms of Karnab stratigraphy should be described as period VIII [Alimov, Boroffka, Buriakov and Parzinger 2003, Abb. 150]. This seems to imply, that Abdurrakhman-kyr served as a crypt that could be re-opened from time to time to accept new deceased: the entrance to the chamber was blocked by a single stone slab ( $1.25 \times 1.00 \mathrm{~m}$ ), which could be effectively removed in order to free the way in. The remnants of the earlier buried people were then moved towards the walls, while the "newcomers" were given the middle of the chamber.

During my stay as a Horstman fellow at the Eurasian Abteilung of the Deutches Archaeologisches Institute in 1998, Dr Nikolaus Boroffka, who served as the actual field director of the Karnab excavations, graciously introduced me to the then unpublished material from Abdurrakhman-kyr. One of the
photographs he showed to me recorded two little round silver objects found amidst the heaps of bones near the western wall of the chamber [Alimov, Boroffka, Buriakov and Parzinger 2003, 207, Abb. 136 and Abb. 137, nos. 3-4]. As in the earlier case of Qara-tepe on Narpay, these objects were described as plaques. As I immediately asserted that these were actually coins, we jointly called Dr Yurii Fedorovich Buriakov, the director of the project on the side of the Uzbek Academy of Sciences and asked him to pass these plaques to the coin cabinet at the Samarqand Institute of Archaeology, where Dr Anvar Atakhodzhaev successfully cleaned them. Subsequently, these coins were published in Atakhodzhaev's short note describing the numismatic finds of the Kanab expedition [Atakhodzhaev 2003, pp. 232-3, according captions under Abb. 1 und 2, there should be two different coins, but in fact there is only one reproduced twice]. Following my initial attribution, Atakhodzhaev identified them as belonging to the Samarqand archer coinage, but, being unaware of the still unpublished "new" type, mistakenly identified them as belonging to the final (fourth) stage of this coinage as defined by Zeimal'. Accordingly, Atakhodzhaev dated these two specimens to the 4-5 ${ }^{\text {th }}$ centuries, mentioning, however, that according to Zeimal', such coins remained in circulation until the early $7^{\text {th }}$ century.


Fig. 3
Coin from Abdarrahman-kyr near Karnab (photo courtesy A. Atakhodzhaev)

Both coins came from the bone heaps situated along the northern wall ${ }^{66}$ and thus should be roughly contemporary with the two ceramic vessels that were found there as well [Alimov, Boroffka, Buriakov and Parzinger 2003, 207, Abb. 136, nos. 20 and 21]. We shall pay some more attention to the date of these vessels, because they are the only objects in this burial that can offer a fairly narrow date [cf. Alimov, Boroffka, Buriakov and Parzinger 2003, 209]. In the publication, Boroffka remarks that the pottery finds in the chamber of Abdurakhman-kyr are comparable to those made in the structures of the $\mathrm{V}^{\text {th }}$ and $\mathrm{VI}^{\text {th }}$ periods in his excavations of Karnab-tepe [Alimov, Boroffka, Buriakov and Parzinger 2003, 209]. This date, however, is way too broad for our purposes Karnab periods V and VI together covered the huge time span from the $2^{\text {nd }}$ century AD to the $8^{\text {th }}$ century AD [Alimov, Boroffka, Buriakov and Parzinger 2003, 131]. I recently had a chance to discuss this question with Dr Boroffka, who informed me, that his reference to the pottery of Karnab V was not meant to include the first centuries AD, but only the very end of this period, which covers the $4^{\text {th }}$ century AD. Even this date, however, was more an attempt to accommodate the $4^{\text {th }}$ to the $5^{\text {th }}$ century date of coins suggested by Atakhodzhaev, than was derived from the analogies in Sogdian ceramics. Indeed, the two pottery jars from the burial [Alimov, Boroffka, Buriakov and Parzinger 2003, 208, Pl.137, 201] share major common characteristics with the jar types of period VI [Alimov, Boroffka, Buriakov and Parzinger 2003, Pl. 108, 7-10 and especially 11]. Unfortunately, the absence of coins among the excavation materials of the Karnab site, itself, makes any precise dates difficult to come by, and we should refer here to more distant analogies. Among those are certainly the jars of Panjikant datable to the $6^{\text {th }}$ century [Raspopova and Shishkina 1999, 266, 4]. It is also worth mentioning that, although some objects found in the tomb belong to the types which had a long life [Alimov, Boroffka, Buriakov and Parzinger 2003, 209], there is nothing in the chamber that could definitely point to an earlier date.

[^23]In other words, the burials with coins in kurgan Abdurrakhman-kyr in Karnab-chul are certainly early mediaeval and are very likely to belong to the $6^{\text {th }}$ century or, at the latest, to the early $7^{\text {th }}$ century.

## 4. Finds on Er-Kurgan

In 1998, Dr Larisa Baratova came across six more coins of this type while working on the numismatic materials of the South Sogdian Archeological Expedition, and which, in 1998, were returned to the coin room of the Samarqand Institute after being cleaned in the conservation laboratories of the Hermitage Museum. In her first publication she accepted the interpretation of these coins suggested in my paper of 1990 [Baratova 2000, 50]. ${ }^{67}$


Fig. 4
Coins from Er-kurgan (K-296 - left; K-253 -- right) (photos courtesy L. Baratova)

All six specimens came from the systematic excavations on the site of Er-kurgan, the remains of the capital city of the Nakhshab oasis. One of the coins is a surface find and consequently has no firm archaeological date [Baratova 2002, 271, no. 3]. Four more were found in the debris filling the rooms in the upper stratum of the site, i.e. in the stratum datable to the $6^{\text {th }}$ century AD [Baratova 2002, 271, nos. 1,2,5 and 6]. Yet Baratova is very cautious and does not consider the stratigraphy of these finds to be conclusive. According to her, only one of the six specimens comes from a datable archaeological context: it was found in a room where another coin, a local Nakhshab copper with the "king stabbing lion" reverse, was also recorded. Accordingly, Baratova dates the archaeological context of the find to the $5^{\text {th }}-6^{\text {th }}$ century [Baratova 2002, 271, no. 4].

