

ORIENTAL NUMISMATIC SOCIETY

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ONS News

ONS Meeting Netherlands

The ONS meeting mentioned in the last Newsletter duly took place in Leiden on 21 October. An additional talk was given by your editor on the gold coins of the Sultans of Bengal in the collection of Dr S Kawale. It is intended to publish many of these coins in future issues of the Newsletter. The meeting was well attended with over 30 members present. The customary auction was very successful with some Dfl 1200 accruing to ONS funds. Our thanks are due to Spinks of London and Dr Wilski for their generosity in donating material for the auction, to Jan Lingem for organising the meeting and to the Coin Cabinet and Museum of Antiquities in Leiden for allowing the meeting to take place on their premises free of charge.



Keen discussion among members at the Leiden meeting



Members assembled outside the museum in Leiden

ONS Meeting Blackburn

This meeting also took place as planned. The attendance was only moderate but it is hoped that the seeds will have been sown for future meetings in the north of England. Our thanks are due to Adrian Lewis for making all the arrangements.

ONS American Region Meeting

This meeting will take place on 9 December, commencing 5 pm, during the New York International Numismatic Convention. The guest speaker will be Dr Lawrence Adams (ONS member and President of the Society for Ancient Numismatics) who will give a talk entitled *Incised Roman auri found in India*. Overseas members planning to come to New York for the convention and their guests are welcome to attend. For further information please contact William B Warden, Jr.

Mongol Study Day

Imperial Mongol Money - the Turkish Aspect is the title of the second annual study day on Mongol coinage. It will take place in the Coin and Medal Department of the British Museum on 10 February 1996, from 10.30 to 16.00. Papers are invited. For further information, please contact Judith Kolbas, Flat 19, 119 Haverstock Hill, London NW3 4RS, UK. Telephone and fax: (44) (0)171 483 1983.

ONS Meeting London

There will be an ONS meeting in London on Saturday 8 June 1996, commencing 2 pm at the Cumberland Hotel in connection with the coin fair to be held there on that day. Our thanks are due to Howard and Frances Simmons for enabling the meeting to take place. Any member wishing to give a talk at the meeting should contact Ken Wiggins.

Members Requests

1. ... is interested in purchasing all materials related to the princely states of India. He collects the following areas: miniature paintings, photographs and photographic albums; fine arts; decorative arts, all items of medical interest; historical materials, documents, letters, firmans; commemorative medals; military and civil orders and decorations; old and new books; flags; maps; coins - Bushby Sahib coins, Raja Geo Thomas rupees; share and stock certificates; hundis, cash coupons, cigarette and trade cards; fiscal, revenue and court fee stamps; stamped paper; postage stamps and covers from Dungarpur, Kotah, Rajpipla and Talcher; picture postcards; postal history material.

2. ... is interested in mediaeval Islamic coins and glass weights in general and the Fatimids of North Africa, Egypt and Syria; the Batinids of Alamut in North Iran; Zanzibar and Arab settlement coinage of East Africa; gold fanams of India. He has many extra coins for exchange and would welcome typed wants lists.

Other News

1. Mamluk Studies

The Middle East Documentation Center of the University of Chicago is presently organising the first issue of *Mamluk Studies Review*, which they will publish annually beginning in the autumn of 1997. They would like to hear from any member interested in contributing an article to the first or subsequent issues. In addition, they can now offer a convenient electronic forum for communication among Mamluk specialists through the MEDOC Mamluk Listserv. You can subscribe by sending a message to majordomo@listhost.uchicago.edu. The body of the text should read: subscribe mamluk your-address. The subject line should be left clear.

Mamluk Studies: a bibliography, a compilation of more than 3400 citations to the secondary literature of the field will be available in a searchable format on the World Wide Web shortly. Information on accessing the bibliography will be given to subscribers of the Mamluk Listserv as soon as it is available. The Center is also compiling a list of scholars working in Mamluk studies and would welcome details from such people. Please contact Bruce D Craig, Director, Middle East Documentation Center, University of Chicago, 5828 South University Avenue, 201 Pick Hall, Chicago, Illinois 60637 USA. Tel: (1) 312 702 8426. Fax: (1) 312 753 0569. E-mail: mideast-library@uchicago.edu.

2. RNS lecture

Jere Bacharach will be giving a talk at the Royal Numismatic Society, London on 21 November 1995 entitled *The interaction of European and Islamic coinage in 15th century Egypt and Syria*. The meeting of the society will take place at the Society of Antiquaries, Burlington House, Piccadilly, London WC1 at 17.30.

New and recent publications

1. Dr Hans Wilski : *Countermarks on Ottoman coins*, published by Münzhandel & Verlag Strothotte, PO Box 42 36, D-33276 Gütersloh, Germany. 331 pages including 36 photographic plates, 50 tables and numerous text figures. Hardbound. Price DM 125 plus postage.

Dr Wilski has provided the following information about the book.

"Throughout the course of the six centuries' history of the Ottoman Empire, coins have been countermarked. This involved both state-issued as well as foreign coins circulating there. This new publication presents the results of a unique in-depth study of this important numismatic phenomenon.

The first and largest part of this book is devoted to the more recent manifestations of the practice of countermarking. At the end of the 19th century, coinciding with the last years of the Empire, large numbers of coins were countermarked in the Aegean region, using both Greek and Turkish script. Until recently, relatively few of these countermarks had been studied and published, and this mostly only fragmentarily. During numerous private exploration visits to the region, I have managed to bring together more than 400 different countermarks of this area.

High quality drawings to actual size illustrate essential characteristics; together with salient data and explanations these are found in extensive but clearly arranged tables. A narrative text and photographic plates, showing nearly all countermarks, supplement the tables.

A chaotic monetary situation during the last years of the Ottoman Empire, resulting in acute shortages of cash, is carefully analysed. The reasons that led to extensive countermarking are discussed and the currency value of the countermarked coins is arrived at through a logical extrapolation of findings. A large number of new readings of mostly cryptic abbreviations that make up these countermarks is added to those already known. All coin hoards relating to this field are described and, where possible, analysed. Full use has been made of all traceable references to these countermarked coins in often difficult to locate literature that has appeared on this subject up to the end of 1994.

The second part of the book is devoted to all other countermarks of the Ottoman Empire, starting with Persian countermarks on Ottoman silver coins of the 15th century up to countermarks of unknown origin on Ottoman nickel coins of the 20th century. The reader will be introduced to an abundance of curious countermarks from different parts of the Ottoman Empire and will become acquainted with the reasons that led to their application.

In the third part of the book contemporary and modern forgeries are discussed. The book ends with a chapter on assay marks, sometimes used to indicate coin imitations of gold, silver or base metal. These imitations were used as trinkets in oriental countries. Their assay marks are often confused with countermarks. The book clears up some misconceptions that exist in this respect."

Dr Wilski, a retired industrial physical chemist, is a collector of Ottoman coins of long standing and a respected authority on many aspects of Ottoman numismatics.

2. *Sylloge Numorum Arabicorum Tübingen - Khurasan I: Gazna / Kabul* by Florian Schwarz has now been published. This volume deals with the mints of Qaristan, Firuzkuh, Bamian, Panjhir, Farwan, Kabul and Ghazna. There are 105 pages, including 39 plates covering 1167 coins. The price is in the region of £70, \$100, FF 550.

3. *Pre-Kushana Coins in Pakistan* by Osmund Bopearachchi and Aman ur Rahman, Karachi 1995. A4 with 80 colour plates covering over 1100 coins. "The book deals with the coinage of the Achaemenid period through the Greek coins found in the region to the Bactro-Greeks, the Indo-Parthians and the Indo-Scythians, and covers the extensive collection of Aman ur Rahman. Additional pages describe hitherto unknown, selected rare coins in the Peshawar Museum and those in another private Pakistani collection.

The main strength of Rahman's collection is that the provenance of the coins has been meticulously documented. It also contains several unique and other extremely rare varieties, including over 100 unreported monograms. The book includes chapters on the history of the period, a technical commentary on exceptional pieces and discussion on monograms and what they signify, plus a chapter on metallurgy."

Copies can be had by sending a US\$ 150 cheque plus postage of \$20 by air or \$5 by sea to: Mr Aman ur Rahman, No. 83, 11th Avenue, F 10/1, Islamabad, Pakistan.

4. The following titles are available from D.K. Printworld (P) Ltd, "Sri Kunj", F-52 Bali Nagar, New Delhi-110 015, India:

Kusana coins and history by Dr PL Gupta and Dr Sarojini Kulashreshtha, 1994, 209p, US\$ 17.30. ISBN 81-246-0017-1.

Ancient Indian coinage: a systematic study of money economy from Janapada period to the early medieval period (600BC to 1200AD) by Dr Rekha Jain, 1995, 250p (tent.) with illustrations, US\$ 23.30 (tent.). ISBN 81-246-0051-1.

"Analysing in depth an astonishing mass of numismatic and kindred data, published in different catalogues, archaeological reports, journals and elsewhere, this book investigates the evolution of ancient India's money economy: in terms of its "coinage", through six successive periods: janapada, Maurya, post-Maurya, Gupta, post-Gupta, and pre-mediaeval - which in their togetherness, span nearly two millennia. Covering the entire subcontinental sprawl, Dr Jain considers the whole variety of coins: local, universal standard, and even foreign, with meticulous descriptions of coin types, symbols, legends, fabric and metrology. The author has drawn on wide-ranging primary and secondary sources and has also tried to establish linkages between different ancient coins and their references/descriptions in Vedic/Buddhist/Jaina texts, Panini's *Astadhyayi*, Kautilya's *Arthashastra*, epic literature, *Dharmasastras*, foreigner's travelogues, old-world mathematical treatises, and numerous contemporary inscriptions."

5. Available from the Indian Books Centre, 40/5 Shakti Nagar, Delhi-110 007, India is *Encyclopedia of India and her states* edited by Verinder Grover, New Delhi, 1995 in 10 volumes. Price US\$ 1000.
6. Northcountry Publishing Company, 1509 Fillmore Street, Alexandria, Minnesota 56308, USA have published *A world of money from the earliest times: a concise non-Eurocentric history of the world's native currencies*, by Allen M Blair, 1995. 158 pages with about 360 illustrations. Price US\$ 30 plus postage from the publisher. "This book, which draws on the findings of scholars from a wide variety of disciplines, is not just about money but the economics of money and constitutes a minihistory of world banking also. Numerous shibboleths about money are demythified - first known coins, for instance, are attested in Old Babylonian archives (1894-1595BC), first known paper (actually leather) money in China about 120BC..."
7. Newsletter 26 (summer 1995) of the International Numismatic Commission includes a report by Helen Wang of the British Museum of her study visit to China in 1994 and her note on the 4th National Conference on Silk Road Coins, Lanzhou, PR China, September 1994. There is also a note by Paul Bernard on the destruction of the Kabul Museum and the sorry state of things in Afghanistan. The newsletter also lists the following publications:
- B Agarwal and S Rai, *Indian punch-marked coins*, 1994, 325p, ill.
 - R Goyal *Indigenous coins of early India*, 1994, 240p, 16 pl.
 - W Hahn *Äthiopien - Kunsthandwerk und Münzen aus Österreichischen Münzsammlungen*, exhibition catalogue, Schloßmuseum Linz, 1994, ISBN 3-900746-70-2. Price ÖS 190.-
 - E Leuthold Jr., *Dirham dei Califfi Abbasidi e dei dinasti Hamdanidi-Buwayhidi-Sasanidi*, Milan, Ullmann, 1995, 21p, 11pl. Available free of charge from the author, Dott. Ing. E Leuthold, Piazza Repubblica, 25, I-20124 Milano, Italy.
 - S Shamma *The time of al-Ma'mun in the light of numismatic evidence* (in Arabic), Yarmouk University, 1995, 910p., 22pl., 195 ill. (Dynasties, names, mints and dates are also given in English), US\$ 50 including postage.
8. Hodge Mehdi Malek *A fifth century hoard of Sasanian drachms (AD 399-460)*, Iran 33 (1995), pp 67-84, 10pl. This article publishes a hoard of 143 Sasanian drachms of Yazdgird I (1), Vahram V (106), Yazdgird II (35) and Peroz (1). The latest coin is a very rare drachm of Peroz of regnal year two (AD 460). The journal *Iran* is available from the British Institute of Persian Studies, The Publications Secretary, c/o The Institute of Archaeology, University College London, 31-34 Gordon Square, London WC1H 0PY, UK.
9. Dr Gyula Petrányi (61 Ay. Filaxenos Street, CY-3025 Limassol, Cyprus) has published a short article on Ottoman coinage in Cyprus in the Numismatic Report of the Cyprus Numismatic Society (volumes XXII - XXV, 1991-4). The article notes the small number of Ottoman coins bearing the mint-name *Kibris* that have so far been published and the author would welcome information on any other such coins that may be in private or institutional collections for a corpus that is in preparation.
10. *Copper cash and silver taels - the story of Ch'ing dynasty money* by John E Sandrock; hardbound, 432pp, 243 photographs, maps and tables. Price: US\$ 44.50 plus US\$ 3.50 in USA, plus US\$ 5.50 by surface bookpost for overseas orders. Available from Bunker Hill Enterprises, Dept. X., PO Box 436, Monkton, MD 21111 0436, USA.
11. *Der Kurusch* an article in honour of Cüneyt Ölçer by Kenan Kerestecioglu appeared in GN 155, May 1993. The article is in German.
12. Volume 17, 1993, of the Numismatic Digest, published by the Indian Institute of Research in Numismatic Studies, Nasik, is due to appear shortly. This issue is notable for a 94 page paper by Nicholas Rhodes on the coins of the Sultans of Kashmir. This paper includes all known types, and by careful analysis and die-study puts forward revised attributions and chronology for a number of the issues. It also seeks to attribute those coins which have hitherto proved enigmatic. All this is essential reading for anyone interested in the series. Other articles in the issue are as follows:
- New silver punchmarked Janapada coins* by Narendra Kothari
 - A note on the Mana hoards of punchmarked coins* by Ajay Mitra Shastri
 - Uninscribed coins from Thathari (M.P.)* by RR Bhargava
 - Coins of the Arjunayanas* by Nisar Ahmad
 - Silver coins of Skanda Satakarni* by Laxmikant B Varma
 - Vasishthiputra Vijaya Satakarni* by Ajay Mitra Shastri
 - A new gold coin-type of Kumaragupta I* by Parmeshwari Lal Gupta
 - Gold coins of the Paramaras: a reappraisal in the light of fresh evidence* by Biswajeet Rath
 - Coins of Baz Bahadur of Malwa* by Danish Moin and Dilip P Balsekar
 - Some Mughal nisars* by MK Gupta
 - Copper coins of Aurangzeb from Haidarabad mint* by AH Siddiqui
 - Coinage of the Ghorpade Chiefs of Gooty* by SU Bhandare
 - Bombay coins of King William and Queen Mary* by Parmeshwari Lal Gupta
 - Ramatankas: their date, role and manufacture* by Michael B Mitchiner
 - Swedish plate money* by Thomas Lautz
 - Chemical and metallographic studies of copper-zinc punchmarked coins* by V Pandit Rao
 - Book review, notes and news.
13. Spink Numismatic Circular, November 1995, Vol CIII No. 9, contains an article by Tony Goodwin entitled *Seventh century Arab imitations of Byzantine folles*.

Work in progress

- The Hyderabad Numismatic Society is preparing a study of the coinage of the Asaf Jahi Nizams of the Deccan and a comprehensive monograph on the Muslim rulers of Mysore.
 - W F Spengler and W G Sayles are working on volume II of their *Turkoman figural bronze coins and their iconography (the Zengids and the Ayyubids)*. This is due to appear early 1996.
 - Michael Mitchiner has been working on a book covering the coinage of Bangladesh from ancient to modern times.
 - John Deyell is still reported to be working on his book on the coins of the Sultans of Bengal.
- The editor would welcome any other information on work in progress.

Lists received

1. Stephen Album (PO Box 7386, Santa Rosa, Calif. 95407, USA) lists 119 (August 1995) and 120 (September 1995).
2. Scott Semans (PO Box 22849, Seattle, WA 98122, USA) list 59T - coinage of Thailand.
3. Monica Tye (Loch Eynort, Isle of South Uist, UK, HS8 5SJ) list 12. This list contains the first instalment of Chinese cash from the Colin Narbeth collection. Enquiries about this collection are welcome.
4. William B Warden, Jr. (PO Box 356, New Hope, PA 18938, USA) has issued several lists recently. These are:
 - i. Islamic coins fixed price list (Ilkhans)
 - ii. Islamic coins fixed price list (India)
 - iii. Islamic coins fixed price list (late Iranian coinage). This list, starting with the Safavids, is available only to those ONS members who request it).
 - iv. Islamic coins fixed price list (Arab-Sasanian)
 - v. Islamic coins fixed price list (various, but with a lot of Ottoman). This list also is available only on request.
5. Persic Gallery (PO Box 10317, Torrance, CA 90505, USA) list 37 of Islamic, Indian and Central Asian coins.

Book Reviews

Jitals - a catalogue and account of the coin denomination of daily use in mediaeval Afghanistan and North West India by Robert and Monica Tye.

Published by Robert Tye, ... 1995. 183pp, hardbound, illustrated throughout with clear drawings. Price £20 plus postage. ISBN 0 9524144 0 6.