## 5. Recent stray finds

Among the ancient coins from private collections found in Afrasiab and published in 2006 by Atakhodzhaev, two belong to our type [Atakhodzhaev 2005, 34-5, nos. 6 and 7]. Unfortunately, no information has survived about the archaeological context of these finds.


Fig. 5
Coin from Afrasiab (photo courtesy A. Atakhodzhaev)
Recently, a specimen belonging to this group was posted by a private collector on the Zeno.ru site. According to the owner's information, this specimen "was unearthed" somewhere in Southern Sogdiana "in a layer with well-dated material of those centuries [earlier in this posting he dates the coin to the $6^{\text {th }}$ century -- AN], among which were the coins of Samarqand ikhshid Warhuman." [Zeno.ru 39942]. The only dated event of Warhuman's reign is his "appointment" to the Samarqand throne by Chinese decree about the delimitation of the Western Region in 655 AD.

[^24]

Fig. 6
Zeno 39942, found in Southern Sogd
Discussing the hoard of 1985, Marshak noted that no coin of this type had been found in Panjikant excavations prior to this date. We should not, however, take his statement as a sign that no coins of this type were in circulation in Panjikant. Given the fragility of currently known specimens (look below in section 8 of this article), one can suspect that the Panjikant soil, relatively high in acid, would oxidise coins to the state that they would not be really recoverable. This would be a much more plausible explanation for the absence of these coins among the Panjikant finds. In fact, one specimen of this type was found during the excavation season of 2009 in Panjikant, in a street stratum dated to the middle of the $8^{\text {th }}$ century [Materialy, 2010, 22, 90, fig. 63]. ${ }^{68}$

## 6. To be and what to be?

In the second of her publications concerned with the "elusive archer" coins, Baratova suggested a new interpretation of these coins: "in our opinion, the images on two specimens in better condition allow us to identify these coins as late (the end of the $1^{\text {st }}$ century AD ) issues imitating the coins of Antochus I with the image of a horse head on the reverse" [Baratova 2002, 271; Баратова 2004, 188, plate]. Recently, Atakhodzhaev adopted Baratova's opinion on this matter, although he neither provided any argumentation in support of his new dating, nor made any reference to Baratova's earlier work [Atakhodzhaev 2005, 34-5].


Fig. 7
Antiochus Imitation of the $1^{s t}$ century $B C$ - early $1^{s t}$ century $A D$
Unfortunately, Baratova does not really spell out what kinds of similarities she had noted between the Antiochus imitations and the two specimens of our type. We may only guess from the text of her article what she means, as there are only two specific mentions of imagery: the reverse design composed of dots and curved lines, and a "large eye," which she sees on the only specimen preserving the remnants of the obverse image [Baratova 2002, 271]. No doubt the physical characteristics of coins, such as their debased metal, curved surface, specific size and weight also played an important role in her conclusion. On the other hand, in re-attributing these coins she ignored the archaeological context of the finds she published.

In other words, there are now two attributions of these coins: (1) as the terminal stage in the Samarqand "archer coinage" (my suggestion initially accepted by Baratova and Atkhodzhaev) and (2) as the late stage in the coinage imitating types of Antiochus (recently put forward by Baratova and favoured by Atkhodzhaev). It is important to note that these are the only two series of small severely scyphate silver coins in the entire Sogdian numismatics and thus these are the only two sensible choices for an attribution of the unidentified coins from Qara-tepe, Panjikant, Samarqand and Southern Sogd. In other words, our task here is limited: we

[^25]need to decide which of the two aforementioned attributions is correct.

Although I do not share the opinion of Baratova and Atakhodzhaev, I would like to start here by summarising all the arguments that can possibly support their hypothesis. First of all, some of the Antiochus imitations are characterised by very bad silver. Furthermore, the design of some of the Antiochus imitations, exactly like the design of the late archer coins, demonstrates a tendency to dissolve into a series of dots. It is true, however, that the mysterious scyphate coins under consideration are different from the Antiochus imitations in three ways: their design is far more "abstract" than those on any of the Antiochus imitations; their blanks are much thinner than those of the Antiochus imitations and, consequently, they are much lighter than Antiochus imitations of a similar size; their metal appears to be much more debased. These particularities, however, do not form an obstacle to the Antiochus imitation theory since, in accordance with the "rules" governing the development of imitation series, the progressive degradation of the imagery almost invariably goes hand in hand with the reduction of weight and the debasement of metal. Thus, in principle, it is possible to assume that the mysterious scyphate coins under consideration form an extension of the Antiochus imitation coinage. In other words, all things considered, the Antiochus imitation series seem to be as good a contender for the position as the late coins of the "archer series."

Which identification is then correct? All three of us at different stages made a choice based on visual similarities. Yet this "method" of "comparative analysis" is certainly unreliable when all known coins are uniformly in a poor state. With an "eye" being all that is left of the obverse image, and with the combination of dots and curved lines on the reverse, completely incomprehensible from the very beginning and then, in addition to it being only partially preserved, one may see almost anything in these coins. Indeed, I am absolutely certain that the reverse image is nothing else but a further stage in the dissolution of the archer figure; Baratova recognises on the obverse the characteristic eye from one of the series of Antiochus imitations; while Atakhodzhaev derives the dots of the reverse from the similarly dotted image of the horse protome on a specific series of Antiochus imitations. As there is obviously no prospect of any future agreement, we should leave these "dangerous" grounds and employ more precise tools of analysis.

The most obvious of these tools would be the archaeological dating. Proposing her new interpretation, Dr Baratova was not aware of any stratigraphic and hoard evidence that could contradict the identification of her coins as late imitations of Antiochus I. Being stray finds, coins from Er-kurgan could provide no date ante quem - there is always the possibility of their transposition from an earlier stratum, for example, with the clay used in construction. It should also be noted that my paper of 1990, on which Baratova based her judgement concerning the Qara-tepe hoard, was written before Manylov provided me with the detailed information about the circumstances of the Qara-tepe find and, thus, contained almost no archaeological information. Likewise, the Karnab burial, known to Dr Atakhodzhaev, was originally dated to periods V and VI of the Karnab stratigraphic column, which meant an extremely broad date range from the $2^{\text {nd }}$ century AD to the $8^{\text {th }}$ century AD. The rest of the evidence escaped Atakhodzaev's attention; hence, his attempt to identify these coins as Antiochus imitations.

The combined information on the archaeological contexts of the currently known finds, which is provided in the first part of this article, makes the identification of our coins as Antiochus imitations absolutely impossible. The archaeological strata in which Panjikant and Qara-tepe hoards were found as well as the newly adjusted date of the Karnab burial plainly suggest that the coins under consideration circulated in the $6^{\text {th }}$ century. While none of the Er-kurgan finds can play a decisive role in dating our coins, it is still worth noting that all of them come from the strata which contained materials datable to the $6^{\text {th }}$ century. Finally, the Panjikant find provides us with an excellent piece of hoard evidence: the two coins under consideration were intentionally
deposited with the ten coins belonging to the previous stage in the Samarqand archer coinage; given the quality of metal, they can by no means be five hundred year old coins by the time of this deposit. In other words, in the light of the archaeological data and hoard evidence it is absolutely impossible to attribute the coins under consideration to the $1^{\text {st }}$ century BC or even the $2^{\text {nd }}$ century AD, as would be required by their identification as Antiochus imitations. Thus, we have no other choice than to consider the coins under consideration as the $6^{\text {th }}$ century extension of the Samarqand archer coinage. In order to simplify the terminology, we shall add them to Zeimal's classification as stage 5 .

## 7. Inserting a missing piece into a fragmentary mosaic

While it is clear that this newly discovered stage 5 in Samarqaand archer coinage should be dated to the $6^{\text {th }}$ century AD, we still have to "insert" these coins into the picture drawn by the earlier numismatic research.

By the beginning of the $6^{\text {th }}$ century, Samarqand already had a monetary history that stretched back over some 800 years - finds of Seleucid copper coins show that the population of the Zarafshan valley was acquainted with a monetary economy as early as in the first half of the $3^{\text {rd }}$ century BC. [Naymark and Yakovlev 2011]. During all these centuries, the Samarqand mint struck exclusively silver and did not switch to copper even when the latter was introduced in the neighbouring Bukhara oasis and in the Kashkadarya valley ( $4^{\text {th }}$ century AD ) and then in Chach ( $5^{\text {th }}$ century AD). Even in the early $6^{\text {th }}$ century, Samarqand kept producing silver archer coins, barely changing types of which went back 500 hundred years to the middle of the $1^{\text {st }}$ century AD [Zeimal' 1972; Zeimal' 1983, 269-276]. Such a stubborn adherence by Samarqand to debased silver and to a completely unreadable version of a very old design may leave an impression of complete backwardness. This, however, hardly fits the image of Samarqandians as the skilful merchants of the Silk Road.

More likely, the stability of design and the adherence to silver resulted from the important position played by Samarqand coins in the monetary economy of Sogdiana as a whole: with all other Sogdian principalities striking only copper, Samarqand coinage served as the regional silver currency. The stability of design was one of the guarantees of this coin's acceptance beyond the borders of the territory controlled by Samarqand rulers. Indeed, finds of Samarqand archer coins have been registered all over the Zarafshan basin with the exception of the Bukhharan oasis and throughout the entire Kashka-darya valley.

One the other hand, these coins were undoubtedly capable of satisfying the needs of local trade as well: weighing between 0.2 and 0.3 grams and minted in large quantities they were quite suitable for the role of small change in the daily retail trade.

The early $6^{\text {th }}$ century obviously witnessed serious changes in Samarqand monetary circulation. First of all, Samarqand archer coins started falling out of circulation in massive numbers - while the history of this coinage extends over 450 years, all six currently known hoards of Samarqand archer coins completely or predominantly consist of specimens belonging to one stage in this coinage, the stage which Zeimal marked as the fourth and the last in his classification. ${ }^{69}$ Secondly, following this massive hoarding, a long period of almost approximately 80 years started, during which no coins are known to have been minted in Samarqand.

It is impossible, however, to imagine that the population of the Sogdian metropolis lived all that time without money so we should look for something that could fill this gap. The stratigraphy of

[^26]Panjikant finds allowed Zeimal' to argue that archer coins belonging to the fourth stage remained in circulation throughout the entire $6^{\text {th }}$ and even in the early $7^{\text {th }}$ century [Zeimal' 1972; Zeimal' 1983a, 271]. These, however, seemed to be insufficient to "cover" this yawning gap, and Zeimal' suggested [1983a, 272273] that there could be a large influx of drachms of Peroz after the Hephthalite conquest of Sogdiana, which he, following Marshak [1971, 65], dated to the early $6^{\text {th }}$ century. He further argued that these drachms and, later, their imitations became the principal silver currency of Samarqand Soghd [Zeimal' 1999, 200]. One can add to this that large sums were probably still paid, as in the times of Old Sogdian Letters, in weighed silver - a "receipt" written on a split stick in the $6^{\text {th }}$ or early $7^{\text {th }}$ century and found during the excavations of the site of ancient Samarqand seems to use weighed staters of silver as the money of account [Livshits 2009, 242-245].