Reviewed by Judith Kolbas

For 700 years at least 25 dynasties struck jitals (67), the small, usually base, coins of northern India and Afghanistan. They were first issued under the Shahis of Kabul in the 8th or 9th century AD and used as a unit of account by Akbar (1556-1605 AD). Jitals have eluded an adequate understanding principally because a corpus of the types has not existed. Robert and Monica Tye have helped alleviate the problem with this publication, having spent many years collecting, recording and examining these coins. The 183 page volume sets out the types in 25 pages at the beginning, then examines them in detail with a general commentary. The bulk of the work, almost 80 pages, is a catalogue of the varieties. This is followed by a review of the legends, list of dynasties, styles of numerals, short bibliography and index.

For most readers, three charts showing the movement of varieties/types is critically important for appreciating the complexity of the subject. The material is so diverse that any form of organisation will have to slight some factors in favour of others but the major problem of covering similar types and their derivatives over non-contiguous territory or time is remedied by these charts. They are placed between the pages of the general account which discusses the coins by reign and then mint. I must confess that, even after a close reading, the coinage still perplexes me more than I should like. However, Tye has answered more questions than he has raised even though he often hedges his account as an hypothetical explanation. In most cases he has made pertinent points so that numismatists will be able to add information to corroborate and expand on his work.

One of these points pertains to his fourth and final chart "Iconoclastic and Figured Coin 'Pairs'." Six examples indicate the relationship in some dynasties of capital to provincial issues: the first were epigraphic while the second carried figures - bull, horse, elephant or lion. Other evidence of ranking is provided by comments spread throughout the text that various provincial issues had less value than the capital's (55, 58). I have noted another aspect of this dichotomy, namely weight. The Mongol series, which are all epigraphic, have heavier weights at the administrative centre. In particular, Ghazna struck billon at the full mithqal while the subsidiary mint, usually Kurriman struck at three-quarters or 18 carats of the 4.125 gram mithqal, namely at 3.09 grams. Recognizing the ranking of mints is the most important factor for making sense of all subsequent Mongol coinage. Hierarchy was a central feature of Tabriz's control over all the money the Mongols produced in Iran before 678/1279: the Tabriz coin was heavier than any other silver, or problems ensued, and had its own design. In 1280s during Ghazan's governorship of Khurasan, the Il-khanids tried to incorporate their cousins into a monetary union of the whole Mongol empire but the Tabriz standard remained heavier and purer than the others. There was an ethical foundation to this practice which had been described clearly by al-Farabi, the second Aristotle to the Muslims, in his *Mabadi' ara' ahl al-maduna al-fadila*. In a harmonious society, the perfect city, like the perfect ruler, was more elevated than its subsidiary components. When it came to coinage, which was an extension of the entity of the political state, in practice nobility meant higher purity of the 'noble' metals and more weight. Tye's awareness of type and purity differences adds considerable knowledge to the monetary, and ultimately economic, system of the area. This and a number of other practices from jital currency were adopted by the Mongols and spread much farther afield than its original homeland.

There are more Mongol pieces around than one can tidy up even with Tye's catalogue but my analysis of the movements of Chinggis Khan's army, historical sources and die types, printed elsewhere, suggests that the issue reading *Chinggis Khan* was minted at Herat, not Ghazna and was quickly withdrawn as soon as Ogedai, probably, became aware of the breach of Mongol protocol. This is the only series that has Chinggis Khan's name on it, except for an extremely poor large flat billon piece struck in Samarqand in 624/1227 at Chinggis Khan's death when he was far away in eastern Mongolia.

Other reviews will hopefully consider some of the material in light of different histories, especially events and coinage in India with which I have no experience. Since this part was new to me, I found that it would have been quite helpful to know how jitals related to other currency. Were there parallel gold and pure silver coins? Often Tye indicates there were but it was not always clear to me. Therefore, unfortunately, I sometimes felt I was adrift in a sea of other coinages with only the jital to hang onto. Nowhere, even in an appendix, did the picture become more clear. Further, the allusions to denominations within the jital system often seemed to mean the jitals themselves in relation to gold or 'dirhem' issues. He has spoken elsewhere about denominations and in an appendix about fiduciary coinage so he has considered these points carefully. However, they were not clear in this volume, leaving me with the impression that unless he wrote otherwise, jitals were valued by their metal content and weight in relationship to whatever other currency they met. In other words, they were important in themselves, not as a supplemental coinage. However, he never actually gave them that prestige. I look forward to the possibility that he will put pen to paper to expand on this subject of the role of the jital in the full monetary system.

Another problem with the work is that we are not given a reason why Tye wants to call these coins "jitals." They are so varied in weight, design, metal and distribution that some definition should be given the reader. At best we get hints of his interpretation throughout the volume: according to MacDowell's analysis (37) the first coins were 70 percent silver but most were about 25, then 18 percent and some with almost no silver, they were basically a thick billon coin which became at the end of its life an accounting unit (79-80), and a weight standard, unspecified (78) but given as 3.1 (71), 3.2 (73), 3.3 and 3.4 grams elsewhere. Even though this material is quite a hodge-podge, it has been given a name which deserves some explanation.

A number of specific points warrant comment but I will restrict myself to three. The historical source for the Mongol period is 'Juzjani,' not 'Jurjani.' Jalal al-Din Manguburni had only a couple of months in late winter after securing his position as heir to issue coins before his great leap into the Indus. Little coinage can be expected from these weeks spent mostly in travel and fighting. Rather more coins in his name should have been issued after he left Multan for Fars and his new conquests in Adharbayjan and Georgia. For almost a decade, but specifically in 623/1226 and again in 627/1230, Khwarazmian fortunes revived strongly in Khurasan and Afghanistan.

Finally the coins of Nawruz in Sistan (50) would have been struck between 688/1289 and 693/1294. Nawruz was the remarkable son of Arghun Aqa, who had been appointed by Ogedai's widow in 641/1243 as the civilian governor of all Mongol lands "from the Oxus to Fars, Georgia, Rum and Mosul." He died naturally in 674/1275, still holding the most important position in the civil administration, the chief tax collector. Nawruz's claim to rule the territory was as strong as the members of the royal family who had appeared on the scene much later and were from a different branch. He was the military governor of the east and allied himself with the Chaghadaids who still had dreams, in spite of the Battle of Herat on 22 July 1270, of controlling Afghanistan down to the Indus. The khan Arghun sent his eldest son, Ghazan, in his early teens, as governor of Khurasan to subdue him. Terms were finally made in favour of Ghazan but Nawruz became the real power behind the throne: he converted Ghazan to Islam three and a half months before Ghazan became ruler and was put in charge of finances immediately after Ghazan's cousin was deposed. He was much too persuasive and competent to make life safe for the new khan so he was murdered less than two years after he helped Ghazan gain the throne. This jital series is the only coinage issued in his name but bears witness to an extremely important period of Il-khanate history.

Because jitals can now be seen in patterns, the book is teeming with ideas but the lasting impression relates to the final appendix, "fiat jitals and horse trading merchants." The supporting material is scattered about in the commentary but the thesis deserves this wrap-up because of its extreme importance. Tye dares to ask the question, "what were these things for?" One obvious answer is local markets but he pursues this much further. What market and what was local about it? His conclusion is that a good deal of this money was used and issued by merchant houses or banks dealing in the import of horses to northern India. It is a very practical explanation for the migrating nature of the types and the location of the mints. Economic history stresses the exotic produce of silk and spices but luxury goods go to capitals and require gold. Not enough attention has been paid to perishable goods that had a bigger market. If the Turfan melons and grapes travelled far afield, why not horses from the steppe? Separately, I had come to the same awareness of the importance of horses for the Mongols. They were the reason the Mongols of Iran preferred to stay in the Mughan plain near the Caspian Sea and the horse trade with the Jazira, through Mardin, was probably the impetus for their first market related coinage. Medieval geographers and historians identify Adharbayjan with horse rearing and trading. Further, when a Mongol sent a gift to his superior or to cement a foreign alliance, he often used some kind of horse. This information is documented amongst the Mongols and should not be unique to them as Tye has demonstrated briefly here. Horse power was more important within Turkish and Mongol society than it was even as a trade item to places that could not keep the animals healthy long. I am unaware of a history of horse breeds from the area but there were many, many different types, not just the massive, blood-sweating, war horse. Tye suggests specifically Turkish trade with the Punjab, which created the Lahore and Delhi type jitals, but he also postulates, less securely but I think correctly, Ghazna, Taliqan and Kurzuwan trading houses (65, 68). This would indicate perhaps commerce amongst the Turkish breeders themselves. It cannot be doubted in my mind that equids were the main item of trade, long and short distance, in this herding environment. Tye has produced a framework for the economic life-blood of the region that deserves much further consideration.

The book has allowed me to see behind a normally squat brown coin with outlandishly stylized lines or legends often enough and purposely not quite on the flan. The author has made me realize they deserve more patience than I have given them so far.

A monetary history of China by Peng Xinwei.

A translation of Peng Xinwei's *Zhongguo Huobi Shi* (third edition 1965) by Edward H. Kaplan, Western Washington University, Bellingham WA 98225-9056, 1993, two volumes, 50 plus 929 pages, 122 black and white plates in text. Paperback, 26.5x20 cm.

Review by Joe Cribb (British Museum)

Those used to struggling to collect and study Chinese coins without any knowledge of the Chinese language will be shocked beyond belief to discover this amazing book. Up to now the English speaking collector has had to be satisfied with a handful of general books, like Schjöhth and Lockhart's catalogues and a few pocket guides like those by Creswell and Remmelts for the cash coins and Wang Yuchuan's excellent introduction to the spade and knife coins (*Early Chinese Coinage*, ANS, New York 1951) and Kann's book on the struck coinages. Kaplan now presents us with more than a handful, a monumental translation of a monumental work embracing at one go the whole of China's monetary history, the excellence of which is an encouragement to throw the rest away.

Peng's original volume (a smaller first edition published in 1954 and the fully revised third edition of 1965, 62 plus 996 pages) is a remarkable masterpiece. It presents a detailed account of the history of China's money, placing coinage in the context of China's other forms of money: shells, silk, paper, precious metals, imported foreign coins, etc. The documentation of monetary production and practice is set alongside a study of Chinese economic theory, price levels and numismatic research.

The depth of analysis by Peng can be seen in his discussion of the period of spade and knife coinage (pp. 31-101). As well as listing and describing the main coin types and inscriptions, together with photographic illustrations of genuine specimens (unlike the Lockhart collection, for example, where most of the early coins are modern copies), he discusses the etymology of the names for them recorded in early Chinese literature, the evolution of the coins from tools, the regional distribution of the coinage from collecting reports, hoards and archaeological contexts, the evidence of central or local administration of coinage, the inscriptions on the coins including their stylistic significance and interpretation, the development of various coin shapes and sizes, their weight standards, their denomination systems, the function of the coins as recorded in early Chinese literature, their dating and attribution, etc.

He readily goes beyond his initial subject to compare the early development of Chinese coinage with the parallel development of coinage in the Greek world, commenting on the predominant use of base metal in China as an indication of a deeper penetration of coinage into society at this early stage. He also discusses the evidence provided by coins for the study of the development of the Chinese writing system.

Alongside this presentation and discussion of coinage, Peng spreads his investigation to examine the monetary role during the period of spade and knife coins. He explores literary and archaeological evidence for the use of gold and silver, again comparing it with western parallels. He lists in full the literary references to monetary payments in weighed units of gold and describes finds of gold ingots with stamps indicating their monetary use. He also refers to the use of base metal and clay copies of gold ingots as funerary offerings.

Following his survey of China's monetary history during the period of the spade and knife coins, Peng adds a section on the impact of the development of money on social and economic life, examining for example the growth of the money supply during the fourth-third centuries BC and its impact on the monetisation of the rural economy. He discusses the development of official salaries, with money replacing payments in kind, and the role of the state and merchants in the production and regulation of coinage. He concludes this by looking at the impact of money on ethics.

The period of the spade and knife coins was an important period for the development of Chinese philosophy and political thought. Monetary theory was an important part of these developments and Peng devotes a section to presenting a variety of quotations from contemporary literature to illustrate attitudes towards political economy and the role and regulation of money within the state. Peng shows the profundity of analysis during this period, with discussions of price control, a gold standard, quantity theories of money supply, denomination structures, etc. He concludes his view of early Chinese money with an account of the development of credit as a monetary device during this period.

The breadth and depth of Peng's study continues at this level for each period of Chinese history down to the end of the Empire (1911), adding for later periods more detailed discussions of paper money, the development of banking and the study of numismatics. For example, his chapter on numismatic research during the Qing Dynasty (pp. 927-941) is extensive and not only lists publications, but also discusses their relative merits.

His discussion and analysis is never superficial. In some cases new discoveries in China and new methodologies have made his work outdated, but what he has to say is always worth including in any reassessment of the subject. Even more remarkable for a Chinese numismatic work is Peng's close attention to documenting his study. His footnotes are a vital part of his presentation, providing references to rare sources, allowing reference back to the contemporary sources and providing credence to his analysis.

For example in his discussion of the Qing Dynasty silver ingot system he considers the actual apparatus of weighing and using ingots on an every day basis (p. 780) and in a footnote he quotes from an eighteenth century Chinese novel the description of a payment involving the cutting up and weighing of small ingots. In his account of the use of foreign silver dollars (pp. 780-785), he quotes from both European and Chinese (including official documents) sources to produce a unique account.

Kaplan has done full justice to Peng's work. It is now possible to make full use of it without any knowledge of Chinese. To this he has added two generous bonuses, an introduction which gives us an insight into Peng's work and life and an index which raises the usefulness of Peng's work to a new level.

Kaplan has carefully marked his translation with the original page numbers so that it is easy to go back to the original, if one wants to see Peng's own words and the Chinese characters used. He has moved Peng's endnotes to be footnotes on the same page as their references (but still notes Peng's original pagination for them). The only gripe this reviewer has is with some awkward translations of coin names, which jar, for example the Qin-Han period ban liang coins are called "half-ouncers", wu zhu coins of Han are "five-grainers", the Kaiyuan tongbao of the Tang Dynasty are called "Inaugural Circulating Treasure coins" or "Inaugural coins" (for short). It would perhaps have been better to keep the Chinese name for precision and to put the translation in brackets after it. This is a small thing, a matter of personal taste, and in no way detracts from the value of the translation.

One could criticise the quality of the plates which appear to be photocopy quality reproductions of the original plates. It is unfortunate that this was all the publisher could achieve, but it is in some ways a reflection of the poor quality of the original printing and one has to make do with them.

In the section of the book devoted to spade and knife coins Kaplan has added to the text some references in brackets noting discoveries which have a bearing on the topics discussed made after Peng's publication. These are mostly sourced to the American coin researcher Bruce W. Smith. Unfortunately these are not as useful as Kaplan hoped, because unlike Peng's work, they lack the publication references needed to make them fully useful.

Another reviewer has described Kaplan's translation of Peng as "the single most important work on the subject in English". This reviewer agrees entirely. It is a remarkable statement to make about a book written thirty years ago, but three decades of further research have done little to diminish the achievement of Peng's masterpiece, which is in reality the single most important work on Chinese money in any language.

Punch-marked coins - approaches to new research

by Joe Cribb

In the last issue of the ONS Newsletter (no. 145, Summer 1995, pp. 5-7) K.J. Atkins published a short article called "Ancient India Magadha-Maurya Punch-Marked Silver Coinage" which prompts me to draw the attention of ONS members interested in this coinage to a few new aspects of research on the topic.

Punch Marks

Dr Atkins is right to draw attention to the outstanding work which is available in P.L. Gupta and Terry Hardaker's *Ancient Indian Silver Punch-Marked Coins of the Magadha-Maurya Karshapana Series*, Nasik, 1985. This study sets out their system of classification for the five-punch coinage, which is the first successful analysis of the internal arrangement of the coinage and its development. As Gupta and Hardaker readily admit, this is a working classification which new examples and further hoards will continue to refine. Apart from drawing attention to Gupta and Hardaker's book the main point of Atkins' article appears to be to discuss the role of the fifth mark and to suggest a new explanation for it. The same question has been approached by Gupta and Hardaker (p. 18) and they treat it with great caution, concluding on the basis of their understanding of the development of the coinage that it could be a quality control mark or a mint indicator mark. Atkins does not address these suggestions but proposes a new explanation, which does not respect Gupta and Hardaker's warning (p.18) that the symbolism of the marks should not be over-interpreted. To suggest, as Atkins does, that an elephant mark signifies coinage made for the army or a leaf for agricultural development, cannot be reconciled with the system of punches as set out by Gupta and Hardaker. Nor does his suggestion bear any relation to our existing flimsy knowledge of the administration of ancient India at the time of the coinage.

Such speculation is not helpful. What is needed is more analysis of the kind already done by Dr Gupta. For example it would be possible to refute or confirm Dr Gupta's suggestion that the fifth marks could be a type of mint signature. If the details of the other four punch marks were studied in order to identify coins struck with the same punch tools (a kind of die study) then it should be possible to see whether the fifth punch mark was a mint mark or not. If there was a cross-over of tools between coins with different fifth marks, then they would all have to have been made in the same place and so the fifth mark could not be a mint mark. But if coins with a specific fifth punch mark were never struck with the punch tools used to make coins with other fifth marks, then it could be a mint mark.

Chronology

Another issue which should also be addressed more scientifically is one which Dr Atkins passes over without question. He follows Dr Gupta's dating and attribution of the coinage without comment. The early fifth century is taken to be the date of the early five-punch coinage, preceded by the local Janapada (republican) coinages of the early sixth century.