The non-metallic and thus perishable forms of money should not be forgotten as well. Unfortunately, our knowledge of them is less then scanty - the scarcity of documentary evidence deprives us of the possibility of forming anything remotely close to a detailed picture created recently for the principally similar economics in the contemporary oasis states of Eastern Turkestan [Wang 2004, 47-115]. Yet a look at this geographically and chronologically scattered data nevertheless suggests a similar picture. Writing in 942-3 ad Narshakhi says that, before the first Bukhar Khuda drachms were struck in Bukhara in the $7^{\text {th }}$ century, "trading was done with cotton cloth and wheat" [Narshakhi-Frye 1954, 35]. Tabari informs us that in 738-9 ad Turgesh Kagan Kursul paid mercenaries "a piece of silk each month, while such a piece would cost at that time 25 dirhams" [Tabari-Beliaev 1987, 266]. Similar prices were assigned to silk in cases of ransom. Defining valuables in which the indemnity was to be paid, the Samarqand treaty of 712 AD preserved to us by ibn al-Atham al Kufi and by Balami says: "and what is going to be given in large pieces of textile, each of them will be [counted as the equivalent of] a hundred dirhams, and small ones for sixty dirhams, while for what will be given in silks, each piece will be [counted as the equivalent of] twenty eight dirhams." [Smirnova 1970, 208] When Qutaiba seized Paykand in 706 AD, among the captives was a man who offered a ransom of "five thousand pieces of Chinese silk worth one million dirhams [Tabari-Hinds 1990, 136]. No doubt, live stock also served as a common exchange equivalent, as it was throughout the entire extent of Central Asian history.

And yet there is still an alarming irregularity in the situation: with the exception of grain, all listed means of exchange have relatively high value per indivisible unit and are not suitable for daily retail trade. Indeed, it is hard to believe that the population of the Sogdian metropolis, which was accustomed to the convenience of a monetary economy on all levels of trade and which was responsible for building a sophisticated system of commercial ties throughout entire Asia and even Europe, lived without small change so necessary for daily transactions.

There is, however, one indirect indication that that the position of "petty cash" did not became vacant in the monetary circulation of Samarqand. One could expect that the lack of small change in circulation would cause the influx of coins from the actively minting neighbouring principalities such as Bukhara, Nakhshab or Chach. Meanwhile, fairly well-studied archaeological strata of the $6^{\text {th }}$ century in eastern Sogd do not yield such "foreign" coins in any noticeable numbers. It is more than likely that the $5^{\text {th }}$ stage Samarqand archer coins were this so invisible small change.

In other words, there is a ready empty socket in the monetary history of Samarqand waiting for our coins. In filling this socket, these coins can be immediately used to solve some puzzling phenomena in the history of Sogdian coinage and monetary circulation.

One such puzzle is the hoarding of $4^{\text {th }}$ stage Samarqand archer coins. Zeimal', who was the first to notice this phenomenon, suggested that it was caused by the influx of Sasanian dirchams, which occurred following the Hephthalite occupation of the country ca. 509 AD [Zeimal' 1983, 271]. In order to drive Samarqand archer coins out of circulation in such huge numbers,
however, the new coins had to be struck of lower quality silver. Meanwhile, no imitations of Peroz with low silver content have been registered on the territory of Sogdiana in the strata of the $6^{\text {th }}$ century. Furthermore, the hoard from Kul' tepe near Hawast (Northern Ustrushana), which remains the only properly published hoard of Sasanian-type drachms from Eastern Sogd, suggests that the minting of Peroz imitations started in Sogdiana only in the $7^{\text {th }}$ century - the hoard contains no imitations, although along with genuine drachms of Peroz there was a coin of Khosrow II with the regnal year 29, which makes the deposit impossible prior to $619 / 620$ AD. [Baratova 2002]. With the discovery of the $6^{\text {th }}$ century archer coins, another explanation of the sudden hoarding of $4^{\text {th }}$ stage Samarqand archer coins becomes possible: having the same weight and status, but lower in silver content, the archer coins of the $6^{\text {th }}$ century drove their higher quality predecessors out of the Samarqand monetary circulation.

## 8. Survival after resurrection

At first sight, the suggestion that these few obscure coins could "fill", even partially, the gap of almost a whole century sounds unrealistic. Yet, an attentive look at the circumstances under which each of the finds became known, makes this suggestion much more attractive.

First of all, given that the blanks of these coins are very thin, we can assume that the highly acidic environment of Sogdian löss soils would completely oxidise the very large percentage of separately lost specimens. In regular excavations, such irrecoverable coin-like piece of oxidised silver-copper alloy would be noted, but the report would usually cautiously mark them as "metal object", or, at best, simply a coin. In exceptional cases, given that no other small silver coins are known in the early mediaeval strata of Samarqand Soghd, a scholar would infer that this was a coin of the Samarqand archer type, but since this enigmatic type was until recently not known, it would automatically be assumed that the specimen belongs to the "regular" well-known type.