The question of early Indian chronology is one fraught with problems, but much of the study of early Indian coinage has for many years been based on a simple assumption: that the chronological elements of the account of Indian history during the early historical period (7th-1st century BC) as found in most Indian history books is to be taken at face value.

This assumption has led Dr Gupta (Gupta and Hardaker, 1985, p. 1) to state that "One of the most abundant coinages of Asia was the punch-marked silver struck in India from the sixth century BC, or earlier, to the second century BC". In his presentation of the precise chronology of these coins he places the earliest phase of the five-punch coinage of the Magadha series, which he dates to the period 500-430 BC, in the reigns of kings Bimbisara and Ajatashatru of Magadha. He points out that these are not the earliest of India's punch-marked coins. In his book *Coins (India - The Land and The People)*, Delhi, 1969, third edition 1991, p. 9, Gupta dates several series of local punch-marked coins issued by local states to the centuries before 500 BC "It may only be said that the coins of these states were current prior to the fifth century BC...". In M. Carter (editor) *A Treasury of Indian Coins*, Marg Publications, Bombay, 1994, p. 18, Gupta further expresses the opinion "... that punch-marked coins were invented very early in India, probably around the eighth century BC...".

The rationale for Gupta's dating can be found in his 1985 book with Terry Hardaker (pp. 31-32). He places the beginning of the Magadha-Maurya karshapana coinage (also known as the five-punch coinage) in the period before the conquest by Magadha state of its

neighbouring states, particularly Kosala, during the period 500-460 BC. He argues that the first phase of this coinage (Gupta and Hardaker Series 1) is only found in the territory controlled by Magadha before its conquests and therefore must predate the conquests. He also refers in the same context to the "pre-karshapana" coinage of Magadha, which preceded the five-punch karshapana coinage, originating during the period 650-550 BC and the coinages of Kashi state and Kosala issued alongside Magadha's pre-karshapana and first phase five-punch coinages.

Gupta is basing this framework of chronology on a well established understanding of the chronology of the Indian states he refers to. For an analysis of this chronology the fullest account can be found in R.C. Majumdar (editor) *The History and Culture of the Indian People*, volume 2, The Age of Imperial Unity, pp. 36-8. The chapter "Rise of Magadha Imperialism" was written by R.K. Mookerji, who states that "The date of the Buddha's death is thus the crucial point in fixing the chronology of the rulers of Magadha and other contemporary dynasties of the period" (p. 36). Mookerji uses the accounts of the kings of Magadha in Indian religious texts, the Puranas, Buddhist scriptures and chronicles, and Jain scriptures to construct a chronology, based on the acceptance of the statement in the Sri Lankan Buddhist Chronicle (*Mahavamsa*) that the Buddha died 218 years before the coronation of the Mauryan king Ashoka, which he dates in 269 BC, i.e. the Buddha died in about 486 BC. He juggles the contradictory information on the Magadhan kings in the Indian religious texts so that their reigns fit the 218 year gap. (The dating of Ashoka's coronation to 269 BC is one of the few corroborated fixed point in early Indian history. Ashoka's reign can be dated by the reference in one of his inscriptions to several contemporary Greek kings. The inscription was erected in the 13th year of his reign and the Greek kings were all reigning during the period 272-255 BC, giving a range for Ashoka's first year of 285-268 BC. The range is a concrete context for Ashoka, but the narrowing of this to 269 BC should, however, be questioned, because it involves the use of dubious evidence of the type criticised below.)

The framework summarised by Mookerji is used without explanation, for example, by the leading Indian historian Romila Thapar in her widely available *A History of India*, Pelican Books, London, 1966 (1987 fifteenth reprint), p. 54-7: "The battle for political pre-eminence in the region among the four states of Kashi, Kosala, Magadha and the Vrijis lasted about a hundred years. Magadha emerged victorious and established itself as the centre of political activity in northern India... The first important king of Magadha was Bimbisara... Bimbisara became king some time in the second half of the sixth century BC... Ajatashatru, the son of Bimbisara, impatient to rule Magadha, murdered his father in about 493 BC, and became king... Ajatashatru died in 461 BC". Both Mookerji and Thapar are basing the precision of these dates for Bimbisara and Ajatashatru on the statement in the Sri Lankan chronicle that the Buddha's death (according to them 486 BC) occurred in the eighth year of the reign of Ajatashatru.

Dr Gupta's dating for the first phase (Series 1) of the Magadha-Maurya five-punch karshapana coinage as 500-430 BC is therefore intended to suggest that it began in the latter part of the reign of Bimbisara and continued for thirty years after the reign of his son Ajatashatru. His total acceptance of the chronology as detailed above from Mookerji and Thapar is indicated by the complete absence of any references/footnotes from his account (Gupta and Hardaker, 1985, pp. 29-32) of the chronological framework of the punch-marked coinage.

The quality of the work on classifying and systematising the punch-marked coinage done by Gupta and Hardaker suggests that we should also respect their chronological analysis, but there are strong reasons (see below) for questioning their conclusions.

The most important reason is the faulty basis on which the above chronological framework of early Indian history is based. If, as Mookerji states, the date of the Buddha is the key to dating early Indian history, then the establishment of some certainty about this key is essential. Exactly this question has been addressed by a new book which should be valuable reading for all those interested in punch-marked coinage. The culmination of several years of collaborative research, *When Did The Buddha Live - The Controversy on the Dating of the Historical Buddha*, edited by Heinz Bechert, (Sri Satguru Publications, Indian Books Centre, Delhi 1995), is devoted to two aspects of the question. It looks at the historical process which underlies the assumption adopted by Dr Gupta, and then examines new approaches to the question. There is not a single mention of coinage in this book, but it is perhaps one of the most important books for the study of early Indian coinage to appear in recent years.

The importance of Bechert's book is its address to the unspoken assumption that the date of the death of the Buddha is a well known and fixed point in ancient Indian history. Thapar dates the life of the Buddha from 566 to 485 BC. The extension of this dating of the Buddha to the chronology of the kings of Magadha is based on the Sri Lankan Buddhist tradition concerning the Buddha which dates his death (paranirvana) in the eighth year of the reign of Ajatashatru. The same Sri Lankan tradition and other Indian religious traditions are the sources used by Mookerji and Thapar to reconstruct their account of the historical context of the life of the Buddha and of the conquests of the early Magadhan kings.

Bechert's book investigates methods, like those used by Mookerji and Thapar, used during the last two centuries to reach such conclusions, and questions the approaches used by previous scholars. He has invited a wide range of scholars from all disciplines involved in early Indian history to study the evidence which could give a solution to the dating of the Buddha. The historicity of the religious traditions are thrown into doubt and the general consensus moves towards a later dating for the Buddha, placing his death at the end of the fifth or in the early decades of the fourth century BC. Bechert's own conclusion is to date the death of the Buddha c. 400-350 BC.

Such a conclusion has clear implications for the dating of the punch-marked silver coinage. If the latest date suggested by Bechert were taken as a means of dating the establishment of Magadhan hegemony, then the first phase of punch-marked coinage, according to Gupta's association of it with the reign of Bimbisara and Ajatashatru, could be dated entirely in the fourth century, c. 396-326 BC, i.e. at least a hundred years later than the c. 500-430 BC suggested by Gupta. But without the framework derived from the religious traditions, is there any justification for making the link between the early Magadhan kings and the punch-marked coinage?

The dating of the punch-marked coinage can only be placed in the Indian historical context once the date of the Buddha can be fixed firmly and once the relationship between the Buddha and the political situation in which he lived can be verified beyond the accounts derived from Indian religious traditions. In 1983 ("Investigating the introduction of coinage in India - a review of recent research", *Journal of Numismatic Society of India*, 1983, pp. 80-101) and 1985 ("Dating India's Earliest Coins", *South Asian Archaeology* 1983, Naples 1985, pp. 535- 554) I made an analysis of the methodology of dating the punch-marked coinage and reached a conclusion that the hoard evidence from ancient Afghanistan and Pakistan was the only relevant reliable chronological indicator. The hoards pointed to a dating of the earliest punch-marked coins in the fourth century and a development from this to the five-punched coinage during a century which associated the beginnings of that coinage with a group of kings of Magadha later than the lifetime of the Buddha.

The hoards show the earliest punch-marked coins, known as bent-bars, deposited before the conquest of the region now known as Afghanistan and Pakistan by Alexander the Great (the Chaman-Hazouri hoard buried after about 360 BC), and the latest phases of the five-punch coinage deposited before the end of Greek rule in Bactria (Ai-Khanoum hoard buried after about 180 BC and before about 130 BC). The process of development from the bent-bar coins to the five-punch coins can also be traced, confirming the position of the bent-bars as India's earliest coins.

The work done by Bechert and his contributors suggest that the topic could be usefully addressed again, with a clearer understanding that the solutions proposed by Gupta, and scholars following the same approach to chronology, are based on a very inaccurate and unreliable assumption about the history of early India. All interested in the question of the dating of the punch-marked coinage would benefit greatly from looking at Bechert's book and understanding its arguments about the chronology of early India which completely deconstruct this assumption.

Anonymous Barakzai coinage - Part II, Kabul
by Hakim Hamidi

The killing of Wazir Fath Khan, the influential Barakzai leader, by Shah Mahmud of the Durrani Dynasty led to a sense of repugnancy against what remained of the Durrani dynasty. Mahmud failed to confront the Barakzais, and left for India. As confusion followed, Dost Muhammad, a Barakzai, in 1239/1823 seized the opportunity and took Kabul by surprise. There he immediately struck a coin, KM 473*

AR rupee, Kabul 1239/1823,
 Kalima within double square,
 in four arcs, the four Orthodox Caliphs/
 Zarb - Daru Sultanat Kabul, 1239.



His elder brothers, as well as the Barakzai Sardars, responded to this aggressive act by calling for a *jirga*, a congress of Barakzai Sardars to settle this offense. Headed by Sherdil, the congress convened in Kabul in 1239/1823. Among other resolutions, Dost Muhammad was removed from Kabul and assigned to Kohistan. He reluctantly accepted the decision of the *jirga* and Sultan Muhammad, his brother, was finally assigned to Kabul where he minted in 1239/1823 an anonymous rupee with the title of Sika i Dowlat i Sultan Zaman:

AR rupee, Kabul 1239,
 regnal year 1, KM 467:



within triple octagon

When Sherdil died, Dost Muhammad once again captured Kabul and Sultan Muhammad proceeded to Peshawar. Purdil Khan, their elder brother, challenged Dost Muhammad but once again the Barakzai elders intervened and the matter was traditionally settled by allowing Dost Muhammad to rule Kabul.

Dost Muhammad issued several types of anonymous rupees followed by a rupee in honour of his father, Payinda Khan. Finally in 1250/1834, he struck a rupee in his own name as Amir. The anonymous coins are:

Dost Muhammad, 1239-1255/1824-39,
 1st reign, AR rupee, Kabul 1240-1241, KM 477:

Fakhar kun ai seem wa zar as seka-e
 Sahib-a Zaman = Be proud oh silver
 and gold from the coin of Sahib-Zaman

تو کون ای سیم و زر از سکه
 صاحب زمان ۱۲۴۱



Zarb-e dar-us-saltanat-e
 Kabul

ضرب دارالسلطنت کابل

AR rupee, Kabul, 1241-44, KM 478

in double line, quatrefoil in centre;
 around margin:

= fakhar-kun ai seem wa zar as seka-e,
 around margin, translation as KM 477

تو کون ای سیم و زر از سکه
 صاحب زمان ۱۲۴۲



ضرب دارالسلطنت کابل
 ۱۲۴۲

AR rupee, Kabul, 1244-55, KM 479.
 Obverse as KM 377, reverse as KM 478.



As the political dust began to settle, he organised the armed forces and consolidated the rule of the central government.

Meanwhile, British agents in Kabul mistakenly sent misinformation to British India concerning Dost Muhammad's overtures to non-English dignitaries.

As a result, the British decided to install Shah Shuja in Afghanistan instead, and they entered Afghanistan through Qandahar, crowning Shah Shuja in Kabul on August 1, 1839. Dost Muhammad surrendered peacefully and was sent to Calcutta. Shah Shuja was consigned to a mountain-top citadel (Bala Hisar); while below, in Kabul, the British appointed key leaders and ruled with impunity. The British army became comfortable and played golf and polo, and relished the abundance of sweet fruit, peaches, grapes and melons. On the surface, the country seemed calm; but this only concealed the people's contempt for the hostile act of invasion and the establishment of a puppet ruler. Shortly afterwards, anti-Shuja literature was disseminated and Afghan leaders gathered to pave the way for an uprising. Groups were organised and, in due course, daily attacks against the British forces were launched in Kabul and other provinces. While Shah Shuja was still in the Bala Hisar Palace, leaders met and agreed that it was wise to have an Amir to administer the anti-Shah Shuja campaign. They designated Muhammad Zaman Khan, a Barakzai and nephew of Dost Muhammad as the Amir on Shawal 14, 1257/ Nov. 4, 1841. Shortly after taking office, Zaman minted the following coin:

Muhammad Zaman 1257-58/1841-2,
 AR rupee, Kabul 1257, KM 485:



At the same time, Akbar Khan, son of Dost Muhammad, left Bukhara and reached Kabul on Ramazan 1257/November 1841. It was he who provided the impetus behind the strategy of the war. By now the whole nation was in revolt. Sir William Macnaghten and several high-ranking officers had already been killed and the British retreated from Kabul on January 6, 1842.

Shah Shuja read the antagonistic literature known as the 'Night Letters', marking him as a weak king. Towards the end he wanted to dislodge himself from the British connection. He tried to create a national party and publicised his legitimacy as a legal king to the Durrani throne. He minted a commemorative-like rupee in the name of his brother, the able king, Shah Zaman:

AR rupee, Kabul 1258/1842, KM 486:

Qarar yaft ba hokm-e Khoda-e ar do
Jahan, rawaj-e Seka-e doulat ba name-e
Shah Zaman = installed with the
commend of God of both Worlds,
coin of realm became current
in the name of Shah Zaman

قرار یافت بحکم خدای هر دو جهان
رواج سکه دولت بنام شاه زمان



transliteration as KM 477

قریب در سلطنت کابل
۱۳۵۸

Shah Shuja was assassinated on Safar 3, 1258/ April 4, 1842. His son, Fath Jang was appointed king and struck several types of rupee. He left Afghanistan in Sha'ban 1258/ Oct. 19, 1842. In the same year, Shapur, another son of Shah Shuja was installed. He stayed long enough to mint a coin. His silver rupee, struck in 1258 is very rare and he was the last Durrani to rule in Afghanistan.

Six rulers minted coins in 1258. This was the year of turmoil in the history of Afghanistan. The British occupation during the reign of Shah Shuja and his sons ended disastrously in 1258/1842.

Finally, the British released Dost Muhammad from India and by the time he arrived in Kabul, his son, Wazir Akbar Khan, had already minted the following, anonymous rupee on Dost Muhammad's behalf:

Kalima



Zarb i Dar-us-Sultanat
Kabul, 1258

Notes

* KM 473 illustrated this example. However, date 1239 is not visible in the illustration and I have not seen a dated specimen.

Rediscovering Sikh Mints - Peshawar, Dera, Rawalpindi by Jyoti Rai ©

In this paper I will show that the mints at Peshawar, Dera and Rawalpindi were operating during the last few years of the Sikh Empire. What is significant is that the functioning of these mints has remained undiscovered or written about in recent times.

After the First Sikh War, the British, under the agreement of December 16, 1846, took a stronger control in the management of the Lahore Durbar. A Regency Council was created and the British Resident was appointed at Lahore. In essence the supervision of the Punjab, during the minority of Maharaja Duleep Singh, was placed under the British Resident. Various administrative changes were implemented including mint operations. An important issue concerning mint operations was the recommendation to reduce the currency to uniformity.

There were various currencies in circulation, namely Mughal, Durrani and Company coins. In addition, there were at least thirty varieties of Nanakshahis each commanding a different rate of exchange. Such was the confusion that it was decided to recoin all the short weight rupees into a single currency. The Resident at Lahore Lt. Col. H.M. Lawrence reports in his diary of June 20, 1847:¹ "Accompanied by my assistants I this morning went to Durbar. Dewan Deena Nat* proposed to call in all the silver coins of various denominations now circulating in the Punjab, especially towards the north and across the Indus, and establish one uniform currency (the Nanuckshahee) throughout the kingdom. This will be a very important reform, and as great a gain to the public in general as a loss to the shroffs and money-changers. I purposed making the proposition myself, but am glad that the Dewan has broached it."

Subsequent action to implement this reform was relatively quick. A mint was established at Pind Dadun Khan.² Old coins were sent to Amritsar in great quantities for recoinage into new Nanakshahis.