Some of these coins, however, obviously survived the adverse soil conditions. Turning up in the hands of a treasure hunter, they would often not be considered worthy of cleaning - the fragility and rather unimpressive appearance of these coins would make them a poor market commodity. Yet even popping up in professional excavations, such a coin was not guaranteed the attention of a numismatist. We have already seen how the unusual shape of these coins prevented them from being recognised as coins: twenty specimens found together on Qara-tepe and two specimens discovered in the Karnab burial were not recognised as coins by four different highly professional archaeologists and were actually identified as plaques. As an archaeologist with 17 years of Central Asian field experience, I can authoritatively state that such fragile and severely corroded "plaques" with no visible decoration were very unlikely to be subjected to any cleaning at all, and certainly would not reach professional conservators, who were very few and were mostly unavailable as they were constantly occupied with much more spectacular material and had to attend to more urgent tasks

Yet even when identified as numismatic objects, these coins sometimes fail to survive cleaning attempts - that was the case of the hoard from Qara-tepe. As a result, there is an unusual feature in our sample; among the 17 published coins, 11 specimens, i.e. $65 \%$, passed through the hands of highly professional museum restorers: the five specimens from Qara-tepe were cleaned in the laboratories of the Moscow Museum of Oriental Art, while the six Er-Kurgan coins were cleaned in the laboratories of the Hermitage Museum in St. Petersburg. Needless to say, such coins had an even smaller chance of survival in the hands of private collectors - until recently the knowledge of cleaning and conservation techniques was rather limited among the amateur numismatists of Central Asia.

In other words, it is likely that the coins we currently have at our disposal constitute a small fraction of what had been actually found and that these coins are not as rare as they may appear to be.

There is, actually, one important indication, that the few known specimens represent a significant coinage - its unexpectedly broad geographic distribution. Indeed, they are found in Panjikant on the upper Zaravshan, in Samarqand in the middle part of this river's valley, at Qara-tepe on the Narpai and in Karnab situated far to the west between Samarqand and Bukharan Sogd, and in the Nakhshab oasis in the lower reaches of Kashka-darya. It is by no means a geographic dispersion characteristic of a small local coinage. In fact, the distribution pattern is similar to that of the specimens belonging to the massive archer coinage of the fourth stage in Zeimal's classification - the whole of Sogd with the exception of Bukhara. In other words, it is likely that the 18 specimens at our disposal are only the tip of an iceberg and that we are dealing here with a major coinage.

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## A SHORT NOTE ON AN UNUSUAL ARABBYZANTINE STANDING CALIPH COIN OF YUBNA-FILASTIN

By Tareq Ramadan

Tony Goodwin's studies in the Khalili Collection, have, without a doubt, shed an enormous amount of light on the various types of known Arab-Byzantine coins and, in particular, on the great deal of diversity within the series of Standing Caliph coins of YubnaFilastin. His overview and cataloging of such types allows us to understand and appreciate the complexity of the series as is indicated by the numerous renditions and styles of the caliph as well as the various types and placements of the Arabic legends on both sides of the coins.

Nonetheless, with Mr. Goodwin's encouragement, I have decided to provide a short note on a slightly unusual coin of Yubna that I came across last year. ${ }^{70}$ The coin, which I believe has not been previously published, stood out to me for two reasons: One, it was rather well-centered for a coin of this mint, and, two, the legends were quite clear, particularly for a Yubna type. On the obverse, the word "Allah" to the left of the standing caliph is crisp and distinct, although on the opposite side of the caliph, there is no visible legend, unfortunately. On the reverse, we see the standard " $m$ ", which was struck with a tail hanging off the upper right side, accompanied by an exergual line below, and some remnants of either a small dot or star above. Alongside the " m " we see a somewhat typical representation of the mint-name "Yubna" (يبنى), upwards and to the right as well as "Filastin" (فلسطين), downwards and to the left of the "m."


Standing Caliph obverse with "Allah" to left of figure


Standing Caliph reverse with " $m$ " and "Filastin" to left, "Yubna" to right.

As Mr Goodwin pointed out, and most importantly, this specimen contains elements of two different types of the Yubna Standing Caliph coins. Specifically, he noted that the obverse of this coin is identical to the obverse of Cat. 34 in his book Arab-Byzantine Coinage: Studies in the Khalili Collection Volume IV, while the reverse was from the same die used for Cat 1., i.e. the same reverse found on the back of the Standing Emperor type, in the same book. ${ }^{71}$ He further commented on the order, content, and locations of the Arabic legends, stating "I'm inclined to think that this was probably a die engraver's error rather than a deliberate variation of the legend by the mint authorities. "Bismallah" looks rather like "(muhammad ra)sul allah" and the Yubna die engravers were clearly mostly illiterate and also in the habit of engraving retrograde legends., ${ }^{, 72}$ Goodwin's contention is that the

[^27]word "Allah" on the obverse left looks very much like the way it is usually written in the phrase "Muhammad Rasul Allah" on the Standing Caliph coins. Alternatively, the word "Allah" could have been succeeded, on the other side, by "bi-'ism" (بس)) as in "bismallah" (بسم الله) although it is still uncertain. Also, the engraver's illiteracy may explain why the first two letters in the word "Yubna" form a closed circle rather than two distinct vertical lines representing the " $y a$ " (ي) and " $b a$ " (ب). Nevertheless, while the coin is not particularly remarkable, it is still a somewhat intriguing find in an already complex and enigmatic series of Arab-Byzantine coinage.

## A QIANLONG BOARD OF REVENUE/BOARD OF WORKS MULE

By Steven H. Kaplan

I have a strange cash coin (No. 1) of the Qianlong Emperor (17361795). ${ }^{73}$ The obverse is of Type G1 (No. 2) promulgated by the eastern branch of the Board of Revenue mint in Beijing between approximately 1782 and $1795 .{ }^{74}$ The reverse (No. 3) is of Type E1 promulgated by the Board of Works mint in Beijing between approximately 1768 and approximately 1773 . $^{75}$

Two other muled cash involving emissions of the Qianlong Emperor (and those of his successor, the Jiaqing Emperor) and the Board of Works mint have been published; one with an obverse and a reverse some sixty years apart, and the other with an obverse and a reverse some sixteen years apart. ${ }^{76}$ The obverse and reverse on this coin are merely some nine years apart and do not mix the emissions of two emperors. The fascinating aspect of this particular cash is that, unlike the two previously published coins, it is a hybrid of cash from different mints.


Since cash were cast from a mother coin, this mismatch of obverse and reverse could not have been due to a mixing of dies, as

[^28]sometimes happens with struck coinage; the only explanation is that the coin is a deliberate fabrication. ${ }^{77}$ The thickness of the coin is no different from that of other cash promulgated during the period in question, which negates the possibility that it is two coins stuck together. It has been suggested that the coin was made by filing down the obverse of a Board of Revenue coin and the reverse of a Board of Works coin, and joining them together. ${ }^{78}$ There is an indentation or lip on the edge of the coin from roughly one o'clock to around six o'clock (as viewed from the obverse), which supports this suggestion. However, there is not the slightest indication of a join from roughly six o'clock to roughly one o'clock, which suggests the possibility that the coin was cast as a hybrid. If so, the mother coin from which the coin was cast must have been made in the manner suggested above. ${ }^{79}$ Either way, as in the case of the two other published mules, this fantasy coin was perhaps made by a mint worker, although the motivation for doing so is obscure.

## 

## Some coins of Ahmad Khan Domboli

Ahmad Khan Domboli rebelled against Agha Muhammad Khan in Azerbaijan during the years AH 1204-6. Ahmad introduced the rial denomination of around 12.7 g , which was subsequently adopted by Agha Muhammad at all of his mints. Ahmad's coins are anonymous whereas similar coins of Agha Muhammad have a small yā muhammad on the reverse (side with mint and date).


Rial of Khuy, struck in AH $1205 ; 12.8 \mathrm{~g}$


Riyal of Tabriz, struck in AH 1204; 12.9 g


Riyal of Tabriz, struck in AH $1206 ; 12.6 \mathrm{~g}$

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[^0]:    1 This article is based on a note posted on the South Asia Coin Group, at http://groups.yahoo.com/group/southasiacoins/files/About\%20obverse\%20and\%20reverse/
    ${ }^{2}$ Source of image: Abul Fazl 'Allami, Ain i Akbari, Vol. I, H. Blochmann (tr.), Calcutta, 1873, pl. III. Available online at www.archive.org

[^1]:    3 Photo by the author.
    4 Source: "The Production of Ancient Coins", www.lawrence.edu/dept/art/buerger/essays/production7
    5 See for example, D.G. Sellwood, "Some experiments in Greek minting technique", Numismatic Chronicle, Royal Numismatic Society, London, 1963, pp. 227-9. A more recent experiment was reported by

[^2]:    ${ }^{8}$ Source: Stack's 2011 International Sale, 10 January 2011, lot 118, on www.coinarchives.com

[^3]:    Photo by Bill Snyder at http://www.littlemistakes.com/
    F.K. Viccajee, Notes on the Hand Minting of Coins of India, Hyderabad, 1908, p. 61.
    3 Stan Goron and J.P. Goenka The Coins of the Indian Sultanates, Delhi, 2001.
    4 Photo from www.zeno.ru

[^4]:    ${ }_{10}$ Photo by the author.
    10 This photo and the following, both by the author.

[^5]:    15 Photo by the author.
    16 Jere L. Bacharach and H.A. Awad, "The Problem of the Obverse and the Reverse in Islamic Numismatics", Numismatic Chronicle, Royal Numismatic Society, London, 1973, pp. 184-191.
    ${ }^{17}$ In the writer's collection, $3.94 \mathrm{~g}, 17 \mathrm{~mm}$.

[^6]:    ${ }^{18}$ In the writer's collection, $4.27 \mathrm{~g}, 23 \mathrm{~mm}$. The (ص) on the bottom reverse of the coin refers to the chief minister, $\mathrm{Sa}^{\circ} \mathrm{id} \mathrm{b}$. Mukhallad.

[^7]:    ${ }^{19}$ Antonio Vives y Escudero. Monedas de las dinastías arábigo-españolas. Madrid: Juan R. Cayon, reprint 1978 [1893].
    ${ }^{20}$ Harry W Hazard. The Numismatic History Of Late Medieval North Africa. New York: American Numismatic Society, 1952.
    ${ }^{21}$ Louis Blancard. Le Millarès. Marseilles, 1876.
    ${ }^{22}$ Coin number is the hoard number. Photos are enlarged.
    ${ }^{23}$ Warren Esty. Posted on Moneta at http://groups. yahoo.com/group/Moneta-L/ on May 30, 2010 at 3:15 P.M.
    ${ }^{24}$ Philip Grierson. Numismatics Oxford Press 1975 p109
    ${ }^{25}$ Zeno.ru. "Oriental Coins Database." Retrieved from
    http://www.zeno.ru/index.php.

[^8]:    ${ }^{26}$ American Numismatic Society. Coin information retrieved from http://numismatics.org/.

[^9]:    ${ }^{27}$ Mohammed El Hadri. Les monnaies mérinides dans l'histoire monétaire du Maroc (13e-15e siècle). Lyon: Université Lumière Lyon 2, 2007.

[^10]:    ${ }^{28}$ H. Edmund Hohertz. A Catalog of the Square Islamic Coins of Spain, Portugal, and North Africa. Wooster, Ohio, 2008.
    ${ }^{29}$ Michael Mitchiner. The World Of Islam: Oriental Coins And Their Values. London: Hawkins Pub., 1977.
    ${ }^{30}$ Slobodan Srećković. Akches. Vol. 1. Belgrade, 1999.