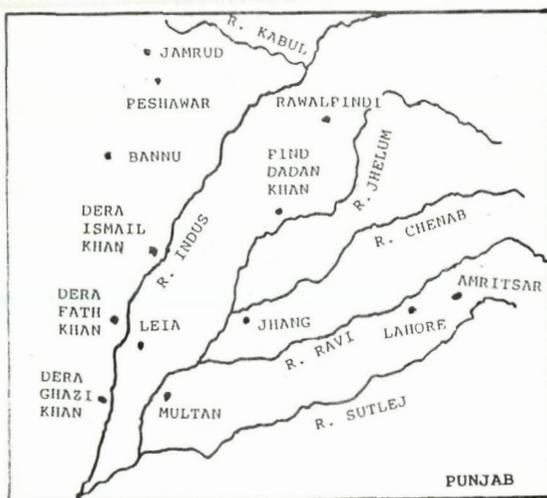


Fig 1
AR rupee
Date: VS 1891
Wt. 9.4 g
Dia. 21 mm



Zarb Peshawar
Julus Sanah

Deg Teg Fath Nusrat Bederang
Yafat az Nanak Guru Gobind Singh



Fig 2
Date: VS 1893
Wt. 8.4 g
Dia. 24 mm



Fig 3
Date: VS 1894
Wt. 8.4 g
Dia. 23 mm



PESHAWAR

The mint at Peshawar was reopened for this purpose. This is evident from the diary of H.M. Lawrence of Dec. 10, 1847.³ "The Mutsuddee of Ruttun Chund, Reeshduraz, reports that, in melting down old money for the new coinage in the Peshawar mint, a loss of 1 rupee per cent has been sustained on the coinage of Sumbut[®] 1888 and of rupees 1-8 per thousand on that of 1894." The date of the extract shows that, at Peshawar, recoinage had started prior to December 1847. This continued till May 1849. This is apparent in abstract of May 1849 from Major G. St. P. Lawrence, the Deputy Commissioner of Peshawar, to the Secretary to the Board of Administration:⁴ "Subject - Abolition of the mint at Peshawar. Solicits the Board's orders as to whether the coinage of Nanakshye rupees is to be continued in the Peshawar mints, and recommends that it be abolished."

On May 21, 1849, the Secretary responds to the Deputy Commissioner: "In reply, concurs in his suggestion to have the mint abolished, and requests that a list of any government property or coin in the mint may be sent to the Board." In yet another reference to this mint, the loss of profits is discussed for the year 1849.

It is thus evident that the mint at Peshawar was active for the period 1847-49. However, the puzzling fact is that there are no Sikh coins with the mint name Peshawar with dates VS 1904, 1905, 1906, AD 1847-49.

Peshawar was a part of the Sikh state from 1834 and remained in Sikh hands till the annexation of the Punjab in 1849. The only coins struck at Peshawar bear the dates VS 1891, 1892, 1893 and 1894, AD 1834-37. It is believed that these were struck by Hari Singh Nalwa, a famous and powerful Sikh general, who captured Peshawar for the Sikhs in 1834. This area was placed in his charge. His death in 1837 at the battle of Jamrud was greatly felt throughout the Durbar. It is interesting to note, however, that the Peshawar Nanakshahis were locally called Peshawari Naunihal Singhji rupees, after Prince Naunihal Singh, the Governor of Peshawar and grandson of Maharaja Ranjit Singh.

The reasons for the missing coins and dates can be explained in three possible ways:

1. That no coins of these dates have surfaced and await discovery.
2. That a die of the Amritsar mint or of some other Sikh mint was used at Peshawar. These coins, thus, would not bear the mint name Peshawar.
3. It may well be that the coins with dates VS 1892, 1893 and 1894, were in actuality struck not only in AD 1835-37 but also in AD 1847-49. The coins of these years (Figs. 2 and 3) are different from the VS 1891 AD 1834 (Fig. 1) in size, weight and diameter. They are more elaborately embellished and most coins are of very good condition. Some VS 1894 coins are machine made with oblique milling. They are unusual as all Sikh coins from the Misls to Maharaja Ranjit Singh and his descendants have been hand struck.

Why would the Lahore Durbar mint coins bearing these particular dates VS 1892-1894 and strike them approximately ten years later in AD 1847-49? An interesting entry appears in the catalogue of the White King Sale of 1905:⁵

"5846 - Régence après la mort de Rundjet Singh. Roupies fr. à Peichawer en 1893 Samvat. marque feuille et étoile, et en 1894, marque feuille et rose. Rodgers n. 24, 2 var. Ar. 2 ps. belles."

Translation: "5846 Regency after the death of Ranjit Singh rupees struck in Peshawar in 1893 Samvat. Mark leaf and star, and in 1894, mark leaf and rose. Rodgers n. 24, 2 var. Ar. 2 pcs. Beautiful."

This implies that the VS 1893 and 1894 rupees are from the Regency period, which began only in December 1846. Rodgers coin #24⁶ has been referred to. Rodgers states that this VS 1894 coin was struck by Hari Singh Nalwa "and the date is that of the battle in which he lost his life 1894 = 1837 AD = Battle of Jamrud." There is obviously a conflict in the attributions made by these two gentlemen.

Rodgers: VS 1894 = AD 1837; White King: VS 1893 and VS 1894 = AD 1847 onwards

Dr. L. White King, L.R.D., C.S.I., F.S.A., Indian Civil Service, was a contemporary and a friend of C.J. Rodgers and he has been described by Rodgers as "a most indefatigable numismatist". He had a vast knowledge of Indian coins. He also had an extensive collection which was auctioned in 1905. Since he was familiar with the Punjab, having also lived in Rawalpindi, he must have had some compelling information on record to justify classifying these coins differently.

If the attribution of White King is correct and the coins were struck at a later date, then the explanation for the missing coins and dates could be as follows. That the coins struck during VS 1904, 1905 and 1906 were minted using dies having dates VS 1892, 1893 and 1894. This was done during the period AD 1847-49, when the mint was opened for recoinage.

The possibility that these coins were re-struck later is a hypothesis. As we conclude this section on Peshawar a few thoughts arise. It is only in the absence of concrete data that we have to resort to hypotheses and suppositions. These, as always, raise other queries. Some obvious ones are:

A. The coins of VS 1892-94 are all short weight rupees. These are, thus, not in consonance with the directions to create a uniform currency.

B. The dates VS 1893 and 1894 were a part of the old currency which was being withdrawn for recoinage, and hence it is unlikely that these dates would be again used during this period.

If Rodgers' dating is correct and the White King attribution is proven wrong, then this explanation of the missing dates falls. Then, perhaps, only some future discovery will reveal the true facts about the Peshawar mint during this period.

DERA



Fig 4
AR rupee
Date: 1884/94



Zarb Dera Samvat
Julus Takht Akal Bakht



same as fig 4
Mark - ੜ

Fig 5
Date: VS 1902
Wt. 10.7 g
Dia. 19 mm



Zarb Derajat

Deg Teg Fath Nusrat Bederang
Yafat az Nanak Guru Gobind Singh
Mark - Ram?

New data has surfaced concerning the mint at Dera. So far, only a few Sikh coins of this mint are known to survive. These bear the name Dera, have fixed date VS1884, and real, but incomplete, dates VS .904, .94, .04. These dates are puzzling. The following extract shows the beginning of new mint operations at Dera Ismail Khan. In the diary of H.B. Edwards, Assistant the Resident at Lahore, on deputation to Bunnoo, this appears:⁷ "Jan. 11, 1848. I find that, though General Cortlandt has received orders to send all Mihrabee rupees to Pind Dadan Khan to be re-coined into Nanuck Shahees by Misr Rullya Ram, the Misr's own man has already converted his former Mihrabee mint at Dera Ismael Khan into a Nanuck Shahee mint which is now busily at work; and as this can only have been done by the wish of Misr Rullya Ram who is charged with the re-issue, and the expense of the mint at Dera is nothing like what the expense would be of hiring camels continually to convey Mihrabees to Pind Dadun Khan and bring back Nanuck Shahees, I have told General Cortlandt to allow the mint to continue till an answer to this reference can arrive from the Resident."

It is clear that a mint at Dera Ismail Khan was converted to re-coin old rupees into new Nanakshahis. Traditionally, in the past, the mints have been known as:

Dera = Dera Ghazi Khan ; Derajat = Dera Ismail Khan

The name Derajat has been used to describe the region along the Indus river. This is the belt extending from Dera Ismail Khan (Northern Derajat), to Dera Fath Khan and on to Dera Ghazi Khan (Southern Derajat). See map. It will be observed from the above extract, and from several other references in his diary, that Edwards has referred to Dera Ismail Khan as Dera. It is a possibility that the new Nanakshahis struck at Dera Ismail Khan bear the mint name 'Dera'. This was, perhaps, done to distinguish them from the Derajat Nanakshahis, which also were and continued to be, minted at Dera Ismail Khan.

C.J. Rodgers, in his Catalog of Coins 1891,⁸ refers to a Dera coin (#119) and dates it VS 1904-AD 1847 with fixed date VS 1884. Later, in the Coins of the Punjab Museum 1894,⁹ Rodgers attributes two coins (#s 26 and 28) and states that they are of Leia - but adds that the mint name is not on them. The dates on the coins are VS 1904-AD 1847 and VS 94 with fixed date VS 1884. The latter coin is reproduced by Goron and Wiggins,¹⁰ and according to them these Leia coins should be attributed to Dera. Here it will be of interest to note that the Dera coin of Fig. 4 bears a close resemblance to Rodgers' Leia coin #28. Hans Herrli¹¹ has pointed this out and believes Fig.4 coin to be of an earlier date and the Leia rupees to have been struck later.

Leia is a town situated on the right bank of the Indus between Dera Ismail Khan and Dera Ghazi Khan. We do not come across any records that show the opening of a mint at Leia for recoinage. However, from this we should not construe that Rodgers' Leia mint did not exist.

It seems likely that the new operations at the Dera mint were carried out for a short period, as all the coins that exist have only one date VS 1904-AD 1847. The manner in which the dates have been inscribed varies, but indisputably they can be interpreted in no way other than VS 1904. No coins with subsequent dates VS 1905-AD 1848 and VS 1906-AD 1849 appear that have the name 'Dera'. We know from Edwards' diary that a mint at Dera Ismail Khan was converted for recoinage prior to January 1848. Also, there are no references to a mint being opened at Dera Ghazi Khan at this time. Thus, these coins bearing the mint name Dera were most likely recoined at Dera Ismail Khan. This new operation was apparently considered to be of no significant benefit and was soon discontinued.

Now we shall discuss the coins with the name Derajat. The coins of this mint, thus far recorded, have dates starting from VS 1892-AD 1835 and continue yearly, ending with VS 1905-AD 1848. It should be noted that this includes the year VS 1904-AD 1848. This record should be revised to include VS 1906-AD 1849. Longworth Dames was in possession of this coin and I quote him:¹² "I have a coin of this mint (Derajat) dated Sambat 1906 (1849), when the Khalsa army was making its last struggle against the British Government."

With this in mind, and noting that there are several other references (Press Lists in the Punjab Secretariat), to the mint at Dera being active till middle of 1849; we may conclude that the Dera Ismail Khan mint alluded to in these references is Derajat. Coins with the name Derajat on them continued to be struck till 1849, whereafter, upon annexation, all mints in the Punjab were shut down.

RAWALPINDI

The recoinage of all short weight currencies was not only being carried out in Pind Dadan Khan, Dera and Peshawar, but vast quantities of old coins were also being sent out in tumbrels¹³ to Amritsar for this purpose.

What has not been known is that there was also a mint at Rawalpindi. On the same day that the proposal for recoinage was made by the Lahore Durbar, orders were issued to also establish another mint for this purpose. H.M. Lawrence wrote in his diary on June 26, 1847:¹⁴ "Orders were sent to the Kardar of Rawul Pindee to establish a mint there forthwith for melting down the miscellaneous rupees current in Huzara and the North-West and issuing Nanuckshahees in their stead. I am trying also to get Maharajah Golab Singh to do the same in his own dominions, substituting of course a Golabee for a Nanuckshahee currency, but making the former equivalent to the latter. This would much simplify commercial transactions between the two countries."

Rawalpindi lies east of Peshawar and between the rivers Indus and Jhelum. It is of interest to note that the existence of a mint at Rawalpindi has not been known to Sikh numismatic scholarship. Nor do we come across any coins that have this mint name on them. This raises interesting questions. Where are these coins? What were their distinguishing features? This subject is worth further investigation. And while pursuing this, we may also uncover links to other 'missing and unknown' Sikh mints, which are slowly being rediscovered.

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2. Oriental Numismatic Society Newsletter 143. 'Unidentified Sikh mints - Proof of the existence of the mint at Nimak'.
3. Lahore Political Diaries. Page 381.
4. Press Lists of Old Records in the Punjab Secretariat. Supplementary. April 1849 to Feb. 1853. Page 11.
5. White King Sale. Amsterdam 1905. Part IV. Page 54.
6. Rodgers C.J. "On the Coins of the Sikhs." JASB, Vol.L. 1881.
7. Lahore Political Diaries. Political Diaries of Lieut. H.B. Edwards. Assistant to the Resident at Lahore 1847-1849. Page 207.
8. Rodgers C.J. Catalogue of Coins in the Government Museum Lahore 1891. Page 98.
9. Rodgers C.J. Coins of the Punjab Museum Part II. Miscellaneous Muhammadan Coins. 1894. Page 189.
10. Oriental Numismatic Society. Information sheet No.26. The Gold and Silver Coinage of the Sikhs. Part IV. Miscellaneous Mints by K. W. Wiggins and S. Goron.
11. Hans Herrli. The Coins of the Sikhs. Page 113.
12. Numismatic Chronicle 1888. Coins of the Durranis and Barakzais by Dames and King. Page 330.
13. Lahore Political Diaries. Page 420.
14. Lahore Political Diaries. Page 190.

Notes

- * Finance Minister of Maharaja Ranjit Singh and subsequently Member of the Council of Regency.
 @ Vikrama Samvat=VS, AD 1=VS 57

Baroda copper coins by Dr Pran N Khanna

Here are some of the copper coins of Baroda that I have found interesting and to my knowledge have not been reported in literature.

Coin #1

Paisa, copper (bronze) wt. 11 gm., diam. 21 mm. Amreli mint.

It shows on the obverse a scimitar, spear, 5 petal flower, and Ka 'Ka' in Negari (Hindi). The reverse shows different symbols - a stylised bird (peacock), in the middle there is possibly a mint name, but this is not clear. The 'Ka' symbol has not been seen in any previously reported coins of Baroda state. To which Prince (Maharaja) of Baroda does it belong? The coin is very well made for a hand-struck dump coin.



Coin #2

Paisa, copper (bronze) wt. 8.00 gm., 17 mm. square.

The obverse shows again a scimitar, branch, Pa = 5 and Ga 'Ga'; dotted circle and solid circle. Symbol Pa = 'Pa', or Gujarati (Negari) Pa = 5 has not been reported before. Is it numeral 5 or 'Pa'? If it is 5 in Negari, it will be the first coin of Baroda State to have a Negari



numeral. If it is 'Pa', then that is Gujarati and 'Ga' is Negari, this will be very unlikely. I believe it is numeral 5. The reverse shows circle of dots and Gujarati સ્વ | સ્વ 'sal' which would mean year in Gujarati. I haven't seen Gujarati, the language of the people of Baroda State, on these coins before. Again, which Prince does this coin belong to? If it is 'Ga' then it is Ganpat Rao, 5th year.

Coin #3

Paisa, copper, wt. 11 gm., 20 mm.

The obverse shows the common Mughal style Badshah Ghazi, most probably of Md. Akbar II. The reverse shows Manus, Jalus, type common to Mughal coins. Negari ગા 'A' and scimitar in 'S' of Jalus. Most probably it is an Anand Rao coin of Baroda mint. This coin is similar to the silver coins, but the scimitar is in the 'S' of Jalus.



Coin #4

Paisa, copper, Amreli mint, wt. 9 gm., 20 mm.

The obverse shows scimitar, leaf, Shri, ગા and રવ 'Ga' and 'Kha' with denticulated border. The positions of 'Ga' and 'Kha' are transposed here for Khande Rao. The reverse shows the Amreli mint name clearly, a leaf, sanat 12 XX and two (crosses) flanking the mint name.



Coin #5

Amreli Paisa, wt. 8 gm., 25 mm.

The obverse is similar to C 29.3, elephant left, flag left, but on a broader planchet. The reverse is like C 29.4, with a date of (12)48.



Coin #6

Copper paisa, wt. 8 gm., 19 mm.

The obverse shows ગા 'A', 5 petal flower, most probably overstruck. The reverse shows 'Shah' AH 122(X). From the style, it could be a Petlad paisa, in the name of Shah Alam II and Anand Rao.

The photographs of coin # 6 are not clear enough for reproduction

Coin #7

Copper half paisa, wt. 5.6 gm., 17 mm.

This is an overstruck coin with jumbled Gujarati and Negari words ગા જ લલ The reverse has Jalus and 66 in Arabic.



A unique silver coin of Sher Shah Suri

Mr RD Shah of London has sent details of a small silver coin struck in the name of Sher Shah Suri in AH 950. Fractional silver coins of the Suris are rare; some 1/2 rupees are known and a few 1/4 rupees. A 1/16 rupee, published in the Journal of the Asiatic Society of Bengal, Numismatic Supplement XXVII, p 132-6 fell to pieces on its journey to England!

The present coin weighs 0.43 of a gram and has a diameter of 8mm. Rupees of Sher Shah weigh 11.0-11.6 grams, to some extent depending on wear. H Nelson Wright, in The Coinage and Metrology of the Sultans of Dehli, p 383, was of the opinion that the Suri rupee standard was based on the tola of 180 grains (96 ratis) = 11.66 grams. At this standard, the present coin would be 1/27 of a rupee, a most unlikely fraction. MR Shah considers the coin to be 1/32 of a rupee but that would give a rupee of 13.76 grams. He also describes it as equivalent to a double paisa. But that would give 64 paises to a Suri rupee whereas in fact there seem to have been 40 copper paises to the rupee. Perhaps this coin was meant to be 1/25 of a rupee. Perhaps also it was found to be both too difficult and too costly to strike silver coins of this size, hence the rarity.