[^11]:    ${ }^{31}$ T. Arnoulet. "Les derniers princes hafsides à Tunis (1526-1574) à partir de documents espagnols et italiens des XVIe et XVIIe siècles." Arab Historical Review for Ottoman Studies, vol. 15-16, pp41-51, 1997.
    ${ }_{32}$ Clifford Edmund Bosworth. The New Islamic Dynasties: A Chronological And Genealogical Manual. New York: Columbia University Press, 1996.
    ${ }^{33}$ The encyclopaedia of Islam - new edition. [Leiden]: Brill. Hafsids: v3 p66-69; Tunis: v10 p629-633.
    ${ }^{34}$ Abu 'Abd Allah Husain. History of the conquest of Tunis and of the Goletta by the Ottomans A.H. 981 (A.D. 1573). Translated from the French by J.T. Carletti. London: Trübner \& Co., 1883. p38 note 3.
    ${ }^{35}$ Charles André Julien. History of North Africa: Tunisia, Algeria, Morocco, from the Arab Conquest to 1830. Translated from the French by John Petrie. New York: Praeger Pub. [1970].
    ${ }^{36}$ Ernest Mercier. Histoire de l'Afrique septentrionale (Berbérie) dupuis les temps les plus reculés jusqu'à la conquête française. Paris: E. Leroux, 1888-1891.
    ${ }^{37}$ Kenneth J Perkins. Historical dictionary of Tunisia. Lanham, Md. : Scarecrow Press, 1997.

[^12]:    ${ }^{38}$ An article by Şule Pfeiffer-Taș and the present author on this topic is in preparation and is planned for publication in the Journal of the Economic and Social History of the Orient. For the publication of the Beçin coin hoard: R.H. Ünal, F. Krinzinger, M. Alram, Ş. Pfeiffer-Taş (eds.), Der Münzschatz von Beçin, Vienna 2010, 2 vols. The Turkish version of the book is currently being prepared.

[^13]:    ${ }^{39}$ For the weight standards based on archive material cp. Ş. Pamuk, $A$ Monetary History of the Ottoman Empire, Cambridge 2000, p. 46, tab. 3.1, p. 63, tab. 4.1, p. 136, tab. 8.2; for the actual coins N. Schindel/Ş. PfeifferTaş, Numismatischer Teil, in: Beçin (as note 1), vol. 1, p. 156-163, 222236, 305-310.
    ${ }^{40}$ Schindel/Pfeiffer-Taş (as note 2), vol. 1, p. 377-381; M. Rodrigues/M. Schreiner, Non-Destructive Analysis of the Hoard of Beçin, in: Beçin (as note 1), vol. 1, p. 526-38.
    ${ }^{41}$ S. Srećković, Akches, Volume One, Osman Gazi-Murad II, 699-848 AH, Belgrade 1999, p. 41.
    ${ }^{42}$ Schindel/Pfeiffer-Taş (as note 2), p. 343-349.
    ${ }^{43}$ N. Schindel/Ş. Pfeiffer-Taș (as note 2), p. 350-354.
    ${ }^{44}$ R. Linke/F. Okyar/M. Schreiner/R. Traum, The Beçin Hoard: Scientific Investigations on the Production Technology of Coin Forgeries, in: Beçin (as note 1), vol. 1, p. 507-525.
    ${ }^{45}$ N. Schindel, 'Ein osmanischer Akçeschatzfund aus dem frühen 17. Jhdt.', Numismatische Zeitschrift 115, 2007, p. 100, 107, no. 158, 110, no. 158.
    ${ }^{46}$ N. Schindel, 'Ein osmanisches Münzkonvolut aus dem 17. Jhdt.', Numismatische Zeitschrift 118, 2011, p. 443, 446, no. 60, 450, no. 60

[^14]:    ${ }^{47}$ S. Srećković, 'Akches Forged in 1565 at the Belgrade Mint', Türk Nümismatik Derneği Bülten 35/36, 1999, p. 38-40.
    ${ }^{48} \mathrm{~A}$. Vilcu, 'Un trésor de contrefaçons d'après les monnaies ottomanes du temps de Mustafa III découvert à Bucarest (Roumanie)', in: Simposio Simone Assemani sulla monetazione islamica. II Congresso Internazionale di Numismatica e di Storia Monetale. Padova 17 maggio 2003, Padova, 2005, p. 191-202.

[^15]:    ${ }^{49}$ S. Srećković, Akches Volume 6. Murad IV - Ahmed III (1032-1143 AH),
    Belgrade 2009, p. 15 f.
    ${ }_{51}^{50}$ Srećković (as note 12), p. 65 f.
    ${ }^{51}$ Schindel/Pfeiffer-Taş (as note 2), p. 351.

[^16]:    ${ }^{52}$ Tibet-i-Kalān means "Great Tibet" and is the name by which Ladakh was known at that time. I gather that this coin is now in the Museum in Qatar.

[^17]:    ${ }^{53}$ S.H.Hodivala, Historical Studies in Mughal Numismatics, NSI 1923 (reprinted 1976), pp.362-68. The Ālamgīrnāma gives the mint as Tibet-iBuzurg, but I suggest that this is an error, and 'Tibet-Kalan' was intended, as in the other texts.
    ${ }^{54}$ Huang P'eng-hsiao: Coins of the Ch'ing Dynasty. Peking, Old Palace Museum, 1937. A review of this booklet was published under the name of John C. Ferguson in Journal of the North China Branch of the Royal Asiatic Society for the year 1938, vol. 49. (footnote by W. Bertsch)

[^18]:    ${ }^{55}$ There exist numerous publications on the Sichuan rupee, inter alia, the following article by Karl Gabrisch: "The Szechuan Rupee and its Variants". Numismatics International Bulletin, vol. 17, no. 4, p. 103-112. See also the following web-pages by Y.K.Leung (Hong Kong):
    http://ykleungn.tripod.com/szerupee.htm
    http://ykleungn.tripod.com/rupee-sp.htm http://home.netvigator.com/~ykleungn/ktrupee.htm

[^19]:    ${ }^{59}$ The Maldives Islands. Monograph on the History, Archaeology, and Epigraphy, H C P Bell, Ceylon Civil Service (retired), 1940 edition by Ceylon Government Press, Colombo; reprint published by the Novelty Printers \& Publishers Pvt. Ltd., Male, Maldives, 2002. ISBN 9991530517
    ${ }^{60}$ The Coinage of the Maldives Islands with some Notes on the Cowrie and Larin, J Allan, Numismatic Chronicle, Fourth Series, Vol.XII, pp.313-332, The Royal Numismatic Society, London, 1912
    ${ }^{61}$ More precisely, it lies about 5 km to the south-west of the regional centre, Ziyatdin, in Samarqand province (at the time of excavations it was Samarqand oblast' and now it is vilayat). Judging by Manylov's description, the site of Qara-tepe hides the remains of a significant town:

[^20]:    "the fortified compound with an area of 3 hectars is situated on a natural hill ... rising 4 to 5 meters above the surrounding plain. Surviving remains of walls and moats weakly mark the borders of the shahristan covering an area up to 10 hectars" [Manylov 1987, 45]. There was an attempt [Adylov and Mirzaakhmedov 1996, 147] to identify this town site with Kndkīn (Lurje restors this toponym's Sogdian form as Kundakēn [Lurje 2004, 75, 14.2]) - a settlement about which Sam‘ānī and Yāqūt say only that it was situated at a distance of half a farsakh from Dabusiyya [Barthold 1968, 125].

[^21]:    ${ }^{62}$ I also formulated a hypothesis that these coins represented a separate branch of the archer series, which branched off the main line of development after Zeimal's third stage and was minted somewhere to the west of Samarqand. I do not support this idea anymore.
    ${ }^{63}$ According to the e-mail I received in 2006 from Dr Atakhodzhaev.

[^22]:    ${ }^{64}$ There must be some confusion with the diameter of these coins: the space formed by two 12 mm coins, however concave they were, would not accommodate 10 specimens belonging to the fourth stage of Samarqand archer coinage, which normally have a diameter within $9-10 \mathrm{~mm}$. On the other hand, if the "scythate bronze coins" had a diameter of 14-16 mm, like all other coins of this type, packing 10 "archers" in between them would look more realistic.
    ${ }^{65}$ In order to describe this suit of microstrata, the original Russian publication employed a technical term "natek" which is used in Central Asian archaeology and does not seem to have a good equivalent in English

[^23]:    ${ }^{66}$ The inscription "Munze", that appears on the plan of the burial with the line pointing to the jaw of the southern of the complete skeletons, as Dr Boroffka gratiously explained to me in an e-mail of 26 July 2007, is a result of confusion and should be ignored

[^24]:    ${ }^{67}$ I myself supplied Dr Baratova with the aforementioned manuscript of my report and am very grateful to her for the faithful references to it in her publications [Baratova 2000, 50; Baratova 2002, 271].

[^25]:    ${ }^{68}$ I would like to thank Pavel Lurje, who gratiously provided me with an image and brief information about the archaeological context of the find in two e-mails of 10 January and 18 January 2010.

[^26]:    ${ }^{69}$ (1) Tall-i Barzu hoard, of which 29 specimens reached the museum [Zeimal' 1972]; (2) a hoard of 26 coins found in Panjikant [Belenitskii, Marshak and Raspopova 1979, 258-261; Zeimal' 1983, 275, 293, Table 31-2, nos. 34-59]; (3) a hoard of 12 coins found in Panjikant [Belenitskii, Marshak and Raspopova 1994, 105; Shkoda 2009, 51, 93]; (4) a hoard of 1500 coins from Afrasiab [Tashkhodzhaev 1974, 12-14]; (5) a hoard of unknown provenance, 50 specimens of which hit the market in 1997 [Markov and Naymark 2002]; and, finally, (6) a huge hoard (said to contain over 3000 specimens) found around 2003 (coins from it reached some private collections in the subsequent year).

[^27]:    ${ }^{1}$ The coin described is part of my personal collection.
    ${ }^{2}$ Arab-Byzantine Coinage: Studies in the Khalili Collection Volume IV pgs. 119 (Cat. 1) and 124 (Cat. 34) in Chapter 4: The Enigmatic Coinage of Yubna (Tony Goodwin, The Nour Foundation 2005).
    ${ }^{3}$ From an e-mail between myself and Mr. Goodwin dated 08/04/2010.

[^28]:    ${ }^{73}$ Attribution of the coin was made by David Hartill, who has permitted the rubbings from his Qing Cash (Royal Numismatic Society, London 2003) to be reproduced in this article (Nos. $2 \& 3$ ).
    ${ }_{74}$ Hartill (2003), Type G1/No. 5.106, p. 84 \& plate 23.
    ${ }^{75}$ Hartill (2003), Type E1, Nos. 6.66-7, p. 101 \& plate 39 (No. 6.67 shown).
    ${ }^{76}$ Hartill, David. "A Chinese Mule." Numismatic Circular, v. 99, no. 1 (Feb., 1991), p. 6; and Hartill, David. "Another Chinese Hybrid." Oriental Numismatic Society Newsletter, no. 138 (Autumn, 1993), p. 10.

[^29]:    ${ }^{77}$ Hartill, David. "Identification Help: Qianlong Board of Works." Ancient Chinese Coins. Yahoo Groups, Message No. 2729. 2 May 2011. Web; and David, Hartill. "Re: Identification Help: Qianlong Board of Works." Message to Steven H. Kaplan. 9 May 2011. E-mail.
    ${ }^{78}$ Jensen, John. "Identification Help: Qianlong Board of Works." Ancient Chinese Coins. Yahoo Groups, Message No. 2736. 3 May 2011. Web.
    ${ }^{79}$ Hartill (1991).