ابوالمظفر
شاه
شر
(سلطان)



خدا الله
ملكه
٩٤٠

Four unusual coins from Bhutan by Wolfgang Bertsch

The coinage of the Himalayan kingdom of Bhutan has been published by Ch. Panish¹ and later in more detail by N.G. Rhodes.²

In this note I would like to publish three coins and one variety which to my knowledge have not been recorded or at least not illustrated previously.

Fig. 1 shows a silver coin in the style of the early Deb Rupees, having the obverse design with a dot between two comma-shaped lines to the right of "ndra" and a fragmentary letter "sa" to the left, similar to Rhodes' type 4, which this author classifies among the earliest coins of Bhutan (Period I, ca. 1790-1840). However, the coin which I illustrate is of roughly double weight at 8.85 g, and with a diameter of 25.3 mm is much larger than the usual Deb Rupees of this type which measure only about 19mm. It is obviously overstruck on a coin which was machine struck with a collar.³ Traces of a border of dots on the obverse and various groups of dots in the field of the reverse are still visible from the original coin design. Unfortunately I am unable to identify the original coin. The most likely candidates would be silver coins from Cooch Behar, Tibet or British India, but as far as I can see, none of these match the weight and diameter of the Bhutanese coin.

In Fig. 2 I illustrate another silver coin in the style of the early Deb rupees with a cross between the two comma-shaped lines to the right of "ndra" on the obverse, similar to Rhodes type 6. My coin is however of more than double weight at 9.87 g and its diameter of 23 mm is much larger than that of average Deb Rupees of this style which have a diameter of about 19 mm and weigh only about 4 grams. The dies used for the coin in Fig. 2 match its size, i.e. they are larger than the ones used for the known smaller size specimens. Possibly this coin was intended as a Rupee and struck on an experimental basis. N.G. Rhodes published a silver Rupee of Bhutan⁴ which is struck to the British Murshidabad Rupee standard and is of the rare type with the Tibetan letter "ma" on the obverse. My example of Fig. 2 seems to be struck to the standard of the rupee of Cooch Bihar. According to Rhodes⁵ a few other lightweight Bhutanese silver rupees, which seem to be double Deb Rupees, have been discovered, but, as far as I know, no illustration of such a coin has been published so far.⁶



The copper coin illustrated as Fig. 3 is in the style of some of the copper coins which Rhodes classifies as belonging to period II (1840 - 1865), showing a cross mark to the left of "ndra" on the obverse⁷ and is struck with a specially prepared large pair of dies on a thick planchet (about 4,5 mm) with a diameter of 30.3 - 31.8 mm. The coin weighs a stunning 26.38 grams, thus being outside the range of any other known early Bhutanese coin, the normal weight of the coins in this style being around 3.9 grams. It is therefore impossible to guess which denomination could have been intended with this issue. We are probably dealing with a medalllic issue, struck for presentation, hence not meant to circulate.

In Fig. 4 and 5 I illustrate two specimens of the well known bronze pice (zang tam) with the portrait of Jigme Wangchuk (1926 - 1952), dated to the earth dragon year (= A.D. 1928) and struck in the Calcutta mint. The coin illustrated as Fig. 4 has a diameter of 25.1 mm (Weight: 4.8g; another specimen in my collection, having the same diameter, weighs 4.67 g), while the coin illustrated as Fig. 5 has the exceptional diameter of 26.5 mm and weighs 7.0 g. The style of the script and of the design is identical on both coins. It seems that the heavier specimen represents the first issue, struck on copper planchets which were specially produced by the Calcutta mint for the Bhutanese pice issue. Probably only few pieces were struck to this heavy standard before the mint switched to the lightweight, smaller planchets which were already being used since 1903 for the British Indian Quarter Anna coins with the portrait of Edward VII and since 1911 with the portrait of George V. Most of these Quarter Annas in my collection weigh around 4.8 g and have a diameter of 25.1 mm, thus matching exactly the planchets of the second, normal Bhutanese pice issue illustrated as Fig. 4.⁸

Notes

- 1: Panish, Charles K.: Early Coinage of Bhutan. ANS Museum Notes 17 (1971), pp. 247-254 and plate XLVII
- 2: Rhodes, Nicholas G.: The Coinage of Bhutan. ONS Information Sheet No. 16, January 1977.
- 3: So far only Bhutanese copper coins overstruck on cut down Quarter Annas of British India have been recorded. Cf. Rhodes, N.G.: Some Bhutanese Overstrikes. ONS Newsletter No. 127, January 1991.
- 4: Rhodes, N.G.: An 18th Century Bhutanese Rupee. ONS Newsletter, No. 107, July - August 1987. See also: Krause/Mishler/Bruce II: Standard Catalogue of World Coins, Deluxe ANA Centennial Edition, Vol 1, Iola 1991, p. 277 (KM # A23)
- 5: Rhodes, N.G. loc. cit.
- 6: The "double Deb Rupee" is listed as KM # B23 without illustration under the heading "Rupee" in Krause/Mishler/Bruce II: Standard Catalogue of World Coins, Iola, 22nd edition for 1995 and 23rd edition for 1996.
- 7: A similar cross mark can be found on the obverse of the coin illustrated as KM # A9 in Krause/Mishler/Bruce II: op. cit.
- 8: Cf. Pridmore, F.: The Coins of the British Commonwealth of Nations. Part 4, India, Vol. 2, p. 149. Pridmore records the weight of the Quarter Anna issues of 1903-1910 minted in Calcutta as 4.85 g and the diameter as 25.4 mm. This standard was not changed for the Quarter Anna issues of George V (1911-1936).

Typology of Javanese cash from the Ethnographic Museum Rotterdam by TD Yih & J de Kreek

Summary of a talk given at the ONS meeting in Leiden on 21 October 1995

The collection of Javanese cash pieces from the EMR consists of about 270 pieces. They belong to the so-called Van Rede collection and are reported to originate from the region of Tegal east of Cheribon on the northern coast of Java. It is quite possible that a number of pieces are identical to the ones from the collection of the Batavian Society for Arts and Sciences as described by van der Chijs in 1898. They have a yellowish-white appearance and are very thin and fragile. A number of pieces are broken.

Three main types can be distinguished:

Firstly, pieces with Chinese legends. These include Northern Sung reign titles such as Xianping yuanbao and Taiping yuanbao and a legend Tianxia Taiping that is often present on charms or palace issues. The characters are generally corrupt. Often there is a reversal in the position of the characters Ping/bao and Tai/ping.

The second main type consists of blank pieces without characters or symbols. They occur with round and square central holes.

The third main type consists of pieces with geometrical symbols like dots, stripes, crosses or plusses. The first three main types account each for about 30 % of the total number of pieces. They often also bear one or two concentric circles running through the characters or symbols.

Finally, a fourth main type that is much less abundant and accounts for about 8 % of the pieces. Intermediate between main type I and III, it is characterised by the presence of crosses or plusses and a character resembling the letter "A" (a corruption of the character Xian ?). Furthermore, there is one piece with a Jawi and one with possibly an Arabic inscription.

The weight ranges from 0.11 and 1.20 grams and varies considerably within the main types. The lightest pieces are found in the blank series and the reduction in weight is mainly caused by the extra-ordinary size of the square inner hole. The Tegal cash pieces are much more fragile than the lead and bronze javanese pieces described by Mitchiner (1986). Lead and tin are the main components as revealed by XRF-analysis. In addition, some zinc and traces of copper and iron could be detected.

Finally, the position of the Tegal pieces in the context of the identification of the historical picis has been discussed.

The fragility of the Tegal pieces complies with the data on the picis. On the other hand the corruption of the characters is not in line with the supposed production in China and export to Java, but rather suggests a local production on Java itself.

The authors are grateful to Dr. Ross and Dr. van de Meiracker for providing the opportunity to study and analyse the coins.

Typology of Xinjiang 1/2 miscal silver pieces.

By TD Yih and J de Kreek

1. Introduction

The Xinjiang silver coinage forms with the tanga as the silver weight a diversity of pieces both with respect to names and types. Whereas several papers have been published summarising the various types of Xinjiang half miscal types,^{1,2} only Lin³ presented some subtypes, especially those with Chinese legends.

Before highlighting the various types it might be useful to outline briefly the denominational names used in Xinjiang at the end of the 19th century. The majority of the silver coins used in Xinjiang during this period bear both Chinese and Arabic/Turki legends. In table 1 a survey is given of the various names. This has been based on the Krause-Mishler catalogue⁴ and on data provided by the German Eastern Turkestan explorer Le Coq.⁵ A number of the names listed are calculation or weight units; if the names are used on coins also the Chinese and/or Arabic/Turki transcription is presented. At the bottom of the table the value is indicated expressed in cash.

It should be noted that in Turki the *f* (ف) is often pronounced as *p*. In script the *p* is generally written as پ , and less often as پ , hence *pul* and *pung* instead of *ful* and *fung*. Considerable regional differences existed. In the city of Turfan the tanga equalled 20 dacan; in the cities of Aksu, Kucha and Yarkand, however, 25 dacan and in the city of Khotan even 50 dacan. In the city of Kashgar the sar equaled 16 instead of 20 tangas.⁵ The literature is often not quite clear. According to Hartmann⁶ before 1880 the copper pieces were divided into two types: those with a square hole were called datschin and equal to 2 pul and those without a square hole called schotschin equal to one pul. After 1880 all copper coins were called datschin. The city of Qumul (Hami) used the word yarmac for brass cash; 1000 of these equalled one sar. Furthermore, Russian coins circulated throughout the area.

A lot of money carried by the German explorer Le Coq consisted of Russian roubles. Russian coins circulated under the name of tin or pung (kopeke) and som (rouble). In the city of Kashgar 1 som equaled 10 tanga. Lansdell⁷ mentions the circulation of large copper money in the city of Kuldja. He distinguished three sizes: a large one equal to 16 dacan (called urfundi dacan); a medium one equal to 8 dacan (called yifundi dacan) and a small one equal to 4 dacan (called banfundi dacan). Besides the coins mentioned above, silver bars circulated in various denominations such as ko-za, la-ardo and yambo equivalent to 3-5, 10-12 and 50-52 sar, respectively.

During the short independency of Xinjiang under Yakub Beg (1864-77) copper, silver and gold pieces called, respectively, falus, tanga and tilla were issued. They were modelled after the pieces circulating in the neighbouring khanate of Khoqand. Contrary to the Chinese fashion the pieces were not cast, but struck. Only after the reconquest of Xinjiang by the Chinese under general Zuo Zhongtang in 1877, i.e. the 3rd year of the Qing dynasty emperor Guangxu, did the Chinese also strike a number of silver half miscal pieces that circulated besides the traditional cash pieces.

These Chinese silver pieces can be divided into 2 main classes: pieces with and without an indication of the traditional square hole of Chinese cash. The pieces with such a hole indication have on the obverse in Chinese the name of emperor Guangxu; the value is generally in Chinese (wu fen) and the mint-indication is in Turki and/or Manchu. The pieces without a square hole indication have generally the value in Turki (besh fung) without a mint indication. An exception is formed by the pieces with the mint-indication Qalgan Aksu and Qalgan Kashgar. As with the Yakub Beg tanga pieces that bear the word *latif* (=good) as an indication of the quality this is also the case with pieces that bear the words *obdan gumush* (=fine silver). Sometimes the word *aq* (=white) is used e.g. *aq fung* (=silver fen).

The following series of pieces will be described:

- Gangsui ning 3rd/4th year series
- Obdan gumush series
- Guangxu/wu fen series
- Yakub Beg tanga pieces

As a basis is used: the author's own collection and two hoards of about 70 (Mr. J. Liang, Hongkong) and about 400 (Mr. S. Album, USA) pieces, which the author generously was permitted to study. Besides existing literature, additional information from J. Cribb (London), N. Ivochkina (St. Petersburg) and F. Thierry (Paris) was also incorporated.

Historically, it would be logical to start with the tanga pieces of Yakub Beg. For practical reasons, however, this series will start with the description of two rare types of pieces from the Obdan gumush series. One of them is quite new and has until now not been mentioned in the literature; the other has been illustrated only in Chinese sources.

The Turki word *obdan* (اوبدان), also written as *abdan* (ابدان) is an indication of good quality and can be translated as fine.

Type 1

The obverse bears the legend *obdan gumush* (اوبدان گوموش) meaning fine silver within a double-lined square. Outside this square there is a very complex decoration partly consisting of crescents with the points to the square. Above the final *sh* of *gumush* the date AH1294 (=AD1877) is visible.

The reverse bears the legend *besh fung* (بش فونگ) meaning 5 fen within a rim with a peculiar involution as is also found in other more common types of the *obdan gumush* series. Above the final loop of the last letter of *fung* the date 1294 is visible.

There were 2 specimens in the Album hoard, one of them only partly readable, the legend being partly off the flan.

The metrical data of the 2 Album specimens are:

Weight(g)	Diameter(mm)	Thickness(mm)
1.50	12.2 - 13.0	1.3
1.65	11.6 - 12.1	1.4 - 2.0

Two other specimens have been illustrated in the literature, by Lin (1988) under no. I2-1 and in the book *Xinjiang Numismatics*² under no. 280. On the two Album pieces the *wa* (و) of *obdan* is only weakly visible; on the illustration in *Xinjiang Numismatics*, however, this letter is visible and clearly separated from the hamza.

In his list no. 46 (1986) S. Album mentions an *obdan gumush* piece dated AH 129(4) with the legends in square on both sides.

Type 2

There was only one specimen available. The piece has a rather crude appearance.

The obverse bears the word *obdan* within a lined circle of dots. These dots are spaced very irregularly. There is an outer rim decoration vvvvvv. There are 4 and 5 small dots around the large dots belonging to the *b* and *n* of *obdan*, respectively.

The reverse bears the word *gumush* above the date 1294 within a lined circle. The number 9 of the date is very corrupt.

The outer rim decoration consists of a circle of dots and crescents with their points directed outside. The upper dot of the three dots belonging to the *sh* of *gumush* is surrounded by 6 small dots converting it to a rosette. Above the final curve there is also an irregular concentration of dots.

Its metrical data are: weight(1.58); diameter (11.8-13.3) and thickness (1.3-1.5).

The *obdan gumush* type of coins are said to have been issued in the city of Kucha in the southern part of Xinjiang after the suppression of the Yakub Beg revolt in 1877.³

Due to the limited number of pieces available at present no more detailed typology can be given. The 4 specimens of type 1 are probably from the same obverse and reverse die. The series will be continued with the Gangsui ning pieces.

The author welcomes any information from fellow ONS members and hopes that this series of papers will lead to a better understanding of this neglected numismatic topic.

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1. Dong Qingxuan: An investigation of the Tian Gang(=Tanga) silver coins of Xinjiang Zhongguo Qianbi 1986/2 p. 15-32.
2. Dong Qingxuan: Xinjiang Numismatics, Beijing and Hongkong, 1991.
3. Lin Gwo-ming, Ma Tak-wo and Chen Gi-mao: Illustrated catalogue of Sinkiang Gold and Silver coins, Taipei, 1988.
4. Krause-Mishler: World catalogue of coins 1990.
5. A. Le Coq: Sprichwoerter und Lieder aus der Gegend von Turfan Baessler Archiv, Beiheft 1, 1911.
6. M. Hartmann, Chinesisch Turkestan, Halle am S., 1908.
7. H. C. Lansdell, Russian Central Asia, vol 1, New York 1970, reprint.

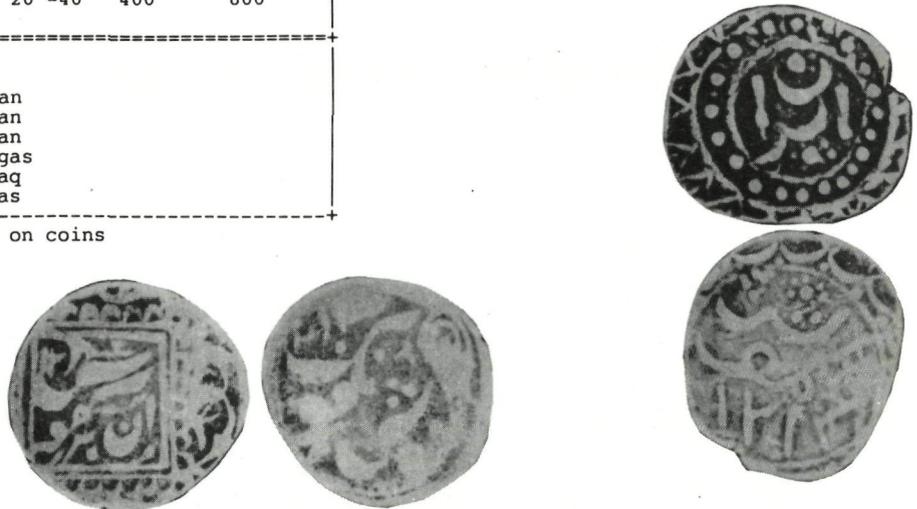
Table 1 The various monetary units used in Xinjiang and their value expressed in chinese cash (Dacan دۋچن)*

Name in Chinese	<u>Li</u>	Fen Candareen	<u>Qian</u> Mace	<u>Liang</u> Tael		
	厘	分	錢	兩		
Name in Turki		Pul	<u>Pung</u>	<u>Miscal</u> Tanga	<u>Sar</u>	Tilla
			فونك	مئقال	سر	
No. of cash	1/4	1/2	4	20 -40	400	800
Regional differences						
Turfan	1 Tanga =	20 Dacan				
Aksu	1 Tanga =	25 Dacan				
Khotan	1 Tanga =	50 Dacan				
Kashgar	1 Sar =	16 Tangas				
Qumul	1 Sar =	1000 Yarmaq				
Kashgar	1 Som =	10 Tangas				

* names underlined also occurring on coins

fig 1

Type 1 and type 2 obdan gumush pieces



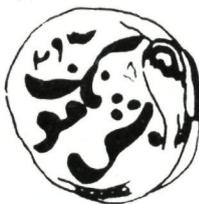
SA1



SA81



SA2



Introduction

This article is the fifth in a series dealing with the copper coinage struck during the Ottoman occupation at various mints in the Yemen in the second half of the tenth and the first half of the eleventh century Hijri (16th and 17th centuries AD). Earlier articles in this series dealt with the Ottoman copper coins of Zabid, al-Mokha, Kawkaban and Sa'dah together and Malhaz.¹

Ottoman copper coins of San'a' *per se* are no longer rare these days, but good specimens remain quite scarce. Lack of a clear reference base for these coins often causes them to be described in sales catalogues in vague and uninformative terms, made worse by the fact that only very few of these coins are clearly dated.

Like the previous articles, the present article is largely based on coins in the author's collection, most of which were collected during a five-year period of residence in the Yemen in the 1980s; a few lots of coins were acquired later through the international coin market. The listing of coins in this article is therefore not to be considered exhaustive nor should the typology, adopted for the purpose of this article, be seen as final.

This series of articles explores the possibilities for a generally valid typology and possibly also dating, of Ottoman copper coins from Yemeni mints. A general picture emerges that embraces most of the types of copper coins that have so far been described for the other Yemeni mints. From this it is clear that despite their difficulties in keeping control of the country, the Ottoman rulers strove to unify to some extent the subsequent issues of copper coins in the Yemen, at least as regards appearance if not metrology.

By invading the Yemen and trying to subdue its traditional rulers and native population the Ottomans soon found that they had taken on an unenviable task. It may be said that they overreached their capabilities. With their superior but cumbersome and heavy armaments and despite their mostly well-trained forces they were no match for the Yemeni tribal fighters. Lightly armed, mobile and very much at home in their mountain vastnesses, these latter could harass the Ottoman troops and camps almost at will without being drawn into battlefield engagements. Only where it came to the conquest and occupation of fixed strategic objects like towns and fortresses could the Ottoman army prevail with its superior armaments. Far from home, with time-consuming and far from secure communications through hostile territory, they were at most times unable to keep a hold on the country itself, and had to content themselves and their masters with holding on to the major strategic towns. No other part of the Ottoman conquests, with the possible exception of the Eastern Anatolian and Caucasian domains, had given the Ottoman Sultans so much trouble to subject and rule as did the Yemen *eyalets*. At hardly any time during their hundred years of occupation of the Yemen were the Ottomans able to subdue, pacify and rule the country in its entirety. They had to deal continuously with native uprisings and guerrilla actions, often resulting from broken agreements and atrocities committed by the Ottoman troops. In addition they suffered rebellions of either their own garrisons or their army commanders.

Ottoman coinage of the period reflects the above facts in an unexpected way. The conquests of individual towns or fortresses by the Ottomans became feats of political, as much as military importance and thus coins would be struck to proclaim such victories. Such 'political' mintings as are well known from the Ottoman European (Balkans) and Persian (eastern Anatolian) campaigns of Sultan Selim I would mostly concern gold or silver coins. In the Yemen the various garrison towns, so precariously held by the Ottomans, were scattered over a vast mountainous terrain that at the best of times would have been difficult to traverse with a heavily equipped army. Such towns were continuously surrounded by hostile tribesmen; without reliable communications they were thus forced to exist in relative isolation.

Consequently, these towns, as individual Ottoman enclaves, were forced to rely largely on their own resources. This would also apply to the production of their own coinage for monetary reasons more than for political purposes, including the minting of copper coins. Thus it was that in the Yemen, a geographical area of a size less than that of e.g. the Ottoman *eyalets* of Sham or Misr, there were in a period of about a hundred years ten mints, possibly more, that struck coins (copper, silver and/or gold) under the Ottomans. In comparison, and for a period much longer than that, only one mint was active in Sham (Dimeshq) and only one (Misr) for the whole of Egypt.²

Of this rich and so far insufficiently studied corpus of coinage, the copper coins form a varied and very considerable part that hopefully will now become better understood and known. After the completion of the present article, it is envisaged to prepare a comprehensive review and collation of all the material so far published on this subject. This would necessarily include a survey of relevant coins from Yemeni mints in major private and public collections of Ottoman coins and should result in a standard work on the Ottoman copper coins from the Yemen.

Historical setting

San'a', despite (or because of) its isolated and lofty location in the highlands, throughout history has been considered by successive competing dynasties as the key to the Yemen. It was therefore not surprising that the Ottomans, far from being content with holding on to their earlier possessions in the coastal lowlands, would also venture inland into the mountainous uplands to conquer the country's capital.

The Ottoman conquest of San'a' has been described by contemporary witnesses and historians of both the Yemeni and Ottoman sides. A number of these manuscripts have been made accessible in translation. Two Ottoman historical texts in particular deal with this episode in detail.³ It is not the intention therefore to relate this interesting history here again; an outline of the events leading up to the Ottoman conquest of San'a' and facts of its subsequent history in so far of numismatic interest, will suffice here.

When in 923/1517 the Ottoman Sultan Selim I defeated the Mamluks and conquered Egypt, the Mamluks in the Yemen were in possession of the towns of Ta'izz and Zabid, and briefly also occupied San'a'. It was thus that already in this same year in the Yemen the *khutbah* was said in the name of the Ottoman Sultan. Shortly thereafter during the same year, however, the Mamluks were forced to surrender San'a' to the Zaydi Imam al-Mutawakkil Sharaf al-Din Yahya. There are no records to show that any coins were minted in San'a' during this brief period of Mamluk occupation, whether in the name of the Ottoman Sultan Selim I or otherwise. The ruling Zaydi Imam used to mint thin copper coins and silver dirhems and fractional dirhems up to the arrival in the Yemen of the Ottomans, but these coins mostly do not show a mint name.⁴

The Ottomans established their presence along the coastal plains of the Yemen in 945/1538-39 conquering Zabid, al-Mokha and 'Aden. From there they ventured inland and conquered Ta'izz (953/1547), after which they proceeded northward on their way to San'a', which was conquered shortly after, in 954/1547. Its fall was largely due to a lack of leadership in the opposing Zaydi forces which were disunited as a result of rivalry between the sons of the old Imam. After the fall of San'a', al-Mutahhar, the elder and most powerful son retreated to Thula, a mountain fortress north-west of San'a' from where he continued his struggle against the Ottoman occupation. Al-Mutahhar meanwhile established his own territory to the west and north west of Kawkaban, which extended all the way into the Tihama coastal plain. In 959/1552, however, he concluded a peace treaty with the Ottoman *beylerbeyi* (governor) whereby he recognised the Ottoman Sultan Suleyman as his overlord and was allowed to remain in control of his part of the country. After the death of his father, the Imam Sharaf al-Din Yahya, in 965/1557-8, he formally became the new Zaydi Imam, whose ruling powers he had in fact already assumed much earlier after his father had withdrawn from San'a' shortly before the Ottomans first threatened the capital in 953.

Towards the end of Sultan Suleyman I's rule, Ottoman presence in the Yemen weakened as a result of the terrible depredations which its *beylerbeyi* Mahmud Pasha visited upon the Yemenis. This Ottoman governor, after his departure from the Yemen in 972/1565, also caused the territory to be split up into an eastern and a western *beylerbeylik* thus causing rivalry between the two new Ottoman governors which further undermined Ottoman authority. Al-Mutahhar rose to the occasion and mounted a Zaydi counter offensive and managed to wrest San'a' from the Ottomans in 975/1567. He then continued to harass the Ottoman troops well into the Tihama lowlands where he even threatened their stronghold Zabid.

At this, the Ottoman Sultan became thoroughly alarmed and in 975/1567 ordered fresh troops and ordnance from Egypt to be dispatched to the Yemen. He also appointed a new governor with clear orders to crush the Zaydi revolt and to bring the Yemen again under Ottoman control. As can be seen, this took place during the rule of Sultan Selim II (974/1566 - 982/1574). The events of this period have been extensively described and documented by Blackburn.⁵

The new Ottoman offensive got underway and in 977/1569, San'a' reverted to Ottoman control, and continued so till the end of the period of Ottoman occupation of the Yemen in 1038/1629.

Earlier work

Little or nothing seems to have been published in contemporary sources concerning the Ottoman copper coins of San'a'. Notes on coinage in early literature mostly concern the silver coinage. Copper coins apparently did not rank as sufficiently important in terms of economic, monetary or political value, and thus may not have qualified for mention by the early historians. Serjeant notes the occurrence of the word *Sulaymani manaqir* in a legal text not further identified, but relevant to the period of the Ottoman occupation of the Yemen.⁶

In modern numismatic literature the first mention of Ottoman copper coins from Yemeni mints known to me occurs in 1983, in two separate publications and by two different authors.

First Dr Nicholas Lowick briefly mentioned the thick Ottoman copper coins of San'a', Sa'dah and Kawkaban in Chapter 16 of Serjeant and Lewcock's *San'a'* book,⁷ however without illustration or reference to sources.

Next Dr Lutz Ilisch published an article concerning the discovery of two hoards of Ottoman *maydins* from the Yemen, amongst which there were also four (thin) copper coins: from Zabid and San'a' one each, and two of unidentified mint.⁸

In 1988 an article by Kürkman dealt with a copper coin purportedly struck at al-Hudaydah.⁹

Samuel Lachman, in his important series of articles with notes on Yemen numismatics (1992) mentioned somewhere that in 975/1567 'The soldiers at 'Aden were paid in copper fulus.'¹⁰

Subsequent mention of Ottoman copper coins from the Yemen can be found from time to time in numismatic auction sales catalogues, but pertinent publications on the subject did not appear until the present series of articles in the ONS Newsletter was started in 1993.

A paper prepared by the present author for presentation at the first International Numismatic Symposium of the Turkish Numismatic Society (TND) in Istanbul in October 1993 offers a survey of the Ottoman copper coinage of the Yemen, including the copper coins of San'a'. The present article is an elaboration based on the relevant chapter of the presentation paper which is yet to be published by the TND as part of the Proceedings of their 1993 Symposium.¹¹

Typology

What has been found for Zabid, largely holds true for the copper coins of San'a'. They can be subdivided into three main types, viz.:

- The first main type: these are the early coins that were probably struck immediately after the conquest of San'a' in 954/1547, along with the silver and gold coins.

- The second main type: the early coins are superseded by coins that were struck probably from the late 950s until the Zaydi reconquest of San'a' by al-Mutahhar in 975/1567. (Al-Mutahhar for a short period then struck his own copper coins and possibly silver too, in San'a', dated 975).

- The third main type: these were coins struck in the period following the Ottoman reconquest of San'a' in 977/1569 up to the end of the Ottoman occupation in 1038/1629.

Within each of these three main types there are a number of types, and subtypes, most of which are represented with a number of more or less clear (die) variants.

The distinction between the first and second main types is not very clear. There are a number of coins that could fit either category and which must be seen as transitional types. It is unlikely that these first and second main types were meant to be separate types; it is more likely that the second main type as distinguished here gradually evolved as a simplified and cruder form of the early main type. The third main type however is quite distinct from the earlier two and is thought to have resulted from the historically significant reconquest of the Yemen.

In view of the extensiveness of the material available, I am forced to deal with its description in two parts. In the present and first part I shall describe the first two main types, as it is difficult to separate them; the second part will deal with the third main type, that of the so-called thick coins of San'a'.

Below I shall try to describe the three main types, firstly according to their general characteristics, after which I intend to show in Table II the subtypes with, in most cases, reconstructed drawings and, where applicable, details of their variants.

Main type I comprises thin copper coins, mostly reasonably well struck, with either legends both sides or with obverses with curious ornamental designs whose meanings have so far eluded me. Where the obverse bears a legend, it reads:

sultan Sulayman (shah?) bin Selim (khan)

سلطان سليمان شاه بن سليم خان

The legend on the reverse is that well-known from most Ottoman coins, including mint and date, viz.:

'azza nasruhu / duriba fi / San'an / 926 (sanah)

عز نصره ضرب في صنعان سنة ٩٢٦

Two aspects of the reverse legends of these coins are noteworthy:

- the word *fi* in a number of cases has been placed in reversed position, with the extended letter *ya* running from right to left (ڤ)

instead of left to right (ڤ) as is common on Ottoman coins.

- the mint name has been written as *San'an* (صنعان) instead of the usual *San'a'* (صنعاء). The latter phenomenon can also be found on some of the early silver Ottoman *maydins* from San'a'.

This peculiar spelling of *San'an* also occurs in an Ottoman document attributed to Selman Re'is, Turkish admiral in the Red Sea, and might well represent both the earliest case of this particular way of writing the name, as well as the origin of the subsequent use of this unusual spelling.¹² This report is dated 931/1525 and thus predates the actual presence of the Ottomans in the Yemen.

This same spelling subsequently occurs considerably later in Rustem Pasha's Chronicle, which deals with Ottoman history up to 968/1561. The part that describes the situation in the Yemen was produced by the second of three scribes who subsequently worked on these chronicles; he most probably wrote his part 955/1548.¹³ Since Rustem Pasha was never directly involved in the Ottoman conquest of the Yemen, it is most likely that the scribes employed in writing the chronicle extracted much of their information from earlier documents. It is however interesting to see that the most important Ottoman source document in this respect, Özdemür's *Fethname* (954), does not use this spelling of *San'an* but uses the normal, proper spelling *San'a'*, without however adding the final letter *hamzah*.¹⁴

The second main type of copper coins of *San'a'* likewise comprises thin coins. These invariably show an ornamental obverse, of which there is a limited number of types with a remarkable range of sub-types. The reverses always show the mint in the usual Ottoman context as shown above, but most frequently with a central ornament represented in a number of variants. The coins of the second main type are generally characterised by a crude script, indifferent lettering and diacritics (pointing) and often down-right corrupt script.

The third main type of copper coins of *San'a'* consists of coins of a considerable range of sizes and weights, but always in a proportion of diameter over thickness that is less than ten and more typically between 5 and 8. Diameters may range from 12 to 20mm, with thicknesses of 1.5 to 4mm. Obverses of these thick coins almost invariably consist of the word *al-mahrusa* written in a convoluted way that was meant to produce a *toughra*-likeness. Their reverses usually involve a central heart-shaped knot with horizontal ribbons that effectively divide the reverse into an upper and a lower part which accommodate the usual *duriba San'a'* (*sanah* 97..). Lettering is usually crude and dies rarely fit the planchets so that mostly only a small part of the text can be deciphered, if at all. More usually than not, the year is off the planchet. Coins of this type will be described in the second part of this article.

The coin material

For a number of years now I have been collecting copper coins from the Yemen in general with a view to building up a collection for study purposes. I am aware that most coins in my collection are not of collector's grade. Most lots of coins that came my way had been picked over at various stages by their diverse owners/traders before they came into my hands. Regrettable as that may be, I am nonetheless on the whole satisfied with what I have obtained for study purposes. Although the coins that had earlier been skimmed off probably represented some fine specimens that would have helped me considerably in piecing together the various obverses and reverses that will be presented below, I have no reason to suppose that they are in any way representative of aspects that I have missed in the subsequent study of the lots available to me. These lots of copper coins were mostly very diverse in themselves, and besides containing coins from various periods and rulers, also contained coins from Yemeni mints other than *San'a'*.

After having worked my way through the amalgamated coin lots (none of these had the added value of an intact hoard that would have merited separate treatment), and after having eradicated from it all coins not belonging to the category of early and thin Ottoman copper coins of *San'a'*, a total of just over 1,500 coins remained. Of these some 600 could not be used for further studies as they showed insufficient detail for further identification according to either obverse or reverse. Another 300 odd coins could be identified in a general sense as to their obverses, but did not show sufficient detail for precise identification of type or subtype of either obverse or reverse.

This left me with 599 coins that showed promising detail for further identification. Because of the yet staggering amount of often seemingly unrelated detail, it proved necessary to devise a system of identification and subdivision into larger groups.

It turned out that the number of types of obverse was relatively small and could conveniently be limited to nine. Thus the coins were subdivided according to these nine obverses. Once this had been achieved, it was shown that in a few cases certain reverses combined with certain obverses, which helped somewhat in reducing the options. However, the opposite also proved the case; there were a great many different reverses that combined with a number of obverses and variants of obverses. When all had been sorted out, well over a hundred different combinations were represented. These are shown in Table II of this article.

The coins

The lots of coins acquired represent a real mix in every sense: from complete blanks to well struck coins, from round, evenly shaped planchets to rough, uneven and un-round planchets, from large planchets and small planchets, to thin and thick (but never very thin or very thick) planchets, from badly corroded coins to cleaned coins, coins with a beautiful patina and coins so ugly no one would want them in their collection; chipped, cracked, holed and scratched. Yet all of them have yielded information, and especially those that are unique in their combination of obverse and reverse, however ugly otherwise, have shown their value in this study.

Metal

The coins almost exclusively consist of copper; only a small proportion, less than one percent, would appear to consist of some yellow copper alloy, brass or bronze. With which additional metal (tin or zinc) the copper is alloyed here is unknown. The coins appear to be of good quality copper that has withstood the ravages of time on the whole quite well. One hardly finds the porosity of metal or the badly laminated planchets that are so common in poorly produced coins. It would be of interest to find out the exact metal composition of these coins as this might help to establish the provenance of the copper used in their production.

Planchets

I am aware that coin lots that have earlier been skimmed off, such as constitute the larger part of the material under study, no longer reflect the real composition of such coin lots in terms of size and weight: the coins creamed off represent the best items that readily sell to collectors, and are usually the bigger and heavier coins showing a good deal of detail.

It did not seem to be relevant to establish the proportions of larger and smaller coins present in the lot. Rather, the collector would be interested to know in what range of diameters and weights these coins may be encountered. From the 600-odd obsolete coins I have taken twenty pieces each of what I perceived to be the smallest size, twenty pieces of the largest planchets and another twenty pieces of coins of the average size, regardless of what might be visible on their surfaces. Of each of these coins I took the largest and smallest diameter, thickness, and weight to establish for each of these groups the average diameter and roundness, the average thickness and average weights. The outcomes are shown below in table I.

Table I: Average diameters, roundness and thickness in millimeters and weights in grams of 20 pieces each of small, medium and large planchets of Ottoman copper coins of *San'a'*.

Planchets size	av. diameter			deviation from roundness	av. thickness and range	av. weight and range
	small	large	av.			
small	11.6	12.6	12.1	8.2%	0.71 (0.4-1.2)	0.56 (0.27-0.92)
medium	14.2	15.3	14.8	7.4%	0.82 (0.6-1.2)	0.94 (0.70-1.37)
large	16.4	17.7	17.1	7.6%	0.86 (0.4-1.2)	1.29 (0.89-2.00)

Typical physical values for these coins may thus range from roughly 12 to 18mm diameter; from 0.4 to 1.2mm thickness and from about 0.5 to 2 grams weight. The deviation from the round is expressed as the difference between the largest and smallest diameter in percents of the average diameter. Although coins of oval and other un-round shapes may be found, most coins show quite well-rounded planchets as the percentages do indeed indicate.

In would appear that the planchets for these coins were cut or even punched from crudely made copper sheets or strips: quite a few show an angular shape with clear snipping marks along the outer edge. Only few coins show the radial expansion cracks that would indicate a process of hammering thick blobs of copper into thinner planchets such as is frequently found with the 'thick' copper coins from Yemeni mints. Another indicator pointing towards the use of (rolled?) copper sheet for the manufacture of planchets is the generally even thickness or flatness of the coins. Differences in thickness from one side of the coin to the other on the whole are small, and would appear to be caused more by the process of actual minting of the coins, rather than by the manufacture of the planchets.

Weight and metrology

Although the process of manufacture of the planchets would appear to have been well developed, the control of weight and/or size within certain limits seems to have received little attention in the process of coining. The sizes and weights of the coins under study would appear to form a universal range of weights between the lower and the higher limits indicated, without showing any particular ranges of weights between which one might expect multiples resp. fractions of one or the other value to occur. Nor would it seem practically feasible in the process of normal monetary transactions to distinguish between coins on the basis of size and/or weight except perhaps between the smaller/lighter and bigger/heavier coins (see table I above). The majority of the coins would belong to a grey mass of practically indistinguishable weights in between these extremes, (609 coins weighing on average 0.87 grams each). Despite the fact that the heavier coins may weigh four times as much as the lightest coins, this proportionally large range yet does not however create the necessary distinction between coins for the practical daily use of such coins, where the human hand is insufficiently sensitive to detect weight differences between coins of say one half of a gram, or even less.

Thus we would have to conclude that the coins would be used on a piece by piece basis, regardless of weight or size, as the weighing of copper coins, except perhaps in large lots, would not normally be done. Copper coins would be for day-to-day transactions, and who would be carrying around a set of sensitive scales in order to buy some bread or some vegetables in the market? Their survival and present occurrence in comparatively large numbers would seem to indicate that these coins were common in their day.

Coining

The overall poor standard of execution of the actual minting appears largely due to two technical reasons: poorly executed dies, that show rapid wear, and the usual problem of dies too large for the planchets to be coined. The fact that the planchets on the whole were thin and too small resulted in the dies frequently partly touching each other, especially when at the time of striking their surfaces would not be exactly parallel to the plane of the thin planchet. This would mean that part of the steel upper die would hit part of the steel lower die, causing, as can be imagined, considerable damage to the engraved die surfaces. At times such clashed dies may have resulted in part of the obverse becoming visible on the reverse or vice-versa. Mostly however the die engraving would quickly become indistinct and require to be engraved anew.

The incredible variety in designs used in producing these coins would seem to point towards a quick wearing off of the die surfaces, requiring frequent re-engraving or changing of the dies. In addition, there seems to have been little or no control over the process of coining. It would appear that a large number of die engravers of no, or at most, limited skill were employed at the mint, and there would seem to have been no check on engraving whatever was fancied. The mastery of written Arabic apparently was no prerequisite for those in control.

All this resulted in a mass of indifferent coins, of which the majority would show insufficient detail for ready identification. Those that showed just enough detail would be of such staggering variety that it would have required as yet a study like the present to know which coins did, and which did not belong to the realm. The conclusion here must be that it did not matter what the coin was, provided it was of copper and roughly within the weight/size range, it would circulate.

All this is in considerable contrast to the quality of the Ottoman silver *maydins* produced at San'a' during the same period. These are on the whole of very uniform size and appearance with well-rounded planchets, their dies mostly engraved with considerable attention to detail of both script and design, and the coins on the whole are well centred and clearly struck to a limited number of designs, as I shall hope to demonstrate in a future article.

These facts might suggest that for a period the copper and silver coins may have been struck at different places by different persons, and possibly for different authorities within the Ottoman government of San'a'. This could account for the very different standards applied to their production.

From the above it must be clear that very little can be said as to the metrology of these coins in relation to the other coinage produced by the Ottomans.

Designs

The obverse designs of the coins under discussion can be limited to nine types, most of which have a number of subtypes. The earlier obverse designs show greater calligraphic and artistic accomplishment. The borderline between the early main type and the later main type of thin coins has therefore been arbitrarily drawn between obverses 1-4 (earlier coins) and 5-9 (later coins).

Thirteen designs (types) of reverses have been distinguished, nearly all of these with a varying number of subtypes.

All obverses are shown in table II, together with the reverses with which they combine. It should be borne in mind that most of the drawings of obverses and reverses shown there are 'reconstructions' generated from the study of, in some cases, many coins of that type or subtype. The illustrations therefore are mostly indicative only and should never be seen as absolute. It is likely that coins will turn up that do not exactly fit any subtype shown in table II, and the discovery of entirely new types and/or subtypes should not at all be ruled out.

Because of the large number of types and subtypes of obverses and reverses, coin faces will be indicated in the text as e.g. O-2.1 (Obverse type 2, subtype 1) and e.g. R-5.9 (Reverse type 5, subtype 9).

It was not always easy to come to a clear view of types. Admittedly, some distinguishing features are based on possibly subjective notions of style rather than on clear-cut differences in design. Designs with a strong element of symmetry or repetition as in many of the obverses, are more readily identifiable; after some training one requires only a comparatively small part of the design to be able to identify it correctly.

With the epigraphy of the reverses of these coins this is quite different. The presence or absence of words (e.g. *fi*, *sanah*) or of letters (e.g. *ba*, *nun*) or the relative positions of words or letters in many cases determines the type or subtype, as does the presence, absence or position of dots. Thus it becomes more important to have well-struck coins or several coins that share certain overlapping features and that may in one or two of the coins yield the final details of the upper or lower left or right part of the coin that were needed to clearly define its design in its totality.

A number of distinctions between subtypes as made in this article may be found arbitrary. It is quite possible that, in future, with the study of more and hopefully better quality coins, some subtypes may be conveniently amalgamated, whereas some other distinctions may lead to other subtypes.

From the study of these coins it would appear that all types and subtypes in principle were provided with an edge circle, and in most cases also with a pearl edge outside the circle. In many individual coins however no sign of either is visible as a result of poor striking. In those cases where such details were clearly present, this has been shown in the drawing.

Obverses

Obverse type 1 (O-1) is represented by 4 subtypes and is the only obverse with writing on it; it shows the name and title of Sultan Sulayman.

The first type (O-1.1) has the full title:

Sultan Sulayman bin Sultan Selim Khan

سلطان سليمان بن سلطان سليم خان

It is represented by a single coin, badly corroded but yet fully legible.

The other coins of this type have a reduced text, reading:

Sultan Sulayman bin Selim Khan

سلطان سليمان بن سليم خان

Differences between subtypes O-1.2 and O-1.3 are mainly in the arrangement of the script and the placement of an ornament. Two coins of subtype O-1.4 share an obverse design that is as yet unclear in its details and quite distinct from the other obverses of type O-1. Coins with obverses of this type almost certainly represent the earliest Ottoman copper coins from San'a'. These coins, similar to the silver *maydins*, may have been also used for political reasons, to proclaim the Ottoman conquest of San'a'.

Obverse type O-2 shows an almost geometric figure of an incomplete circle, within which a V-shaped angle with circle segments and another small circle. The second specimen has a similar but somewhat degenerated design. Unfortunately this O-2 design is represented by only two coins both rather damaged and poorly struck. They are shown under O-2.1 and O-2.2. The meaning of this enigmatic design has so far eluded me. It is not impossible that it is related to the series of designs represented under types O-4 and O-5 (see below).

Obverse type O-3 shows a most pleasing design of a small five-petalled flower or calyx in the centre, with an exuberant whorl of five sepals attached to it. Although there are minor differences in the design of the eight coins representing O-3, these do not warrant a division into subtypes. Thus it is the only single type obverse design.

Obverse type O-4 has been divided into four subtypes, that are difficult to distinguish and may, or may not, form different stages in development (or degeneration) of one and the same design. As none of them are really clear over any sizeable part of the coin surface, it was impossible to provide complete, reconstructed drawings. They have all in common that they resemble a bunch of more or less intricately intertwined branches, with or without leaves or buds. No clear line of symmetry can be distinguished in any of them, and it is doubtful if there is such a line in these designs. There are in all 23 coins representing subtypes O-4.1 to O-4.4.

It is here that, also on the basis of the reverses that combine with these coins, and somewhat arbitrarily, the dividing line between the earlier and the later main types of thin Ottoman coins of San'a' has been drawn. This might correspond to the late 950s or early 960s AH.

The design of O-5 is in fact a clear continuation of the branch-like designs of O-4, as can be clearly seen in the design of O-5.1, that combines a few natural branchlets with an overall more rigid and stylised design of some symmetry. The design then passes through several stages of 'degeneration' of which O-5.2 is by far the most common result, and O-5.3 appears to be a culmination of stylised symmetry. Various features that form part of the design in its different guises as it may appear in its ever incomplete forms are provided in a number of drawings under O-5.2V and O-5.3V (V=variant(s)) under the heading 'Remarks' following table II.

It is not impossible that the designs of O-2 through O-5 form a sequence of related designs, which at the hands of inexperienced die engravers have suffered a considerable decline to the point where relationships are no longer clear. Hopefully, coins of this series in other collections, and of better quality than those used in this study, will be able to shed some light on this hypothesis.

The main feature of type O-6 is a hexagram (Star of David, Solomon's Seal) with an ornament within its central hexagon. Dots are usually liberally applied especially within the triangular interstices within the hexagram and those surrounding it. An equally common feature is formed by the typical 'accents' that emphasise the shape of the hexagram, which are found along the outer, and within the inner triangles that make up the hexagram. Dots and accents occur in varying positions and arrangements, and due to the mostly poorly struck coins it is not always possible to clearly make out which of the possible combinations one is looking at. More than twelve subtypes have been distinguished.

Typical features of the hexagram itself are firstly that its main triangular lines tend to be somewhat curved towards the centre, causing a concave effect on the inner hexagon; secondly, the main triangle lines of the hexagram often do not meet at the edge circle of the coin, leaving the points of the triangle 'open'.

The other variable with this type of obverse is the central ornament. Its most common shape is that of the two crossed ovals or loops, which intentionally or otherwise may have given rise to various derived forms as can be seen in the illustrations.

The hexagram is a common design feature of Ottoman coins throughout the ages. However, the features of concave lines, open angles and especially the use of 'accents' appear to be typical features of this particular type of coin that is known in the Yemen from the mints of Zabid, Kawkaban, Sa'dah and San'a'.

The design of type O-7 is based on a square, or more correctly in most cases, a rectangle, the sides of which have been extended to form an eight-pointed star or octagram of a peculiar shape, with somewhat convex lines bending back towards the centre of the square or rectangle, mostly with dots in every interstice that will take one. As with the hexagram, the arrangements of dots may vary, but the design of O-7 does not show the 'accents' that are so typical of many O-6 types. Within the square there is a central ornament, most frequently that of the crossed loops or some derived form. Eleven subtypes.

The obverses under O-8 are based on multi-petalled rosettes. The number of petals may range from four to fourteen, possibly more. The rosettes are always central and may occur by themselves, but more usually they are encased within a border of outward-facing 'crescents', in some cases a few, i.e. 5 to 7 crescents, in other cases from 8 to 10 crescents. Within the crescents are 'accents' or symbols in the shape of 'flying birds'. More than ten crescents occur, which of necessity are smaller and do not contain any 'accents' or symbols. Other derived forms with surrounding hexagons or octagons exist, one of which shows the rosette in the shape of four hearts with their points meeting in the centre (O-8.8, #112). Eight subtypes have been encountered.

The obverses under O-9 are a round-up of remaining designs that do not conveniently fit any of the other obverses, and that are, for the present, too poorly represented to form a separate type of obverse. Eight subtypes.

Reverses

Under 'reverse' in the context of this paper is understood the face of the coin that shows the name of the mint, usually as part of the following text:

'azza nasruhu / duriba (fi) San'a(n) (sanah 926) عز نصره ضرب في صنعان سنة ٩٢٦

A central ornament may be included in this text, either as a calligraphic component (mostly as part of the reversed letter *ya* of the word *fi*), or just as a feature by itself. The year is shown (often only partially) on some coins of the earlier types, but is absent from all the later reverses. Where it is present, it is invariably 926, the year of Sultan Sulayman's accession. More often than not, the digits are found blundered, and 926 can only be understood from inference.

The calligraphy of especially the later coins can be exceedingly poor, to the extent that the proper reading of the text can only be achieved through the knowledge acquired from the study of all the subtypes, where one is gradually introduced to the many mistakes and enigmas that occur.

The peculiar spelling of *San'an* has already been mentioned. This spelling persists almost throughout the series. The last letter *nun* may be found in several positions, e.g. crossing the vertical letter *alif*, a favourite way as may be found on many Ottoman coins in words like e.g. *sultan*, *Sulayman* and *Kawkaban*; it may be found 'sitting' just above the letter '*ain*' or the first *nun* of *San'an*, or maybe 'floating' somewhere else in the text, where it may not immediately be distinguished from the letter *ba* of the word *duriba*, as more often than not, neither of these letters are provided with their proper distinguishing dots. In another form one finds the final *nun* loosely attached to the lower end of the vertical stroke of the *alif*, thus almost forming the shape of the letter *dal*, which may give rise to confusion with the mint name *Sa'dah* as in e.g. #030, 045, 055, 056 and 072.

The upward denticle, distinctive of the initial letter *sad* and the similar denticle of the first letter *nun* of *San'an* are often deleted altogether, thus doing away with two essential features of proper writing. The letter '*ain*' of the same word often gets blown up to an open loop, while the following letter *alif*, normally a clear and distinctive feature, becomes an indistinct upward curve. An extreme case of such degraded writing is shown in table II, #122. The words *duri(ba)*, '*azze* and *nasru(hu)* are often rendered as loose curls and strokes without any distinguishing diacritics or other essential calligraphic features. The letter (syllable) *hu* usually disappears altogether. Coupled with an almost random distribution of these elements of writing, the epigraphy of such coins becomes in effect almost meaningless.

It can be seen in the many examples shown in table II, column 3, that the typology of these reverses at times becomes somewhat arbitrary and is nearly always confusing.

R-1, complete text as above, but without *fi*; traditional arrangement, without central ornament; *sanah* above year 926. Generally accomplished calligraphy, balanced arrangement. No subtypes.

R-2, complete text, with date and *fi* in reversed position, horizontal line extending from right to left; heart-shaped knot above *San'an*, with the point down, as part of extended horizontal line of *fi*; *sanah* below the year 926. Six subtypes.

R-3, text complete as R-2 above, but with *fi* in peculiar downward curve below *San'an*; heart-shaped knot in downward line of *fi*, lower part of which probably making up the word *sanah* which is below 926. Eight subtypes.

R-4, text usually incomplete, with poor calligraphy and inadequate 'dotting'; arrangement and shape of letters and/or words mostly haphazard; with heart-shaped knot in *fi*, as a central ornament, pointing down. No year. Ten subtypes with some variants.

R-5, as R-4, but knot pointing up. No year. Three subtypes.

R-6, as R-4, but instead of heart-shaped knot now central ornament of crossed loops in x-arrangement.¹⁵ No year. Fifteen subtypes.

R-7, as R-6, crossed loops ornament in + arrangement. No year. Eleven subtypes.

R-8, as R-4, but instead of knot a diamond (lozenge) shaped central ornament. Six subtypes.

R-9, central ornament now oval cartouche with '*azze nasruhu duri-* above, *-ba* inside the cartouche and *fi San'a(n)* below the cartouche; letter *ya* of *fi* extending under *San'a* from right to left. No year. No subtypes.

R-10, central ornament 'Gordian' knot. No year. Two subtypes.

R-11, central ornament rosette. Two subtypes, one with year (968?).

R-12, without central ornament, but with a variety of arrangements of the text. No year. Fifteen subtypes.

R-13, designs not yet clear. No year. Two subtypes.

The coins

In table II the coins have been arranged according to the types and subtypes of the obverses. All combinations observed have been numbered serially. These numbers are found in column 1.

The obverses are shown only once with their code in column 2 whereas the reverses that combine with these obverses are listed with their code in column 3 every time they occur. Thus some reverses may be encountered several times in the table. This was done to spare the reader the unattractive task of tracing the reverses back via their code to their first occurrence in the table. In a few cases where the coin(s) in question showed neither clear obverse nor reverse, no drawings are given, but just an indication of the type of obverse and/or reverse is provided.

Horizontal lines in the table separate obverse types.

As explained above, the letters O and R stand for obverse and reverse; the numbers following them, separated by a dot, show type and subtype respectively. In cases where the type could not be ascertained, the letter U (unknown) has been used. The letter X indicates that a subtype could not be further identified. The letter V is used to indicate a variant of a subtype.

Column 4 provides the number (n) of coins of that particular combination. Coin weights or average weights (in some cases also weight ranges) in the case of more than three coins, are given in column 5 as a matter of interest. As already demonstrated in table I, neither the weights nor diameters or thicknesses form determining parameters distinctive of types or subtypes of these coins; hence the data on dimensions have not been included in table II.

Some remarks relating to the coin types shown in table II will be found following the table, arranged according to the serial number of the entry.

Table II: Types of thin Ottoman copper coins of San'a'. Obverses, reverses, number studied, coin weights and weight range in grams.

Serial no.	Obv.	Rev.	n	Weight
001	O-1.1	R-1	1	0.90
				
002	O-1.2	R-2.1	1	0.69
				
003	O-1.3	R.2.1	2	0.57 0.60
				
004	O-1.4	R.3.1	2	0.82 1.50
	?			
005	O-2.1	R.2.2	1	0.68
				
006	O-2.2	R-2.3	1	0.74
				
007	O-3	R-2.4	2	1.19 1.10
				
008	O-3	R-2.5	4	1.02 av. 0.87-1.33
				
009	O-3	R-2.6	2	1.10 0.91
				
010	O-4.1	R-3.2	1	1.39
				
011	O-4.2	R-3.3	1	1.12
				

Serial no.	Obv.	Rev.	n	Weight
012	O-4.3	R-3.4	2	1.36 1.62
				
013	O-4.3	R-3.5	3	1.45 av. 1.31-1.68
				
014	O-4.4	R-3.6	5	1.00 av. 0.57-1.37
				
015	O-4.4	R-3.6V	6	0.96 av. 0.73-1.55
				
016	O-4.4	R-3.7	5	1.00 av. 0.83-1.19
				
017	O-5.1	R-3.8	1	0.82
				
018	O-5.2	R-4.1V	8	0.95 av. (incl. #019 & #020)
				
019	O-5.2	R-4.1V		see #018
				
020	O-5.2	R-4.1V		see #018
				
021	O-5.2	R-7.4	4	1.02 av. 0.84-1.16
				
022	O-5.2	R-12.1	5	0.89 av. 0.37-1.29
				

Serial no.	Obv.	Rev.	n	Weight
023	O-5.2	R-12.7	6	1.16 av. 0.94-1.31
				
024	O-5.2	R-12.2V	1	1.15
				
025	O-5.2	R-12.3	19	1.07 av.
				
026	O-5.2	R-12.4V	1	1.12
				
027	O-5.2	R-12.4V	3	1.21 av. 0.73-1.55
				
028	O-5.2V	R-6.10	2	0.89 1.23
				
029	O-5.3	R-12.8	16	1.00 av.
				
030	O-5.3	R-6.8	1	1.10
				
<hr/>				
031	O-6.1	R-4.2	1	0.59
				
032	O-6.2	R-12.9	2	0.89 0.89
				
033	O-6.3	R-4.3	3	0.63 0.54 1.09
				
034	O-6.4	R-4.3	2	0.65 0.91
				
035	O-6.5	R-12.10	1	0.79
				

Serial no.	Obv.	Rev.	n	Weight
036	O-6.6	R-5.1	4	0.94 av. 0.59-1.38
				
037	O-6.6	R-5.2	1	0.90
				
038	O-6.6	R-6.5?	4	0.59 av. 0.40-0.72
				
039	O-6.6	R-6.6	1	0.87
				
040	O-6.6	R-7.1	9	1.12 av. 0.97-1.36
				
041	O-6.6	R-7.2	3	1.32 0.84 0.98
				
042	O-6.6	R-7.3	12	1.08 av.
				
043	O-6.6	R-7.5	12	1.15 av.
				
044	O-6.6	R-8.3	3	0.69 1.06 0.96
				
045	O-6.7	R-6.10	9	1.25 av.
				
046	O-6.7	R-7.10	1	1.23
				
047	O-6.7	R-8.5	7	1.11 av.
				
048	O-6.7	R-6.10V	1	0.62
				

Serial no.	Obv.	Rev.	n	Weight
049	O-6.7	R-12.2V	1	0.68
				
050	O-6.7	R-10.2	1	0.95
				
051	O-6.7	R-	1	1.07
				
052	O-6.8	R-4.4	1	0.71
				
053	O-6.8	R-4.5	1	0.71
				
054	O-6.8	R-4.6	1	0.69
				
055	O-6.8	R-4.9	8	0.83 av. 0.58-1.05
				
056	O-6.8	R-4.10	13	0.91 av.
				
057	O-6.8	R-6.1	85	1.03 av.
				
058	O-6.8	R-6.2	31	0.97 av.
				
059	O-6.8	R-6.2V	1	1.08
				
060	O-6.8	R-6.3	59	1.08 av.
				
061	O-6.8	R-6.4	9	1.12 av.
				

Serial no.	Obv.	Rev.	n	Weight
062	O-6.8	R-6.9	5	0.99 av. 0.44-1.77
				
063	O-6.8	R-6.11	1	1.01
				
064	O-6.8	R-6.13	4	1.14 av.
				
065	O-6.8	R-10.1	1	0.41
				
066	O-6.9	R-U	2	1.15 1.35
				
067	O-6.10	R-U	2	0.91 0.61
				
068	O-6.11	R-7.11	1	0.78
				
069	O-6.11	R-U	1	0.83
070	O-6.12	R-6.15	5	0.99 av.
				
071	O-6.12	R-7.5	2	0.83 1.51
				
072	O-6.X	R-6.X	1	1.28
				
073	O-6.X	R-8.6	1	0.87
				
074	O-6.X	R-12.5V	1	0.81
				

Serial no.	Obv.	Rev.	n	Weight
075	O-6.X	R-12.X	1	0.92
076	O-6.X	R-13.1	3	1.01 1.00 1.07
077	O-6.X	R-13.2	2	0.78 0.61
078	O-7.1	R-4.8	4	1.01 av. 0.77-1.25
079	O-7.1	R-6.1	2	0.82 0.67
080	O-7.1	R-12.1V	4	1.11 av. 0.91-1.19
081	O-7.1	R-12.2	4	1.12 av. 1.03-1.22
082	O-7.2	R-4.8	2	1.12 1.12
083	O-7.2	R-12.1V	6	1.14 av.
084	O-7.2	R-12.1V	3	1.14 av.
085	O-7.3	R-7.1	4	0.84 av. 0.64-1.03
086	O-7.4	R-12.1V	1	1.26
087	O-7.4	R-12.6	1	1.00

Serial no.	Obv.	Rev.	n	Weight
088	O-7.5	R-12.8	1	0.97
089	O-7.6	R-6.X	1	0.71
090	O-7.7	R-13.1	4	1.04 av. 0.84-1.21
091	O-7.8	R-12.1	1	1.20
092	O-7.9	R-12.1V	3	0.58 1.21 0.57
093	O-7.10	R-U	2	0.30 0.91
094	O-7.11	R-6.X	1	0.80
095	O-8.1	R-8.4	2	0.49 0.87
096	O-8.1	R-12.13	26	0.94 av.
097	O-8.1	R-12.X	2	1.10 0.90
098	O-8.2	R-12.X	2	0.52 0.68
099	O-8.3	R-4.7	1	1.41
100	O-8.3	R-6.7	8	0.71 av.

Serial no.	Obv.	Rev.	n	Weight
101	O-8.3	R-8.1	14	1.15 av.
				
102	O-8.3	R-9	14	1.10 av.
				
103	O-8.4	R-8.2	3	1.20
				1.29
				1.12
104	O-8.4	R-9	9	0.95 av.
				
105	O-8.4	R-12.10	1	0.70
				
106	O-8.5	R-9	4	1.07 av.
				0.86-1.40
107	O-8.5	R-12.10	1	1.22
				
108	O-8.5	R-12.X	2	1.99
				1.20
109	O-8.6	R-11.1	4	1.20 av.
				0.86-1.55
110	O-8.6	R-11.2	1	1.43
				
111	O-8.7	R-7.8	3	0.66
				0.80
				0.50

Serial no.	Obv.	Rev.	n	Weight
112	O-8.8	R-5.3	2	0.83
				0.69
113	O-8.X	R-9	9	0.81 av.
				
114	O-8.X	R-12.1V	1	0.74
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115	O-9.1	R-6.14	2	0.62
				0.36
116	O-9.2	R-12.11	1	0.82
				
117	O-9.3	R-5.2	1	0.89
				
118	O-9.4	R-5.1	1	1.00
				
119	O-9.5	R-U	2	0.77
				0.63
120	O-9.6	R-12.14	1	0.81
				
121	O-9.7	R-8.4	3	0.41
				0.72
				0.59
122	O-9.8	R-12.15	4	1.19 av.
				1.11-1.28

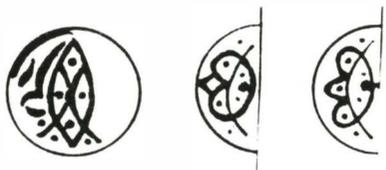
Remarks

Coins #004: these two coins show very fine calligraphy on the reverse, one of them has an as yet unexplained sign () crossing *fi* and above the last *nun* of *San'an*. The obverses of these two coins require further elucidation. Details are too few to attempt a reconstruction, but are sufficient to show they are different from any of the other obverses.

Coins #018 to #027: O-5.2 has as a characteristic feature a short horizontal bar in the centre that appears to join two symmetrical vertical halves made up of curls and curves. It has however many variants of which a few might qualify as subtypes, but these coins almost invariably are so poorly struck that only a small part is visible on each coin. Some of the more prominent features are shown below under O-5.2V. They have as yet been left un-numbered.



Coins #028 and #029: O-5.3 is similar to O-5.2 but does not have the horizontal bar. Instead, it has two or more dots on either side of the centre.



Coin #031: although in terms of obverse this coin is properly arranged under O-6, in terms of its fabric (thin and comparatively large planchet) and reverse, it belongs clearly to the earlier coins. The mint San'a' can only be inferred from a small part of the *alif* showing. No year is visible.

Coins #057 to #064 share similar reverses that mainly differ in the placement of single or groups of dots, and in the position of the final *nun* of *San'an*. Moreover, the different ways in which the horizontal line of the letter *ya* of *fi* connects to the central ornament (bottom or middle) is characteristic. In #064, note the reversed position of *fi*.

#076 and #077, R-13.1 and R-13.2: two most peculiar designs, that took a long time piecing together, and even then they are not yet complete. R-13.1 might actually come under O-12, whereas R-13.2 might come under R-7. More specimens will be required to further clarify this design.

Notes

1. These articles were published in the *ONS Newsletter*, nos. 137 (1993), 138 (1993), 139 (1994) and 140 (1994) resp.
2. For this approximate comparison, see e.g. Map XXXIV in D.E. Pitcher, *An Historical Geography of the Ottoman Empire from the earliest times to the end of the sixteenth century*, Leiden, 1972.
3. These Ottoman sources are:
 Özdemür Bey's *Fethname* for the Conquest of San'a' in Rajab 954/August 1547, made accessible in annotated translation by J. R. Blackburn under the title: 'The Ottoman Penetration of the Yemen', in: *Archivum Ottomanicum VI*, 1980, pp.55-100;
 Rustem Pasha's *Tarikh-i-al-i-Osman*, made accessible in annotated translation by Ludwig Forrer under the title *Die Osmanische Chronik des Rustem Pascha*, in the series *Tuerkische Bibliothek*, Leipzig, 1923, pp.155-77.
 A most useful and readable rendering concerning the total period of the Ottoman occupation of the Yemen is that by Prof. R. B. Serjeant in chapter 8 of his book: *San'a', an Arabian Islamic City*, (Serjeant and Lewcock eds.), World of Islam Festival Trust, London, 1983, pp.68-76.
 (Özdemür in Forrer's and Blackburn's spelling, Serjeant renders it as 'Uzdimir').
4. For a description of these coins see S. Lachman, 'The Numismatics of the Yemen of the 10th/16th Century' (part 6) in: *Spinks Numismatic Circular*, November 1992, pp.300-302.
5. J. R. Blackburn, 'The Collapse of Ottoman Authority in Yemen, 968/1560-976/1568', in *Die Welt des Islams*, XIX, 1-4 (1979), pp.119-76.
6. R. B. Serjeant, *The Portuguese off the South Arabian Coast - Hadrami Chronicles*, Oxford, 1963. Appendix III, p.141.
7. Nicholas Lowick, 'The Mint of San'a': A Historical Outline', chapter 16 in: *San'a' an Arabian Islamic City*, (see note 3 above), pp.303-308. The reference in question is on p.307a.
8. Lutz Ilisch, 'Zwei Funde osmanischer Maydins aus dem Yaman' in: *Muenstersche Numismatische Zeitung*, vol. XIII, No. 4, December 1983, p.37, item 115. In this context see also my article 'Ottoman copper coins from Zabid in the Yemen' in *ONS Newsletter* no. 137, Summer 1993, the coin of type VII.
9. Garo Kürkman, 'Yavuz Sultan Selim Adina Yemen'de Darb Edilen İlk Bakir Sikke' in: *TND Bülten* no. 25, 1988, pp.17-18.
10. Samuel Lachman, 'The Numismatics of the Yemen of the 10th/16th Century', parts 1-6 in *Spinks Numismatic Circular*, May-November 1992. The particular mention of copper 'fulus' is in part 4 (September), p.224, note HR55, and is ascribed to al-Nahrawali's '*al-Barq al-Yamani fi al-Fath al-Uthmani*', republished at Riyadh in 1967.
11. Dick Nauta, 'A survey of the Ottoman copper coinage of the Yemen' (June 1993) in: *Proceedings of the First International Numismatic Symposium of the Türk Numismatik Derneği*, Istanbul, October 1993. (Yet to be published, precise title and other details not yet known.)
12. Salih Özbaran, 'A Turkish Report on the Red Sea and the Portuguese in the Indian Ocean (1525)' in *Arabian Studies IV*, (Cambridge) 1978, pp.81-87. The peculiar spelling of *San'an* is not commented on, except that in brackets the proper spelling is given.
13. Ludwig Forrer, *op. cit.* p.160, main text and note 4, where he states that throughout the text the spelling *San'an* is used, without however explaining or speculating as to the reason why this should be so. The dating of the relevant part is dealt with by Forrer (chapter entitled *Die Handschriften*, pp. 4 and 5).
- In a personal communication, Blackburn suggests the possibility that the spelling of *San'an* may be attributed to the document dated 931/1525, mentioned in the text above, and that its only other occurrence is in a letter sent from 'Aden to Istanbul by Khadim Sulayman Pasha in 945/1538, raising the possibility that the latter person, who led a large Ottoman naval expedition which captured 'Aden and the southern Tihamah, was in possession of a copy of the earlier 931/1525 report attributed to Selman Re'is.
- The coins shown in the present article however demonstrate that use of this spelling persisted in and around San'a' from 953 onwards and may have extended over a period of many years.
14. For this spelling of *San'a*: see Blackburn, *op. cit.* (note 3 above), pp. 94-100 where the manuscript itself has been reproduced.
15. The design of these coins most likely derives from coins struck in Haleb (Aleppo, Syria) under the reign of Sultan Selim I. A number of these coins with almost identical reverse features is shown in Cüneyt Ölçer's book no. 13: *Ottoman Coinage During the Reign of Yavuz Sultan Selim I, Son of Bayezid II, 918-926AH/1512-1520AD*, Istanbul, 1989. Most coins from no. 9475a till 9487 show the crossed loops and also in weight and size correspond to the San'a' coins described here (see table II, R-6).